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GOVERNMENT NOTICES GOEWERMENTSKENNISGEWINGS

DEPARTMENT OF LAND AFFAIRS DEPARTEMENT VAN GRONDSAKE

No. 1982

6 December 1996

PROVISION OF CERTAIN LAND FOR SETTLEMENT ACT, 1993

DESIGNATION OF CERTAIN LAND SITUATED IN THE DISTRICT OF BARBERTON, PROVINCE OF MPUMALANGA

Under sections 2 (1) (c) and 2 (3) of the Provision of Certain Land for Settlement Act, 1993 (Act No. 126 of 1993), read with President's Minute No. 13 of 10 June 1994, I, Derek Andre Hanekom, Minister for Agriculture and Land Affairs, hereby designate—

the Remainder of the farm Sassenheim 695 JT, and Portion 3 of the farm Sassenheim 695 JT, situated in the District of Barberton, Province of Mpumalanga, for the purposes of settlement and hereby impose the following conditions for the use of the designated land:

- (a) The Emjindini Trust shall hold the land for the benefit of the beneficiaries as identified in the trust deed.
- (b) The trust shall establish a Project Planning Committee which shall draw up a development plan to be submitted to me for approval. No settlement shall take place before such plan has been approved by me and such planning has been done: Provided that should it be necessary for settlement to take place before the development planning has been completed, application may be made to the Director General of the Department of Land Affairs who may identify the settlement area in collaboration with the Trust and the Provincial Government.
- (c) The trust shall ensure that the provisions of the Water Act, 1956 (Act No. 54 of 1956), and the Conservation of the Agricultural Resources Act, 1983 (Act No. 43 of 1983), are complied with.

D. A. HANEKOM

Minister for Agriculture and Land Affairs

Date: 5 October 1996.

No. 1982

6 Desember 1996

WET OP DIE BESKIKBAARSTELLING VAN SEKERE GROND VIR VESTIGING, 1993

AANWYSING VAN SEKERE GROND GELEË IN DIE DISTRIK BARBERTON, PROVINSIE MPUMALANGA

Kragtens artikels 2 (1) (c) en 2 (3) van die Wet op die Beskikbaarstelling van Sekere Grond vir Vestiging, 1993 (Wet No. 126 van 1993), gelees met Presidentsminuut No. 13 van 10 Junie 1994, wys ek, Derek Andre Hanekom, Minister vir Landbou en Grondsake, hierby—

die Restant van die plaas Sassenheim 695 JT, en Gedeelte 3 van die plaas Sassenheim 695 JT, geleë in die distrik Barberton, provinsie Mpumalanga, vir doeleindes van vestiging aan en lê hierby die volgende voorwaardes vir die gebruik van die aangewese grond op:

- (a) Die Emjindini Trust moet die grond tot voordeel van die begunstigdes soos in die trustakte geïdentifiseer, hou.
- (b) Die trust moet 'n beplanningskomitee stig wat 'n ontwikkelingsplan moet opstel en aan my vir goedkeuring voorlê. Geen vestiging mag plaasvind voordat sodanige plan deur my goedgekeur is en die beplanning gedoen is nie: Met dien verstande dat indien dit nodig sou wees dat vestiging moet plaasvind voordat die ontwikkelingsbeplanning gedoen is, aansoek by die Direkteur-generaal van die Departement van Grondsake gedoen kan word, wat 'n vestigingsgebied in samewerking met die Trust en die Provinsiale Regering kan identifiseer.
- (c) Die trust moet verseker dat aan die bepalings van die Waterwet, 1956 (Wet No. 54 van 1956), en die Wet op die Bewaring van Landbouhulpbronne, 1983 (Wet No. 43 van 1983), voldoen word.

D. A. HANEKOM

Minister vir Landbou en Grondsake

Datum: 5 Oktober 1996.

No. 1984

6 December 1996

APPLICATION FOR AN AWARD OF RIGHTS IN LAND IN TERMS OF THE LAND REFORM (LABOUR TENANTS) ACT, No. 3 OF 1996

TO: The Director-General
Department of Land Affairs
Private Bag X833
PRETORIA
0001.

1. APPLICANT

- 1.1 The Applicants are Isaac Khokhok, Jan Banana and Kleinbooi Mahlangu, labour tenants presently residing on the farm Vaalbank 511, Registration Division JR, Transvaal, ground 131,2993 hectares, District of Bronkhorstspuit.
- 1.2 Applicants falls within the ambit of the Land Reform (Labour Tenants) Act, No. 3 of 1996:
 - 1.2.1 Applicants has the right to reside on the farm Vaalbank 511 (hereinafter called the farm).
 - 1.2.2 While the said farm was owned by Mr Piet Smit and Don Smit and subsequently their sons, Mr Karel, Bert, John, Hendrick Boet Johannes Jacobus Smit, Applicants, had the right use to cropping land on the farm for their own family's benefit. Each year they planted maize. This was the case until 1993 when the applicants were heated by drought. In addition applicants use land for grazing which is still the case today.
 - 1.2.3 Applicants constructed their own homestead on the farm for their families when they first arrived.

During 1993 Mr Johannes Boet Smit constructed for all applicants four (4) roomed houses. The applicants and their families, which consists of Maria Nofanezile Mahlangu, three (3) sons and seven (7) daughters, were given the right to live in the four (4) roomed houses. At present all three applicants resides there with their families.
 - 1.2.4 The four (4) roomed house are of a permanent fixture of the land, with running water.
 - 1.2.5 Over the years applicants resided on, and had the right, to use land, to plough maize and graze their goats and cattle. In terms of a contract of labour tenancy, as head of the household the applicants provided labour for both themselves and for Mr Piet and Don Smit and successive owners of the farm.

There was no fixed time for work and applicants were to predominantly paid in money. The right to use the land for residential purposes, and for cropping and grazing was the *quid pro quo* for labour and exceeded the value of any payment applicants received.

- 1.2.6 Applicant's grandparent, Geelbooi Suhla Mahlangu, also resided on the farm until his death during 1985.

Their grandmother, Linah Mahlangu, also died on the farm and was buried at Vaalbank 511.

- 1.2.7 Applicant's grandparents resided on the farm and had the right to cropping and grazing on the land in terms of the labour tenancy contract. When the grantparent became too old to work, his sons and grandson (Applicants) stepped in his shoes and took over the labour tenancy contract.

2. PRESENT OWNER OF THE FARM

2.1 The present owner of the farm is Johannes Jacobus Boet Smit.

2.2 He inherited the farm from his father Mr Don Smit.

3. FAMILY HISTORY OF APPLICANT

3.1 According to Applicants' identity documents they were born 1951, 1964 and 1966 respectively on the farm.

3.2 At the time of their birth Applicants' parent Geelbooi Mahlangu worked on the farm as a labour tenant. Applicants grew up on the farm together with their brothers and sisters.

4. RIGHTS CLAIMED BY APPLICANTS

4.1 Rights of ownership to—

4.1.1 land currently used for their four roomed house for dwelling;

4.1.2 land for cropping and grazing, land at least the same in extent as the land used for that purpose until presently. Applicants have 18 head of cattle, 10 head of cattle, four head of goats, and several chickens, respectively.

4.2 Servitudinal Rights to—

4.2.1 right of way over the Farm Vaalbank to provide access to Applicants' home for themselves, their families and visitors, from the nearest main road between N4 and Pretoria Road;

4.2.2 right of access to water by Applicants and their families for both domestic use, to water their cattle, goats, chickens and crops;

4.2.3 right to graze the aforesaid stock.

Dated at Bronkhorstspuit on this 11th day of November 1996.

T. N. NGCOBO

Deputy Director

Applicant/Authorised Representative

Contact address: Messrs J. B. Sibanyoni, Suite 2, Success Building, corner of Church and Kruger Streets (P.O. Box 1532), Bronkhorstspuit. Ref. Mr Monyeke. Tel. No. (01212) 2-2982/3. Fax No. (01212) 2-2983.

No. 1985

6 December 1996

APPLICATION FOR AN AWARD IN LAND IN TERMS OF THE LAND REFORM (LABOUR TENANTS) ACT, No. 3 OF 1996

TO: The Director-General
Department of Land Affairs
Private Bag X833
PRETORIA
0001.

APPLICANT

1. Applicant is Mr Jacob Msiza a labour tenant presently residing on Tweefontein, District of Bronkhorstspuit.

1.2 Applicant falls within the ambit of the Land Reform (Labour Tenants) Act, No. 3 of 1996, in that:

1.2.1 Applicant had the right to graze goats on the farm. He grazed five head of goats up to date.

1.2.2 Applicant had the right to plough crops on the farm until the previous owner of the farm, Mr Andries van Staden, the father to the respondent, passed away.

1.2.3 Applicant constructed his own homestead on the farm for his family which consisted of his wife and five children. At present Applicant resides there with his wife Sophy Msiza (born Mabena).

1.2.4 The homestead is a permanent fixture of land.

It comprises several huts or rooms joined together to form an integrated homestead and is constructed of mud, dung and corrugated iron on the roof.

- 1.2.5 For the past nine years Applicant resided on, and had the right to graze his goats. As head of the household the Applicant provided labour to the owner of the farm Mr Andries van Staden and after his deceased to his wife Loui Van Staden and Van Staden the junior (Ankie van Staden) as and when required. There was no fix time for work and Applicant was paid R60,00 per month plus a bag of maize meal. In addition to these right to use the land for residential purposes and for grazing was the *quid pro quo* for labour and exceeded the value of any payments applicant may have received.
- 1.2.6 For all this years until today. It is understood that Applicant as a labour tenant, had the right to reside on the farm and to use the land for grazing on a continual basis in consideration for provision of labour.
- 1.2.7 Applicant's uncle and other relatives died during 1985 and was buried on the same farm Tweefontein not far from the homestead.
- 1.2.8 The remuneration received for labour provided by the Applicant consisted in the main of the right to occupy land for residential purposes and the right to use land for grazing and was greater in value than any remuneration they may have received in either cash or kind.

2. OWNER OF THE FARM

- 2.1 The owners of the farm Tweefontein is the family of the late Mr Andries van Staden.
- 2.2 Mr and Mrs Van Staden passed away in 1992 and 1993 respectively and the sons inherited the farm.
- 2.3 The Van Staden's juniors are now selling the farm through an estate agent. The new owner, who is unknown to me, said he cannot buy the farm if there are labour tenants on it.

3. FAMILY HISTORY OF THE APPLICANT

- 3.1 According to Applicant's identity document he was born in 1952 and he spend most of his childhood on the abject farm also known as Tweefontein.
- 3.2 At the time of the Applicant's childhood his late uncle and guardian Mnyazwa Msiza was working on the farm as a labour tenant.
- 3.3 Applicant's guardian Mnyazwa Msiza was married to Linna Msiza (born Mtsweni). Applicant grew up together with his uncle's four children, including Johanna Msiza who is also an applicant.

4. RIGHTS CLAIMED BY THE APPLICANT

- 4.1 Rights of ownership to—
 - 4.1.1 land currently used for his homestead;
 - 4.1.2 land for grazing, same in extend as land used for that purpose till 1996.
- 4.2 Servitudinal rights to—
 - 4.2.1 right of way over the farm Tweefontein to provide access to Applicant's homestead for himself, his family and visitors from the nearest main road between Delmas and Bronkhorstspuit;
 - 4.2.2 right of access to water by the applicant and his family for both domestic use and to water his cattle;
 - 4.2.3 right to graze at least 20 head of goats, rights which existed till October 1996 when the owners of the farm Mr Van Staden ordered the Applicant to leave together with his belongings from the farm Tweefontein (see trekpas attached and marked "A").

T. N. NGCOBO

Deputy Director

Applicant/Authorised Agent

Contact address: Attorney J. B. Sibanyoni, Applicant's Attorney, Suite 2, Success Building, corner of Church and Kruger Streets (P.O. Box 1532), Bronkhorstspuit, 1020. Tel. No. (01212) 2-2982/3. Fax No. (01212) 2-2983.

No. 1986

6 December 1996

APPLICATION FOR AN AWARD OF RIGHTS IN LAND IN TERMS OF THE LAND REFORM (LABOUR TENANTS) ACT, No. 3 OF 1996

TO: The Director-General
Department of Land Affairs
Private Bag X833
PRETORIA
0001.

1. APPLICANT

- 1.1 The Applicant is Ms Nomoya Johannah Msiza, ID No. 560707 0430 08 4, a second generation labour tenant presently residing on Portion 12 of the farm Tweefontein 541 JR, in the Bronkhorstspuit District.

1.2 Applicant falls within the ambit of the Land Reform (Labour Tenants) Act, No. 3 of 1996, in that:

- 1.2.1 Applicant has the right to reside on Portion 12 of the farm Tweefontein 541 JR in the District of Bronkhorstspuit, hereinafter called "the farm".
- 1.2.2 Applicant's father, Holland Msiza, during his lifetime, resided on the farm and was given the right to occupy and use it by the previous owner, Mrs Van Staden. Applicant's mother also resided on the farm. They were both buried on the farm not far from the homestead.
- 1.2.3 Applicant's father constructed the present homestead on the farm for his family which consisted of his wife and nine children and nine grand children.
At present applicant lives on the farm with her six children; her younger brother, Dingaan Stemmer, and her younger sisters, Welleminah and Thoko.
- 1.2.4 The homestead is a permanent fixture of the land. It comprises several huts and is constructed of wood, mud, dung and mud brick and thatch as well as corrugated iron.
- 1.2.5 Applicant as well as her father resided on the farm and they had the right to use the land on the farm in terms of a contract of labour tenancy. Applicant worked for Mrs Van Staden.
- 1.2.6 Their right to occupy and use a portion of the farm consisted of the right to erect a dwelling, to keep and graze stock, and to do cropping for the whole family. Each year applicant's father planted maize, pumpkins and sorghum. This was the case until when Mrs Van Staden became ill and she leased the farm.
- 1.2.7 Applicant grazed 30 head of cattle on the farm and presently there are 14 cattle, eight goats, five sheep and many chickens.
- 1.2.8 Applicant's brother, Dingaan, also worked on the farm until August 1996 when the people who hired the farm from the present owner dismissed him summarily from the work.
- 1.2.9 Applicant's father earned R60,00 per month and applicant's brother earned R40,00 per month. When Applicant's father was injured and crippled during the course of his employment until he eventually died, his son, Dingaan, stepped in his shoes and took over the labour tenancy contract. Dingaan earned R40,00 per month.
- 1.2.10 The remuneration received for labour provided by applicant and her father and brother consisted in the main of the right to occupy land for residential purposes and the right to use land for cropping and grazing and was greater in value than any remuneration they may have received in either cash or kind.

2. PRESENT OWNER OF THE FARM

- 2.1 The present owners of the farm are Mrs Van Staden's son, children (Plosman, Enkie, Sussie, Andries, Delinah).

3. FAMILY HISTORY OF APPLICANT

- 3.1 According to Applicant's identity document she was born on another portion of the farm Tweefontein on 1956-07-07.
- 3.2 Applicant's mother and father together with the whole family started residing on the farm during 1962. Both parents are buried on the farm not far from the homestead.

4. RIGHTS CLAIMED BY APPLICANT

- 4.1 Rights of ownership to—
 - 4.1.1 land currently used for her homestead;
 - 4.1.2 land for cropping, land at least the same land used for that purpose.
- 4.2 Servitudinal rights to—
 - 4.2.1 right of way over the farm Tweefontein to provide access to Applicant's homestead for herself, her family, her brother and sisters, from the nearest main road between Bronkhorstspuit and Delmas on the road over the farm which is already in existence;
 - 4.2.2 right of access to water by the Applicant and his family for both domestic use, to water his cattle and water his crops;
 - 4.2.3 right to graze at least the present stock and its produce on the farm.

T. N. NGCOBO

Deputy Director

Applicant/Authorised Agent

Contact address: Attorney J. B. Sibanyoni, Applicant's Attorney, Suite 2, Success Building, corner of Church and Kruger Streets (P.O. Box 1532), Bronkhorstspuit, 1020. Ref. Mr Sibanyoni. Tel. No. (01212) 2-2982/3. Fax No. (01212) 2-2983.

**DEPARTMENT OF HOME AFFAIRS
DEPARTEMENT VAN BINNELANDSE SAKE**

No. 2000

6 Desember 1996

**VOORNAAMSVERANDERING INGEVOLGE ARTIKEL 24 VAN DIE WET OP REGISTRASIE VAN
GEBORTES EN STERFTES, 1992 (WET No. 51 VAN 1992)**

Die Direkteur-generaal het ten opsigte van die volgende persone die verandering van hul voorname na die voorname in kursief gedruk goedgekeur:

1. Fabian Mouton (750529 5254 08 1) Camelliastraat 76, Bontheuwel - *Fahiem*
2. Ndivaye Mutota (710304 5851 08 1) Posbus 1451, Warmbad - *Jona Ndivaye*
3. Zangene Ndwonde (580802 5373 08 6) Monyanestraat 163, Thokoza, Alberton - *Zangene Benett*
4. Bongani Maposa (721006 6006 08 9) Kamer 14, Blok A, Enkelkwartiere 1, Sebokeng - *Bongani William*
5. Ketlhgetseng Veronica Dasheka (640421 0820 08 8) Posbus 25, Mothibistad - *Ketlhoetseng Veronica*
6. Keabetse Rietn Melore (560310 1048 08 6) Posbus 996, Kuruman - *Keabetse Riena*
7. Modisaotsile Alfios Diphatse (750201 5611 08 8) Boschstraat 290, Ikhotseng, Warrenton - *Alpheus Modisaotsile Dodo*
8. Molemoeng Cornelia Sephekolo (700805 0891 08 0) Posbus 949, Kuruman - *Molemoeng Caroline*
9. Mmadithoia Gloria Nape (670702 0422 08 9) Posbus 2217, Rustenburg - *Gloria Moipone Mmadithola*
10. Mariam Kelebogile Fanampe (750130 0584 08 3) Posbus 586, Kuruman - *Kelebogile Mirriam*
11. Corliena Sebiene Klaaste (751006 0144 08 7) Frieslandstraat 888, Bella-Vista, Ceres - *Nicolene Corliena*
12. Salamina Rammoki (721114 0554 08 6) Huis 28508, Uitbreiding 5, Mamelodi Oos - *Nthabiseng Salaminah*
13. René Cornelia Isaacs (750325 0161 08 6) Skyweg 56, Bishop Lavis - *Zuleiga*
14. Sankies Essel (481230 5614 08 7) Posbus 68, Barkly-Wes - *Jan*
15. Vivian Nosiviwe Malrasi (701029 0757 08 9) Posbus 40, Kuilsriver - *Vivian Nobongile*
16. Florine Magdalene Benjamin (340705 0270 08 5) Pilotweg 11, Strandfontein - *Magdeline*
17. Cecelia Isaacs (310527 0071 08 1) Sunbirdhof 8, Bridgetown, Athlone - *Washela*
18. Helena Sophia Hector (630319 0821 08 4) Suikerkanstraat 40, Piketberg - *Ilona Helena*
19. Zolile William Swini (310101 6050 08 3) Posbus 783, Humansdorp - *William*
20. Julayi Moses Mahlangu (570705 5290 08 9) Huis 164, Blok AA, Soshanguve - *Moses Juda*
21. Skwini Hoza (750918 5359 08 3) P O Box 74141, Pretoria - *Skwini Elvis*
22. Neil Rubin Arendse (680120 5171 08 0) 15de Laan 125, Elsiesrivier - *Naeem*

No. 2001

6 Desember 1996

**VOORNAAMSVERANDERING INGEVOLGE ARTIKEL 24 VAN DIE WET OP REGISTRASIE VAN
GEBORTES EN STERFTES, 1992 (WET No. 51 VAN 1992)**

Die Direkteur-generaal het ten opsigte van die volgende persone die verandering van hul voorname na die voorname in kursief gedruk goedgekeur:

1. Jacob Jansen (720403 5142 08 3) Hazelstraat 50, Avonwood, Elsiesrivier
- *Jason Randall*
2. Jukaina Schalkwyk (701022 0191 08 6) Grosvenorlaan 206, Saxon Sea,
Atlantis - *Soekayna*
3. Naftale Wilson (651119 5151 08 9) Olienstraat 28, Eersterivier -
Naphtali
4. Henry Esterhuizen (641205 5185 08 7) Whitestraat 8, Bishop Lavis,
Lavistown - *Warren Henry*
5. Eugene Castelein (730604 5054 08 1) Erasmusstraat 11, Wilkoppies,
Klerksdorp - *Jean Cares*
6. Frederik Jacobus Kilian (361024 5097 08 7) Elliotstraat 38, Demist,
Uitenhage - *Frederick Jacobus*
7. Magdelene Williams (570807 0176 08 9) Lochstraat 17, The Hague, Delft,
Eersterivier - *Mareldia*
8. Magrietha Maria Johanna Smit (580622 0094 08 5) Burns Laan 9, Orkney -
Magriet
9. Lynette Lolita Kok (591118 0157 08 6) Faraday Boulevard 168,
Vanderbijlpark - *Daneel  Christel*
10. Africa John Jansen (421123 5136 08 1) Nerinastraat 10, Protea Park,
Atlantis - *John Joseph*
11. Omar Jabaar (560310 5236 08 3) Zitherstraat 8, Steenberg - *Sulaiman*
12. Elaine Elizabeth Swartz (620808 0181 08 7) Woonstel 0-4, Riverview,
Worcester - *Ilhaam*
13. Augus Janse (630826 5230 08 7) Pontacweg 30, Uitbreiding 20, Belhar,
Matroosfontein - *August*
14. Louisa Naidoo (600506 0689 08 3) Stevens Slot 22, 4de Laan, Grassy Park
- *Layla*
15. Beatrice Lilian Khan (601126 0211 08 2) Rubensweg 54, Macassar - *Lameez*
16. Pieter Frederik Labuschagne (610613 5204 08 8) Posbus 6989, Dunswart -
Juan Perrie
17. Johannes Stephanes Delport (630914 5115 08 4) River Lodge No I,
Kroonstad - *Johannes Stephanus*
18. Johannes Stone (730103 5224 08 3) Oesterstraat 44, Diazville, Saldanah
Baai - *Jason Johannes*
19. Abraham Waries (640227 5210 08 8) Desmorestraat 160, Paarl - *Aiden
Patrick*
20. Vaughan Sampson (691114 5549 08 7) Prunusstraat 61, Bonteheuwel - *Wayne
Vaughan*

21. Anna Catharina Badenhorst (671217 0044 08 9) Posbus 10111, Hennopsmeer - *Anna Tizo Catharina*
22. Mieta Magrieta Fleur (670123 0214 08 9) Posbus 21, Karredouw - *Myrtle Mieta*
23. Glanville Pullers (681008 5279 08 7) Posbus 3053, Postmasburg - *Glenwille Sylvester*

No. 2002

6 Desember 1996

**AANNAME VAN ANDER VAN INGEVOLGE ARTIKEL 26 VAN DIE WET OP REGISTRASIE VAN
GEBORTES EN STERFTES, 1992 (WET No. 51 VAN 1992)**

Die Direkteur-generaal het ten opsigte van die volgende persone die verandering van hul van na die van in kursief gedruk goedgekeur:

1. Qoboloza Jim Lengisi - 041120 5042 087 - Stasiestraat 11, De Aar - *Links*
2. Sinki Michael Swarts - 620509 5805 080 - sy eggenote - Patricia Swarts - 650624 0677 088 - en twee minderjarige kinders - Nyameka Vivian Tisetsa Swarts - 930927 0267 087 - Clamentine Beaula Swarts - 880703 0094 080 - 621 Kwa Mandlenkosi, Beaufort Wes - *Motsoane*
3. Daniel Gaopalelwe Moloko - 730715 6066 088 - Tsoaistraat 4438, Bochbela Woonbuurt, Bloemfontein - *Monosi*
4. Gembe Johannes Ntuli - 650418 5491 086 - 3031 Moloto, Kwamhlanga - *Skosana*
5. Samuel Thomas Saffieris - 450321 5125 088 - en sy eggenote - Louise Saffieris - 1947.05.16 - Rapshodystraat 44, Groenheuwel, Paarl - *Saffier*
6. Patrick Mphangane - 620427 5617 084 - Posbus 1856, Witbank - *Khoza*
7. Thomas Booise - 281011 5081 085 - Mossiestraat 48, Ladismith - *Flink*
8. Richard Goliat - 510822 5114 087 - sy eggenote - Van Huyssteenlaan 104, Worcester - *Goliath*
9. Mgamule Albert Radebe - 520805 5462 083 - sy eggenote - Betty Mericca Radebe - 550209 0698 085 - en vier minderjarige kinders - Absalon Doctor Radebe - 1985.06.07 - Ayanda Goodman Radebe - 880523 5420 084 - Delisile Precious Radebe - 920410 0468 080 - Michael Jabu Radebe - 1981.06.15 - 1895 Embalenhle, Evander - *Nkosi*

No. 2011

6 Desember 1996

BIRTHS AND DEATHS REGISTRATION ACT, 1992 (ACT No. 51 OF 1992)

NOTICE OF RECTIFICATION

**ASSUMPTION OF ANOTHER SURNAME IN TERMS OF SECTION 26 OF THE BIRTHS AND DEATHS
REGISTRATION ACT, 1992 (ACT No. 51 OF 1992)**

Notice is hereby given that Entry No. 30 of Government Notice No. 1924, which was published in *Government Gazette* No. 17617 dated 22 November 1996 is hereby rectified to read as follows:

1. Mabakane Matheus Mohlabé—640521 5815 08 0—P.O. Box 270, Trichardsdal—*Shikwambane*.

No. 2003

6 December 1996

**ALTERATION OF FORENAMES IN TERMS OF SECTION 24 OF THE BIRTHS AND DEATHS
REGISTRATION ACT, 1992 (ACT No. 51 OF 1992)**

The Director-General has in respect of the following persons approved the alteration of their forenames to the forenames printed in italics:

1. Nozibomvana Judith Ntanzu (330322 0191 08 9) Upper Nselen Store, PO Upper Nseleni - *Judith Juliet*
2. Makhotsa Phooko (630101 2749 08 7) Room 189, Jabula Hostel, Bleskop - *Makhotsa Mary*
3. Nontomzana Yame (700706 0935 08 5) House 3209, Thubong, Welkom - *Nontomzana Nakhaya*
4. Fanuana Amos Mtshweni (630228 5678 08 6) Stand 852, Kwaguqa, Extension 14, Witbank - *Amos Fanyana*
5. Matlalala Maleho (601221 0906 08 6) 7 Angelier, Virginia - *Matlakala Magdeline*
6. Mashilo Frederick Lathane (700303 5516 08 4) P O Box 2935, Pietersburg - *Fredrick Masilu*
7. Mashego Happy Matemane (721109 0387 08 1) 52 Mngadi Street, Atteridgeville - *Happy Malekgala*
8. Zintle Radebe (721224 1195 08 4) P O Box 4, Umzimkulu - *Nozintle Pretty*
9. Nyankwabe Mumsie Mathebula (710405 0665 08 5) House 12213, P.O. Rethabile, Mamelodi East - *Mumsie Prudence*
10. Petrus Dhlamini (391226 5299 08 4) 4981 Mocke Street, Daveyton - *Petrus Masotsha*
11. Gohelaftang Emily Serati (450612 0655 08 1) Private Bag 2303, Kuruman - *Gohelamang Emily*
12. Mukebes Lennox Malatjie (411124 5200 08 5) P O Box 394, Steelpoort - *Michael Lennox*
13. Mphotse Marina Maropola (710101 0943 08 1) P O box 39, Parktown, Johannesburg - *Marina Refilwe Mphotse*
14. Morihla David Makena (580815 5424 08 9) 3262 Lowghome Street, Wattville - *Mashego David*
15. Generose Duma (721002 0328 08 2) Private Bag X33, Ulundi - *Generose Nomusa*
16. Mtuzeni Gwebityala (560303 6361 08 3) Bleskop Hostel, Room 48, Bleskop - *Mtuzeni George*
17. Nokwazi Gwamanda (720422 0287 08 1) Private Bag X9073, Pietermaritzburg - *Goodness Nokwezi*
18. Tsehlo Samuel Hlaheng (651211 5272 08 8) House 131, Sedibeng Section, Tembisa - *Tshehlo Peace Samuel*
19. Suzan Lolly Sitole (660701 0369 08 6) House 7048, Motlounq Section, Katlehong - *Susan Lorraine*
20. Margaret Mkhono Mofokeng (721228 0383 08 8) House 1866, Radebe Village, Vrede - *Magret Nkhono*

21. Thanduxolo Plomnqa (750325 5990 08 3) 8103 Time Housing, Tokoza - *Thanduxolo Chacklas*
22. Thandeka Ntshangase (1975-02-08) Ohlange Phase, Inanda - *Thandeka Pearl*
23. Hlengiwe Beauty Mkhize (520906 0180 08 2) P O Box 1863, Fourways - *Hleneiwe Buhle*
24. Theresa Annah Mthethwa (551106 0785 08 7) House 2624, Everest, Tokoza - *Theresa Thabile*
25. Nndateni Netshivhale (660830 5695 08 6) Private Bag 1404, Lwamondo, Venda - *Nndateni Arnold*
26. Thathephi Madlala (301119 0281 08 3) Private Bag X507, Pomperoy - *Thathephi Shwelezile*
27. Charmaine Paulse (700518 0145 08 0) 21A Pilos Road, Manenberg - *Raashidah*
28. Mthandazo Petros Hlengisa (560614 5786 08 2) A-547 Zakhele Street, Khayelitsha - *Patrick Mthandazo Petrus*
29. Thembi Virginia Ntimane (700807 0357 08 8) P O Box 831, Kwalugedlane - *Solani Thembisile Virginia*
30. Mninawa Gerald Mrwashu (571123 5754 08 9) 30 Andries Crescent, Buffalo Flats - *Lulamile Mninawa Gerald*
31. Mary Meisie Ledwaba (620222 0212 08 4) 40 Motsepe Street, Atteridgeville - *Mary Mashadi*
32. Shilavi Rachel Machimana (450606 5497 08 5) House 593, Mofolo-South, P.O. Dube, Johannesburg - *Shilavi Richard*
33. Thembalihle Samuel Mlaba (590703 5368 08 4) House 530, Zone 1, Diepkloof - *Thembalihle Seneth*
34. Lungiswa Khohdlo (700616 6624 08 0) A45 Phola Park, Thokoza - *Lungiswa Alfred*
35. Monica Nokuzola Makanjana (660303 1457 08 3) House 80, Maphanga Section, Katlehong - *Monica Nomfundo*
36. Puleng Maria Motlounq (550620 0466 08 5) 7469 Mokgoera Street, Tokoza - *Mmafumane Maria*
37. Phindi Louis Sibanyoni (611223 5494 08 2) 383 Skosana Street, Phola Township, Ogies - *Louis Phindi*
38. Simon Makhari (540613 5419 08 7) P O Box 108, Vhulaudzi - *Ndwamato Simon*
39. Selefina Siphuma Mtshepi (520106 5851 08 0) 2882 Matlala Street, Vosloorus, Boksburg - *Selwyn Siphon*
40. Noncedo Johanna Olympia Cikizwa (581231 0912 08 7) P O Box 905, Boksburg - *Noncedo Johanna Olive*
41. Lena Mohoahle (360619 0273 08 7) P O Box 12860, Mamelodi East - *Letjae Lena*
42. Frans Marcus Nkululeko Ntlemeza (721015 5525 08 0) 247 Mokhoko Street, Kagiso - *Nkululeko Frans Marcus*
43. Sakarea Joel Mohlala (750820 5453 08 2) P O Box 756, Sekhukhune - *Katudi Zacharia*

44. Mmaisaka Sara Macheru (740817 0393 08 4) P O Box 4932, Sovenga - *Sarah Maisaka*
45. Ambuti Daniel Mohoaladi (580703 5806 08 5) P O Box 11172, Tramshed, Pretoria - *Buti Daniel*
46. Mabel Ngubane (740817 0324 08 9) P O Box 1848, Ladysmith - *Mabel Bonisiwe Thasiselo*
47. Kelogetswe Gabannelwe (740623 5825 08 2) P O Box 670, Kuruman - *Kelogetswe Petrus*
48. Mosibi Godwil Senwamadi (750713 5393 08 7) P O Box 759, Lenyenye - *Boldwin Masebe*
49. Mazweni Samson Dlamini (531012 5422 08 7) E1386, Dalmeny Road, Ntuzuma - *Dumile Samson*
50. Dimakatso Patricia Suliman (721125 0979 08 1) 7 Vanadium Crescent, Copesville, Pietermaritzburg - *Amina*
51. Thcophilus Tabo Mahlati (690509 5628 08 1) P O Box 26, Brackenfell - *Theophilus Thabo*
52. Vanisa Johanna Maluleka (701206 0328 08 3) P O Box 177, Groothoek - *Vanisa*
53. Seeng Adeline Papashane (391025 0278 08 9) House 375, Khutsong Township, Carletonville - *Adelade Matseliso Seeng*
54. Wellington Mlanjeni Nomgo (540415 5909 08 7) Everite Hostel, Room J5, Brackenfell - *Wellington Mlandeli*
55. Masihoi Monica Malumane (530403 0396 08 0) House 7402, Khutsong Township, Carletonville - *Monica Maseobe*
56. Freeda Malekgofa Mputle (750505 1778 08 3) P O Box 1721, Rustenburg - *Fredah Mmalekgotla*
57. Nomasila Johanna Jele (420818 0278 08 2) 17 Ndaka Street, Kwathema - *Esther Johanna*
58. Nondlandla Mtimkulu (600116 0150 08 4) 1245B Zola North, PO Kwa Xuma - *Nonhlanhla*
59. Sibobo Telem (580216 5831 08 6) 721 Siminya Street, Attridgeville, Pretoria - *Sibobo David*
60. Cathrine Victoria Sibanda (670627 0477 08 2) House 12134, Mamelodi East, PO Rethabile - *Victoria Makhanana*
61. Kgabisho Soetboy Sedimo (250101 7717 08 8) P O Box 837, Taung Station - *Kgabisho Softboy*
62. Rankgatwe Benjamin Masilo (470618 5631 08 0) House 999, Block C, Mabopane - *Benjamin Jeremiah Rankgatwe*
63. Anthea Stemmet (760119 0125 08 6) 2 Essenhout Street, Bonteheuwel - *Aaqilah*
64. Johannes Vavane (680903 5791 08 4) H G De Witt Building, conour of Bosman and Skinner Street, Pretoria - *Masome Neo*
65. Daphney Motshwene (661002 0605 08 5) House K420, Soshanguve - *Daphney Ramokone*
66. Maggie Galane (730928 0984 08 7) P O Box 46, Boyne - *Dorah Ramokone*

67. Henny Bethuel Phoku (750508 5484 08 8) P O Box 930, White River - *Bethuel Henny*
68. Mamaropene Sehoana (560403 0869 08 9) 79 Frans Du Toit Street, Phalaborwa - *Sewela Florence*
69. Prosper Nopondwana (680815 6094 08 8) P O Box 3301, George Industria - *Prosper Mthetheleli*
70. Lingiwe Mtshumpela (740601 1078 08 8) House 5003, Kwa Masiza - *Lingiwe Novulile*
71. Therolt Letsosa (520301 5181 08 9) House 4696, Chiawelo, Extension II, PO Chiawelo - *Therolt Lucky*
72. Pertunia Ledwaba (750908 0638 08 6) 494 Ebencuyler Drive, Zone 1, Diepkloof - *Palesa Petunia*
73. Cassieim Moosa (1939-11-28) 36 Zenith Way, Rocklands, Mitchells Plain - *John*
74. Anias Salebona Nkwanyana (1975-08-02) P O Box 883, Piet Retief - *Richard Salebona*
75. Francina Hendrina Abrahams (1928-04-01) 5 Snoeker Street, Beacon Valley, Mitchells Plain - *Faezha*
76. Molifi Theoane (1961-09-26) P O Box 22, Westonaria - *Molifi Joseph*
77. Matome Joseph Matlakala (680202 5471 08 0) P O Box 3847, Sovenga - *Matome Kelly*
78. Nomonde Ngqoyiya (690906 0068 08 3) House 83, Extension 4, Grahamstown - *Nomonde Sylvia*
79. Florentia Ntinga (611015 0612 08 4) P O Box 84, Mpumalanga Township - *Florence*
80. Primrose Mafilika (371108 0269 08 6) 8639 Tlhware Street, Garankuwa - *Primrose Nomakhosazana*

No. 2009

6 Desember 1996

BIRTHS AND DEATHS REGISTRATION ACT, 1992 (ACT No. 51 OF 1992)

NOTICE OF RECTIFICATION

ASSUMPTION OF ANOTHER SURNAME IN TERMS OF SECTION 26 OF THE BIRTHS AND DEATHS REGISTRATION ACT, 1992 (ACT No. 51 OF 1992)

Notice is hereby given that Entry No. 72 of Government Notice No. 1924, which was published in *Government Gazette* No. 17617 dated 22 November 1996, is hereby rectified to read as follows:

1. Henry Siphiwe Nkontwane—631228 5463 08 2—P.O. Box 17253, Imbali, Pietermaritzburg—*Kheswa*.

No. 2010

6 Desember 1996

BIRTHS AND DEATHS REGISTRATION ACT, 1992 (ACT No. 51 OF 1992)

NOTICE OF RECTIFICATION

ASSUMPTION OF ANOTHER FORENAME IN TERMS OF SECTION 24 OF THE BIRTHS AND DEATHS REGISTRATION ACT, 1992 (ACT No. 51 OF 1992)

Notice is hereby given that Entry No. 7 of Government Notice No. 1925, which was published in *Government Gazette* No. 17617 dated 22 November 1996 is hereby rectified to read as follows:

1. Mphiliseni Mkhwanazi—740506 5560 08 2—P.O. Box 7540, Empangeni Rail—*Masinga*.

No. 2004

6 December 1996

**ALTERATION OF FORENAMES IN TERMS OF SECTION 24 OF THE BIRTHS AND DEATHS
REGISTRATION ACT, 1992 (ACT No. 51 OF 1992)**

The Director-General has in respect of the following persons approved the alteration of their forenames to the forenames printed in italics:

1. Maxwell Mashupye Kgaphola (591009 5842 08 9) 11 Nesor Street, Wilgepark, Harrismith - *Mashupye Ratale*
2. Bhekuyise Elliot Khomo (610405 5578 08 6) House J1296, Kwa Mashu Township, Kwa Mashu - *Bhekuyise Elliot Zo*
3. Ellias Sango Tyumzana (620513 5690 08 8) House 4840, NU8, Mdantsane - *Sango*
4. Martha Mokhantso Setai (630707 0441 08 7) House 153, Matlwangtswang, Steynsrus - *Martha Mokhantso Papali*
5. Senzo Zulu (661117 5413 08 5) P O Box 3476, Mandini - *Semzo Lucky*
6. Moahloli Joshua Motaung (731221 5355 08 4) P O Box 322, Letlhabile - *Motaung Moahloli Joshua*
7. Eugenia Dipolelo Nthoba (731115 0786 08 9) P O Box 2, Randfontein - *Eugenia Malerato*
8. Agnes Dabea Molokoane (681024 0722 08 8) P O Box 65, Brits - *Agnes Tebogo Tabea*
9. Keneilwe Tilly Siti (660718 0722 08 0) 1105 Strydom Street, Vryburg - *Keneilwe Mathildah*
10. Nontise Evaline Nowatsha (720106 0865 08 3) House 7974, Silver City, Bekkersdal, Westonaria - *Nophelo Evaline*
11. Nontokozo Maureen Xulu (731207 0376 08 4) P O Box 2143, Pietermaritzburg - *Nonhlanhla Mercy*
12. Mamobise Cathrine Gingoos (700407 0846 08 9) 552 Msimanga Street, Batho Township, Bloemfontein - *Mamodise Catherine*
13. Mosimane Otsile Attwell Mongalanyane (730122 5773 08 9) P O Box 5006, Taung - *Monnaotsile Attwell*
14. Thokozile Kris Maimela (510720 0214 08 6) House 802, Mashemong Section, Tembisa - *Thokozile Grace*
15. Ntombizanele Constance Batyi (690103 0425 08 9) Brand No 3, Room A44, Welkom - *Nokhaya Constance*
16. Tlalane Sedia (701203 0582 08 2) P O Box 1368, Dikganeng - *Eunice Tlalane*
17. Iris Nophelo Madikizela (610707 0980 08 8) P O Box 23, Port Edward - *Iris Ntombizodidi*
18. Makhosandile Juqu (680105 6687 08 5) House A11932, Wallacedene, Kraaifontein - *George*
19. Mduduzi Njongo (710511 5837 08 0) House L354, Umlazi Township, PO Umlazi - *Mduduzi Gladwell*
20. Aaron Senty Manzini (720130 5598 08 5) P O Box 222, Shongwe Mission - *Abel Senty*

21. Gijima Zakhele Mathenjwa (731222 5422 08 0) P O Box 2153, Empangeni - *Mwezi Zakhele*
22. Winnie Mokoena (750311 0324 08 0) P O Box 78, Hazyview - *Winnie Nolwazi*
23. Mpho Sanie Moshiya (750107 0882 08 9) P O Box 151, Radium - *Sanny Mpho*
24. Busisiwe Beator Shabalala (720912 1025 08 4) P O Box 108, Bulwer - *Busisiwe Beata*
25. Ngwashimbuli Patience Cecilia Lunga (740629 0359 08 4) House 1028, Block AA, Soshanguve - *Patience*
26. Lesego Ruth Mampane (710504 0844 08 6) P O Box 281, Swartklip - *Ruth Motsei Lesego*
27. Mthuthuzeli Desmond Mafa (740222 5877 08 4) C605 Amanzimtoti Road, PO Kwa-Mashu - *Mthuthuzeli Desmond Bonginkosi*
28. Sehlule Innocent Thusi (751002 5555 08 8) P O Box 184, Estcourt - *Sehlule Innocent Bongani*
29. Ntombizine Ziwani (730712 0768 08 2) Needs Camp Trust, Kidds Beach, East London - *Ntombizine Fourgirl*
30. Elizabeth Mafatle (501024 0710 08 1) House 1345, Zone 10, Sebokeng - *Masabeta Elizabeth*
31. Milo Virginia Matsepe (740105 0802 08 4) 269 Bree Street, Exporthouse, Johannesburg - *Virginia Milo*
32. Herbert Zithulele Zulu (700727 5666 08 7) P O Box 81, Highflats - *Herbert Thulani*
33. Enock Vakutshiwo Dlamini (740215 5956 08 0) P O Box 510, Umzimkulu - *Enoch*
34. Motlatjo Emely Moholoa (710305 0517 08 0) 201 Esperanto Flat, Skinner Street, Pretoria - *Motlatjo Emmy*
35. Mzikayise Knox Pafa (720309 5798 08 1) 145 Tabata Street, New Brighton, Port Elizabeth - *Mzikayise Justice*
36. Nomthandazo Baleni (560910 1023 08 6) House 14154, Extension 2, Tokoza - *Nomthandazo Nobantu Florence*
37. Gcinikhaya Ndleleni (541120 5676 08 7) House 3410, Everest, Thokoza Township, Alberton - *Gcinikhaya Elson*
38. Tsepo Sebopi Sebopedi (721130 5372 08 4) 46 Cuckoo Avenue, Cashane, Extension 2, Rustenburg - *Sebopi Oeme*
39. Sihle Lungile Dube (700927 0615 08 5) P O Box 53, Empangeni - *Lungile Sphehile*
40. Phikida Abedina Mokwena (581101 0932 08 0) Mothwa Haven, 335 Booyzen Street, Eloffsdal - *Maria Mmapula*
41. Ketlareng Senatle (350408 0279 08 4) P O Box 23157, Kagisanong - *Ketlareng Dorothy*
42. Sheleng Isaac Molati (670312 5773 08 8) 2387 Madiehe Street, Bohlokong - *Isaac*
43. Jannicke Lutchmiah (1951-09-10) P O Box 171, Lotus Garden, Pretoria West - *Jannickie*

44. Thiathu Cliff Singo (1964-12-10) P O Box 69, Thohoyandou - *Thiathu Clive*
45. Maria Mashiane (640202 0783 08 2) P O Box 33, Hartswater - *Matshidiso Maria*
46. Ntombifikile Mthembu (1973-07-01) House 769, Jabavu, PO Steadville - *Ntombifikile Phumzile Cherol*
47. Leinah Manzini (751208 0299 08 1) Stand No 280, Benfarm, Lulekani - *Leinah Caroline*
48. Gertrude Sikweza (641226 0217 08 9) P O Box 5217, Johannesburg - *Gertrude Nombeko*
49. Mark Rodney Madlingozi (731012 5421 08 7) NY 100-94, Gugulethu - *Mark Toto Mzuvukile*
50. Morgern Malinga (540605 5708 08 9) P O Box 173, Kwadlangezwa - *Morgan Sibusiso*
51. Nondumiso Masango (680618 0615 08 4) 67 Dower Street, Kokstad - *Nondumiso Noreen*
52. Duduzile Doris Makhaye (690727 0461 08 0) House A173, Inanda Newtown, Inanda - *Duduzile Gladness*
53. Felix Kona (691204 5349 08 1) P O Box 3704, Johannesburg - *Fezile Felix*
54. Ntombizonke Theresa Bokolo (690623 0683 08 0) House C377B, Site C, Khayelitsha - *Tozie Theresa*
55. Joseph Bosaletse (691224 5577 08 5) 5428 Mancoe Street, Rocklands Township, Bloemfontein - *Itumeleng Joseph*
56. Notobile Rosy Sikepe (590505 0732 08 5) P O Box 10063, Imizamo Yeto Estate, Hout Bay - *Nomathamsanga*
57. Nceba Nqomboti (620203 5803 08 5) 390 Ngema Section, Germiston - *Nceba Henry*
58. Gezahlale Zuma (170108 5088 08 8) Private Bag X12, Loskop - *Gezahlale Phineas*
59. Sindiswa Lillian Speelman (690703 0716 08 8) Mathew Goniwe Flats, Block 3, Room 1, Kwazakhele, Port Elizabeth - *Lungiswa Lillian*
60. Celiwe Ngubane (680608 0626 08 2) P O Box 136, Gingindlovu - *Promise Celiwe*
61. Samuel Separa Shekeshe (660424 5453 08 2) House 406, Phooko Section, Katlehong - *Samuel Tsietsi*
62. Mfanelo Ntiyantiyam (690910 6194 08 3) House A274, Newtown, Inanda - *Mfanelo Ronnie*
63. Thabisa Hombisa Royo (660213 0653 08 9) House 8084A, Zone 6, Pimville - *Thabisa Theodora Hombisa*
64. Bangenzeleni Euginia Mabaso (700915 0348 08 8) House J1406, Kwa Mashu Township, Kwa Mashu - *Ntombizodwa Euginia*
65. Bonginhlanhla Shezi (730830 5447 08 8) P O Box 31, Bulwer - *Bonginhlanhla Andries*
66. Khazamula Samuel Maluleke (710202 6972 08 0) P O Box 1079, Giyani - *Colly*

67. Sam Oralame Seametse (390102 5544 08 7) P O Box 919, Kuruman - *Sam Opalame*
68. Tandeka Mhlana (640426 0704 08 3) House 433, Khumalo Valley, Katlehong - *Thandeka Yvonne*
69. Christina Singh (671209 0100 08 6) Flat 80, Canelands, Verulam - *Gayatri*
70. Chunderwathie Soogreem (690319 0298 08 2) 38 Tensing Way, Everest Heights, Verulam - *Anisha*

No. 2006

6 December 1996

**ALTERATION OF FORENAMES IN TERMS OF SECTION 24 OF THE BIRTHS AND DEATHS
REGISTRATION ACT, 1992 (ACT No. 51 OF 1992)**

The Director-General has in respect of the following persons approved the alteration of their forenames to the forenames printed in italics:

1. Pragasen Pragasen - 710708 5168 082 - PO Box 13783, Humewood - *Pragasen Thandiuthabany Soobiah*
2. Juan Suarez Suarez Aguilar - 390301 5077 185 - 54 Magnolia Crescent, Fairbridge Heights, Uitenhage - *Juan*
3. Edwin James Schroeder - 720201 5269 082 - 38 Russel Harvey Road, Woodlands, Mitchell's Plain - *Suleiman*
4. Mchithwa Mthethwa - 490817 5292 085 - PO Box 654, Bergville - *Mchithwa David*
5. Ron Nyirenda Nyirenda - 640412 5887 081 - 13 Benjamin Street, Robertsham - *Ron Sam Ganizani*
6. Danny Ka-Nkomo - 500226 5750 084 - PO Box 10485, Vorna Valley, Midrand - *Danny Winfield*
7. Nomathamsanqa Cecilia Ka-Nkomo - 521125 0701 081 - PO Box 10485, Vorna Valley, Midrand - *Nomathamsanqa Winfield*
8. Nkosinomsa Ishmael Nzima - 591210 5687 082 - 475 B Zone 2, Meadowlands - *Nkosinomsa Goodman*
9. Shilubane Evelyn Shilubane - 390625 0184 087 - PO Box 223, Letaba - *Gana Evelyn*
10. Malose Alfred Mokonyane - 450601 5454 087 - Plot 22, Lowmeadow Farm, Mooderfontein - *Malose Job*
11. Goolam Cassim - 440628 5094 087 - PO Box 280, Richards Bay - *Goolam Hoosen*
12. Nuyahavho Phineas Mailula - 620426 5329 088 - PO Box 231, Tshilwavhusiku - *Muyahavho Jackson*
13. Petrus Lefa Senamolele - 650729 5640 088 - 2403 Mapetla Extension 1, Tshiawelo - *Tieho Petrus Lefa*
14. Nozizwe Jackbeth Mkhuzo Neé Mlotha - 1322 Mokgethi Street, Khuma Location, Stilfontein - *Nozizwe Jacobeth*
15. Jurgens Jacobus Gere - 500102 5085 088 - PO Box 53, Bedford View - *James Warren*
16. Mphikeleli Meshack Mdalose - 570228 5336 083 - Wellington Court, Flat 301, 34 Leyds Street, Joubertpark - *Patrick Mphikeleli Umuntuakalahiwa Meshack*

No. 2005

6 December 1996

**ALTERATION OF FORENAMES IN TERMS OF SECTION 24 OF THE BIRTHS AND DEATHS
REGISTRATION ACT, 1992 (ACT No. 51 OF 1992)**

The Director-General has in respect of the following persons approved the alteration of their forenames to the forenames printed in italics:

1. Deborah Davids (690327 0193 08 8) 51 First Avenue, Belgravia Estate, Athlone - *Tasneem*
2. Nathan Avontuur (730907 5074 08 6) 7 Simondium Close, Westridge, Mitchells Plain - *Nadeem*
3. Maria Cristina Mathew (680906 0036 08 2) 26 Arnold Street, Observatory - *Cristina*
4. Collette Isabel Ferguson (731005 0157 08 6) 17 Ironwood Street, Eastridge, Mitchells Plain - *Nicollette Isabel*
5. Deidré Nicolette Harold Harris (691125 0096 08 0) 20 Croton Road, Merewent, Durban - *Deidré Nicolette*
6. Shu-Yi Hung (630622 0791 18 5) 292 Braam Pretorius Street, Sinoville, Pretoria - *Demi Stephanie*
7. Nazeem Adams (680112 5248 08 3) 4 Palladium Road, Westgate, Mitchells Plain - *Nathan*
8. Sigalit Lamb (670209 0600 08 6) 26 Luise Street, Linmeyer - *Kerry-Anne Sigalit*
9. Mofe Richard Moteka (450307 5556 18 2) Chamber of Mines, East Driefontein, Carletonville - *Mope Richard*
10. Sabeena Yusuf Moosa (710525 0886 18 1) P O Box 31, Richmond - *Sabeena Salim*
11. Logandra Munsamy Naidoo (660328 5141 08 6) P O Box 2558, New Germany - *Logan*
12. Nisha Vawda (650911 0142 08 4) P O Box 26327, Isipingo Beach - *Aneesa*
13. Glynis Ellen Biggs (641218 0121 08 0) 56 Abelia Road, Kloof - *Stacie Leigh Brooke*
14. Asa Adams (581026 0161 08 5) 7 Berry Road, Wynberg - *Ayesha*
15. Muniamma Govender (570111 0126 08 1) Lot 31, Motala Heights, Pinetown - *Pricilla*
16. Nithianandan Bangar Chetty (611013 5095 08 2) 80 Cardinal Road, Stonebridge, Phoenix - *Mervin*
17. Liola Elizabeth Gray (481003 0529 08 3) No 1 Sorrento, North Road, Morningside, Sandton - *Lee*
18. Machalis Sotiriou (530319 5060 08 5) P O Box 5101, Rivonia - *Michalis*
19. Shirley Viswakanthy Raj (570605 0197 08 3) P O Box 41071, Richards Bay - *Shirley*
20. Jagruthi Mathura (650301 0104 08 8) 12 Renown Road, Westville, Durban - *Jagruthi Jantilal*
21. Gaven Angus Brian Louw (610602 5197 08 7) 5 Dormer Avenue, Crawford - *Faizal*
22. Shane Alan Fataar (610818 5055 08 9) 56 Lainsburg Road, Heideveld, Athlone - *Shahied*
23. Cameron Claudette Cowley (630615 0102 08 0) 30 Goetham Street, Paarl - *La-eeqah*

No. 2007

6 December 1996

**ASSUMPTION OF ANOTHER SURNAME IN TERMS OF SECTION 26 OF THE
BIRTHS AND DEATHS REGISTRATION ACT, 1992 (ACT No. 51 OF 1992)**

The Director-General has authorized the following persons to assume the surname printed *italic*:

1. Lesailane Sarah Matshile - 650525 0493 089 - PO Box 1213, Masemola - *Matshike*
2. Mirriam Sizakele Motshela - 450715 0450 088 - and minor child - Solomon Mathupha Motshela - 1979.09.04 - 13692 Madihlaba Street, Daveyton - *Mashiloane*
3. Abel Nyembe - 321021 5164 080 - and his wife - Hluphekile Doris Nyembe - 410307 0210 081 - 44 Jasper Road, Robertsham, Johannesburg - *Shabalala*
4. Thandanani Emmanuel Zikhali - 750403 5363 088 - PO Box 5380, Durban - *Makhanya*
5. Delani Alfred Buthelezi - 640410 5675 084 - his wife - Sbhongile Princess Buthelezi - 681125 1240 085 - and minor child - Thobile Queentin Buthelezi - 870930 0383 088 - Private Bag 9949, Ladysmith - *Nkosi*
6. Famanda Solly Sibisi - 600206 5617 086 - his wife - Rosemary Sibisi - 660420 0583 089 - and minor child - Hlamulo Sibisi - 1990.02.13 - 4151 Thembeke Section, Extension 11, Tembisa - *Rikhotso*
7. Andiswa Patricia Tyokela - 650501 0423 087 - House 2745, Zone 2, Diepkloof, Soweto - *Thomas*
8. Doctor Richard Tembe - 610420 5511 086 - PO Box 93, Mkhize - *Zungu*
9. Thulile Cecilia Bhulose - 721005 0492 089 - Adams Mission, Adams - *Blose*
10. Stanley Tamsanqa Mlotshwa - 621206 5472 081 - 37 Lingenhof, Derkseln Street, Paarl - *Sontshi*
11. Kwetesa Olifant Moyo - 600814 5595 085 - PO Box 1, Koringpunt - *Kekana*
12. Midi Elizabeth Monyeke - 440117 0298 083 - 8 Vosloo Street, Windsor Glen, Randburg - *Mosima*
13. Carmel De Kleyn - 750223 0219 089 - PO Box 525, Klerksdorp - *Knott*
14. Thamsikaya Mazingela - 720704 5989 088 - PO Box 30, Umtata - *Koyana*
15. Bhekizenzo Joseph Thungo - 610707 5425 089 - PO Box 22120, Newcastle - *Ntombela*
16. Jabulani Bhakunina Biyela - 611106 5385 089 - A 259 Kwa-Mashu Hostel, Kwa-Mashu - *Magwaza*
17. Flora Misiwe Yeko - 540806 0675 089 - 24 Venice Road, Morning Side, East London - *Vuso*
18. Jonas Bishop Monareng - 420527 5455 088 - PO Box 244, Ohrigstad - *Gouws*
19. Robertson Sanele Vilakazi - 681019 5409 087 - PO Box 1610, Newcastle - *Madi*
20. Molatelo Freddy Efalao - 661102 5681 089 - 508 Motheong Section, Tembisa - *Masilompana*
21. Fatima Tanana Dawood - 580722 0787 082 - 160 A-6th Street, Mzinoni Township, Bethal - *Milanzi*
22. Jayakrishna Sokalingam - 620110 5222 085 - his wife - Savithri Sokalingam - 651126 0088 083 - and minor child - Tremayne Sokalingam - 861123 0241 081 - PO Box 821, Bethal - *Gopalan*

23. Yusuf Hoosen Mahomed - 660707 5115 085 - and his wife - Hawa Bibi Mahomed - *Agjee*
24. Mandla Hlebi Sithole - 670625 5619 088 - 243 Samela Drive, Sobantu - *Mbatha*
25. Simon Mgumbe Ntuli - 710104 6129 085 - PO Box 412, Sehlakoene - *Mnguni*
26. Mlashi Justice Fakude - 690811 5408 088 - PO Box 57, Hluhluwe - *Hlatshwayo*
27. Zephrit Bheki Msomi - 641118 5784 082 - 4435 Umlazi Township, Umlazi - *Mkhize*
28. Msawenkosi Mandlenkosi Qwabe - 681119 5300 086 - 1073 Clermont Road, Clernaville - *Masango*
29. Sipho Moses Phiri - 540121 5280 087 - PO Box 42, Hazyview - *Mnisi*
30. Takalani Elon Ndou - 630605 6036 085 - PO Box 1, Manenzhe - *Manenzhe*
31. Masai Waterniel Sepuru - 620616 5679 082 - Private Bag 1600, Makonde - *Nemavhola*
32. Sitho Reuben Mathe - 620315 5915 089 - PO Box 33, Mkuze - *Mthethwa*
33. Mothobi Zakia Mokoena - 631104 5552 085 - 536 Petsana, Reitz - *Mlaba*
34. Vincent Bogacwe - 431125 5509 082 - PO Box 520, Taung Station, Taung - *Bogacwi*
35. Husain Abdool Rahman - 740530 5014 080 - PO Box 37631, Overport - *Moosa*
36. Zain Pillay - 721227 5243 081 - 9 Clay Manor, Tereance Manor, Phoenix - *Hoosen*
37. Joseph Mdluli - 730322 5413 088 - 232 Block L, Soshanguve - *Sehale*
38. Judas Elliot Mahlalela - 630426 5061 085 - PO Box 1120, Kanyamazane - *Mathabela*
39. Lesley Mduduzi Mngomezulu - 740201 5443 089 - PO Box 1934, Empangeni - *Buthelezi*
40. Stingoti Flipu - 370910 5293 081 - 10287 Kwa-Zakhele, Port Elizabeth - *Phillip*
41. Ntombekhaya Patricia Melani - 750314 0611 084 - House 740, Extension 6, Grahamstown - *Mkhontwana*
42. Motlatso Nancy Masia - 730202 0528 082 - PO Box 731, Duiwelskloof - *Shai*
43. Jason Louise Chick - 720405 6187 082 - his wife - Xiaowen Chick - 740223 0470 180 - and minor child - Wilson Chick - 960418 5192 085 - PO Box 236, Bruma - *Cheung*
44. Jonas Serekele Morifsi - 740524 5342 088 - Room 347, Block U, Saulsville - *Moriswi*
45. Christine Ngakane - 760601 0981 089 - 8518 Zone 6, Diepkloof - *Makhubo*
46. Archie Bala Kananda - 560615 5718 082 - his wife - Regina Kananda - 531014 0820 083 - and minor child - Matshepo Promise Kananda - 830107 0383 082 - PO Box 2092, Lawley - *Mokone*
47. Sarah Lizzy Ngomane - 550120 0511 089 - PO Box 675, Kwalugedlane - *Madonsela*
48. Magauta Erica Nhlapo - 731128 0574 082 - 2900 Protea Glen, Chiawelo - *Mofubedu*

49. Moses Sbusiso Phehlane - 721115 5481 084 - PO Box 66, Westonaria - *Lubisi*
50. Ngoako Geoffrey Sebola - 740417 5824 082 - 19 Sethokga Section, Tembisa - *Kumalo*
51. Nomfundo Albertina Ngejang Mahlangu - 631108 0634 087 - 9 Maetane Street, Kwa-Thema - *Ndinisa*
52. Venetia Batiisiye Mashiloane - 641008 0509 081 - Private Bag 428, Graskop - *Chiloane*
53. Simon Joseph Nhlapo - 640108 5519 084 - P 3053 Cow Village, Mzinoni, Bethal - *Dhlamini*
54. Thanda Clifford Mbonambi - 750808 5620 081 - F 870 Ntuzuma, Kwa-Mashu - *Mkhize*
55. Khuthala Cylia Vaaltein - 640609 0838 080 - 141 Mkombe Street, Motherwell - *Faltein*
56. Simon Mbane - 310511 5165 080 - and his wife - Daniswa Ida Mbane - 400506 0303 083 - 836 Mofolo North, Dube - *Mbele*
57. Sarah Memela - 630219 0606 081 - and her three minor children - Thulisile Patience Memela - 820428 0310 087 - Nelisile Pamela Memela - 830311 0355 088 - Mantombi Pearl Memela - 890706 0333 083 - PO Box 2091, Port Shepstone - *Nkomo*
58. Mafanyo Enoch Motabatsinde - 1936.01.26 - PO Matidze, Matidze - *Makhuvha*
59. Dylan John Green - 680510 5020 081 - and his wife - Shannon Lynda Vaughan Green - 691217 0034 086 - 54 Primrose Hill, 26 Campbell Road, New Germany - *Murdey-Green*
60. Daniel Johnson - 600928 5263 088 - his wife - Maria Johnson - 630926 0780 084 - and four minor children - Nico Johnson - 880818 5254 081 - Joseph Johnson - 800226 5278 083 - Doreen Johnson - 830806 0213 088 - Miena Johnson - 950429 0217 084 - 6066 Maphuta Street, Mankurwane, Kimberley - *Skinner*
61. Mohamed Sharief Cassiem - 700805 5197 087 - 31 Heron Road, Pelican Park, Grassy Park - *Hamdulay*
62. Mahommed Yasin Ajam - 671222 5077 084 - PO Box 9681, Azaadville - *Dawood*
63. Pragasen Chetty - 710708 5168 082 - PO Box 13783, Humewood - *Pragasen*
64. Juan Suarez Aguilar - 390301 5077 185 - and his wife - Antonia Aguilar - 400328 0077 181 - 54 Magnolia Crescent, Fairbridge Heights, Uitenhage - *Suarez Aguilar*
65. Edwin James Calvert - 720201 5269 082 - 38 Russel Harvey Road, Woodlands, Mitchell's Plain - *Schroeder*
66. Mchithwa Khumalo - 490817 5292 085 - PO Box 654, Bergville - *Mthethwa*
67. Ron Nyirenda Ngcongwane - 640412 5887 081 - his wife - Ichi Charity Ngcongwane - 680223 0599 089 - and three minor children - Taweni Sam Ngcongwane - 880509 5327 080 - Junior Ngcongwane - 920619 5303 080 - Chimango Nick Ngcongwane - 950809 5089 085 - 13 Benjamin Street, Robertsham - *Nyirenda*
68. Danny Winfield - 500226 5750 084 - and his wife - Nomathamsanqa Cecilia Winfield - 521125 0701 081 - PO Box 10485, Vorna Valley, Midrand - *Ka-Nkomo*
69. Mhlanganisi Mlenga - 1967.03.26 - PO Box 81, Idutywa - *Nikelo*

70. Themba Cyril Makhathini - 550917 5614 085 - 1366 A Emndeni South Location, Kwa-Xuma - *Ntuli*
71. Kompo January Segwe - 460101 5937 080 - 104 Moletsane, Kwa-Xuma - *Mahlonoko*
72. Ephraim Zoyisile Mothobi - 750121 5358 086 - 900 Mofolo North, Dube - *Makhaphela*
73. Auma Annah Ramaele - 640216 0391 084 - 4038/7 Meqheleng, Ficksburg - *Mobe*
74. Bhekizitha Dladla - 650111 5216 088 - PO Box 25, Kwa-Dlangezwa - *Mngadi*
75. Tswaledi Johannes Nkogatse - 630130 5339 083 - PO Box 116, Motetema - *Phala*
76. Helen Nomusa Khuzwayo - 720925 0798 089 - 68 White City, Hambanati Road, Tongaat - *Ngidi*
77. Bhekabakubo Ngongoma - 590612 5411 085 - and his wife - Pitshika Them bani Ngongoma - 641120 0541 087 - Private Bag X5511, Scottburgh - *Zama*
78. Vuyelwa Avis Wotshiki - 730724 0711 087 - T-40 Khayelitsha, Molteno - *Mcitwa*
79. Fanyana Simon Kunene - 500422 5667 085 - PO Box 2414, Newcastle - *Mbatha*
80. Samson Mandla Sibanyoni - 691123 5467 083 - Private Bag X3254, Ogies - *Mokoena*
81. Vusumuzi Vincent Sibiya - 570616 5805 083 - House F 1384, Ntuzuma Township, Kwa-Mashu - *Khanyile*
82. Thomas Mbuyiseni Mthlale - 650522 5438 086 - 432224 Indanda Mission, Inanda - *Majozi*
83. Bheki Duncan Mabizela - 600306 5282 087 - Hlanyathi Primary School, Hlabisa - *Mdlalose*
84. Jayeni John Ntimba - 560322 5444 088 - PO Box 8, Kwalugedlane - *Khoza*
85. Ramaesela Rebecca Nmatle - 321115 0267 086 - 101 Demeer Street, Pietersburg - *Mmatli*
86. Sam July Lekhuleni - 660620 5379 082 - Tweefontein Colliery Hostel, Room 27 A, Witbank - *Mnisi*
87. Mbimbi Motha - 371124 5151 088 - Kwaggafontein, Arnot - *Mabena*
88. Virginia Thembinkosi Nkosi - 740303 0418 080 - PO Box 839, Piet Retief - *Vilakazi*
89. Sicelo Alfred Ngcola - 700816 5833 084 - 548023 Zone 3, Residensia - *Mbele*
90. Frank Moalosi Makgobatlou - 721006 5749 085 - 48-12th Avenue, Alexandra - *Mokgohloa*
91. Nomthandazo Ndzonga - 640911 0646 087 - 442 Lower Cross Roads, Nyanga - *Mangwengwe*
92. Thembinkosi Majwede - 690202 6612 086 - House J 600, Nyanga - *Hondwana*
93. Bhekumuzi Elijah Nkosi - 561027 5775 089 - 453 Mofolo North, Dube - *Ngema*
94. Joseph Biyela - 640229 5493 086 - PO Box 2111, Esikhawini - *Mthembu*
95. Colleen Anne Francis - 1952.05.05 - 43 Percival Road, Hanpden Park, Eastbourne - *Spencer*
96. Nthabiseng Pauline Moloi - 531103 0616 086 - House 18892, Zone 14, Sebokeng - *Potse*

97. Thulani Johannes Mkhabela - 700907 5638 084 - PO Box 1259, Ladysmith - *Mgaga*
98. Tholuoe Martha Lekulo - 280809 0191 085 - 6169 Mpye Street, Tokoza - *Mokoena*
99. Princess Vie Mhlanga - 700704 0687 087 - Private Bag X8520, Esikhawini - *Nyawo*
100. Eucratia Mpete - 710926 0578 085 - 61-4th Avenue, Alexandra - *Phoofolo*
101. Bennet Masupa - 340110 5398 082 - 1559 Lusasa Street, Ngangelizwe Location, Umtata - *Mavundla*
102. Bhekisisa Lyzen Hlophe - 491017 5660 089 - his wife - Sithelepfi Glory Hlophe - 501119 0712 085 - and four minor children - Vumokuhle Sandisiwe Hlophe - 1979.07.15 - Bhekashiye Lethokuhle Nsikayakhe Hlophe - 1981.08.14 - Ziphezinhle Samukelisiwe Siyanda Hlophe - 1983.03.02 - Sicelokuhle Ndabenhle Necebenhle Hlophe - 890102 5289 084 - PO Box 46, Elandslaagte - *Ntarzi*
103. Ashwin Krishna - 680516 5207 081 - PO Box 65423, Reservoir Hills - *Gowraki*
104. Devasagium Chinsamy - 570825 5073 085 - his wife - Kanagavelli Chinsamy - 580925 0227 088 - and three minor children - Natassia Chinsamy - 850422 0151 081 - Nerissa Chinsamy - 850422 0152 089 - Raoul Chinsamy - 831002 5084 083 - PO Box 3140, Stanger - *Govender*
105. Vishal Manilall - 700313 5174 081 - 17 Onyx Road, Everest Heights, Verulam - *Barath*
106. Mnguni Samuel Ndlovu - 530106 5678 085 - Stand No 7721, Magogeni Trust, Shongwe Mission - *Mongwe*
107. Nomasonto Elizabeth Masoeu - 631222 0589 082 - 10 Caproni Street, Stanfield, Standerton - *Nhlapo*
108. Msongela Jackson Mashaba - 561226 5400 082 - PO Box 1212, Shongwe Mission - *Sambo*
109. Sipho Harry Gumede - 471103 53378 086 - and his wife - Them bani Iris Gumede - 511001 0615 088 - PO Box 370, Hibberdene - *Ngcobo*
110. Boyi Albert Dlamini - 391230 5316 088 - 2772 Zone 10, Meadowlands - *Khumalo*
111. Mmanto Francelinah Kapeye - 581219 0371 081 - PO Box 34, Trichardtsdal - *Seerane*
112. Webster Sipho Nkwanyana - 550622 5812 081 - and minor child - Gugulethu Bridgette Nkwanyana - 920706 0330 083 - 676 Legwale Street, PO Kwa-Xuma - *Mbatha*
113. Pieter Motloun - 470822 5505 084 - 36 Yusif Street, Florida Lake, Florida - *Mahlaba*
114. Job Meyomo Chauke - 571119 5319 089 - Plot 1478, Winterveldt - *Mzimba*
115. Carol-Anne Botha - 480913 0146 087 - PO Box 32693, Glenstantia, Pretoria - *Gioia-Botha*
116. Mamjikeleni Mndongwane - 1930.01.22 - Private Bag X105, Ngqeleni - *Nondlobo*
117. Notest Nondatsi Ntyinkala - 420912 0327 088 - 369 Dyakala Street, New Cross Roads Nyanga - *Mzela*
118. Mary Veronica Shongwe - 551231 0693 089 - 302 Kinso Flat, 61 Plein Street, Sunnyside - *Magodiolo*

119. Narebotse James Mokome - 390501 5419 085 - Private Bag X1013, Burgersfort - *Seopela*
120. Peggy Thaba - 731007 0527 086 - PO Box 3248, Pietersburg - *Lekgothoane*
121. Piyake John Jiyane - 600321 5374 081 - Stand 2626, Vezikuhle Village, Siyabuswa - *Mahlangu*
122. Gijimane Henry Mhaule - 540724 5333 085 - PO Box 1104, Hazyview - *Mazibane*
123. David Navigator Mashego - 680624 5638 089 - PO Box 1011, Bushbuckridge - *Brown*
124. Maida Bantahli Pebane - 610528 0445 082 - Private Bag X422, Graskop - *Malatsi*
125. Maanaso Klaas Mashabela - 230417 5121 080 - PO Box 2088, Witbank - *Monaiwa*
126. Bongani Mandla Cele - 631120 5674 083 - H 1009, Umlazi Township, Umlazi - *Zungu*
127. Sibusiso Nicky Phillip Nxumalo - 630923 5656 088 - 10 Bonamour Court, 13th Avenue, Glenwood, Durban - *Duma*
128. Mafologetje Phillip Phala - 670625 5635 084 - 880 Sedibeng Section, Tembisa - *Matjie*
129. Thulani Senzo Nzuza - 750510 5446 083 - PO Box 503, Mtunzini - *Mabaso*
130. Sipho Victor Nqumako - 600416 5693 082 - PO Box 98, Izotsha - *Mbewu*
131. Elphas Madala Lubisi - 510918 5383 084 - PO Box 5017, Nelspruit - *Ngwenya*
132. Ntombizodwa Emma Majeke - 710704 0886 083 - 69 Tshepe Street, Saulsville - *Sekalo*
133. Jerry Bhekisisa Dlamini - 710916 6072 084 - 26 Halelock Road, Pietermaritzburg - *Dimba*
134. Molobela Veronica Masina - 740325 0518 080 - 6319 Block R, Mamelodi West, Pretoria - *Maseko*
135. Philangenkosi Zwelihle Zondo - 750517 5641 084 - PO Box 43217, Inanda - *Mdletshe*
136. Howard Tshotla - 591216 5708 083 - PO Box 468, Pinelands - *Mbandezelo*
137. Potsane Abram Mosopa - 590607 5963 085 - Moeka, Moretele - *Motileng*
138. Maku Patricia Ngomane - 740620 0387 084 - PO Box 2706, White River - *Venat*
139. Zethu Carol Zindela - 750102 0562 088 - PO Box 83, Nqabeni - *Shazi*
140. Oupa Reuben Mkhize - 750612 5394 089 - 178 Sibiko Street, Patanda, Heidelberg - *Nhlapo*
141. Nkathula Michael Ndlwana - 410209 5444 089 - NY-136-5, Guguletu - *Mtwana*
142. Mmalesia Emly Mareletse - 520228 0383 081 - and minor child - Maphoka Patricia Mareletse - 891213 0348 087 - PO Box 11694, Merafong - *Ramatsebe*
143. Velaphi David Dlamama - 630709 5400 084 - his wife - Mirriam Lindiwe Dlamama - 650504 0295 083 - and two minor children - Mzwakhe Gabriel Dlamama - 1987.10.02 - Thembisile Bridget Dlamama - 920229 0151 086 - 11847 Emaphupheni, Daveyton - *Shezi*
144. Fikile Admiral Memeka - 510119 5381 083 - and his wife - Nowonga Patricia Memeka - 550218 0598 088 - 703 Nu 15, Mdantsane Township, Mdantsane - *Nameka*

145. Nkosinomsa Ishmael Mazibuko - 591210 5687 082 - his wife - Emily Mazibuko - 620326 0736 081 - and minor child - Mbali Mazibuko - 910918 0126 088 - 475 B Zone 2, Meadowlands - *Nzima*
146. Shilubane Evelyn Gana - 390625 0184 087 - PO Box 223, Letaba - *Shilubana*
147. Malose Alfred Lehutjo - 450601 5454 087 - and his wife - Iris Buyiswa Lehutjo - 541026 0517 087 - Plot 22, Lowmeadow Farm, Modderfontein - *Mokonyane*
148. Goolam Hoosen - 440628 5094 087 - and his wife - Farida Hoosen - 480715 0116 089 - PO Box 280, Richards Bay - *Cassim*
149. Bafana Rulumeni - 660915 5998 083 - A 393, Umlazi Township, Umlazi - *Bulala*
150. Robert Nkaleko Dube - 730205 5590 080 - PO Box 92004, Inanda - *Mhlongo*
151. Ndaba Israel Khanyile - 580821 5643 082 - PO Box 4745, Durban - *Biyela*
152. Fikile Richard Ngese - 640926 5689 080 - PO Box 43127, Inanda - *Pezisa*
153. Mandla Abednego Zuma - 640801 5744 088 - H1037 Mthini Road, Kwa-Mashu - *Mpulo*
154. Siza Norman Mokoena - 690303 6246 089 - F101 Mkhwanazi Road, Kwa-Mashu - *Mesane*
155. Babakhe Petros Phumuza - 520126 5527 084 - Z413 Avenue, Clermont, Pinetown - *Zondo*
156. Kalabas Charlie Letsoalo - 440831 5190 083 - 1424 Zone 1, Seshego - *Motlanthe*
157. Jonathan Glorius Ngwenya - 610224 5412 086 - PO Box 2348, Esikhawini - *Langwenya*
158. Ambrose Mtshali - 460205 5356 082 - and his wife - Sibongile Constance Mtshali - 470308 0542 082 - E1914 Ntuzuma Township, Kwa-Mashu - *Cele*
159. Petrus Lefa Namanyane - 650729 5640 088 - 2403 Mapetla Extension 1, Tshiawelo - *Senamolele*
160. Nozizwe Jackbeth Mkhuzo Neé Molota - 1322 Mokgethi Street, Khuma Location, Stilfontein - *Mkhuzo Neé Mlotha*
161. Jurgens Jacobus Greef - 500102 5085 088 - his wife - Jeanette Kathleen Greef - 511115 0096 089 - and minor child - Michelle Joy Greef - 880415 0082 086 - PO Box 53, Bedford View - *Gere*
162. Mphikeleli Meshack Mangaliso - 570228 5336 083 - Wellington Court, Flat 301, 34 Leyds Street, Joubertpark - *Mdlalose*

No. 2008

6 December 1996

**INSERTION OF SURNAME IN TERMS OF SECTION 23 OF THE BIRTHS AND DEATHS
REGISTRATION ACT, 1992 (ACT No. 51 OF 1992)**

The Director-General has in respect of the following persons approved the insertion of their surname printed in italics:

1. Venketamah Pillai (1919.01.19) 76 Cooper Street, Greytown - *Reddy*
2. Kamala (1940.10.22) 8 Wapenaar Road, Merrivale, Howick - *Moodley*
3. Chengamma (1924.12.28) 38 Anritsar Road, Mountview, Pietermaritzburg - *Gengan*
4. Lutchmee (1950.05.21) Flat 1 Door 63, Zone 3, Belvedere, Tongaat - *Chetty*
5. Jankee (1949.05.17) 261 Effingham Road, Redhill, Durban - *Sarruppen*
6. Jayarajh (1948.04.03) P O Box 1264, Verulam - *Deeplall*
7. Thooliah (1918.12.10) 422 Trenance Park Drive, Palmview, Phoenix - *Rampersad*
8. Meelambal Naidu (1943.09.18) 15 Silvermount Circle, Moorton, Chatsworth - *Papiah*
9. Mariamma (1935.12.06) 34 Aspern Avenue, Croftdene, Chatsworth - *Govender*
10. Govindamma (1936.10.16) Road 332, Block 101 House 287, Westcliff, Durban - *Narasimulu*
11. Asha Bee Mohamed (1936.08.23) 122 Maple Drive, Trenance Park, Verulam - *Shaik Abdool*
12. Enith Ally (1926.10.15) 122 Maple Drive, Trenance Park, Verulam - *Mohamed*
13. Jugdeyi Woodaychand (1928.06.03) P O Box 4458, Stanger - *Chadhi*
14. Sewdass (1925.10.03) P O Box 4458, Stanger - *Woodaychand*
15. Sporsathi (1930.03.06) 29 Warangal Road, Merebank - *Bisnath*
16. Muniamma Munsami (1949.03.28) 27 Dewstone Road, Whetstone, Phoenix - *Govender*
17. Harribal (1940.11.20) 1 Stanbury Close, Eastbury, Phoenix - *Balbanan*
18. Basdeo (1942.09.01) P O Box 1153, Stanger - *Hurdeo*

19. Jamila Bee (1920.07.18) 123 Alpine Road, Springfield, Durban - Moosruf
20. Rami Moodley (1947.04.04) 71 Road 703, Montford, Chatsworth - Moodley
21. Diloo (1933.12.18) 30 Tronthill Place, Hillgrove, Newlands West - Chirkut
22. Parbathi Kemraj (1931.06.30) 32 Hippo Road, Sea Cow Lake, Durban - Maharaj
23. Jasoda Singh (1919.03.02) P O Box 4372, Mandini - Singh
24. Din Mahomed (1936.12.28) P O Box 922, Verulam - Suliman
25. Faith Frank (1941.08.06) P O Box 1827, Lenasia - Samuel
26. Govindasamy (1915.05.11) 58 Tensing Road, Naidooville Township, Umkomaas, Natal - Naicker
27. Govindammal (1934.09.26) Road 302 House 630, Unit 3, Chatsworth - Govender
28. Devanamma (1941.03.19) 38 Benevolent Street, Croftdene, Chatsworth - Moonsammy
29. Anjalamma (1934.06.08) P O Box 26423, Oaklands, Verulam - Govender
30. Mustapha (1939.05.11) L14 Zone 3, Belvedere, Tongaat - Mohamed
31. Rameshar (1942.06.14) 43 Bluecrest Terrace, Bayview, Chatsworth - Foolchand
32. Daniel (1929.04.06) 12 Buttergreen Gardens, Greenbury, Phoenix - Vandiyar
33. Marrieama Vandiyar (1934.04.10) 12 Buttergreen Gardens, Greenbury, Phoenix - Reddy
34. Osman (1938.07.11) 47 Rudmore Road, Stanmore, Phoenix - Bux
35. Fathima Bee Bee Bux (1941.09.30) 47 Rudmore Road, Stanmore, Phoenix - Hussain
36. Krishnamma (1945.04.25) 166 Ritz Road, Northdene - Dorasamy
37. Chinamma (1942.10.14) 22 Eastbury Drive, Unit 7, Phoenix - Naidu
38. Muniamma (1942.01.09) 24 Citrus Drive, 2 Fingh Court, Isipingo - Pillay
39. Kistamma (1945.03.09) 1 Heron Court, 6 Citrus Drive, Isipingo - Pillay

40. Puspa (1950.05.28) 4 Robin Court, 7 Citrus Drive, Orient Hills, Isipingo - *Pillay*
41. Atchamma (1919.07.01) 76 Ashvale Close, Rydalvale, Phoenix - *Pillay*
42. Tholsiamma (1930.10.07) 86 Dahlia Road, Asherville, Durban - *Naidoo*
43. Nirmala Bhoola (1943.06.16) 21 Delta Road, Asherville - *Ramjee*
44. Polingam (1931.08.27) 20 Green Gardens, Phoenix - *Nadar*
45. Nagaruthanam (1960.06.26) 23 Bankgreen Place, Greenbury, Phoenix - *Nadasen*
46. Rajpathy Ramparsad (1919.06.22) 37 Valley Road, Sea Cow Lake, Durban - *Dhayaram*
47. Ramdularie Ramkrepal (1936.11.21) P O Box 45319, Chatsglen, Durban - *Mahabir*
48. Savithri Yakub (180504 0072 085) 230 Regina Road, Northdale, Pietermaritzburg - *Aothar*
49. Chundervathee Ramsunder (320505 0036 088) 94 Road 601, Arena Park, Chatsworth - *Devnarain*
50. Poobathy Ramalingam (500219 0113 085) 18 Sport Park Close, Shastri Park, Phoenix - *Govindsamy*
51. Muniamma Appana (520913 0066 089) 38 Allen Place, Northcroft, Phoenix - *Pillay*
52. Meenacheama Naidoo (420914 0041 081) 28 Viola Road, Asherville, Durban - *Naidoo*

No. 2012

6 December 1996

BIRTHS AND DEATHS REGISTRATION ACT, 1992 (ACT No. 51 OF 1992)

NOTICE OF RECTIFICATION

ASSUMPTION OF ANOTHER SURNAME IN TERMS OF SECTION 26 OF THE BIRTHS AND DEATHS REGISTRATION ACT, 1992 (ACT No. 51 OF 1992)

Notice is hereby given that Entry No. 60 of Government Notice No. 1924, which was published in *Government Gazette* No. 17617 dated 22 November 1996, is hereby rectified to read as follows:

1. Gunga Sewnarayan—371207 5046 08 3—and his wife Zuleka Bibi Sewnarayan—450612 0127 08 1—Flat 105 Umgeni Heights, 40 Kenville Road, Kenville—***Sheikh***.

**DEPARTMENT OF HOUSING
DEPARTEMENT VAN BEHUISING****No. 1966****6 December 1996****RENT CONTROL ACT, 1976 (ACT No. 80 OF 1976)****EXEMPTION FROM RENT CONTROL OF CERTAIN DWELLINGS WITH DETACHED DOUBLE GARAGE CONVERTED INTO A ONE-ROOMED DWELLING: 32 AND 32A CLARENS ROAD, SEA POINT, CAPE TOWN**

Under section 51 (g) of the Rent Control Act, 1976 (Act No. 80 of 1976) I, Sankie D. Mthembu-Mahanyele, Minister of Housing, hereby declare that the dwellings known as 32 and 32A Clarens Road, Sea Point, Cape Town, with detached double garage converted into a one-roomed dwelling situated on Erf 367, Sea Point, Cape Town, are exempted from rent control.

S. D. MTHEMBU-MAHANYELE**Minister of Housing***Date: 13 November 1996.***No. 1966****6 Desember 1996****WET OP HUURBEHEER (WET No. 80 VAN 1976)****VRYSTELLING VAN HUURBEHEER VAN SEKERE WONINGS MET 'N LOSSTAANDE DUBBELMOTORHUIS
OMSKEP IN 'N EENKAMERWONING: CLARENSWEG 32 EN 32A, SEEPUNT, KAAPSTAD**

Kragtens artikel 51 (g) van die Wet op Huurbeheer, 1976 (Wet No. 80 van 1976), verklaar ek, Sankie D. Mthembu-Mahanyele, Minister van Behuising, hierby dat die wonings bekend as Clarensweg 32 en 32A, Seepunt, Kaapstad, met losstaande motorhuis omskep in 'n eenkamerwoning geleë op Erf 367, Seepunt, Kaapstad, van huurbeheer vrygestel is.

S. D. MTHEMBU-MAHANYELE**Minister van Behuising***Datum: 13 November 1996.***DEPARTMENT OF POSTS, COMMUNICATIONS AND BROADCASTING
DEPARTEMENT VAN POS-, TELEKOMMUNIKASIE EN UITSAAIWESE****No. 2013****6 December 1996****APPOINTMENT OF MEMBERS TO THE BOARD OF THE SOUTH AFRICAN BROADCASTING CORPORATION**

It is hereby notified for general information that the President has under the powers vested in him by sections 4 (2), 4 (3) and 5 (1) of the Broadcasting Act, 1976 (Act No. 73 of 1976), as amended, with effect from 1 December 1996, appointed the following persons as members of the Board of the South African Broadcasting Corporation, for a period of three years:

Prof. P. M. Zulu—Chairperson

Ms B. H. Bam—Vice-Chairperson

Mr F. Beukman

Mrs A. C. P. Boshoff

Ms L. J. Campher

Dr P. Davis

Dr F. J. Kok

Mr M. Langa

Prof. M. V. Mzamane

Mr L. M. Nyhonyha

Dr W. Rowland

Ms M. Sekhukhuni

Rev. G. M. Setiloane

Ms S. V. M. Sisulu

Mr A. H. Sparks

Prof. J. A. Thembela

No. 2013

6 Desember 1996

AANSTELLING VAN LEDE IN DIE RAAD VAN DIE SUID-AFRIKAANSE UITSAAIKORPORASIE

Hiermee word vir algemene inligting bekendgemaak dat die President kragtens die bevoegdheid hom verleen by artikels 4 (2), 4 (3) en 5 (1) van die Uitsaaiwet, 1976 (Wet No. 73 van 1976), soos gewysig, met ingang van 1 Desember 1996 die volgende persone vir 'n tydperk van drie jaar as lede van die Raad van die Suid-Afrikaanse Uitsaaikorporasie aangestel het:

Prof. P. M. Zulu—Voorsitter
Me. B. H. Bam—Visevoorsitter
Mnr. F. Beukman
Mev. A. C. P. Boshoff
Me. L. J. Campher
Dr. P. Davis
Dr. F. J. Kok
Mnr. M. Langa
Prof. M. V. Mzamane
Mnr. L. M. Nyhonyha
Dr. W. Rowland
Me. M. Sekhukhuni
Ds. G. M. Setiloane
Me. S. V. M. Sisulu
Mnr. A. H. Sparks
Prof. J. A. Thembela

**DEPARTMENT OF TRADE AND INDUSTRY
DEPARTEMENT VAN HANDEL EN NYWERHEID**

No. 1976

6 December 1996

STANDARDS ACT, 1993**PROPOSED AMENDMENT OF THE COMPULSORY SPECIFICATION FOR CHILD RESTRAINING DEVICES
FOR USE IN MOTOR VEHICLES**

It is hereby made known under section 22 (3) of the Standards Act, 1993 (Act No. 29 of 1993), that the Minister of Trade and Industry intends to amend the compulsory specification for child restraining devices for use in motor vehicles, published by Government Notice No. 238 of 14 February 1986, by the withdrawal of the compulsory specification and the substitution thereof of the proposed compulsory specification contained in the Schedule.

The purport of the amendment is to incorporate all the amendments to the ECE regulation on which the compulsory specification is based, in the compulsory specification.

Any person who wishes to object to the intention of the Minister to amend the compulsory specification, shall lodge his objection in writing with the President, South African Bureau of Standards, Private Bag X191, Pretoria, 0001, on or before the date two (2) months after publication of this notice.

69 MEESTERS (ENG)

SCHEDULE

PROPOSED AMENDMENT OF THE COMPULSORY SPECIFICATION FOR CHILD-RESTRAINING DEVICES FOR USE IN MOTOR VEHICLES

1 Scope

This specification applies to child-restraint systems that are suitable for installation in power-driven vehicles that have three or more wheels and meet the requirements of SABS 1429:1987, *Motor vehicle safety specification for strength of seats and of their anchorages*, and SABS 1430:1987, *Motor vehicle safety specification for anchorages for restraining devices in motor vehicles*, and that are not intended for use with folding (tip-up) seats or with side-facing seats.

NOTES

1 This safety specification is based on ECE Regulation No. 44 of 22 January 1981, *Uniform provisions concerning the approval of restraining devices for child occupants of power-driven vehicles ("Child restraints")*, including

Revision 1/Addendum 43/Amendment 1 of 16 November 1982,
Revision 1/Addendum 43/Amendment 1/Corrigendum 1 of 19 March 1984,
Revision 1/Addendum 43/Amendment 2 of 18 April 1986,
Revision 1/Addendum 43/Amendment 3 of 15 December 1987,
Revision 1/Addendum 43/Amendment 4 of 16 February 1989,
Revision 1/Addendum 43/Amendment 4/Corrigendum 1 of 9 October 1992,
Revision 1/Addendum 43/Amendment 5 of 17 April 1991, and
Revision 1/Addendum 43/Corrigendum 1 of 9 October 1992.

2 For ease of cross-reference, the numbering system used in the ECE Regulation has been retained. The text of those clauses/subclauses that are not applicable to South African conditions has been deleted and replaced by the word "Reserved".

2 Definitions

For the purposes of this specification, the following definitions apply;

2.1 child-restraint system; restraint; restraining device: Means an arrangement of components which can comprise the combination of straps or flexible components with a securing buckle, adjusting devices, attachments, and, in some cases, a supplementary device such as a carry-cot, an infant carrier, a supplementary chair or an impact shield or both, capable of being anchored inside a power-driven vehicle. It is so designed as to diminish the risk of injury to the wearer, in the event of a collision or of an abrupt deceleration of the vehicle, by limiting the mobility of the wearer's body.

2.1.1 Child restraints fall into four mass groups:

2.1.1.1 Group 0 for children of mass less than 10 kg;

2.1.1.2 Group I for children of mass from 9 kg to 18 kg;

2.1.1.3 Group II for children of mass from 15 kg to 25 kg;

2.1.1.4 Group III for children of mass from 22 kg to 36 kg.

2.1.2 Child restraints fall into three categories:

2.1.2.1 A **universal** category, for use on all types of vehicle;

2.1.2.2 A **semi-universal** category, for use on certain specified types of vehicle;

2.1.2.3 A **specific-vehicle** category, for use on one single vehicle type equipped with the anchorages designed by the manufacturer of the vehicle, or by the manufacturer of the child-restraint system.

2.1.3 Child-restraint systems can be of two classes:

- An **Integral class** that comprises a combination of straps or flexible components with a securing buckle, an adjusting device, attachments, and, in some cases, a supplementary chair or an impact shield or both, that is capable of being anchored by its own integral strap or straps;
- A **non-Integral class** that can comprise a partial restraint (see 2.1.3.1), which, when used in conjunction with an adult seat belt that passes around the body of the child or restrains the device in which the child is placed, forms a complete restraint system.

2.1.3.1 partial restraint: Means a device such as a booster cushion (see 2.1.3.2), which, when used in conjunction with an adult seat belt that passes around the body of the child or restrains the device in which the child is placed, forms a complete restraint system.

2.1.3.2 booster cushion: Means a firm cushion that can be used with an adult seat belt and that is restrained by either that seat belt or by separate means.

2.1.3.3 guide strap: Means a strap that constrains the shoulder strap of the adult seat belt in a position to suit the child and where the effective position at which the shoulder strap changes direction, can be adjusted by means of a device that can be moved up and down the strap to locate the wearer's shoulder, and then locked into that position.

NOTE – This guide strap is not meant to carry a significant part of the dynamic load.

2.2 child-safety chair: Means a child restraint that incorporates a chair in which the child is held.

2.3 belt: Means a child restraint that comprises a combination of straps with a securing buckle, adjusting devices and attachments.

2.4 chair: Means a structure that is a constituent part of the child restraint and is intended to accommodate a child in a seated position.

2.4.1 carry-cot: Means a restraint system that is intended to accommodate and restrain the child in a supine or prone position, with the child's spine perpendicular to the median longitudinal plane of the vehicle, and that is so designed as to distribute the restraining forces over the child's head and body (excluding its limbs) in the event of a frontal collision or of an abrupt deceleration.

2.4.2 carry-cot restraint: Means a device that is used to restrain a carry-cot by securing it to the structure of the vehicle.

2.4.3 infant carrier: Means a restraint system that is intended to accommodate the child in a rearward-facing semi-recumbent position and that is so designed as to distribute the restraining forces over the child's head and body (excluding its limbs) in the event of a collision or of an abrupt deceleration.

2.5 chair support: Means that part of a child restraint by which the chair can be raised.

2.6 child support: Means that part of a child restraint by which the child can be raised within the child restraint.

2.7 impact shield: Means a device that is secured in front of the child and that is designed to distribute the restraining forces over the greater part of the height of the child's body in the event of a frontal impact.

2.8 strap: Means a flexible component that is designed to transmit forces.

2.8.1 lap strap: Means a strap that, either in the form of a complete belt or in the form of a component of such a belt, passes across the front of, and is intended to restrain, the child's pelvic region.

2.8.2 shoulder restraint: Means that part of a belt which is intended to restrain the child's upper torso.

2.8.3 crotch strap: Means a strap (or divided straps, where two or more pieces of webbing make up the strap) that is attached to the child restraint and the lap strap and is so positioned as to pass between the child's thighs; it is designed to prevent the child from sliding under the lap belt in normal use and to prevent the lap belt from moving up off the pelvis in an impact.

2.8.4 child-restraining strap: Means a strap that is a constituent part of a belt and that is intended to restrain only the body of the child.

2.8.5 child-restraint attachment strap: Means a strap that attaches the child restraint to the structure of the vehicle and that can be a part of the vehicle-seat retaining device.

2.8.6 harness belt: Means a belt assembly that comprises a lap belt, shoulder restraints and, if fitted, a crotch strap.

2.8.7 Y-shaped belt: Means a belt where the combination of straps is formed by a strap to be guided between the child's legs and a strap for each shoulder.

2.9 buckle: Means a quick-release device that enables the child to be held by the restraint or the restraint to be held by the structure of the car, and that can be opened quickly. The buckle can incorporate the adjusting device.

2.9.1 enclosed buckle release button: Means a buckle release button such that it is not possible to release the buckle, using a sphere of diameter 40 mm.

2.9.2 non-enclosed buckle release button: Means a buckle release button such that it is possible to release the buckle, using a sphere of diameter 40 mm.

2.10 adjusting device: Means a device that is intended to enable a restraint or its attachments to be adjusted to the physique of the wearer, or to the configuration of the vehicle, or to both. The adjusting device can be a part of the buckle, or can be a retractor or any other part of the safety belt.

2.10.1 quick adjuster: Means an adjusting device that can be operated by one hand, in one smooth movement.

2.11 attachments: Means parts of the child restraint, including securing components, that enable the child restraint to be firmly secured to the vehicle structure, either direct or through the vehicle seat.

2.12 energy absorber: Means a device that is designed to dissipate energy independently of, or jointly with, a strap and that forms part of a child restraint.

2.13 retractor: Means a device that is designed to accommodate a part or the whole of the strap of a child restraint. The term covers the following devices:

2.13.1 automatically locking retractor: Means a retractor that allows extraction of the desired length of a strap and, when the buckle is fastened, automatically adjusts the strap to the wearer's physique, further extraction of the strap without voluntary intervention by the wearer being prevented.

2.13.2 emergency-locking retractor: Means a retractor that does not restrict the belt wearer's freedom of movement in normal driving conditions. Such a device has length-adjusting devices that automatically adjust the strap to the wearer's physique, and a locking mechanism that is actuated in an emergency by:

2.13.2.1 deceleration of the vehicle, extraction of the strap from the retractor, or any other automatic means (single sensitivity); or

2.13.2.2 a combination of any of these means (multiple sensitivity).

2.14 restraint anchorages: Means those parts of the vehicle structure or seat structure to which the child-restraint attachments are secured.

2.14.1 additional anchorage: Means a part of the vehicle structure or of the vehicle seat structure, or any other part of the vehicle, to which a child restraint is intended to be secured and that is additional to the anchorage covered by SABS 1430:1987, *Motor vehicle safety specification for anchorages for restraining devices in motor vehicles*.

2.15 forward-facing: Means facing in the normal direction of travel of the vehicle.

2.16 rearward-facing: Means facing in the direction opposite to the normal direction of travel of the vehicle.

2.17 Inclined position: Means a special position of the chair, which allows the child to recline.

2.18 lying down/supine/prone position: Means a position in which at least the child's head and body are on a horizontal surface when the child is at rest in a restraint.

2.19 child-restraint type: Is descriptive of child restraints that do not differ in such essential respects as:

2.19.1 the category, and the mass group(s) for which, and the position and orientation (as defined in 2.15 and 2.16) in which, the restraint is intended to be used;

2.19.2 the geometry of the child restraint;

2.19.3 the dimensions, mass, material and colour of

- the seat,
- the padding, and
- the impact shield;

2.19.4 the material, weave, dimensions and colour of the straps;

2.19.5 the rigid components (buckle, attachments, etc.).

2.20 vehicle seat: Means a structure, that can be or need not be integral with the vehicle structure, complete with trim and intended to seat one adult person. In this connection:

2.20.1 group of vehicle seats: Means either a bench seat or a plurality of seats that are separate but side by side (i.e. so fixed that the front anchorages of one seat are in line with the front or rear anchorages of another seat or on a line that passes between those anchorages), each seat accommodating one or more seated adult persons;

2.20.2 vehicle bench seat: Means a structure complete with trim and intended to seat more than one adult person;

2.20.3 vehicle front seats: Means the group of vehicle seats that are situated foremost in the passenger compartment, i.e. that have no other seat direct in front of them;

2.20.4 vehicle rear seats: Means fixed, forward-facing vehicle seats that are situated behind another group of vehicle seats.

2.21 adjustment system: Means the complete device by which a vehicle seat or its parts can be adjusted to suit the physique of the seat's adult occupant; this device can, in particular, permit one or more of the following:

2.21.1 longitudinal displacement;

2.21.2 vertical displacement;

2.21.3 angular displacement.

2.22 vehicle seat anchorage: Means the system, including the affected parts of the vehicle structure, by which a vehicle seat as a whole is secured to the vehicle structure.

2.23 seat type: Is descriptive of a category of vehicle seats that do not differ in such essential respects as:

2.23.1 the shape, dimensions and materials of the seat structure;

2.23.2 the types and dimensions of the seat adjustment and locking systems; and

2.23.3 the type and dimensions of the adult safety-belt anchorage on the seat, of the seat anchorage, and of the affected parts of the vehicle structure.

2.24 displacement system: Means a device that enables a vehicle seat or one of its parts to be displaced angularly or longitudinally, without a fixed intermediate position, to facilitate the entry and exit of passengers and the loading and unloading of objects.

2.25 locking system: Means a device that ensures that a vehicle seat and its parts are maintained in the position of use.

2.26 lock-off device: Means a device that locks and prevents movement of one section of the webbing of the belt. When supplied with group I restraints, the device allows compliance with 6.2.9.

3 Reserved

4 Markings

4.1 A child restraint shall be clearly and indelibly marked with the manufacturer's name, trade name or trade mark, and part number and a means of identification for traceability purposes.

4.2 One of the plastics parts of the child-restraint device (such as the shell, impact shield, booster cushion, etc., other than the belt(s) or harness), shall be marked clearly (and indelibly) with the year of production.

4.3 If the restraint is to be used in combination with an adult safety belt, the correct routing of the webbing shall be clearly indicated by means of a drawing permanently attached to the restraint.

5 Reserved

6 General requirements

6.1 Positioning and securing on the vehicle

6.1.1 The use of child restraints of the "universal" and "specific-vehicle" categories is permitted in front and rear seating positions if the restraints are fitted in conformity with the manufacturer's instructions.

6.1.2 The use of child restraints of the "semi-universal" category is permitted as prescribed in 6.1.2.1 and 6.1.2.2:

6.1.2.1 In the case of forward-facing devices, in the rear adult seating positions.

6.1.2.2 In the case of rearward-facing devices, in the front adult seating positions.

6.1.3 Depending on the category to which it belongs, the child restraint shall be secured to the vehicle structure or to the seat structure:

6.1.3.1 for the "universal" category: only by means of the anchorages prescribed in SABS 1430:1987 (see 2.14.1);

6.1.3.2 for the "semi-universal" category: by means of the lower anchorages prescribed in the said SABS 1430 and additional anchorages that meet the recommendation of annex 11 to this specification;

6.1.3.3 for the "specific-vehicle" category: by means of the anchorages designed by the manufacturer of the vehicle or by the manufacturer of the child restraint.

6.1.3.4 In the case of child-restraining straps or child-restraint attachment straps that utilize belt anchorages to which an adult belt or belts are already fitted, the test authority shall check that:

- The effective adult anchorage position complies with the said SABS 1430;
- Effective operation of both devices is not hindered by the other;
- The buckles of the adult system and the additional system are not interchangeable.

In the case of child-restraint systems that utilize bars (or extra devices attached to the anchorages that comply with the said SABS 1430) that move the effective anchorage position outside the scope of SABS 1430, the following points shall apply:

- The test authority shall apply the requirements of annex 11 to this specification, to the bar and to the fastenings;
- The bar shall be included in the dynamic test, with the loading being applied to the mid-position of the bar and to its greatest extension, if the bar is adjustable;
- The effective position and operation of any adult anchorage by which the bar is fixed shall not be impaired.

6.1.4 The child restraint may itself be secured by an adult safety belt with or without a retractor, but such adult seat belt shall meet the requirements of SABS 1080:1983, *Restraining devices (safety belts) for occupants of adult build in motor vehicles (Revised requirements)*, or of any equivalent standard in force.

6.1.5 The child-restraint manufacturer shall declare in written form that the toxicity of the materials that are used in the manufacture of restraint systems and that are accessible to the restrained child is in conformity with the relevant parts of CEN *Safety of toys* (June 1982). Tests to confirm the validity of the declaration may be carried out at the discretion of the test authority. This subclause does not apply to restraint devices of groups II and III.

NOTE – The relevant CEN specifications can be obtained from CEN, 2 Rue Bréderode B.P.5, B 1000 Bruxelles, Belgium, or from the SABS.

6.1.6 The child-restraint manufacturer shall declare in written form that the flammability of the materials used to manufacture the restraint is in conformity with the relevant paragraphs of the ECE Consolidated Resolution on the construction of vehicles (R.E.3) (document TRANS/SC1/WP29/78, paragraph 1.42). Tests to confirm the validity of the declaration may be carried out at the discretion of the test authority.

6.2 Configuration

6.2.1 The configuration of the restraint shall be such that:

6.2.1.1 The restraint gives the required protection in any intended position of the restraint system;

6.2.1.2 The child is easily and quickly installed and removed; in the case of a child-restraint system in which the child is restrained by means of a harness belt or a Y-shaped belt without a retractor, each shoulder restraint and lap strap shall be capable of movement relative to one another during the procedure prescribed in 7.2.1.4.

In these cases, the belt assembly of the child-restraint system may be designed with two or more connecting parts;

6.2.1.3 Setting of the restraint in the inclined position, if possible, can be performed without readjustment of the straps. A deliberate hand-action shall be required in order to put the restraint in the inclined position;

6.2.1.4 A group I restraint system shall keep the child so positioned that the required protection is provided, even when the child is asleep.

6.2.2 All restraint devices of groups I, II and III restraint systems shall be such that they support the child's pelvis in the event of a collision.

6.2.3 All straps of the restraint shall be so placed that they cannot cause discomfort to the child during normal use or assume a dangerous configuration. The distance between the shoulder straps in the vicinity of the neck should be at least the width of the neck of the appropriate test manikin.

6.2.4 The assembly shall not subject weak parts of the child's body (abdomen, crotch, etc.) to excessive stresses. The design shall be such that compression loads are not imposed on the crown of the child's head in the event of a collision.

6.2.5 The child restraint shall be so designed and installed as:

6.2.5.1 to minimize the danger of injury to the child and to other occupants of the vehicle through, for example, sharp edges or protrusions (as defined in SABS 1047:1984, *Motor vehicle safety standard specification for interior fittings (passenger cars)*);

6.2.5.2 not to exhibit sharp edges or protrusions that are liable to cause damage to vehicle-seat covers or to occupants' clothing;

6.2.5.3 not to subject weak parts of the child's body (abdomen, crotch, etc.) to the supplementary inertial forces that the restraint sets up;

6.2.5.4 to ensure that the restraint's rigid parts do not, at points where they are in contact with straps, exhibit sharp edges that are capable of abrading the straps.

6.2.6 Any part made separable to enable components to be fixed and detached shall be so designed as to avoid any risk of incorrect assembly and use, as far as possible. Devices that lock the adult seat belts, if any, shall be permanently attached to the restraint system for which they are intended to be used.

6.2.7 Where a child restraint of group I and group II and of groups I and II combined, includes a chair back, the internal height of the latter, determined in accordance with the diagram in annex 12 to this specification, shall be not less than 500 mm.

6.2.8 Only automatically locking retractors or emergency-locking retractors may be used.

6.2.9 In the case of group I restraints, it shall not be possible for the child to easily loosen that part of the system that restrains the pelvis after the child has been installed; any device that is designed to restrain the pelvis shall be permanently attached to the child-restraint system.

6.2.10 A child restraint may be designed for use in more than one mass group, provided that it is able to satisfy the requirements laid down for each of the groups concerned.

6.2.11 Child restraints with retractor

In the case of a child restraint that incorporates a retractor, the retractor shall have met the requirements of 7.2.3.

6.2.12 In the case of booster cushions, the ease with which the straps and tongue of an adult belt pass through the fixture points shall be examined. This applies in particular to booster cushions that are designed for the front seats of cars, and which may have long semi-rigid stalks. The fixed buckle should not be allowed to pass through the fixture points of booster seats, or to permit a lie of belt completely different from that of the test trolley.

6.2.13 to 6.2.20 Reserved

7 Particular requirements

7.1 Provisions applicable to the assembled restraint

7.1.1 Resistance to corrosion

7.1.1.1 A complete child restraint, or the parts thereof that are liable to corrode, shall be subjected to the corrosion test specified in 8.1.1.

7.1.1.2 After the corrosion test as prescribed in 8.1.1.1 and 8.1.1.2, no sign of deterioration that is likely to impair the proper functioning of the child restraint, and no significant corrosion, shall be visible to the unaided eye of a qualified observer.

7.1.2 Energy absorption

7.1.2.1 All surfaces of a restraint that are liable to be impacted by the head or face shall comply with the requirements of the said SABS 1047 (see 6.2.5.1).

7.1.3 Overturning

7.1.3.1 The child restraint shall be tested as prescribed in 8.1.2; the test manikin shall not fall out of the restraint and, when the test seat is in the upside-down position, the manikin's head shall not move more than 300 mm from its original position in a vertical direction relative to the test seat.

7.1.4 Dynamic test

7.1.4.1 General

The child restraint shall be subjected to the dynamic tests as prescribed in 8.1.3.

7.1.4.1.1 Child restraints of the "universal" and "semi-universal" categories shall be tested on the test trolley by means of the test seat prescribed in annex 6 to this specification, and in conformity with 8.1.3.1.

7.1.4.1.2 Child restraints of the "specific-vehicle" category shall be tested either in a vehicle body shell on the test trolley, as prescribed in 8.1.3.2, or on a complete vehicle, as prescribed in 8.1.3.3.

7.1.4.1.3 The dynamic test shall be performed on child restraints that have not previously been under load.

7.1.4.1.4 During the dynamic test, no part of the child restraint that actually helps to keep the child in position shall break, and no buckles or locking system or displacement system shall release.

7.1.4.1.5 In the case of a restraint of the "non-integral class" the seat belt used shall be the standard belt and its anchorage brackets shall be as prescribed in annex 13 to this specification.

7.1.4.2 Chest acceleration

7.1.4.2.1 The resultant chest acceleration shall not exceed 540 m/s^2 , except during periods whose sum does not exceed 3 ms.

7.1.4.2.2 The vertical component of the acceleration from the abdomen towards the head shall not exceed 295 m/s^2 , except during periods whose sum does not exceed 3 ms.

NOTE – Chest acceleration limits do not apply when the "newborn" test manikin is being used.

7.1.4.3 Abdominal penetration

7.1.4.3.1 During the verification described in 5.3 of annex 8 to this specification, there shall be no visible sign of penetration of the modelling clay in the abdomen, that has been caused by any part of the restraining device.

NOTE – Because the "newborn" test manikin is not fitted with any abdominal insert, only a subjective analysis can be used as a guide to abdominal penetration.

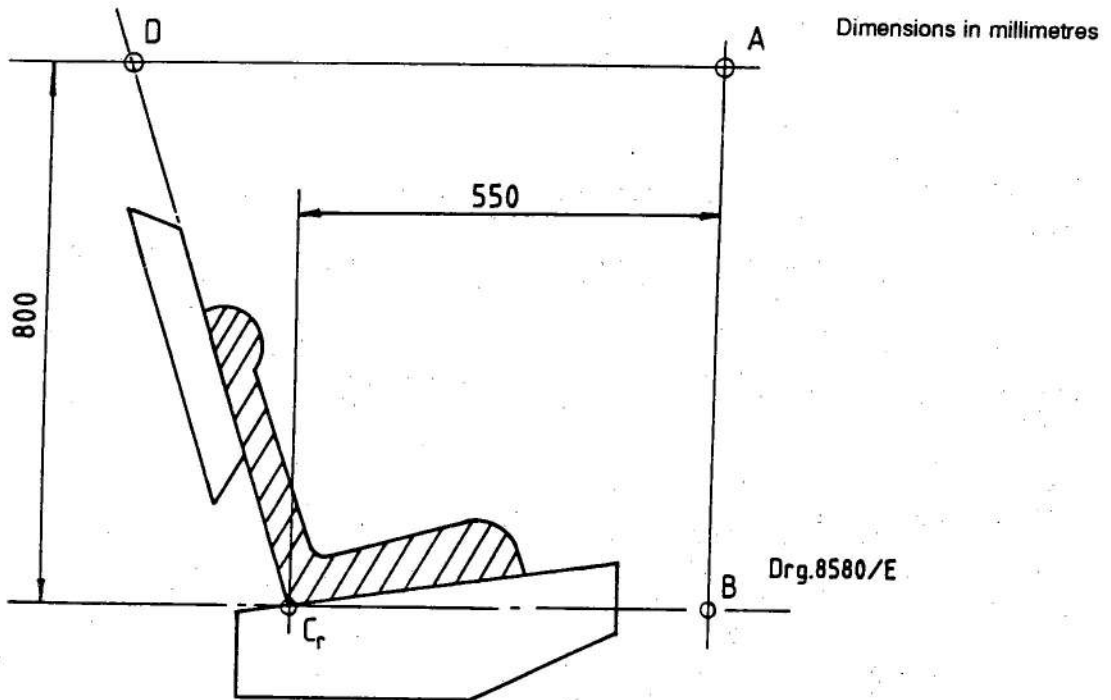
7.1.4.4 Manikin displacement

7.1.4.4.1 Child restraints of the "universal" and "semi-universal" categories:

7.1.4.4.1.1 Groups I, II and III

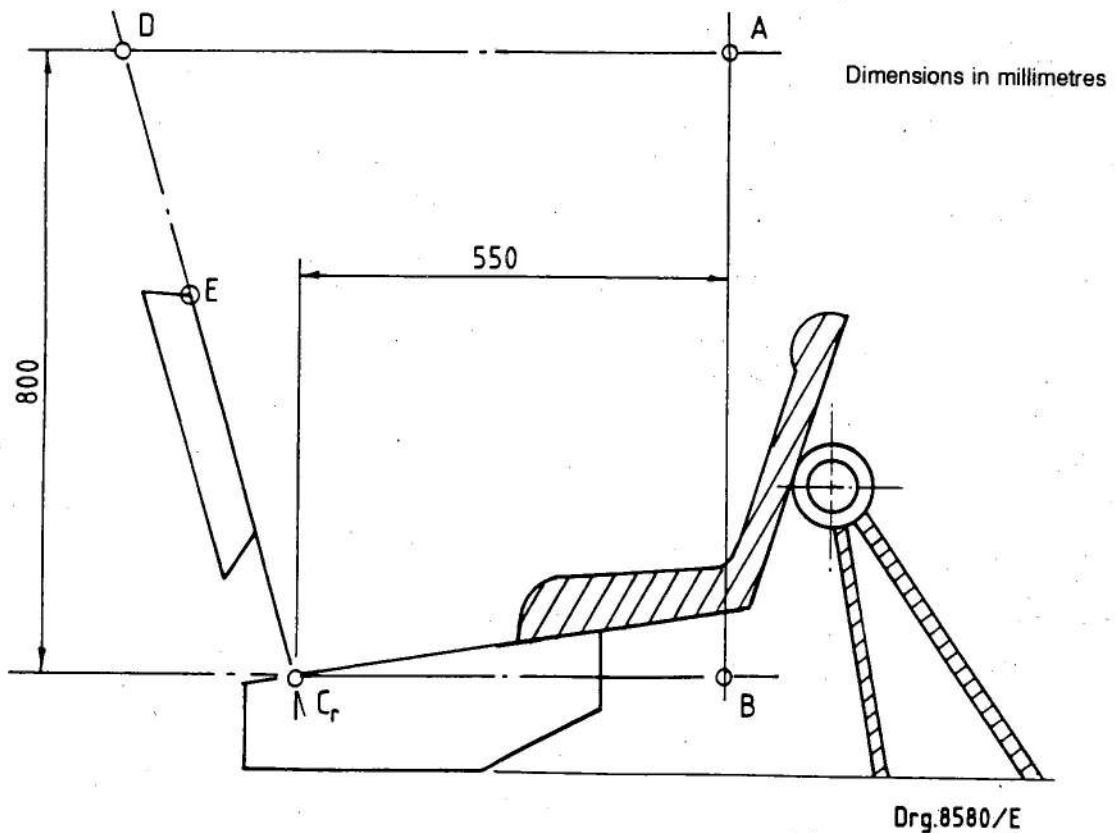
7.1.4.4.1.1.1 Forward-facing devices

The head of the test manikin shall not pass beyond the planes BA and DA, as defined in the figure below:



7.1.4.4.1.1.2 Rearward-facing devices

The head of the test manikin shall not pass beyond the planes AD and DC_r , as defined in the figure below:



7.1.4.4.1.2 Group 0

The test manikin, excluding its limbs, shall be retained within the restraint system and shall not overlap the planes indicated below:

- For rearward-facing devices mounted against the instrument panel:

Planes AD and DC,

- For rearward-facing devices not mounted against the instrument panel, and for carry-cots:

Planes AB, AD and DE

7.1.4.4.2 Child restraints of the "specific-vehicle" category: when a child restraint of this category is tested in a complete vehicle or in a vehicle body shell, the head of the test manikin shall not come into contact with any part of the vehicle, except as follows: If there is such contact by the head of the test manikin, the speed of impact of the head shall be less than 24 km/h and the part contacted shall meet the requirements for energy-dissipating material laid down in the said SABS 1047 (see 6.2.5.1).

7.2 Provisions applicable to individual components of the restraint

7.2.1 Buckle

7.2.1.1 The buckle shall be so designed as to preclude any possibility of incorrect manipulation. This means, *inter alia*, that it shall not be possible for the buckle to be left in a partially closed position; it shall not be possible to exchange the buckle parts inadvertently when the buckle is being locked; the buckle shall only lock when all parts are engaged. Wherever the buckle is in contact with the child, it shall not be narrower than the minimum width of strap as specified in 7.2.4.1.1. This subclause is not applicable to belt assemblies already approved in accordance with SABS 1080:1983, *Restraining devices (safety belts) for occupants of adult build in motor vehicles (Revised requirements)*, or any equivalent standard in force.

7.2.1.2 The buckle, even when not under tension, shall remain closed whatever its position. It shall be easy to operate and to grasp. It shall be possible to open the buckle by pressure on a button or on a similar device. The surface to which this pressure is applied shall have, in the position of actual unlocking: for enclosed devices, an area of not less than 4,5 cm² with a width of not less than 15 mm; and for non-enclosed devices, an area of 2,5 cm² with a width of not less than 10 mm. The buckle release area shall be coloured red. No other part of the buckle shall be of this colour.

7.2.1.2.1 Deleted

7.2.1.2.2 Deleted

7.2.1.3 The buckle release area shall be red; no other part of the buckle shall be of this colour.

7.2.1.4 It shall be possible to release the child from the restraint by means of a single operation on a single buckle. In the case of a group 0 restraint, the child may be removed together with devices such as an infant carrier/carry-cot/carry-cot restraint, provided that the child-restraint system can be released by operation of a maximum of two buckles.

7.2.1.5 In the case of groups II and III restraints, the buckle shall be so placed that the child occupant can reach it. In addition, the buckle shall, for all groups, be so placed that its purpose and mode of operation are immediately obvious to a rescuer in an emergency.

7.2.1.6 Opening of the buckle shall enable the child to be removed independently of the "chair", "chair support" or "impact shield", if fitted. The crotch strap shall be released by operation of the same buckle.

7.2.1.7 The buckle shall be capable of withstanding repeated operation and shall, before the dynamic tests prescribed in 8.1.3, undergo a test that comprises 5 000 opening and closing cycles under normal conditions of use.

7.2.1.8 The buckle shall be subjected to the following tests of opening:

7.2.1.8.1 Test under load

7.2.1.8.1.1 A child restraint that has already undergone the dynamic tests prescribed in 8.1.3 shall be used for this test.

7.2.1.8.1.2 The force required to open the buckle in the test prescribed in 8.2.1.1 shall not exceed 60 N.

7.2.1.8.2 No-load test

7.2.1.8.2.1 A buckle that has not previously been subjected to a load shall be used for this test. The force needed to open the buckle when it is not under load shall be not less than 10 N in the test prescribed in 8.2.1.2.

7.2.2 Adjusting device

7.2.2.1 The range of adjustment shall be sufficient to permit correct adjustment of the child restraint throughout the mass group for which the restraint is intended and to permit satisfactory installation in all specified vehicle models.

7.2.2.2 All adjusting devices shall be of the "quick adjuster" type, except that adjusting devices used only for the initial installation of the restraint in the vehicle may be of other than the "quick adjuster" type.

7.2.2.3 Devices of the "quick adjuster" type shall be easy to reach when the child restraint is correctly installed and the child or test manikin is in position.

7.2.2.4 A device of the "quick adjuster" type shall be easily adjustable to the child's physique. In particular, in a test performed in accordance with 8.2.2.1, the force required to operate a manual adjusting device shall not exceed 50 N.

7.2.2.5 Two samples of the child-restraint adjusting devices shall be tested as prescribed in 8.2.3.

7.2.2.5.1 The amount of strap slip shall not exceed 25 mm for one adjusting device or 40 mm for all adjusting devices.

7.2.2.6 The device shall not break or become detached when tested as prescribed in 8.2.2.1.

7.2.3 Retractors

7.2.3.1 Automatically locking retractors

7.2.3.1.1 The strap of a belt equipped with an automatically locking retractor shall not unwind by more than 30 mm between locking positions of the retractor. After a rearward movement of the wearer, the belt shall either remain in its initial position or return to that position automatically on subsequent forward movement of the wearer.

7.2.3.1.2 If the retractor is part of a lap strap, the retracting force of the strap shall be not less than 7 N, as measured in the free length between the test manikin and the retractor, as prescribed in 8.2.4.1. If the retractor is part of a shoulder restraint, the retracting force of the strap shall be not less than 2 N and not more than 7 N, as similarly measured. If the strap passes through a guide or pulley, the retracting force shall be measured in the free length between the test manikin and the guide or pulley.

If the assembly incorporates a manually or an automatically operated device that prevents the strap from being completely retracted, that device shall not be in operation when these measurements are effected.

7.2.3.1.3 The strap shall be repeatedly withdrawn from the retractor and allowed to retract, in the conditions prescribed in 8.2.4.2, until 5 000 cycles have been completed. The retractor shall then be subjected to the corrosion test described in 8.1.1 and to the dust-resistance test described in 8.2.4.5. It shall then satisfactorily complete a further 5 000 cycles of withdrawal and retraction. After the above tests, the retractor shall continue to operate correctly and to meet the requirements of 7.2.3.1.1 and 7.2.3.1.2.

7.2.3.2 Emergency-locking retractors

7.2.3.2.1 An emergency-locking retractor shall, when tested as prescribed in 8.2.4.3, satisfy the conditions below:

7.2.3.2.1.1 It shall be locked when the deceleration of the vehicle reaches $4,4 \text{ m/s}^2$.

7.2.3.2.1.2 It shall not lock for strap accelerations of less than $7,8 \text{ m/s}^2$, as measured in the axis of strap extraction.

7.2.3.2.1.3 It shall not lock when its sensing device is tilted by not more than 12° in any direction, from the installation position specified by the manufacturer of the retractor.

7.2.3.2.1.4 It shall lock when its sensing device is tilted by more than 27° in any direction, from the installation position specified by the manufacturer of the retractor.

7.2.3.2.2 Where the operation of a retractor depends on an external signal or power source, the design shall ensure that the retractor locks automatically upon failure or interruption of that signal or power source.

7.2.3.2.3 A multiple-sensitivity emergency-locking retractor shall meet the requirements set out above. In addition, if one of the sensitivity factors relates to strap extraction, locking shall have occurred at a strap acceleration of $14,7 \text{ m/s}^2$, as measured in the axis of strap extraction.

7.2.3.2.4 In the tests referred to in 7.2.3.2.1.1 and 7.2.3.2.3, the amount of strap extraction that occurs before the retractor locks shall not exceed 50 mm, starting at the length of unwinding specified in 8.2.4.3.1. In the test referred to in 7.2.3.2.1.2, locking shall not occur during the 50 mm of strap extraction, starting at the length of unwinding specified in 8.2.4.3.1.

7.2.3.2.5 If the retractor is part of a lap strap, the retracting force of the strap shall be not less than 7 N, as measured in the free length between the test manikin and the retractor, as prescribed in 8.2.4.1. If the retractor is part of a shoulder restraint, the retracting force of the strap shall be not less than 2 N and not more than 7 N, as similarly measured. If the strap passes through a guide or pulley, the retracting force shall be measured in the free length between the manikin and the guide or pulley. If the assembly incorporates a manually or an automatically operated device that prevents the strap from being completely retracted, that device shall not be in operation when these measurements are effected.

7.2.3.2.6 The strap shall be repeatedly withdrawn from the retractor and allowed to retract, in the conditions prescribed in 8.2.4.2, until 40 000 cycles have been completed. The retractor shall then be subjected to the corrosion test described in 8.1.1 and to the dust-resistance test described in 8.2.4.5. It shall then satisfactorily complete a further 5 000 cycles of withdrawal and retraction (making 45 000 cycles in all). After the above tests, the retractor shall continue to operate correctly and to meet the requirements of 7.2.3.2.1 to 7.2.3.2.5.

7.2.4 Straps

7.2.4.1 Width

7.2.4.1.1 The minimum width of the child-restraint straps shall be 25 mm for groups 0 and I restraints, and 38 mm for groups II and III restraints.

These dimensions shall be measured during the strap strength test prescribed in 8.2.5.1, without stopping the machine and under a load equal to 75 % of the breaking load of the strap.

7.2.4.2 Strength after room conditioning

7.2.4.2.1 On two sample straps conditioned as prescribed in 8.2.5.2.1, the breaking load of the strap, determined as prescribed in 8.2.5.1.2, shall not be less than 4,8 kN for groups 0 and I restraints and 9,6 kN for groups II and III restraints.

7.2.4.2.2 The difference between the breaking loads of the two samples shall not exceed 10 % of the greater of the two breaking loads measured.

7.2.4.3 Strength after special conditioning

7.2.4.3.1 On two straps conditioned as prescribed in one of the provisions of 8.2.5.2 (except 8.2.5.2.1), the breaking load of the strap shall be not less than 75 % of the average of the loads determined in the test referred to in 8.2.5.1.

7.2.4.3.2 In addition, the breaking load shall be not less than 3,6 kN for restraints of groups 0 and I, 1,5 kN for those of group II, and 7,2 kN for those of group III.

7.2.4.3.3 The testing authority may dispense with one or more of these tests if the composition of the material used, or information already available, renders the test or tests superfluous.

7.2.4.3.4 The abrasion conditioning procedure of type 1 defined in 8.2.5.2.6 shall be performed only when the microslip test given in 8.2.3 gives a result above 50 % of the limit prescribed in 7.2.2.5.1.

7.2.4.4 Delete

7.2.4.5 Delete

7.2.4.6 Delete

7.2.5 Lock-off device

7.2.5.1 The lock-off device shall be permanently attached to the child restraint.

7.2.5.2 The lock-off device shall not impair the durability of the adult belt.

7.2.5.3 The lock-off device shall not prevent the rapid release of the child.

8 Description of tests

8.1 Tests of the assembled restraint

8.1.1 Corrosion

8.1.1.1 The metal items of the child restraint shall be positioned in a test chamber as prescribed in annex 4 to this specification. In the case of a child restraint that incorporates a retractor, the strap shall be unwound to its full length minus 100 mm $\pm$ 3 mm. Except for short interruptions that might be

necessary, for example to check and replenish the salt solution, the exposure test shall proceed continuously for a period of 50 h.

8.1.1.2 On completion of the exposure test, the metal items of the child restraint shall be gently washed, or dipped, in clean running water of a temperature not higher than 38 °C, to remove any salt deposit that might have formed, and then allowed to dry at room temperature for 24 h before inspection in accordance with 7.1.1.2.

8.1.2 Overturning

8.1.2.1 The test manikin shall be placed in the restraint installed in accordance with this specification and taking into account the manufacturer's instructions and with the standard slack as specified in 8.1.3.6.

8.1.2.2 The restraint shall be fastened to the test seat or vehicle seat. The entire seat shall be rotated around a horizontal axis contained in the median longitudinal plane of the seat through an angle of 360° at a speed of 2° to 5° per second. For the purposes of this test, a restraint intended for use in specific vehicles may be attached to the test seat described in annex 6 to this specification.

8.1.2.3 This test shall then be carried out again, the seat being rotated in the reverse direction after, if necessary, the test manikin has been replaced in its initial position. With the rotational axis in the horizontal plane and at 90° to that of the two earlier tests, the procedure shall be repeated in the two directions of rotation.

8.1.2.4 These tests shall be carried out using both the smallest and the largest appropriate manikin of the group or groups for which the restraining device is intended.

8.1.3 Dynamic tests

8.1.3.1 Tests on the trolley and test seat

8.1.3.1.1 Forward-facing

8.1.3.1.1.1 The trolley and test seat used in the dynamic test shall meet the requirements of annex 6 to this specification.

8.1.3.1.1.2 The trolley shall remain horizontal throughout deceleration.

8.1.3.1.1.3 The deceleration of the trolley shall be achieved using the apparatus prescribed in annex 6 to this specification, or any other device that gives equivalent results. This apparatus shall be capable of the performance specified in 8.1.3.4 and in annex 7 to this specification.

8.1.3.1.1.4 The following measurements and inspections shall be made:

8.1.3.1.1.4.1 the trolley speed, immediately before impact;

8.1.3.1.1.4.2 the stopping distance;

8.1.3.1.1.4.3 the displacement of the test manikin's head in the vertical and horizontal planes for groups I, II and III restraints and, for group 0 restraints, the displacement of the manikin (other than its limbs);

8.1.3.1.1.4.4 the chest acceleration in three mutually perpendicular directions, except in the case of the "newborn" test manikin; and

8.1.3.1.1.4.5 any visible signs of penetration of the modelling clay in the abdomen (see 7.1.4.3.1), except in the case of the "newborn" test manikin.

8.1.3.1.1.5 The tests shall be filmed at a frequency of at least 500 frames per second.

8.1.3.1.1.6 After impact, the child restraint shall be inspected visually, without the buckle's being opened, to determine whether there has been any failure or breakage.

8.1.3.1.2 Rearward-facing

8.1.3.1.2.1 The test seat shall be rotated through an angle of 180° when it is being tested in compliance with the requirements of the rear impact test.

8.1.3.1.2.2 When a rearward-facing child restraint intended for use in the front seating position is being tested, the vehicle facia shall be represented by a rigid bar so attached to the trolley that all the energy absorption takes place in the child restraint.

8.1.3.1.2.3 The deceleration conditions shall satisfy the requirements of 8.1.3.4.

8.1.3.1.2.4 The measurements to be made shall be similar to those listed in 8.1.3.1.1.4.

8.1.3.1.2.5 The tests shall be filmed at a frequency of at least 500 frames per second.

8.1.3.1.2.6 After impact, the child restraint shall be inspected visually, without the buckle's being opened, to determine whether there has been any failure or breakage.

8.1.3.2 Test on trolley and vehicle body shell

8.1.3.2.1 Forward-facing

8.1.3.2.1.1 The method used to secure the vehicle during the test shall not be such that the anchorages of the vehicle seats, adult safety belts and any additional anchorages required to secure the child restraint will be strengthened or such that the normal deformation of the structure will be lessened. No part of the vehicle shall be present which, by limiting the movement of the test manikin, would reduce the load imposed on the child restraint during the test. The parts of the structure eliminated may be replaced by parts of equivalent strength, provided that they do not hinder the movement of the test manikin.

8.1.3.2.1.2 A securing device shall be regarded as satisfactory if it produces no effect on an area that extends over the entire width of the structure and if the vehicle or structure is blocked or fixed in front at a distance of not less than 500 mm from the anchorage of the restraint system. At the rear, the structure shall be secured at a sufficient distance behind the anchorages to ensure that all requirements of 8.1.3.2.1.1 are fulfilled.

8.1.3.2.1.3 The vehicle seat and child restraint shall be fitted and shall be placed in a position that has been selected by the testing authority (conducting the tests) to give the most adverse conditions in respect of strength, compatible with installing the test manikin in the vehicle. The position of the vehicle seat-back and child restraint shall be stated in the report. The vehicle seat-back, if adjustable for inclination, shall be locked as specified by the manufacturer or, in the absence of any specification, at an actual seat-back angle as near as possible to 25°.

8.1.3.2.1.4 Unless the instructions for fitting and use require otherwise, the front seat shall be placed in the most forward normally used position in the case of child restraints that are intended for use in the front seating position, and in the rearmost normally used position in the case of child restraints that are intended for use in the rear seating position.

8.1.3.2.1.5 The deceleration conditions shall satisfy the requirements of 8.1.3.4. The test seat will be the seat of the actual vehicle.

8.1.3.2.1.6 The following measurements and inspections shall be made:

8.1.3.2.1.6.1 the trolley speed, immediately before impact;

8.1.3.2.1.6.2 the stopping distance;

8.1.3.2.1.6.3 any contact of the test manikin's head (in the case of group 0, not taking the manikin's limbs into account) with the interior of the vehicle body shell;

8.1.3.2.1.6.4 the chest deceleration in three mutually perpendicular directions, except in the case of the "newborn" test manikin;

8.1.3.2.1.6.5 any visible signs of penetration of the modelling clay in the abdomen (see 7.1.4.3.1), except in the case of the "newborn" test manikin.

8.1.3.2.1.7 The tests shall be filmed at a frequency of at least 500 frames per second.

8.1.3.2.1.8 After impact, the child restraint shall be inspected visually, without the buckle's being opened, to determine whether there has been any failure or breakage.

8.1.3.2.2 Rearward-facing

8.1.3.2.2.1 For rear impact tests, the vehicle body shell shall be rotated through an angle of 180° on the test trolley.

8.1.3.2.2.2 In all other respects, the requirements for frontal impact shall apply.

8.1.3.3 Test with complete vehicle

8.1.3.3.1 The deceleration conditions shall satisfy the requirements of 8.1.3.4.

8.1.3.3.2 For frontal impact tests, the procedure shall be that set out in annex 9 to this specification.

8.1.3.3.3 For rear impact tests, the procedure shall be that set out in annex 10 to this specification.

8.1.3.3.4 The following measurements and inspections shall be made:

8.1.3.3.4.1 the speed of the vehicle/impactor, immediately before impact;

8.1.3.3.4.2 any contact of the manikin's head (in the case of group 0, not taking the manikin's limbs into account) with the interior of the vehicle;

8.1.3.3.4.3 the chest acceleration in three mutually perpendicular directions, except in the case of the "newborn" test manikin;

8.1.3.3.4.4 any visible signs of penetration of the modelling clay in the abdomen (see 7.1.4.3.1), except in the case of the "newborn" test manikin.

8.1.3.3.5 The tests shall be filmed at a frequency of at least 500 frames per second.

8.1.3.3.6 The front seats, if adjustable for inclination, shall be locked as specified by the manufacturer or, in the absence of any specification, at an actual seat-back angle as near as possible to 25°.

8.1.3.3.7 After impact, the child restraint shall be inspected visually, without the buckle's being opened, to determine whether there has been any failure or breakage.

8.1.3.4 The conditions for dynamic tests are summarized in the table on the following page.

8.1.3.5 Child restraints that require the use of additional anchorages

8.1.3.5.1 In the case of "semi-universal" child restraints that require the use of additional anchorages, the requirement for a frontal impact test, in accordance with 8.1.3.4, shall be carried out as follows:

8.1.3.5.2 In the case of restraints with short upper attachment straps, for example intended to be attached to the rear parcel shelf, the upper anchorage configuration on the test trolley shall be as prescribed in appendix 4 of annex 6 to this specification.

8.1.3.5.3 In the case of restraints with long upper attachment straps, for example intended for use where there is no rigid parcel shelf and where the upper anchorage straps are attached to the vehicle floor, the anchorages on the test trolley shall be as prescribed in appendix 4 of annex 6 to this specification.

8.1.3.5.4 In the case of restraints intended for use in both configurations, the test that uses the anchorage configurations prescribed in 8.1.3.5.2 and 8.1.3.5.3 shall be carried out, except that, in the case of the test that uses the anchorage configurations prescribed in 8.1.3.5.3, only the heavier manikin shall be used.

8.1.3.5.5 In the case of rearward-facing restraints, the lower anchorage configuration on the test trolley shall be as prescribed in appendix 4 of annex 6 to this specification.

1	2	3	4	5	6	7	8
Test	Restraint	Frontal impact			Rear impact		
		Speed	Test pulse	Stopping distance during test	Speed	Test pulse	Stopping distance during test
		km/h		mm	km/h		mm
Trolley with test seat	Forward-facing rear seat semi-universal *	50 + 0 - 2	1	650 ± 50	—	—	—
	Rearward-facing front seat semi-universal **	50 + 0 - 2	1	650 ± 50	30 + 2 - 0	2	275 ± 25
Trolley with test seat	Forward-facing front and rear seats universal *	50 + 0 - 2	1	650 ± 50	—	—	—
	Rearward-facing front and rear seats universal **	50 + 0 - 2	1	650 ± 50	30 + 2 - 0	2	275 ± 25
Vehicle body on trolley	Forward-facing front and rear seats *	50 + 0 - 2	1	650 ± 50	—	—	—
	Rearward-facing front and rear seats *	50 + 0 - 2	1	650 ± 50	30 + 2	2	275 ± 25
Whole vehicle barrier test	Forward-facing front and rear seats	50 + 0 - 2	3	Not specified	—	—	—
	Rearward-facing front and rear seats	50 + 0 - 2	3	Not specified	30 + 2 - 0	4	Not specified

LEGEND

Test Pulse No. 1 — As prescribed in annex 7 to this specification — frontal impact.

Test Pulse No. 2 — As prescribed in annex 7 to this specification — rear impact.

Test Pulse No. 3 — Deceleration pulse of vehicle subjected to frontal impact.

Test Pulse No. 4 — Deceleration pulse of vehicle subjected to rear impact.

NOTE — All restraint systems of group 0 shall be tested according to "rearward-facing" conditions in frontal and rear impact.

* During calibration, the stopping distance shall be 650 mm ± 30 mm.

** During calibration, the stopping distance shall be 275 mm ± 20 mm.

8.1.3.6 Test manikins

8.1.3.6.1 The child restraint and test manikins shall be installed in such a way that the requirements of 8.1.3.6.3.1 are met.

8.1.3.6.2 Installation of the test manikin

8.1.3.6.3 The child restraint shall be tested using the test manikins prescribed in annex 8 to this specification.

8.1.3.6.3.1 In the case of frontal impact with forward-facing restraints and rear impact with rearward-facing restraints, the test manikin shall be so placed that the gap is between the front of the manikin and the restraint; in the case of forward impact with rearward-facing restraints, the test manikin shall be so placed that the gap is between the rear of the manikin and the restraint. In the case of carry-cots, the test manikin shall be placed in a straight horizontal position as close as possible to the centre-line of the carry-cot.

8.1.3.6.3.2 Child restraint without a chair

Place the test manikin in the vehicle seat or test seat.

Place a board 25 mm thick and 200 mm wide between the back of the test manikin and the back rest of the vehicle seat or test seat.

Adjust the belt in accordance with the manufacturer's instructions, justified by the testing authority.

8.1.3.6.3.3 Child restraint with a separately anchored chair

Place the test manikin in the child's chair.

Place a board 25 mm thick and 60 mm wide between the test manikin and the seat-back of the chair.

Adjust the belt in accordance with the manufacturer's instructions, justified by the testing authority.

Place both the manikin and the chair on the test seat and adjust the straps of the restraint in accordance with the manufacturer's instructions, justified by the testing authority. Remove the board.

8.1.3.6.3.4 The longitudinal plane that passes through the centre-line of the manikin shall be set midway between the two lower belt anchorages; however, note shall also be taken of 8.1.3.2.1.3. In the case of booster cushions to be tested with the test manikin that represents a 10-year old child, the longitudinal plane that passes through the centre-line of the manikin shall be positioned $75 \text{ mm} \pm 5 \text{ mm}$ to the left or right with regard to the point midway between the two lower belt anchorages.

8.1.3.6.3.5 In the case of restraints that require the use of a standard belt, the shoulder strap may be positioned on the test manikin prior to the dynamic test, by the use of a lightweight masking tape of sufficient width and length. In the case of rearward-facing devices, the head of the manikin may be held against the backrest of the restraint system by the use of a lightweight masking tape of sufficient width and length.

8.1.3.7 Category of test manikin to be used

8.1.3.7.1 Group 0 restraint: test using a "newborn" manikin and a manikin of mass 9 kg.

8.1.3.7.2 Group I restraint: test using manikins of mass 9 kg and 15 kg respectively.

8.1.3.7.3 Group II restraint: test using manikins of mass 15 kg and 22 kg respectively.

8.1.3.7.4 Group III restraint: test using manikins of mass 22 kg and 32 kg respectively.

8.1.3.7.5 If the child-restraint system is suitable for two or more mass groups, the tests shall be carried out using the lightest and heaviest manikins specified above for all the groups concerned. However, if the configuration of the restraint alters considerably from one group to the next, for instance when the configuration of the harness or the length of the harness is changed, the testing authority conducting the tests may, if it deems it advisable, add a test with a manikin of intermediate mass.

8.2 Tests of individual components

8.2.1 Buckle

8.2.1.1 Opening test under load

8.2.1.1.1 A child restraint that already has been subjected to the dynamic test specified in 8.1.3 shall be used for this test.

8.2.1.1.2 The child restraint shall be removed from the test trolley or from the vehicle, without the buckle's being opened. A tension of 200 N shall be applied to the buckle. If the buckle is attached to a rigid part, the force shall be applied that reproduces the angle formed between the buckle and that rigid part during the dynamic test.

8.2.1.1.3 A load shall be applied at a speed of 400 mm/min $\pm$ 20 mm/min to the geometric centre of the buckle-release button, along a fixed axis running parallel to the initial direction of motion of the button. The geometric centre applies to that part of the surface of the buckle to which the release pressure is to be applied. The buckle shall be secured against a rigid support during the application of the opening force.

8.2.1.1.4 The buckle opening force shall be applied, using a dynamometer or similar device in the manner and direction of normal use. The contact end shall be a polished metal hemisphere of radius 2,5 mm $\pm$ 0,1 mm.

8.2.1.1.5 The buckle opening force shall be measured and any failure noted.

8.2.1.2 Opening test under zero load

8.2.1.2.1 A buckle assembly that has not previously been subjected to a load shall be mounted and positioned under a "no load" condition.

8.2.1.2.2 The method of measuring the buckle opening force shall be as prescribed in 8.2.1.1.3 and 8.2.1.1.4.

8.2.1.2.3 The buckle opening force shall be measured.

8.2.2 Adjusting device

8.2.2.1 Ease of adjustment

8.2.2.1.1 When a manual adjusting device is being tested, the strap shall be drawn steadily through the adjusting device, having regard for the normal conditions of use, at a rate of approximately 100 mm/s, and the maximum force shall be measured to the nearest newton after the first 25 mm of strap movement.

8.2.2.1.2 The test shall be carried out in both directions of strap travel through the device, the strap being subjected 10 times to the full travel cycle, prior to the measurement.

8.2.3 Microslip test (see annex 5, figure 3)

8.2.3.1 The components and adjusting devices to be subjected to the microslip test shall be kept, for a

minimum of 24 h before testing, in an atmosphere that has a temperature of $20\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$ and a relative humidity of $(65 \pm 5)\%$. The test shall be carried out at a temperature of between $15\text{ }^{\circ}\text{C}$ and $30\text{ }^{\circ}\text{C}$.

8.2.3.2 The free end of the strap shall be arranged in the configuration in which it is when the adjusting device is in use in the vehicle, and shall not be attached to any other part.

8.2.3.3 The adjusting device shall be placed on a vertical piece of strap, one end of which bears a 50 N load (guided in a way that prevents the load from swinging and the strap from twisting). The free end of the strap from the adjusting device shall be mounted vertically upwards or downwards, as it is in the vehicle. The other end shall pass over a deflector roller, with its horizontal axis parallel to the plane of the section of strap that supports the load, the section that passes over the roller being horizontal.

8.2.3.4 The adjusting device under test shall be arranged in such a way that its centre, in the highest position to which it can be raised is $300\text{ mm} \pm 20\text{ mm}$ from a support table and that the load of 50 N is $100\text{ mm} \pm 20\text{ mm}$ from that support table.

8.2.3.5 Twenty pre-test cycles shall be completed and 1 000 cycles shall then be completed at a frequency of 0,5 cycles per second, the total amplitude being $300\text{ mm} \pm 20\text{ mm}$ or as specified in 8.2.5.2.6.2. The 50 N load shall be applied only during the time that corresponds to a shift of $100\text{ mm} \pm 20\text{ mm}$ for each half period. Microslip shall be measured from the position at the end of the 20 pre-test cycles.

8.2.4 Retractor

8.2.4.1 Retracting force

8.2.4.1.1 The retracting forces shall be measured with the child restraint fitted with a test manikin as for the dynamic test prescribed in 8.1.3. The strap tension shall be measured at the point of contact with (but just clear of) the manikin, while the strap is retracted at an approximate rate of 0,6 m/min.

8.2.4.2 Durability of retractor mechanism

8.2.4.2.1 The strap shall be withdrawn and allowed to retract for the required number of cycles, at a rate of not more than 30 cycles per minute. In the case of emergency-locking retractors, a jolt to lock the retractor shall be introduced at each fifth cycle. The jolts shall occur in equal numbers at each of five different extractions, namely at 90 %, 80 %, 75 %, 70 % and 65 % of the total length of the strap on the retractor. However, where the length of the strap exceeds 900 mm, the above percentages shall be related to the final 900 mm of strap that can be withdrawn from the retractor.

8.2.4.3 Locking of emergency-locking retractors

8.2.4.3.1 The retractor shall be tested once for locking, when the strap has been unwound to its full length minus $300\text{ mm} \pm 3\text{ mm}$.

8.2.4.3.2 In the case of a retractor that is actuated by strap movement, the extraction shall be in the direction in which it normally occurs when the retractor is installed in a vehicle.

8.2.4.3.3 When retractors are being tested for sensitivity to vehicle accelerations, they shall be tested at the above extraction length in both directions along two mutually perpendicular axes that are horizontal if the retractors are to be installed in a vehicle as specified by the child-restraint manufacturer. When this position is not specified, the testing authority shall consult the child-restraint manufacturer. One of these test directions shall be selected by the testing authority (conducting the test) to give the most adverse conditions with respect to actuation of the locking mechanism.

8.2.4.3.4 The design of the apparatus used shall be such that the required acceleration is given at an average rate of increase of acceleration of at least 245 m/s^2 .

8.2.4.3.5 For testing for compliance with the requirements of 7.2.3.2.1.3 and 7.2.3.2.1.4, the retractor shall be mounted on a horizontal table and the table tilted at a speed not exceeding 2°/s until locking has occurred. The test shall be repeated with tilting in other directions, to ensure that the requirements are fulfilled.

8.2.4.4 Corrosion test

8.2.4.4.1 The corrosion test shall be carried out as described in 8.1.1.

8.2.4.5 Dust-resistance test

8.2.4.5.1 The retractor shall be positioned in a test chamber, as shown in annex 3 to this specification. It shall be mounted in an orientation similar to that in which it is mounted in the vehicle. The test chamber shall contain dust as specified in 8.2.4.5.2. A length of 550 mm of the strap shall be extracted from the retractor and kept extracted, except that it shall be subjected to 10 complete cycles of retraction and withdrawal within 1 min or 2 min after each agitation of the dust. For a period of five hours, the dust shall be agitated every 20 min for 5 s by compressed air that is free of oil and moisture, is at a gauge pressure of 550 kPa $\pm$ 50 kPa and enters through an orifice of diameter 1,5 mm $\pm$ 0,1 mm.

8.2.4.5.2 The dust used in the test described in 8.2.4.5.1 shall consist of about 1 kg of dry quartz. The particle size distribution shall be as follows:

- a) passing 150 μ m aperture, 104 μ m wire diameter: 99 % to 100 %;
- b) passing 105 μ m aperture, 64 μ m wire diameter: 76 % to 86 %;
- c) passing 75 μ m aperture, 52 μ m wire diameter: 60 % to 70 %.

8.2.5 Static test for straps

8.2.5.1 Strap strength test

8.2.5.1.1 Each test shall be carried out on two new samples of strap, conditioned as specified in 7.2.4.

8.2.5.1.2 Each strap shall be gripped between the clamps of a tensile-strength testing machine. The clamps shall be so designed as to avoid breakage of the strap at or near them. The speed of traverse shall be about 100 mm/min. The free length of the specimen between the clamps of the machine at the start of the test shall be 200 mm $\pm$ 40 mm.

8.2.5.1.3 The tension shall be increased until the strap breaks and the breaking load shall be noted.

8.2.5.1.4 If the strap slips or breaks at or within 10 mm of either of the clamps, the test shall be deemed to be invalid and a new test shall be carried out on another specimen.

8.2.5.2 Specimens cut from straps shall be conditioned as given in 8.2.5.2.1 to 8.2.5.2.6.

8.2.5.2.1 Room conditioning

8.2.5.2.1.1 The strap shall be kept for 24 h in an atmosphere that has a temperature of 20 °C $\pm$ 5 °C and a relative humidity of (65 $\pm$ 5) %. If the test is not carried out immediately after conditioning, the specimen shall be placed in a hermetically closed receptacle until the test begins. The breaking load shall be determined within 5 min after removal of the strap from the conditioning atmosphere or from the receptacle.

8.2.5.2.2 Light conditioning

8.2.5.2.2.1 The apparatus described in SABS method 405, *Textiles — Colourfastness to artificial light — Xenon arc fading lamp test*, shall be used and the length of the test strap shall be at least 1,3 m.

A central portion of the strap, of length at least 200 mm, shall be exposed to light for the time necessary to produce fading of Light Fastness Standard No. 7 to a contrast equal to grade No. 4 on the grey scale.

8.2.5.2.2.2 After exposure, the strap shall be kept for a minimum of 24 h in an atmosphere that has a temperature of $20\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$ and a relative humidity of $(65 \pm 5)\%$. The breaking load shall be determined within 5 min after the removal of the strap from the conditioning apparatus.

8.2.5.2.3 Cold conditioning

8.2.5.2.3.1 The strap shall be kept for a minimum of 24 h in an atmosphere that has a temperature of $20\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$ and a relative humidity of $(65 \pm 5)\%$.

8.2.5.2.3.2 The strap shall then be kept for 1,5 h on a plane surface in a low-temperature chamber in which the air temperature is $-15\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$. It shall then be folded and the fold shall be loaded with a masspiece of mass 2 kg that has previously been cooled to $-15\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$. When the strap has been kept under load for 30 min in the same low-temperature chamber, the masspiece shall be removed and the breaking load shall be measured within 5 min after removal of the strap from the low-temperature chamber.

8.2.5.2.4 Heat conditioning

8.2.5.2.4.1 The strap shall be kept for 3 h in a heating-cabinet atmosphere that has a temperature of $60\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$ and a relative humidity of $(65 \pm 5)\%$.

8.2.5.2.4.2 The breaking load shall be determined within 5 min after removal of the strap from the heating cabinet.

8.2.5.2.5 Exposure to water

8.2.5.2.5.1 The strap shall be kept fully immersed for 3 h in distilled water, at a temperature of $20\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$, to which a trace of wetting agent has been added. Any wetting agent suitable for the fibre under test may be used.

8.2.5.2.5.2 The breaking load shall be determined within 10 min after removal of the strap from the water.

8.2.5.2.6 Abrasion conditioning

8.2.5.2.6.1 The components or devices to be subjected to the abrasion test shall be kept, for a minimum of 24 h before testing, in an atmosphere that has a temperature of $20\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$ and a relative humidity of $(65 \pm 5)\%$. The room temperature during the testing shall be between $15\text{ }^{\circ}\text{C}$ and $30\text{ }^{\circ}\text{C}$.

8.2.5.2.6.2 The table below sets out the general conditions for each test:

1	2	3	4	5
	Load N	Frequency Hz	Cycles No.	Shift mm
Type 1 procedure	10	30	1 000	300 ± 20
Type 2 procedure	5	30	5 000	300 ± 20

Where there is insufficient strap to test over 300 mm of shift, the test may be applied over a shorter length, subject to a minimum of 100 mm.

8.2.5.2.6.3 Particular test conditions

8.2.5.2.6.3.1 Type 1 procedure (for cases where the strap slides through the quick adjusting device)

The 10 N load shall be vertically and permanently applied on one of the straps. The other strap, set horizontally, shall be attached to a device that is capable of giving the strap a back-and-forth motion. The adjusting device shall be so placed that the horizontal strap remains under tension (see figure 1 of annex 5 to this specification).

8.2.5.2.6.3.2 Type 2 procedure (for cases where the strap changes direction in passing through a rigid part)

During this test, the angles of both straps shall be as shown in figure 2 of annex 5 to this specification. The 5 N load shall be permanently applied. For cases where the strap changes direction more than once in passing through a rigid part, the load of 5 N may be so increased as to achieve the prescribed 300 mm of strap movement through that rigid part.

8.3 Deleted

8.4 High-speed films

8.4.1 The behaviour of the test manikin and its displacement shall be determined by means of a high-speed camera.

8.4.2 A calibration screen shall be so mounted firmly on the trolley or in the vehicle structure that the displacement of the manikin can be determined.

9 to 13 Reserved

14 Instructions

14.1 Each child restraint shall be accompanied by instructions, in both English and Afrikaans. The instructions shall be as set out in 14.2 and 14.3.

14.2 The instructions for installation shall include the following:

14.2.1 The list of vehicles and vehicle models for which the child restraint is intended shall be clearly visible at the point of sale, without removal of the packaging. (This list is not required in the case of systems of the "universal category".) If the child restraint requires an adult safety belt, the following wording shall be added to this list: "Only suitable for use in the listed vehicles fitted with lap/3-point/static/with retractor safety belts, that comply with SABS 1080 or other equivalent specifications". (Delete lap/3-point, etc., as appropriate.) In the case of carry-cot restraints, a list of carry-cots for which the device is suited shall be given.

14.2.2 The method of installation, illustrated by means of photographs or clear drawings, or both.

14.2.3 Advice to the user to the effect that the rigid items and plastics parts of a child restraint shall be so located and installed that they are not liable, during everyday use of the vehicle, to become trapped by a movable seat or in a door of the vehicle.

14.2.3.1 The user should be advised to use carry-cots perpendicular to the longitudinal axis of the vehicle.

14.3 The instructions for use shall include the following:

14.3.1 The mass group(s) for which the device is intended.

14.3.2 When the child restraint is used in combination with an adult safety belt, the type of safety belt to be used, by means of the following wording: "Only suitable for use in the listed vehicles fitted with lap/3-point/static/with retractor safety belts that comply with SABS 1080 or other equivalent specifications". (Delete lap/3-point, etc., as appropriate.)

14.3.3 The method of use, illustrated by means of photographs or clear drawings, or both.

14.3.4 The operation of the buckle and adjusting devices, explained clearly.

14.3.5 A recommendation that any straps holding the restraint to the vehicle be tight, that any straps restraining the child be adjusted to the child's body, and that straps not be twisted.

14.3.6 The importance of ensuring that any lap strap be worn low down, so that the pelvis is firmly engaged.

14.3.7 A recommendation that the restraint be replaced when it has been subjected to violent stresses in an accident.

14.3.8 Instructions for cleaning.

14.3.9 A general warning to the user concerning the danger of making any alterations or additions to the restraint without the approval of the competent authority, and the danger of not following closely the installation instructions provided by the child-restraint manufacturer.

14.3.10 When a chair is not provided with a textile cover, a recommendation that the chair be kept away from sunlight, otherwise it might be too hot for the child's skin.

14.3.11 A recommendation that children not be left in their child-restraint system unattended.

15 Reserved

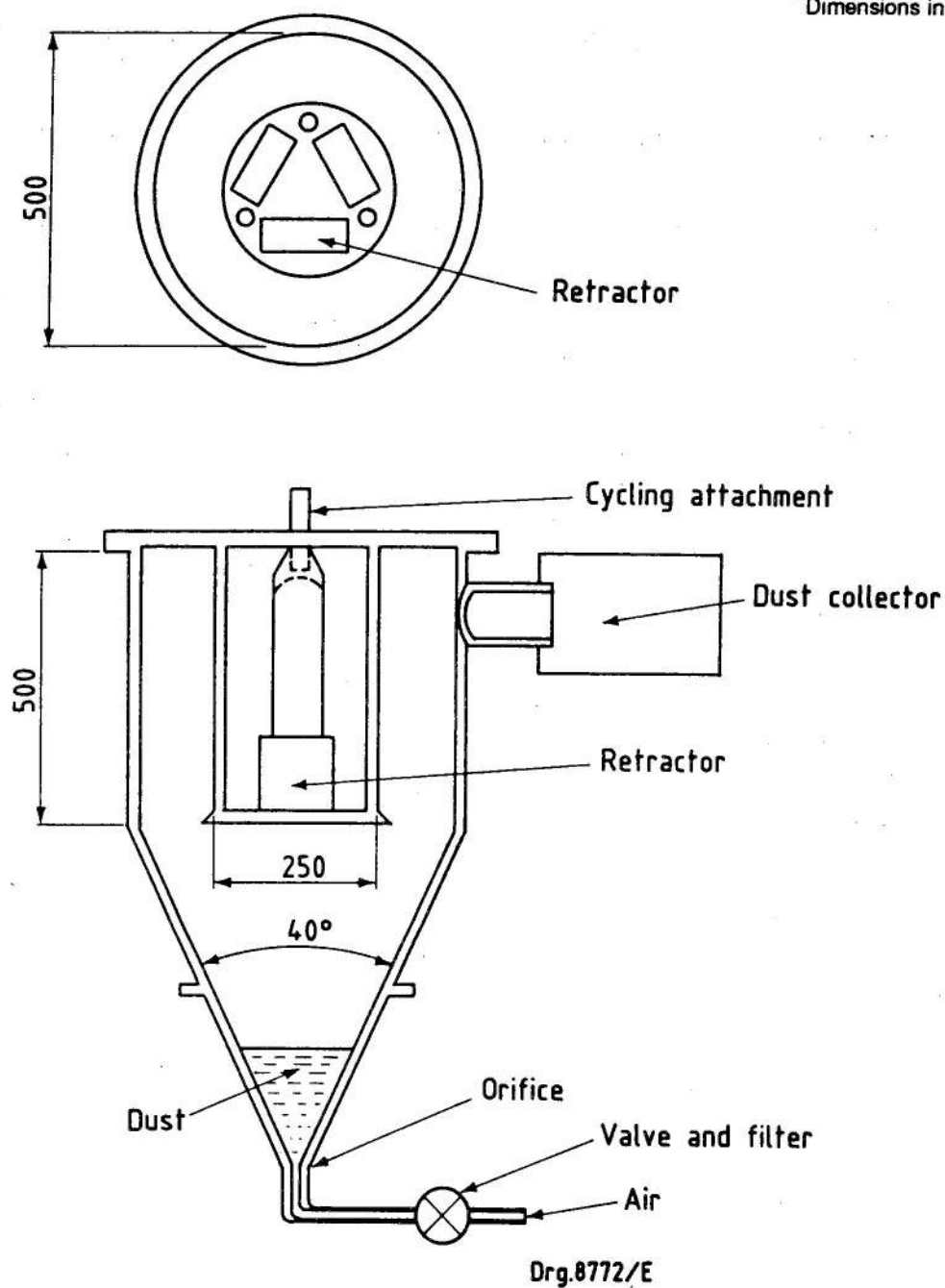
16 Reserved

Annex 1 Reserved

Annex 2 Reserved

Annex 3**Arrangement of apparatus for dust-resistance test**

Dimensions in millimetres



Annex 4

Corrosion test

1 Test apparatus

1.1 The apparatus shall consist of a mist chamber, a salt solution reservoir, a supply of suitably conditioned compressed air, one or more atomizing nozzles, sample supports, provision for heating the chamber, and necessary means of control. The size and detailed construction of the apparatus shall be optional, provided that the test conditions are met.

1.2 The design of the apparatus shall be such that drops of solution that have accumulated on the ceiling or cover of the chamber do not fall on test samples.

1.3 Drops of solution that fall from test samples shall not be returned to the reservoir for respraying.

1.4 The apparatus shall not be constructed of materials that will affect the corrosiveness of the mist.

2 Location of test samples in the mist chamber

2.1 Samples, except retractors, shall be supported or suspended between 15° and 30° from the vertical and preferably parallel to the principal direction of horizontal flow of mist through the chamber, based upon the dominant surface being tested.

2.2 A retractor shall be so supported or suspended that the axis of the reel for storing the strap is perpendicular to the principal direction of horizontal flow of mist through the chamber. The strap opening in the retractor shall also be facing in this principal direction.

2.3 Each sample shall be so placed as to permit free settling of mist on all samples.

2.4 Each sample shall be so placed as to prevent the salt solution from one sample from dripping onto any other sample.

3 Salt solution

3.1 The salt solution shall be prepared by dissolving 5 ± 1 parts (by mass) of sodium chloride in 95 parts of distilled water. The salt shall be sodium chloride that is substantially free of nickel and copper and that contains not more than 0,1 % of sodium iodide and not more than 0,3 % of total impurities in the dry state.

3.2 The solution shall be such that, when atomized at 35 °C, the collected solution has a pH value in the range 6,5 to 7,2.

4 Compressed air

4.1 The compressed air supply to the nozzle or nozzles for atomizing the salt solution shall be free of oil and dirt, and shall be maintained at a pressure of between 70 kPa and 170 kPa.

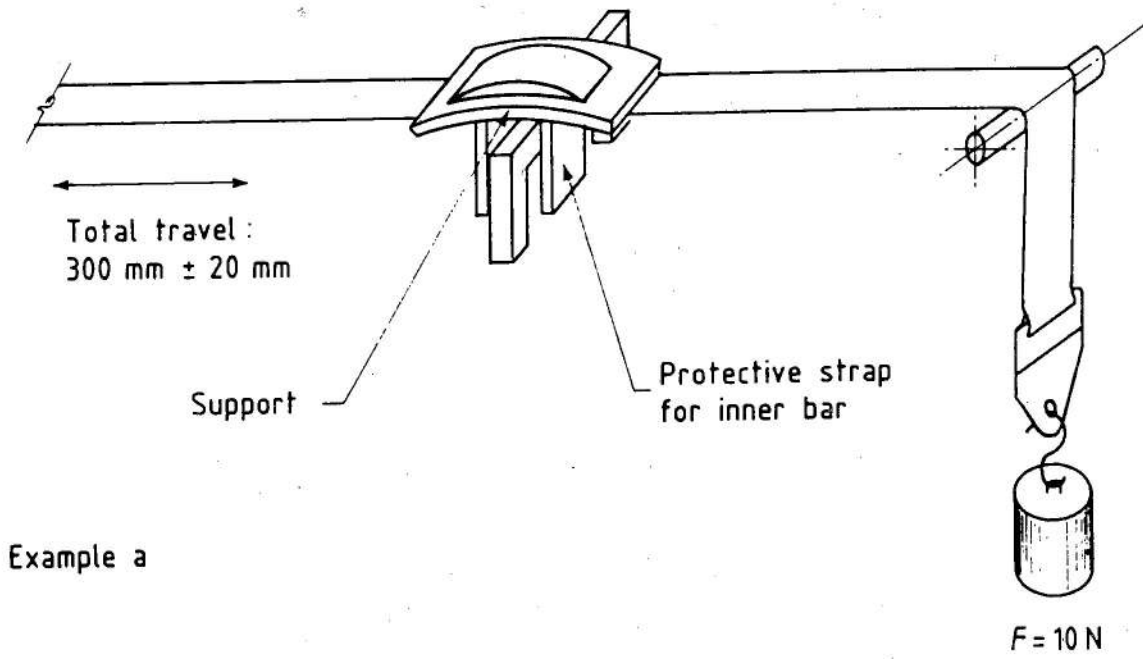
5 Conditions in the mist chamber

5.1 The exposure zone of the mist chamber shall be maintained at $35\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$. At least two clean mist collectors shall be so placed within the exposure zone that no drops of solution from the test samples or any other source are collected. The collectors shall be placed near the test samples, one as near as possible to any nozzle and one as far as possible from all nozzles. The mist shall be such that, for each 80 cm^2 of horizontal collecting area, from 1,0 ml to 2,0 ml of solution per hour, when measured over an average of at least 16 h, is collected in each collector.

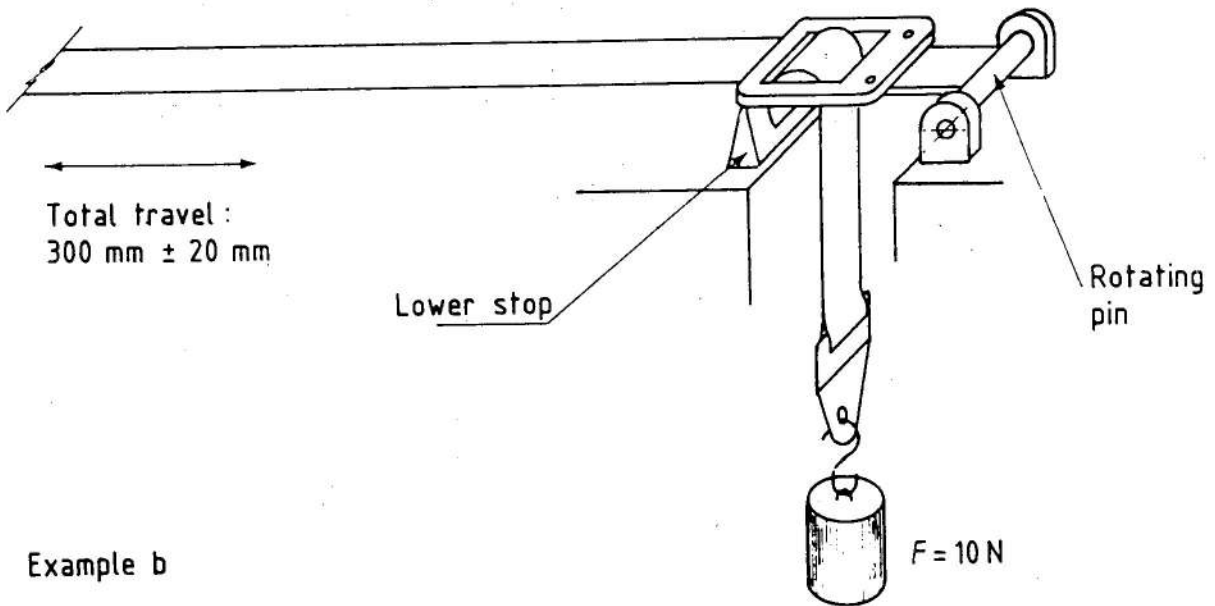
5.2 The nozzle or nozzles shall be so directed or baffled that the spray does not impinge on the test samples direct.

Annex 5

Abrasion and microslip test



Example a



Example b

Org.10281/E

Figure 1 — Procedure type 1
Examples of test arrangements corresponding to the type of adjusting device

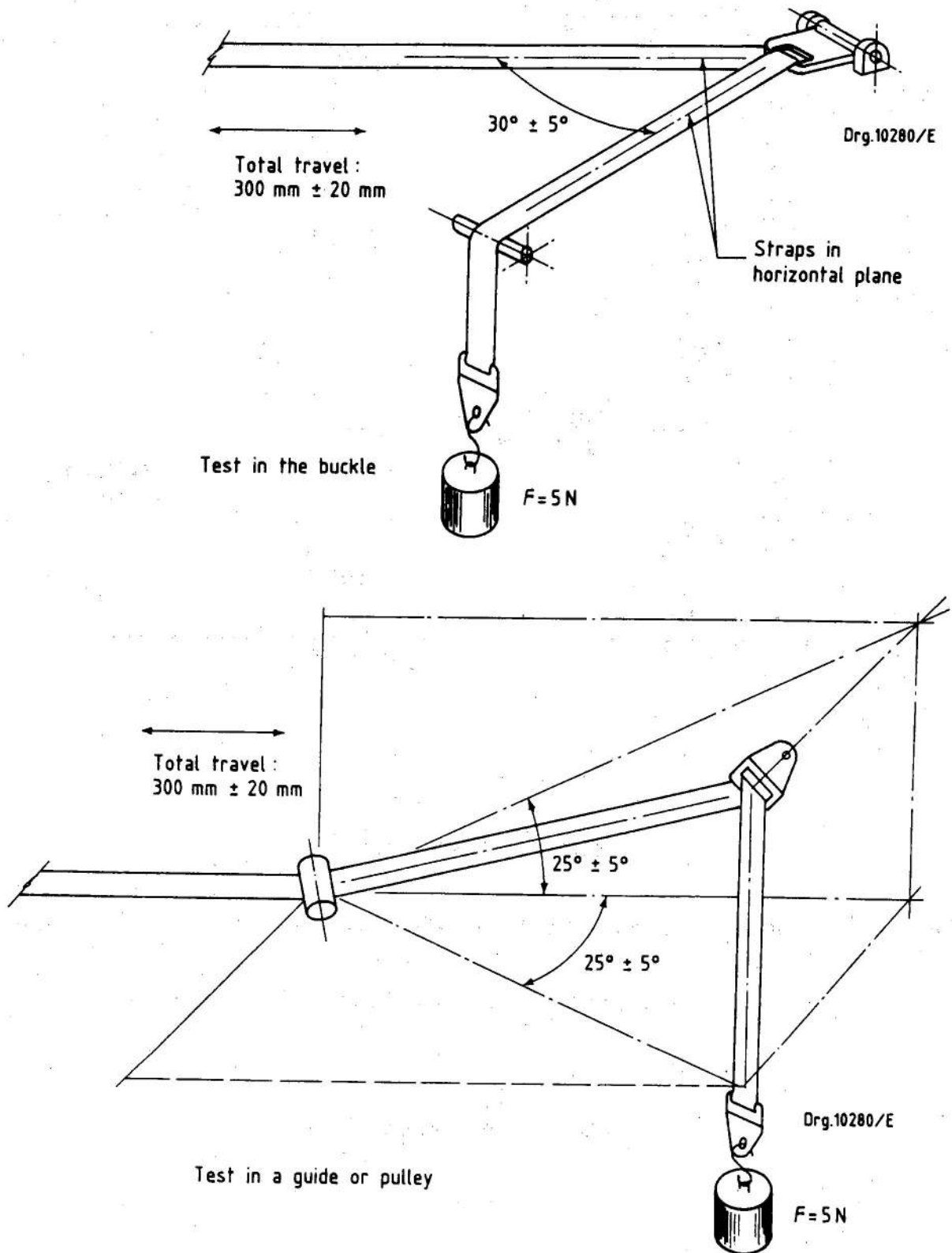
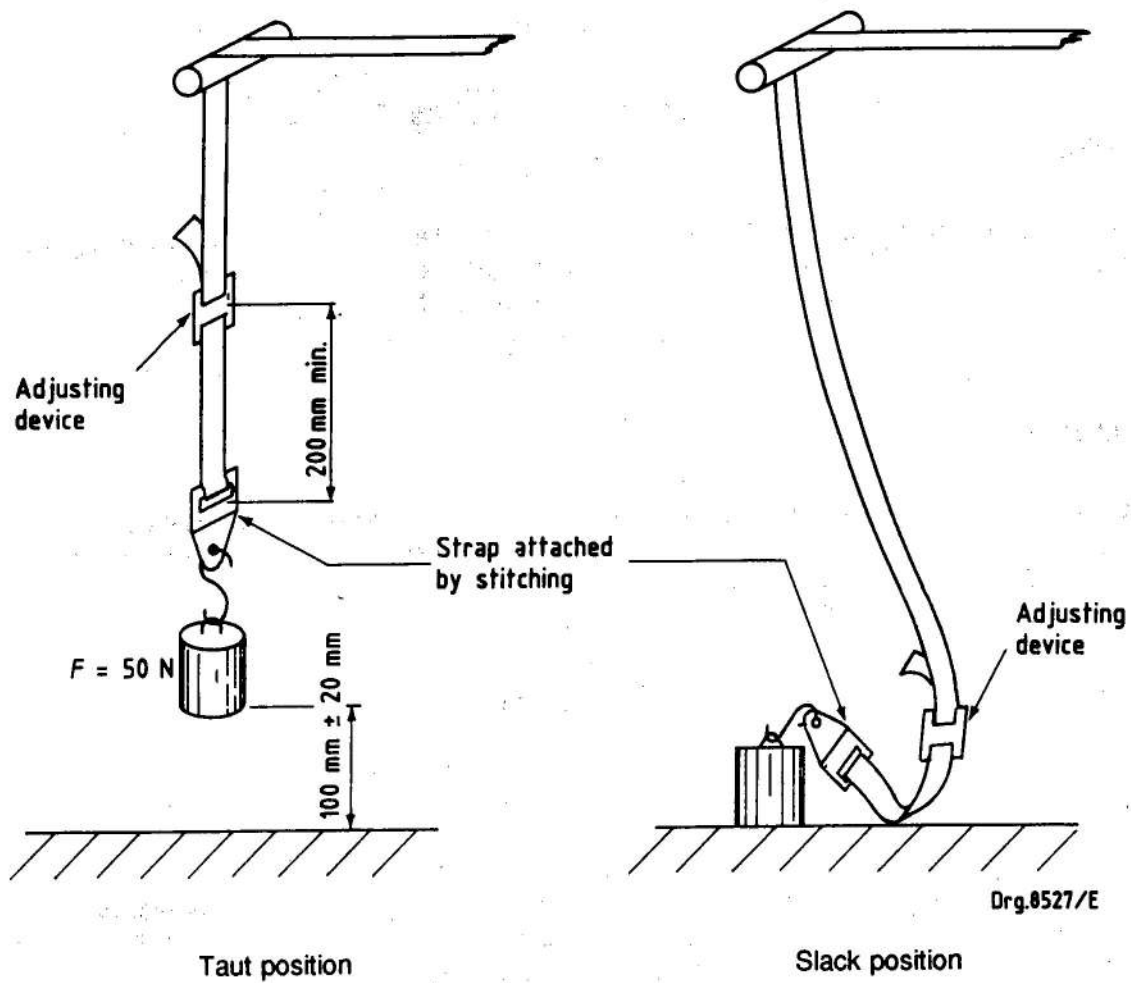


Figure 2 — Procedure type 2



Total travel: $300\text{ mm} \pm 20\text{ mm}$

The load of 50 N on the testing device shall be vertically so guided as to prevent load-swing and twisting of the strap.

The attaching device shall be fixed to the load of 50 N in the same way as in the vehicle.

Figure 3 — Microslip test

Annex 6

Description of trolley

1 Trolley

1.1 For tests on child restraints, the trolley, carrying the test seat only, shall have a mass of $400 \text{ kg} \pm 20 \text{ kg}$. For tests on restraint systems, the trolley with the attached vehicle structure shall have a nominal mass of 800 kg. However, the total mass of the trolley and vehicle structure may, if necessary, be increased by increments of 200 kg. In no case shall the total mass differ from the nominal value by more than 40 kg.

2 Calibration screen

2.1 A calibration screen shall be attached firmly to the trolley with a movement limit line plainly marked on it, to enable compliance with forward movement criteria to be determined from photographic records.

3 Test seat

3.1 The test seat shall be constructed as follows (see appendix 1):

3.1.1 a rigid back of height 500 mm, fixed, covered with polyurethane foam of thickness 70 mm (whose characteristics are given in the table below (see 3.1.5)) and tilted 20° rearwards. The lower part of the back is made of a tube of diameter 20 mm;

3.1.2 a seating, made from the material described in appendix 1 to this annex. The rear part of the seating is made from a rigid sheet metal, whose upper edge is a tube of diameter 20 mm. For the tests, the seating is covered with a light cloth not liable to affect the rigidity;

3.1.3 an opening is left between the back and the cushion of the test seat, as prescribed in appendix 1 to this annex;

3.1.4 the width of the test seat is 800 mm;

3.1.5 characteristics of polyurethane foam filling:

1	2
Density (kg/m^3)	35 - 45
Bearing strength (kPa): *p - 25 % p - 50 % p - 65 %	$2,5 \pm 0,5$ $3,7 \pm 0,5$ $5,0 \pm 0,5$
Bearing strength factor: p - 65 %/p - 25 %	< 2,5
Compression set (%)	< 15
Tear strength (N/m)	≥ 500
Breaking strength (kPa)	≥ 100
Elongation at rupture (%)	≥ 100
*p = initial thickness of polyurethane foam.	

3.2 Test of rearward-facing restraints

3.2.1 A special frame shall be fitted on the trolley, in order to support the child restraint as shown in figure 1.

3.2.2 A steel tube shall be attached firmly to the trolley in such a way that a load of 5 000 N applied horizontally to the centre of the tube does not cause a movement greater than 2 mm.

3.2.3 The dimensions of the tube shall be 500 mm x 100 mm (o.d) x 90 mm (i.d).

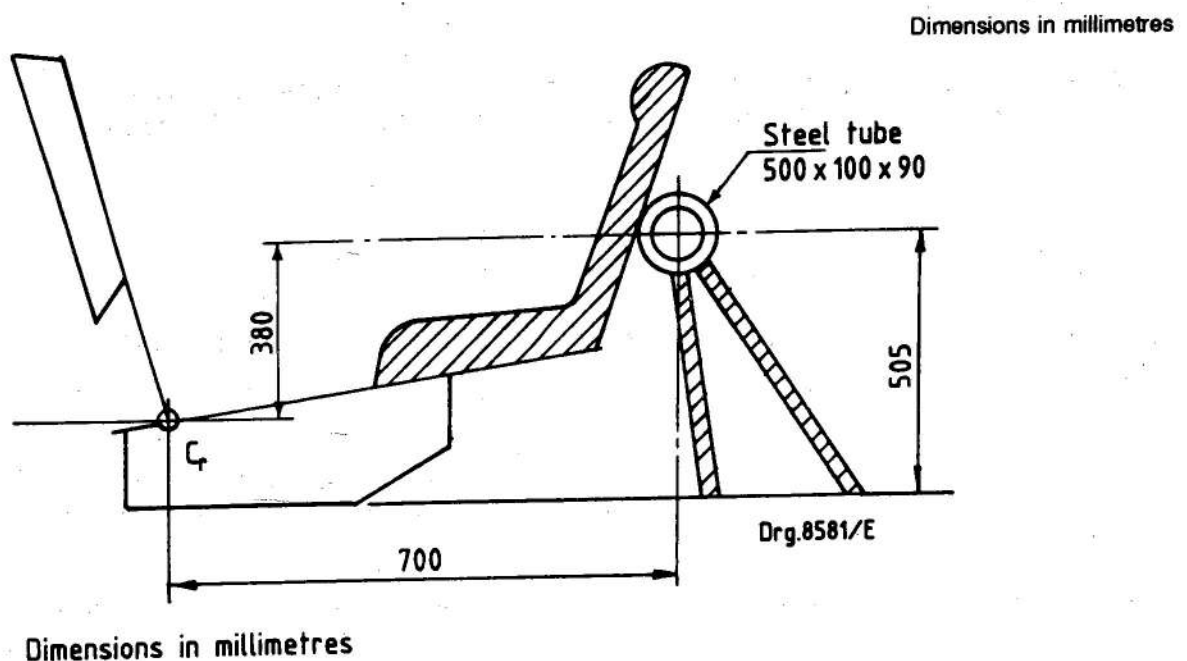


Figure 1 — Arrangement for testing a rearward-facing restraint

4 Stopping device

4.1 The device shall consist of two identical absorbers mounted in parallel.

4.2 If necessary, an additional absorber shall be used for each 200 kg increase in nominal mass. Each absorber shall comprise:

- 4.2.1 an outer casing formed from a steel tube;
- 4.2.2 a polyurethane energy-absorber tube;
- 4.2.3 a polished-steel olive-shaped knob penetrating into the absorber; and
- 4.2.4 a shaft and an impact plate.

4.3 The dimensions of the various parts of this absorber shall be as shown in the diagrams reproduced in appendices 2 and 3 to this annex.

4.4 The characteristics of the absorbing material shall be as given in table 1 and table 2 of this annex.

4.5 The stopping device assembly shall be maintained for at least 12 h at a temperature between 15 °C and 25 °C before being used for the calibration tests described in annex 7 to this specification. The stopping device assembly shall, for each type of test, meet the performance requirements laid down in appendices 1 and 2 of annex 7. For dynamic tests of a child restraint, the stopping device assembly shall be maintained for at least 12 h at the same temperature, to within 2 °C, as that at which it is maintained before the calibration test. Any other device that gives equivalent results shall be deemed to be acceptable.

Table 1

1	2
Characteristics of the absorbing material "A" (to be determined by suitable methods ¹⁾)	
Shore hardness A:	95 ± 2 at 20 °C ± 5 °C temperature
Breaking strength:	$R_b \geq 34,3$ MPa
Minimum elongation:	$A_b \geq 400$ %
Modulus at 100 % elongation: at 300 % elongation:	$\geq 10,8$ MPa $\geq 23,5$ MPa
Compression set:	22 h at 70 °C ≥ 45 %
Density at 25 °C:	1,05 g/cm ³ to 1,10 g/cm ³
Aging in air (using a suitable method ²⁾), 70 h at 100 °C	Shore hardness: max. variation ± 3 Breaking strength: decrease < 10 % of R_b Elongation: decrease < 10 % of A_b Mass: decrease < 1 %
Immersion in oil (using a suitable oil ³⁾), 70 h at 100 °C	Shore hardness: max. variation ± 4 Breaking strength: decrease < 15 % of R_b Elongation: decrease 10 % of A_b Volume: swelling 5 %
Immersion in oil (using a suitable oil ⁴⁾), 70 h at 100 °C	Breaking strength: decrease < 15 % of R_b Elongation: decrease < 15 % of A_b Volume: swelling < 20 %
Immersion in distilled water, 1 week at 70 °C	Breaking strength: decrease < 35 % of R_b Elongation: increase < 20 % of A_b

Table 2

1	2
Characteristics of the absorbing material "B" (to be determined by suitable methods ¹⁾)	
Shore hardness A:	88 ± 2 at 20 °C ± 5 °C temperature
Breaking strength:	$R_0 \geq 29,4$ MPa
Minimum elongation:	$A_0 \geq 400$ %
Modulus at 100 % elongation: at 300 % elongation:	$\geq 6,9$ MPa $\geq 12,7$ MPa
Compression set:	22 h at 70 °C ≥ 45 %
Density at 25 °C:	1,08 g/cm ³ to 1,12 g/cm ³
Aging in air (using a suitable method ⁵⁾), 70 h at 100 °C	Shore hardness: max. variation ± 3 Breaking strength: decrease < 10 % of R_0 Elongation: decrease < 10 % of A_0 Mass: decrease < 1 %
Immersion in oil (using a suitable method ⁶⁾), 70 h at 100 °C	Shore hardness: max. variation ± 4 Breaking strength: decrease < 15 % of R_0 Elongation: decrease 10 % of A_0 Volume: swelling 5 %
Immersion in oil (using a suitable method ⁷⁾), 70 h at 100 °C	Breaking strength: decrease < 15 % of R_0 Elongation: decrease < 15 % of A_0 Volume: swelling < 20 %
Immersion in distilled water, 1 week at 70 °C	Breaking strength: decrease < 35 % of R_0 Elongation: increase < 20 % of A_0

1) Suitable methods can be found in ASTM 2000, *Standard classification system for rubber products in automotive applications*.

The relevant ASTM standard can be obtained from ASTM, 1916 Race Street, Philadelphia, PA 19103, USA, or from the SABS.

2) A suitable method is ASTM D 573.

3) A suitable oil is ASTM reference oil No. 1.

4) A suitable oil is ASTM reference oil No. 3. ASTM reference oils are obtainable from Penreco, 4426 East Washington Blvd., Los Angeles, CA 90023-4476, USA.

5) A suitable method is ASTM D 573.

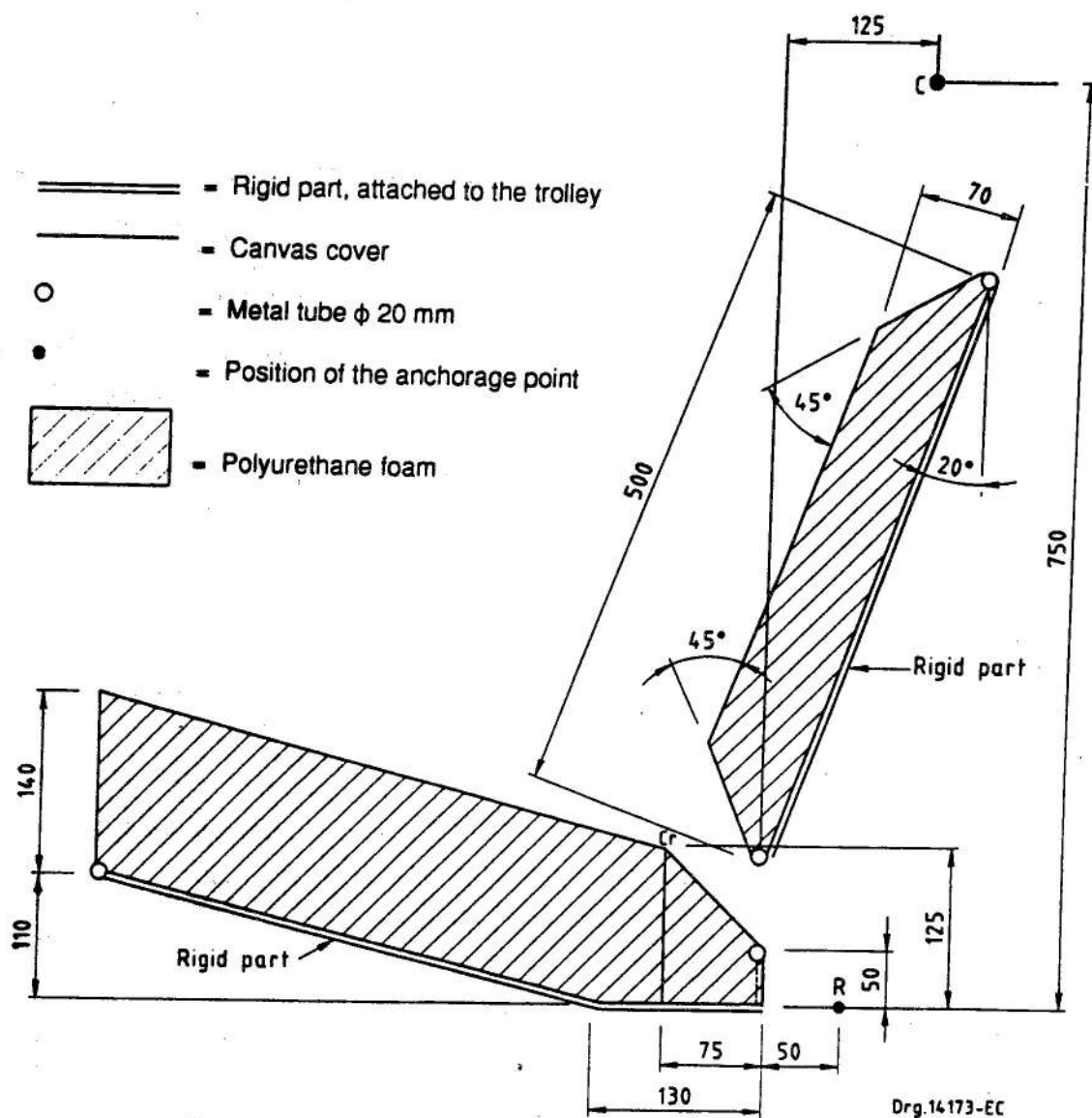
6) A suitable method is ASTM D 471, using oil No. 1.

7) A suitable method is ASTM D 471, using oil No. 3.

Annex 6 — Appendix 1

Dimensions of the seat on the trolley

Dimensions in millimetres



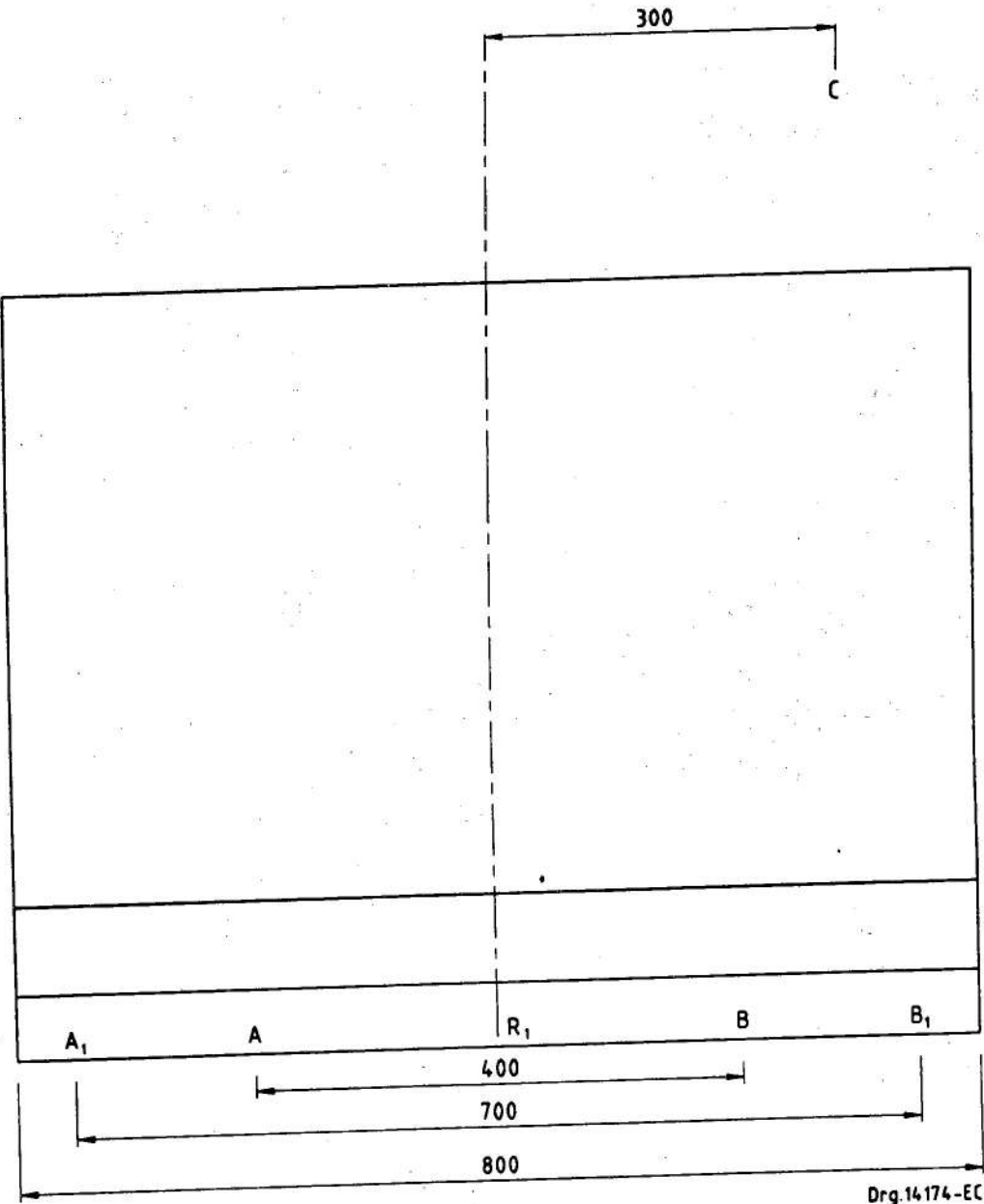
NOTE — A deviation of the longitudinal axis of the bolts through the anchorages A and B from the vertical is allowed in order to create sufficient clearance for the standard anchorage plate, as defined in figure 2 of annex 13 to this specification. Anchorage point A lies on the same line as A_1 , R_1 , B and B_1 (see figure on next page).

Annex 6 — Appendix 1 (continued)

Position of the seat on the trolley

Rear view of seat

Dimensions in millimetres



Annex 6 — Appendix 2

Stopping device

Frontal impact

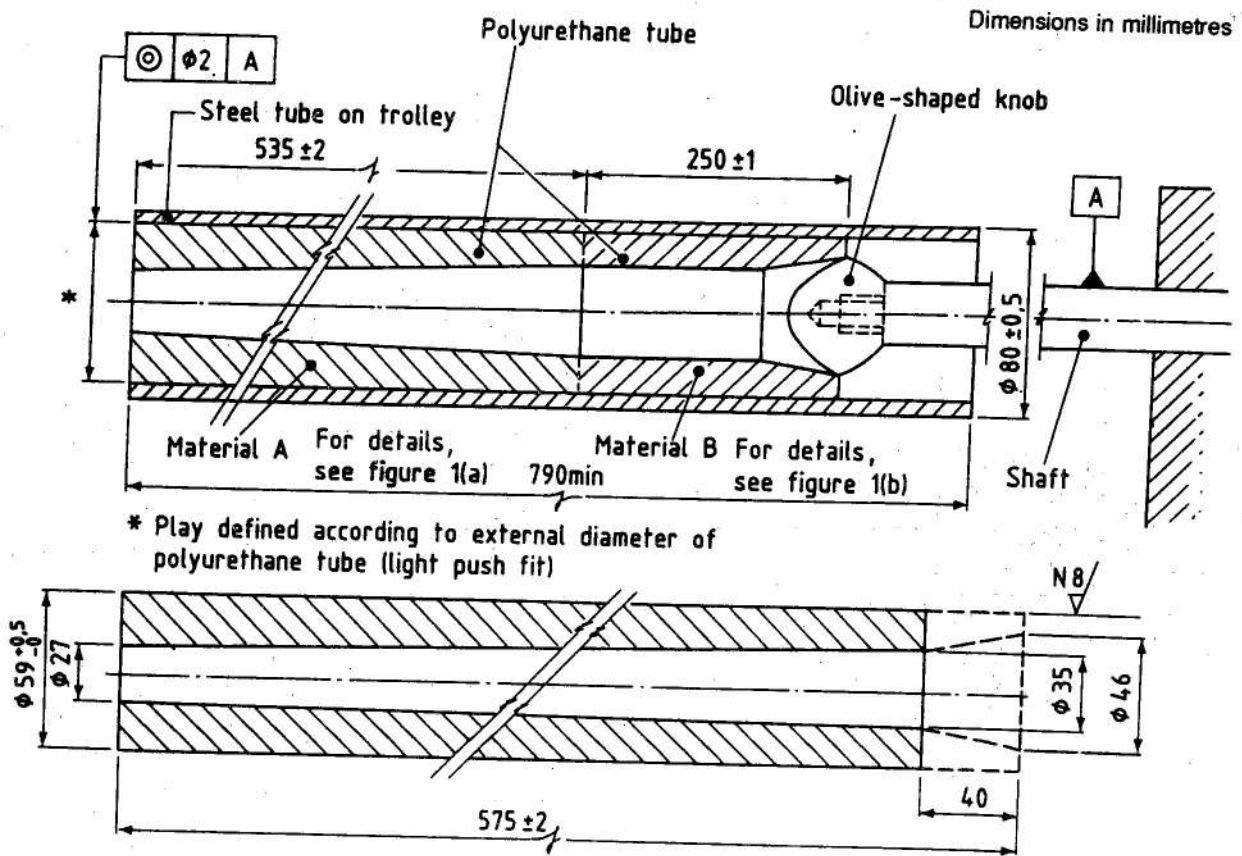
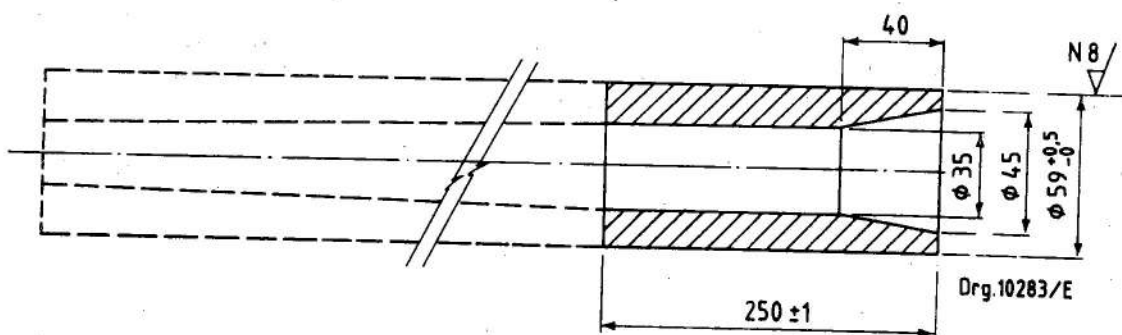


Figure 1(a) — Material A



Dimensions in millimetres

Figure 1(b) — Material B

Annex 6 — Appendix 2

Stopping device

Olive-shaped knob

Frontal impact

Dimensions in millimetres

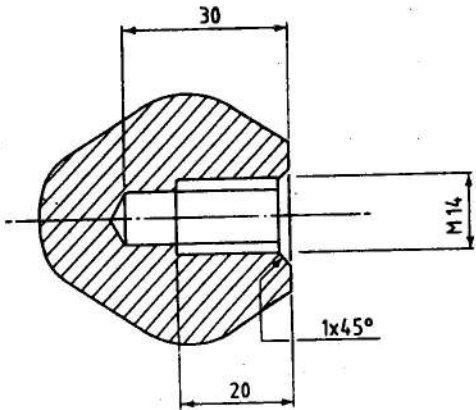


Figure 2

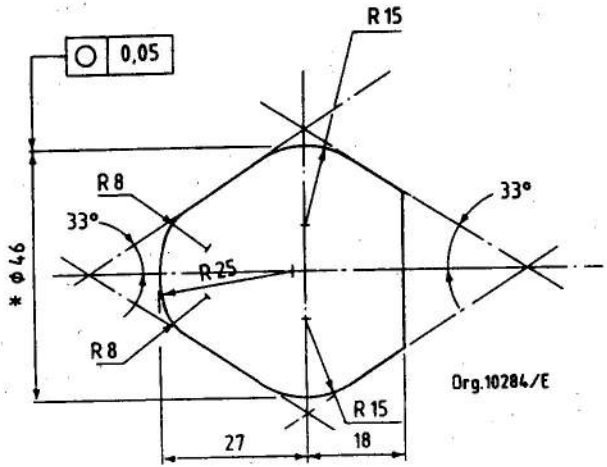


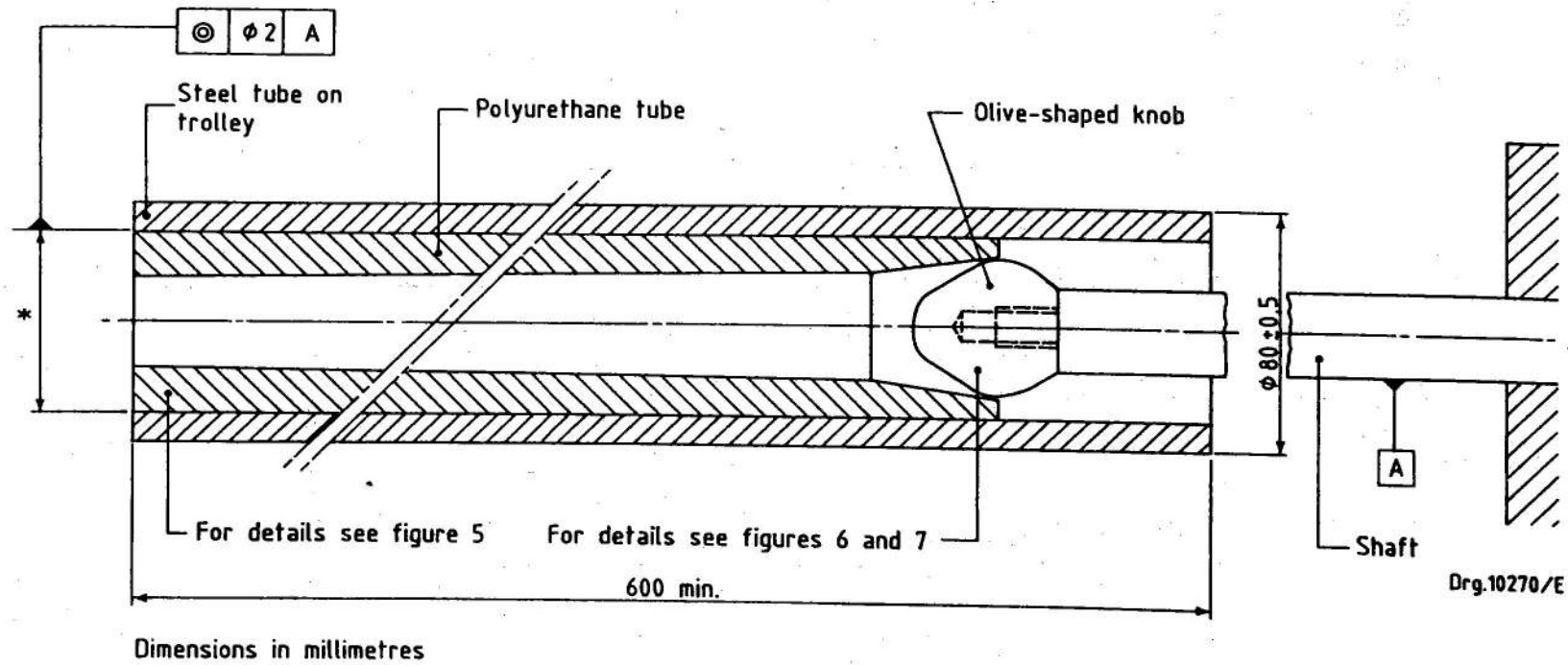
Figure 3

* This dimension might vary slightly as a result of tolerances in the manufacture of polyurethane tubes.

Stopping device

(assembled)
Rear impact

Dimensions in millimetres



*Play defined according to external diameter of the polyurethane tube (light push fit)

Figure 4

Annex 6 — Appendix 3

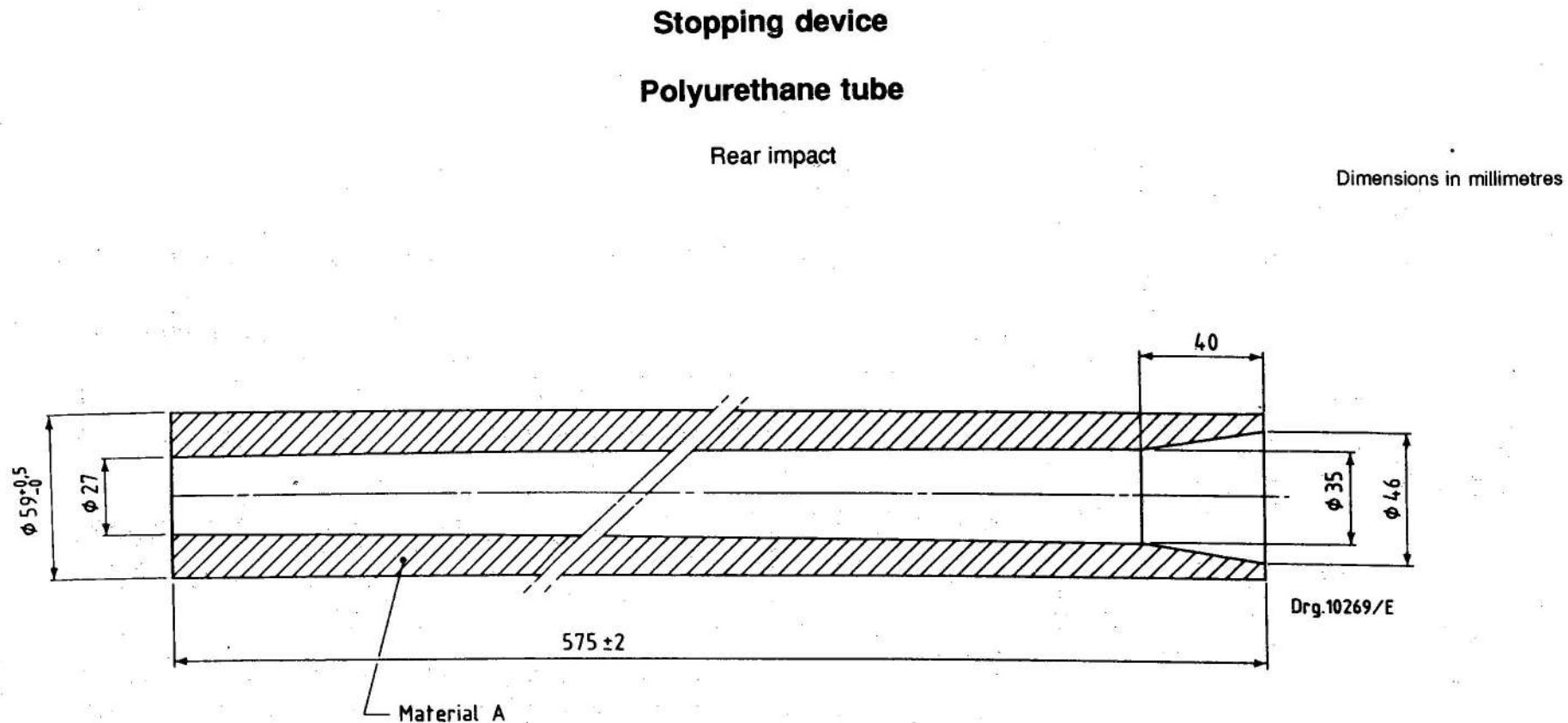


Figure 5

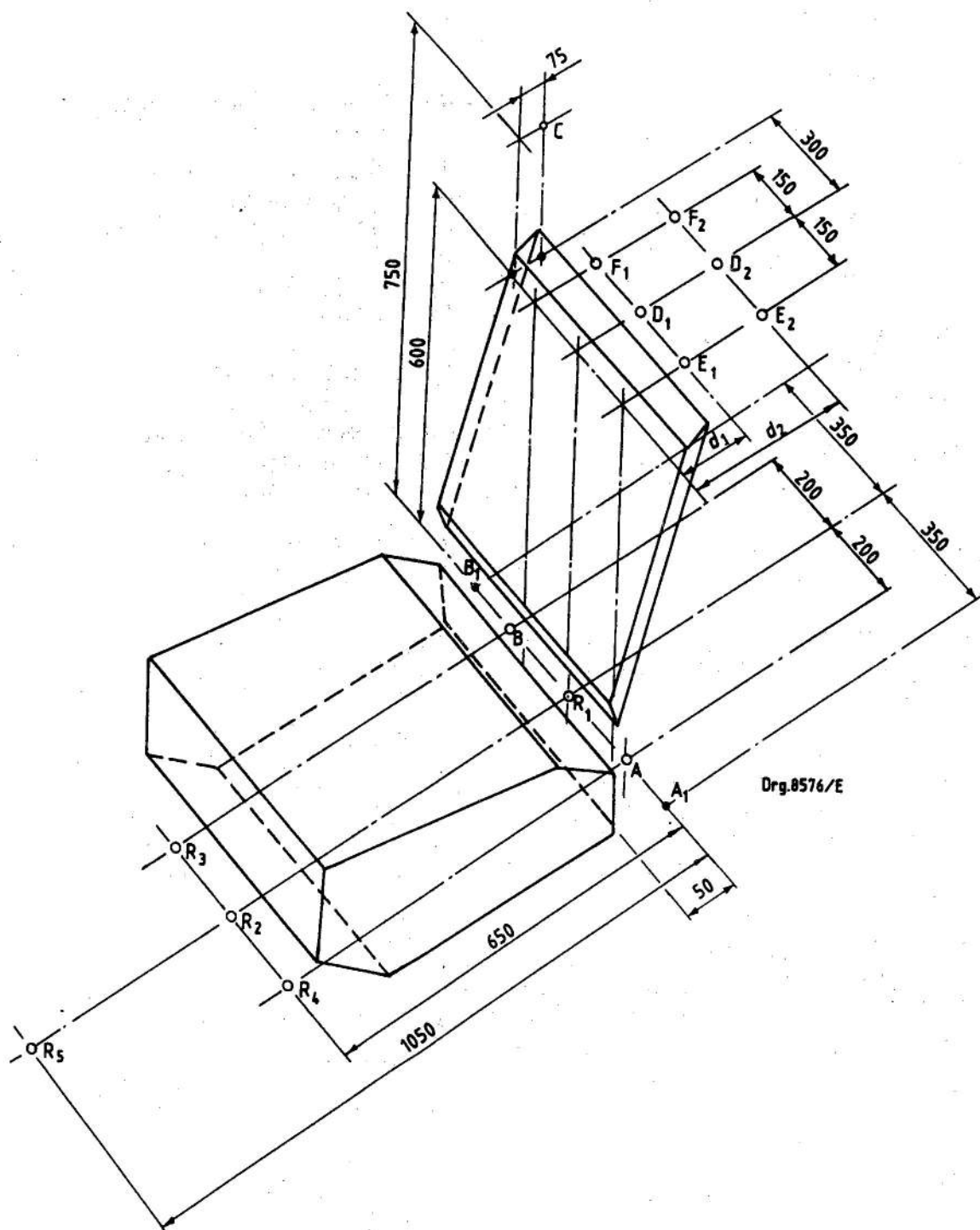
Figure 6 – Reserved

Figure 7 – Reserved

Annex 6 — Appendix 4

Arrangement and use of anchorages on the test trolley

- 1 The anchorages shall be positioned as shown in the figure below.
- 2 Anchorages A, B and C (C optional) that meet the requirements of SABS 1429:1987, *Motor vehicle safety specification for strength of seats and of their anchorages*, shall be used for child restraints in the "universal" category.
- 3 Anchorages A, B and D shall be used for child restraints in the "semi-universal" category, that have only one additional upper anchorage.
- 4 Anchorages A, B, E and F shall be used for child restraints in the "semi-universal" category, that have two additional upper anchorages.
- 5 Anchorage points R_1 , R_2 , R_3 , R_4 and R_5 shall be the additional anchorage points for rearward-facing child-restraint systems in the "semi-universal" category, that have one or more additional anchorages (see 8.1.3.5.5 of this specification).
- 6 The points that correspond to the arrangement of the anchorages, show where the ends of the belt are to be connected to the trolley or to the load transducer, as the case may be. The structure that carries the anchorages shall be rigid. The upper anchorages shall not be displaced by more than 0,2 mm in the longitudinal direction when a load of 980 N is applied to them in that direction. The trolley shall be so constructed that no permanent deformation occurs during the test in the parts that bear the anchorages.
- 7 In the case of carry-cots of group 0 that have a length of more than 400 mm, the points A_1 and B_1 can be used alternatively, as specified by the manufacturer of the restraint systems. A_1 and B_1 are located on a line through A and B and at a distance of 350 mm from R_1 .



Dimensions in millimetres

The distances d_1 and d_2 shall be:

d_1 = 200 mm for vehicles with parcel shelf
(F₁, D₁, E₁)

d_2 = 900 mm for vehicles with folding back rear seat (estate type)
(F₂, D₂, E₂)

Annex 7

Curve of the trolley's deceleration as a function of time

1 The deceleration curve of the trolley weighted with inert masspieces to produce a total mass of $455 \text{ kg} \pm 20 \text{ kg}$ in the case of child-restraint tests performed in accordance with 8.1.3.1 of this specification and of $910 \text{ kg} \pm 40 \text{ kg}$ in the case of child-restraint tests performed in accordance with 8.1.3.2 of this specification, where the nominal mass of the trolley and the vehicle structure is 800 kg , shall be, in the case of frontal impact, within the hatched area shown in appendix 1 to this annex, and, in the case of rear impact, within the hatched area shown in appendix 2 to this annex.

2 If necessary, the nominal mass of the trolley and attached vehicle structure may be increased for each increment of 200 kg by an additional inert mass of 28 kg . In no case shall the total mass of the trolley, the vehicle structure and inert masspieces differ from the nominal value for calibration tests by more than 40 kg . During calibration of the stopping device, the stopping distance shall be $650 \text{ mm} \pm 30 \text{ mm}$ for frontal impact, and $275 \text{ mm} \pm 20 \text{ mm}$ for rear impact.

NOTE — The calibration and measuring procedures should correspond to those defined in a suitable procedure¹⁾ and the measuring equipment should correspond to the specification of a data channel, with a channel frequency class (CFC) 60.

1) A suitable procedure is given in ISO 6487:1980.

Annex 8

Description of test manikins

1 General

1.1 The dimensions and masses of the test manikins are based on those of children of the 50th percentile of nine months, three, six and ten years.

1.2 The manikins consist of a metal and polyester skeleton with cast polyurethane body components.

1.3 Reserved

2 Construction (see the appendix to this annex)

2.1 Head

2.1.1 The head is made of polyurethane and is reinforced by metal strips. Inside the head it is possible to install measuring equipment on a polyamide block at the centre of gravity.

2.2 Vertebrae

2.2.1 Neck vertebrae

2.2.1.1 The neck is made of five rings of polyurethane containing a core of polyamide elements. The atlas-axis block is made of polyamide.

2.2.2 Lumbar vertebrae

2.2.2.1 The five lumbar vertebrae are made of polyamide.

2.3 Chest

2.3.1 The skeleton of the chest consists of a tubular steel frame on which the arm joints are mounted. The spine consists of a steel cable with four threaded terminals.

2.3.2 The skeleton is coated with polyurethane. Measuring equipment can be housed in the chest cavity.

2.4 Limbs

2.4.1 The arms and legs are made of polyurethane, reinforced with metal elements in the form of square tubes, strips and plates.

The knees and elbows are provided with adjustable hinge joints. The joints of the upper arm and upper leg consist of adjustable ball-and-socket joints.

2.5 Pelvis

2.5.1 The pelvis is made of glass-reinforced polyester, coated with polyurethane.

2.5.2 The shape of the upper part of the pelvis, which is important for determining sensitivity to abdominal loading, simulates, as far as possible, the shape of a child's pelvis.

2.5.3 The hip joints are situated just below the pelvis.

2.6 Assembly of the test manikin

2.6.1 Neck/chest/pelvis

2.6.1.1 The lumbar vertebrae and the pelvis are threaded onto the steel cable and the tension is adjusted by means of a nut. The neck vertebrae are mounted and adjusted in the same way. Since the steel cable should not be free to move through the chest, it shall not be possible to adjust the tension of lumbar vertebrae from the neck, or vice versa.

2.6.2 Head/neck

2.6.2.1 The head is mounted and adjusted by means of a bolt and nut through the atlas-axis block.

2.6.3 Torso/limbs

2.6.3.1 The arms and legs are mounted on, and adjusted in relation to, the torso by means of ball-and-socket joints.

2.6.3.2 In the case of the arm joints, the balls are connected to the torso; in the case of the leg joints, the balls are connected to the legs.

3 Main characteristics

3.1 Mass

Table 1

1	2	3	4	5
Component	Mass, by age group kg			
	9 months	3 years	6 years	10 years
Head and neck	2,20 ± 0,10	2,70 ± 0,10	3,45 ± 0,10	3,60 ± 0,10
Torso	3,40 ± 0,10	5,80 ± 0,15	8,45 ± 0,20	12,30 ± 0,30
Upper arm (2 x)	0,70 ± 0,05	1,10 ± 0,05	1,85 ± 0,10	2,00 ± 0,10
Lower arm (2 x)	0,45 ± 0,05	0,70 ± 0,05	1,15 ± 0,05	1,60 ± 0,10
Upper leg (2 x)	1,40 ± 0,05	3,00 ± 0,10	4,10 ± 0,15	7,50 ± 0,15
Lower leg (2 x)	0,85 ± 0,05	1,70 ± 0,10	3,00 ± 0,10	5,00 ± 0,15
Total	9,00 ± 0,20	15,00 ± 0,30	22,00 ± 0,50	32,00 ± 0,70

3.2 Principal dimensions

3.2.1 The principal dimensions, based on figure 1 of this annex, are given in table 2.

Dimensions in millimetres

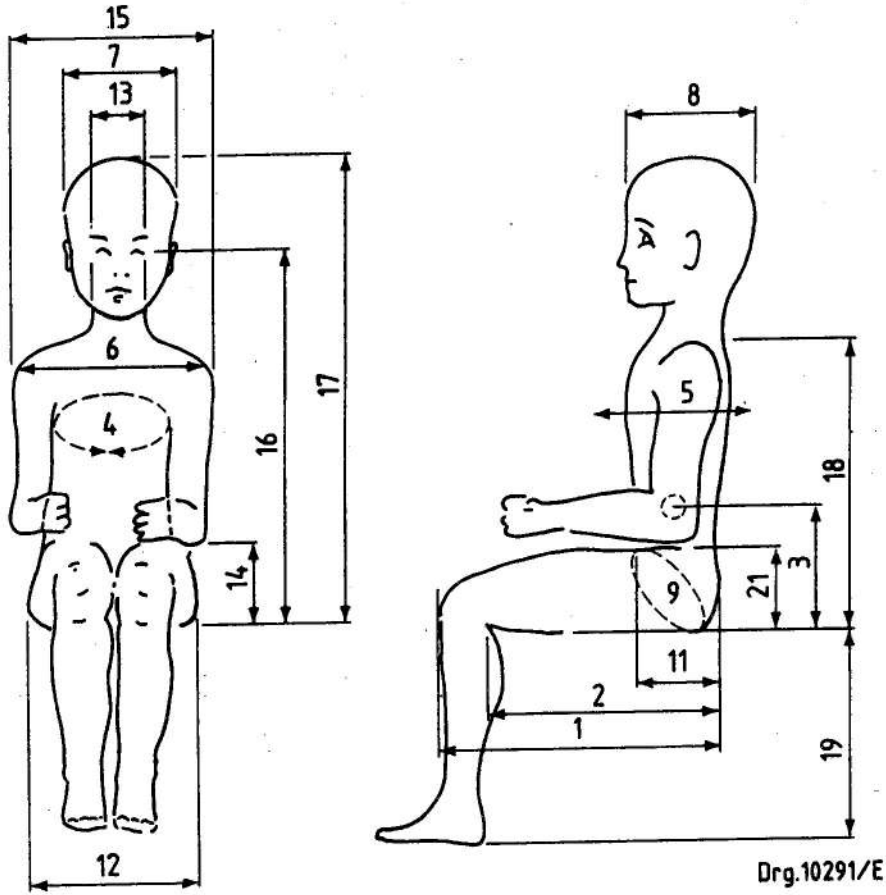


Figure 1 — Principal dimensions of manikins

Table 2

1	2	3	4	5	6
No.	Dimensions	Dimensions, by age group mm			
		9 months	3 years	6 years	10 years
1	Back of buttocks to front knee	195	334	378	456
2	Back of buttocks to popliteus, sitting	145	262	312	376
3	Centre of gravity to seat	180	190	190	200
4	Chest circumference	440	510	580	660
5	Chest depth	102	125	135	142
6	Distance between shoulder blades	170	215	250	295
7	Head width	125	137	141	141
8	Head length	166	174	175	181
9	Hip circumference, sitting	510	590	668	780
10	Hip circumference, standing (not shown)	470	550	628	740
11	Hip depth, sitting	125	147	168	180
12	Hip width, sitting	166	206	229	255
13	Neck width	60	71	79	89
14	Seat to elbow	135	153	155	186
15	Shoulder width	216	249	295	345
16	Eye height, sitting	350	460	536	625
17	Height, sitting	450	560	636	725
18	Shoulder height, sitting	280	335	403	483
19	Sole to popliteus, sitting	125	205	283	355
20	Stature (not shown)	708	980	1 166	1 376
21	Thigh height, sitting	70	85	95	106

4 Adjustment of joints

4.1 General

4.1.1 In order to achieve reproducible results using the test manikins, adjust the friction in the various joints, the tension in the neck and lumbar cables and the stiffness of the abdominal insert to specified values.

4.2 Adjustment of the neck cable

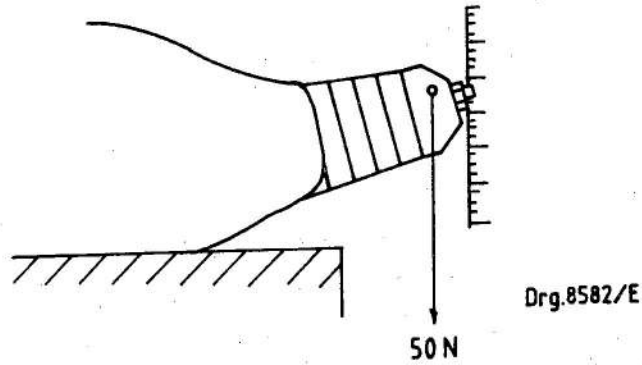
4.2.1 Place the torso on its back in a horizontal plane.

4.2.2 Mount the complete neck assembly without the head.

4.2.3 Tighten the tensioner nut on the atlas-axis block.

4.2.4 Place a suitable bar or bolt through the atlas-axis block.

4.2.5 Loosen the tensioner nut until the atlas-axis block is lowered by $10 \text{ mm} \pm 1 \text{ mm}$ when a load of 50 N directed downwards is applied to the bar or bolt through the atlas-axis block (see figure 2).

**Figure 2**

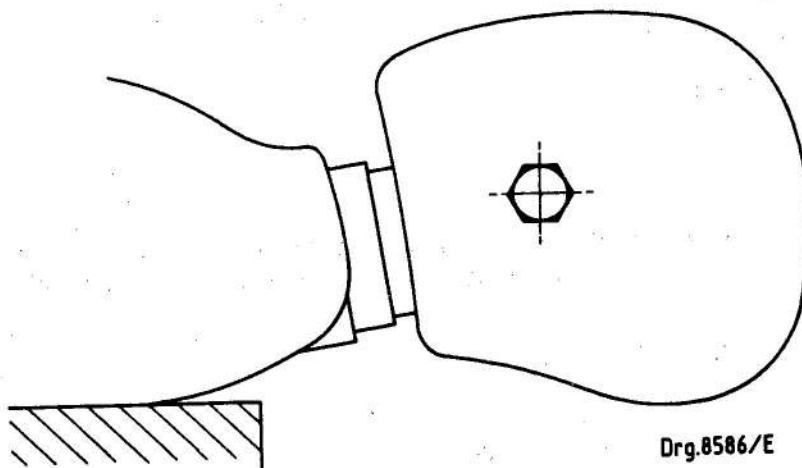
4.3 Atlas-axis joint

4.3.1 Place the torso on its back in a horizontal plane.

4.3.2 Mount the complete neck and head assembly.

4.3.3 Tighten the bolt and adjustment nut through the head and the atlas-axis block, with the head in a horizontal position.

4.3.4 Loosen the adjustment nut until the head can be moved (see figure 3).

**Figure 3**

4.4 Hip joint

4.4.1 Place the pelvis on its front in a horizontal plane.

4.4.2 Mount the upper leg without the lower leg.

4.4.3 Tighten the adjustment nut, with the upper leg in a horizontal position.

4.4.4 Loosen the adjustment nut until the upper leg can be moved (see figure 4).

4.4.5 Check the hip joints frequently in the initial stages. (This is necessary because of running-in problems.)

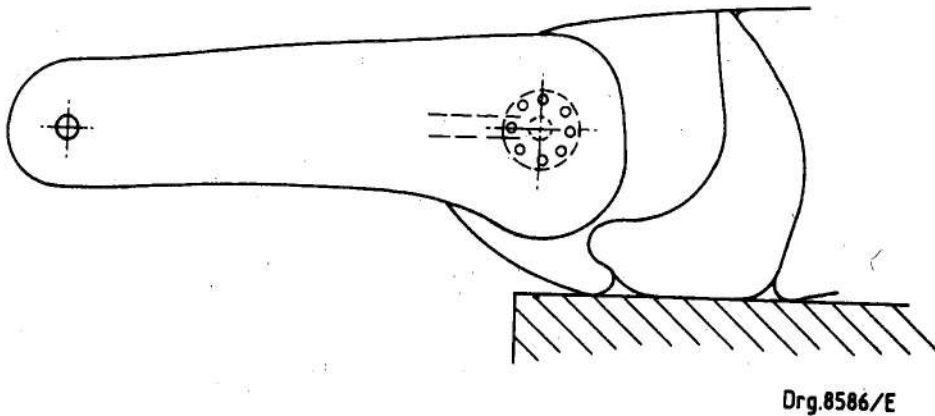


Figure 4

4.5 Knee joint

4.5.1 Place the upper leg in a horizontal position.

4.5.2 Mount the lower leg.

4.5.3 Tighten the adjustment nut of the knee joint, with the lower leg in a horizontal position.

4.5.4 Loosen the adjustment nut until the lower leg can be moved (see figure 5).

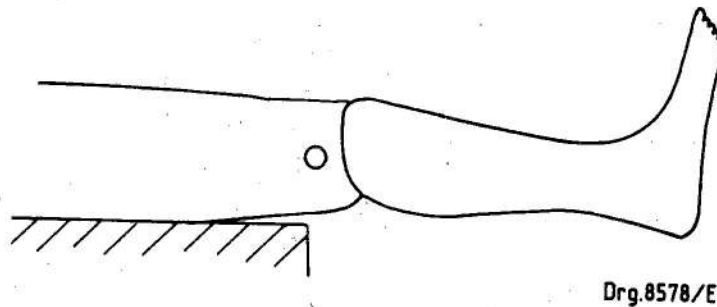


Figure 5

4.6 Shoulder joint

4.6.1 Place the torso upright.

4.6.2 Mount the upper arm without the lower arm.

4.6.3 Tighten the adjustment nuts of the shoulder, with the upper arm in a horizontal position.

4.6.4 Loosen the adjustment nuts until the upper arm can be moved (see figure 6).

4.6.5 Check the shoulder joints frequently in the initial stages. (This is necessary because of running-in problems.)

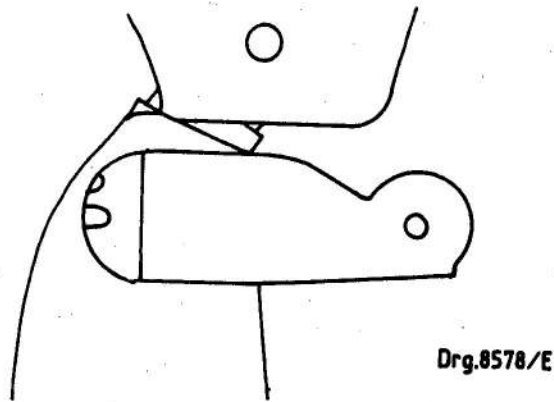


Figure 6

4.7 Elbow joint

- 4.7.1** Place the upper arm in a vertical position.
- 4.7.2** Mount the lower arm.
- 4.7.3** Tighten the adjustment nut of the elbow, with the lower arm in a horizontal position.
- 4.7.4** Loosen the adjustment nut until the lower arm can be moved (see figure 7).

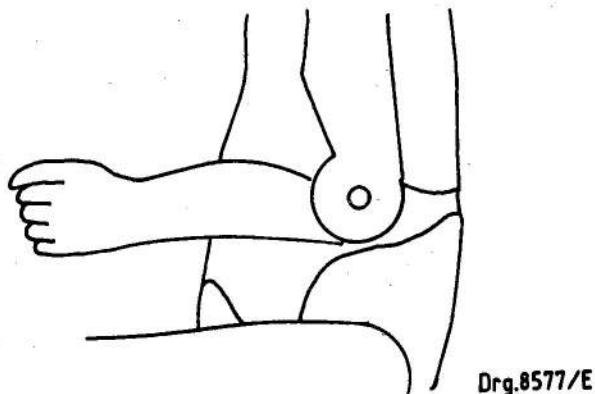
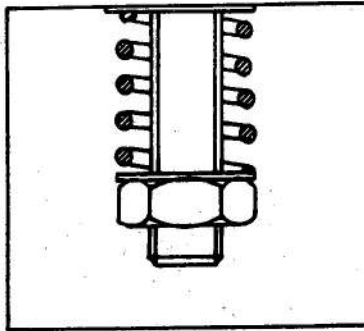


Figure 7

4.8 Lumbar cable

- 4.8.1** Assemble the upper torso, lumbar vertebrae, lower torso, abdominal insert, cable and spring.

4.8.2 Tighten the cable adjustment nut in the lower torso until the spring is compressed to two-thirds of its unloaded length (see figure 8).



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Figure 8

4.9 Calibration of the abdominal insert

4.9.1 General

4.9.1.1 Carry out the calibration by means of a suitable tension-producing machine.

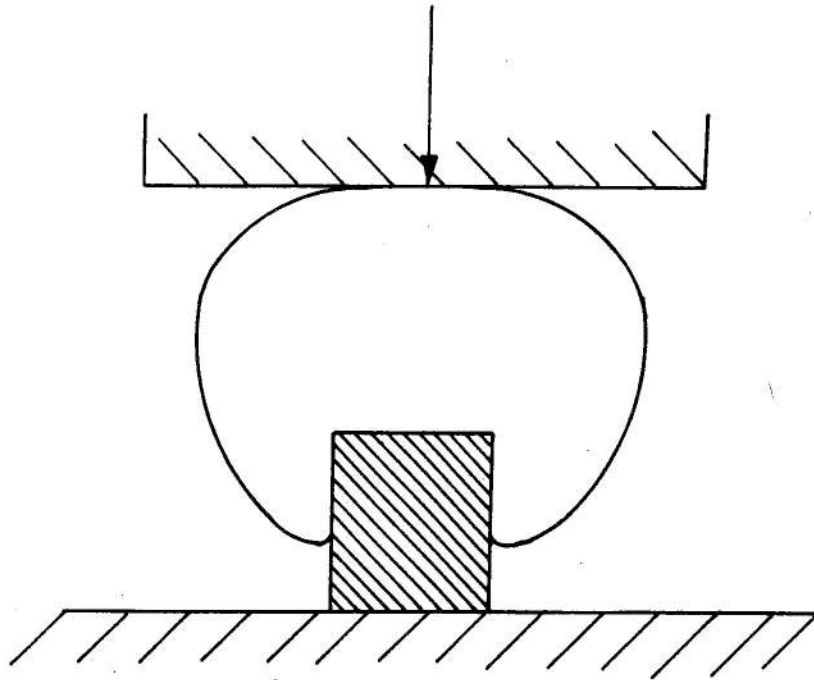
4.9.2 Place the abdominal insert on a rigid block that has the same length and width as the lumbar spinal column. Ensure that the thickness of this block is at least twice the thickness of the lumbar spinal column (see figure 9).

4.9.3 Apply an initial load of 20 N.

4.9.4 Apply a constant load of 50 N.

4.9.5 Ensure that the deflection of the abdominal insert after two minutes under the constant load is

- 11,5 mm $\pm$ 2,0 mm for the 9 months manikin;
- 11,5 mm $\pm$ 2,0 mm for the 3 years manikin;
- 13,0 mm $\pm$ 2,0 mm for the 6 years manikin; and
- 13,0 mm $\pm$ 2,0 mm for the 10 years manikin.



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Figure 9

5 Instrumentation

5.1 General

5.1.1 The calibration and measuring procedures shall be based on a suitable procedure (see note to clause 2 of annex 7 to this specification).

5.2 Installation of the accelerometer in the chest

Mount the accelerometer in the protected cavity in the chest.

5.3 Indication of abdominal penetration

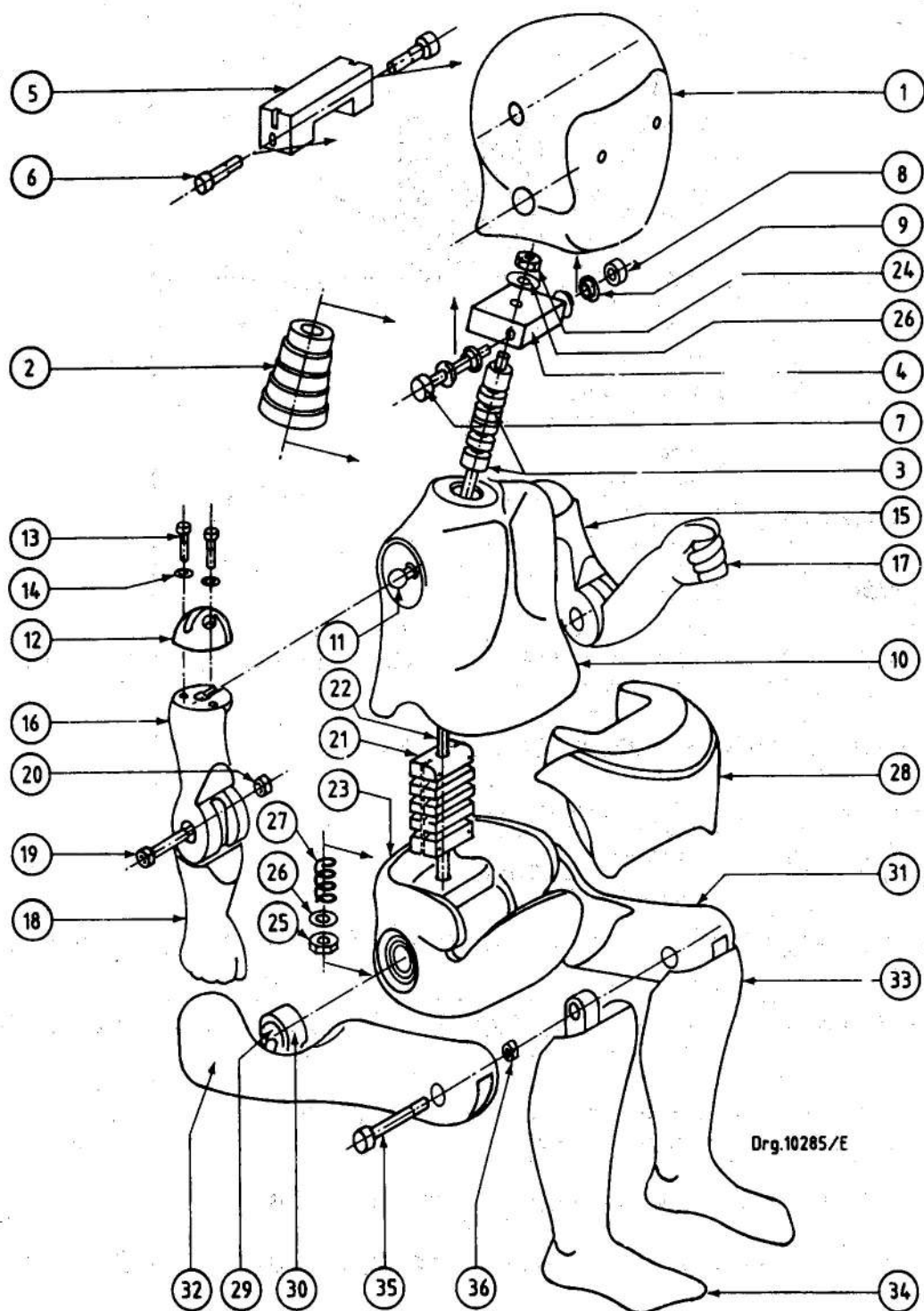
5.3.1 Connect a sample of modelling clay vertically to the front of the lumbar vertebrae by means of thin adhesive tape.

5.3.2 Note that a deflection of the modelling clay does not necessarily mean that penetration has taken place.

5.3.3 The modelling clay samples shall be of the same length and width as the lumbar spinal column; the thickness of the samples shall be $25 \text{ mm} \pm 2 \text{ mm}$.

5.3.4 Use only the modelling clay that is supplied with the test manikins.

5.3.5 Ensure that the temperature of the modelling clay during the test is $30 \text{ }^{\circ}\text{C} \pm 5 \text{ }^{\circ}\text{C}$.

Annex 8 — Appendix**Exploded view of the manikin**

1	2	3
Part No.	Description	Number
1	Head	1
2	Neck elements	5
3	Neck core elements (polyamide)	6
4	Atlas-axis block	1
5	Transducer mounting block	1
6	Transducer mounting block attachment bolt	2
7	Head bolt	1
8	Nut	1
9	Washer	4
10	Upper torso	1
11	Shoulder-joint ball	2
12	Shoulder-joint socket half	2
13	Adjustment bolt for shoulder joint	4
14	Spring washer	4
15	Upper arm left	1
16	Upper arm right	1
17	Forearm left	1
18	Forearm right	1
19	Elbow-hinge bolt	2
20	Elbow-hinge nut	2
21	Lumbar vertebrae	5
22	Spine cable	1
23	Lower torso	1
24	Adjustment nut for neck	1
25	Adjustment nut for lumbar vertebrae	1
26	Washer	3
27	Spring	1
28	Abdominal insert	1
29	Hip-joint ball	2
30	Hip-joint adjustment nut	2
31	Upper leg left	1
32	Upper leg right	1
33	Lower leg left	1
34	Lower leg right	1
35	Knee hinge bolt	2
36	Knee hinge nut	2
	Accessories (not shown)	
37	Modelling clay	1
38	Jacket	1
39	Trousers, pair of	1

Annex 9

Frontal impact test against a barrier

1 Installations, procedure and measuring instruments

1.1 Testing ground

The test area shall be large enough to accommodate the run-up track, barrier and technical installations necessary for the test. The last part of the track, for at least 5 m before the barrier, shall be horizontal, flat and smooth.

1.2 Barrier

The barrier shall consist of a block of reinforced concrete not less than 3 m wide at the front and not less than 1,5 m high. The barrier shall be of such thickness that its mass is at least 70 000 kg. The front face shall be vertical, perpendicular to the axis of the run-up track, and covered with plywood boards of thickness $20 \text{ mm} \pm 1 \text{ mm}$ and in good condition. The barrier shall be either anchored in the ground or placed on the ground with, if necessary, additional arresting devices to limit its displacement. A barrier with different characteristics, but that gives results at least as conclusive, may likewise be used.

1.3 Propulsion of the vehicle

At the moment of impact, the vehicle shall no longer be subjected to the action of any additional steering or propelling device or devices. It shall reach the barrier on a course perpendicular to the front face of the barrier; the maximum lateral misalignment permitted between the vertical median line of the front of the vehicle and the vertical median line of the barrier shall be $\pm 300 \text{ mm}$.

1.4 State of the vehicle

1.4.1 The vehicle under test shall either be fitted with all the normal components and equipment the mass of which is included in its unladen service mass or be in such a condition as to fulfil this requirement in so far as the components and equipment of concern to the passenger compartment and the distribution of the service mass of the vehicle as a whole are concerned.

1.4.2 If the vehicle is driven by external means, the fuel installation shall be filled to at least 90 % of its capacity, either with fuel or with a non-flammable liquid, that has a density and a viscosity close to those of the fuel normally used. All other systems (brake-fluid containers, radiators, etc.) shall be empty.

1.4.3 If the vehicle is driven by its own engine, the fuel tank shall be at least 90 % full. All other liquid-holding tanks shall be filled to capacity.

1.4.4 If the manufacturer so requests, the testing authority responsible for conducting the tests may allow the same vehicle as is used for tests prescribed by other specifications (including tests capable of affecting its structure) to be used for the tests prescribed by this specification.

1.5 Impact velocity

The impact velocity shall be $50 \text{ km/h} \begin{smallmatrix} +0 \\ -2 \end{smallmatrix} \text{ km/h}$. However, if the test has been carried out at a higher impact velocity and the vehicle has satisfied the conditions prescribed, the test shall be considered satisfactory.

1.6 Measuring instruments

The instrument used to record the velocity referred to in 1.5 above shall be accurate to within 1 %.

Annex 10

Rear impact test procedure

1 Installations, procedures and measuring instruments

1.1 Testing ground

The test area shall be large enough to accommodate the propulsion system of the impactor and to permit after-impact displacement of the impacted vehicle and installation of the test equipment. The part in which vehicle impact and displacement occur shall be horizontal. (The slope shall be less than 3 %, measured over any length of 1 m.)

1.2 Impactor

1.2.1 The impactor shall be of steel and of rigid construction.

1.2.2 The impacting surface shall be flat and at least 2 500 mm wide and 800 mm high. Its edges shall be round to a radius of curvature of between 40 mm and 50 mm. It shall be clad with a layer of plywood of thickness $20 \text{ mm} \pm 1 \text{ mm}$.

1.2.3 At the moment of impact, the following requirements shall be met:

1.2.3.1 The impacting surface shall be vertical and perpendicular to the median longitudinal plane of the impacted vehicle.

1.2.3.2 The direction of movement of the impactor shall be substantially horizontal and parallel to the median longitudinal plane of the impacted vehicle.

1.2.3.3 The maximum lateral deviation permitted between the median vertical line of the surface of the impactor and the median longitudinal plane of the impacted vehicle shall be 300 mm. In addition, the impacting surface shall extend over the entire width of the impacted vehicle.

1.2.3.4 The ground clearance of the lower edge of the impacting surface shall be $175 \text{ mm} \pm 25 \text{ mm}$.

1.3 Propulsion of the impactor

The impactor shall either be secured to a carriage (moving barrier) or form part of a pendulum.

1.4 Special provisions applicable where a moving barrier is used

1.4.1 If the impactor is secured to a carriage (moving barrier) by a restraining element, the latter shall be rigid and incapable of being deformed by the impact; the carriage shall, at the moment of impact, be capable of moving freely, shall no longer be subject to the action of the propelling device, and shall have a velocity of between 30 km/h and 32 km/h.

1.4.2 The combined mass of carriage and impactor shall be $1\,100 \text{ kg} \pm 20 \text{ kg}$.

1.5 Special provisions applicable where a pendulum is used

1.5.1 The distance between the centre of the impacting surface and the axis of rotation of the pendulum shall be not less than 5 m.

1.5.2 The impactor shall be freely suspended by rigid arms, rigidly secured to it. The pendulum so constituted shall be substantially incapable of being deformed by the impact.

1.5.3 A stopping device shall be incorporated in the pendulum, to prevent any secondary impact by the impactor on the test vehicle.

1.5.4 At the moment of impact, the velocity of the centre of percussion of the pendulum shall be between 30 km/h and 32 km/h.

1.5.5 The reduced mass " m_r " at the centre of percussion of the pendulum is defined as a function of the total mass " m ", of the distance a^2) between the centre of percussion and the axis of rotation, and of the distance " l " between the centre of gravity and the axis of rotation, by the following equation:

$$m_r = m.l/a$$

1.5.6 The reduced mass " m_r " shall be $1\,100\text{ kg} \pm 20\text{ kg}$.

1.6 General provisions relating to the mass and velocity of the impactor

If the test has been conducted at an impact velocity higher than that prescribed in 1.4.1 or 1.5.4 (as applicable) of this annex, or with a mass greater than that prescribed in 1.4.2 or 1.5.6 (as applicable) of this annex, or with both a higher velocity and a greater mass than those prescribed, and the vehicle has met the requirements prescribed, the test shall be considered satisfactory.

1.7 State of the vehicle during the test

The vehicle under test shall either be fitted with all the normal components and equipment the mass of which is included in its unladen service mass or be in such condition as to fulfil this requirement in so far as the distribution of the service mass of the vehicle as a whole is concerned.

1.8 The complete vehicle with the child restraint installed in accordance with the fitting instructions shall be placed on a hard, flat and level surface, with the handbrake off and in neutral gear. More than one child restraint may be tested in the same impact test.

2) The distance " a " is equal to the length of the synchronous pendulum under consideration.

Annex 11

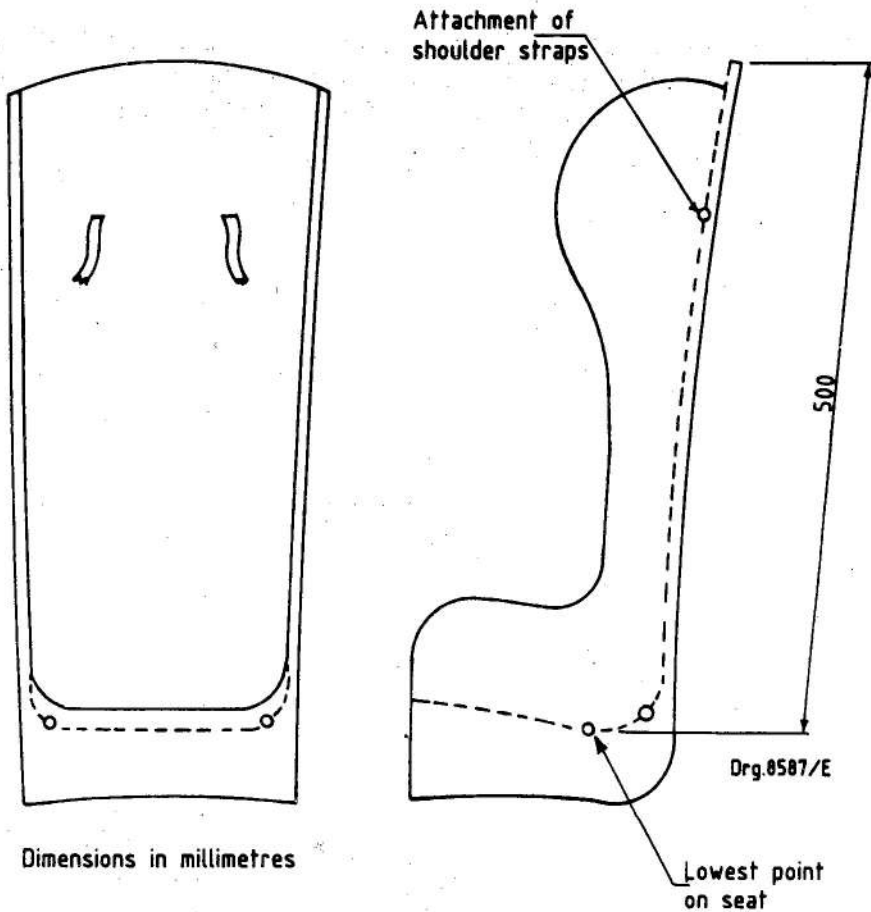
Additional anchorages required for attaching child restraints of the semi-universal category to motor vehicles

- 1** This annex applies only to the additional anchorages for attaching child restraints in the "semi-universal" category or to bars and other special items used to secure child-restraining devices to the bodywork, whether or not they make use of the said SABS 1430 (see 2.14.1 of this specification) anchorages.
- 2** The anchorages shall be determined by the manufacturer of the child restraint, in agreement with the vehicle manufacturer, and details shall be submitted for approval to the testing authority conducting the tests. The testing authority may take into account information obtained from the vehicle manufacturer.
- 3** The manufacturer of the child restraint shall provide the necessary parts for fitting the anchorages and a special plan for each vehicle, showing their exact location.
- 4** The user shall be responsible for fitting the anchorages to the vehicle in accordance with the instructions provided by the manufacturer of the child restraint.

Annex 12

Chair

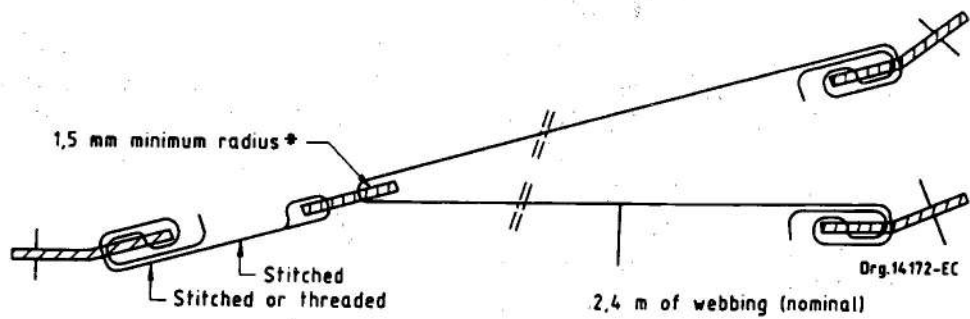
Dimensions in millimetres



Annex 13

Standard seat belt

- 1** The seat belt shall be made to the configuration shown in figure 1 and shall meet the dynamic test requirements of the said SABS 1080 (see 7.2.1.1 of this specification), without preconditioning.
- 2** The width of the straps under a load of 8,8 kN shall be not less than $48 \text{ mm} \pm 2 \text{ mm}$.
- 3** The elongation of the straps under a further load of 8,8 kN, after a preloading of 0,2 kN shall be $(12 \pm 1) \%$.
- 4** The elongation of the straps under a further load of 5,5 kN, after a preloading of 0,2 kN, shall be $(6 \pm 1) \%$.
- 5** If necessary, a two-point standard belt may be used that consists of two standard anchorage plates (as shown in figure 2 of this annex) and a strap that fulfils the abovementioned requirements. This seat belt shall meet the dynamic test requirements of the said SABS 1080 (see 7.2.1.1 of this specification), without preconditioning.



* To reduce the risk of the webbing's being cut at the tongue position.

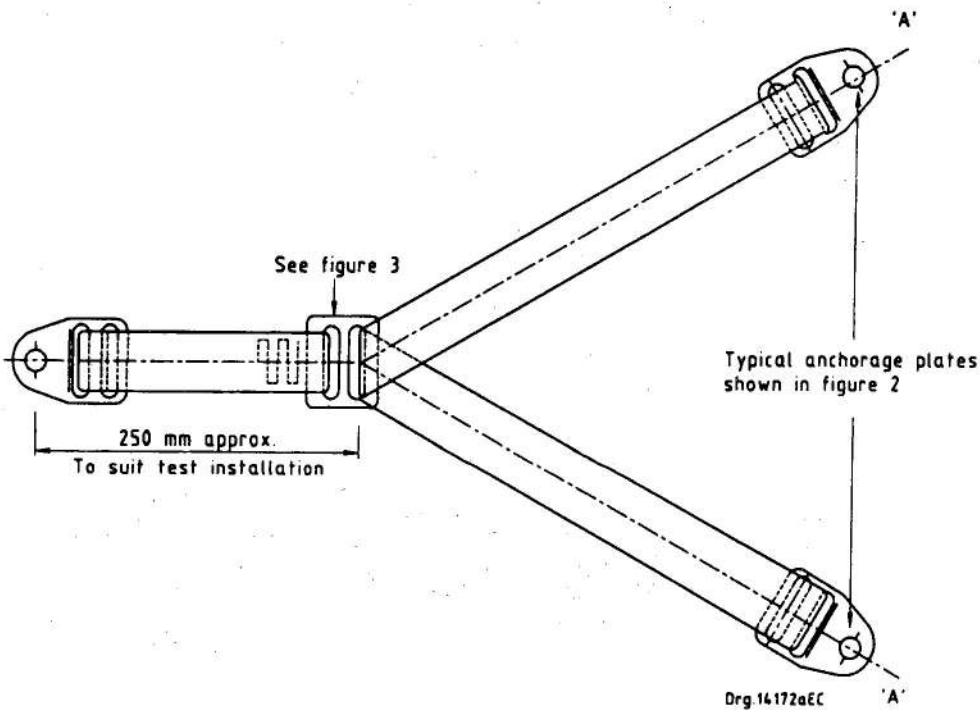


Figure 1 — Standard belt configuration

Dimensions in millimetres

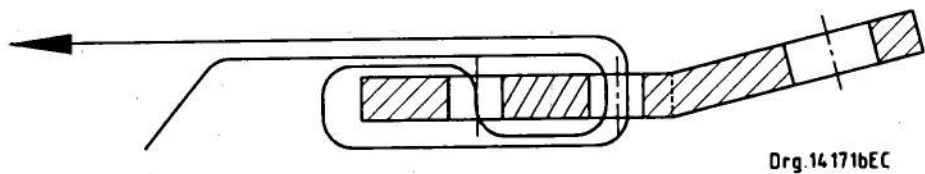
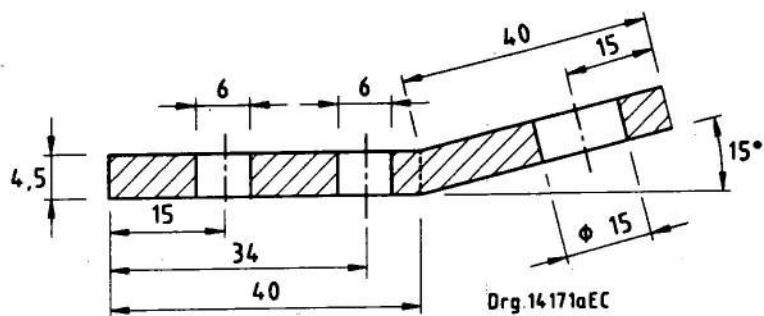
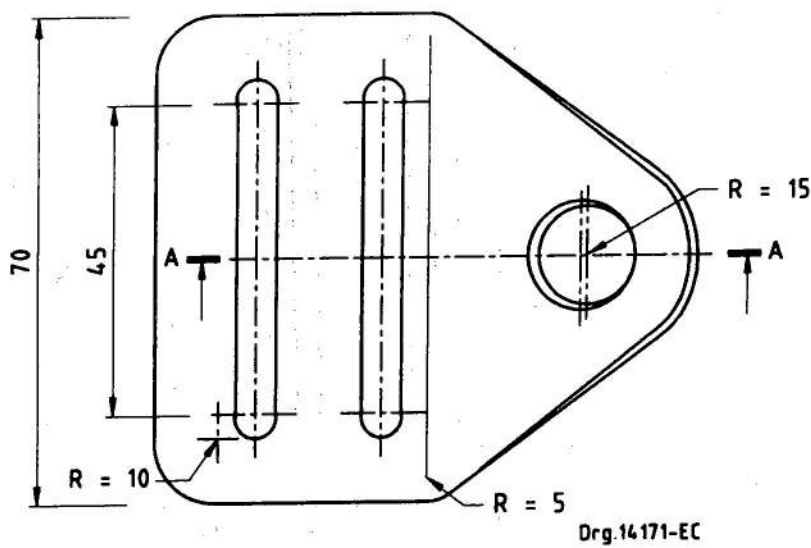


Figure 2 — Typical standard anchorage plate

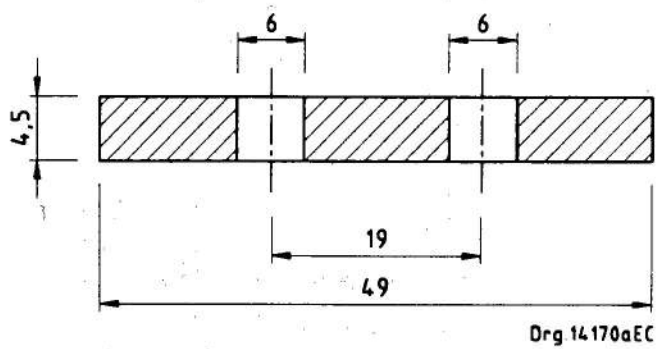
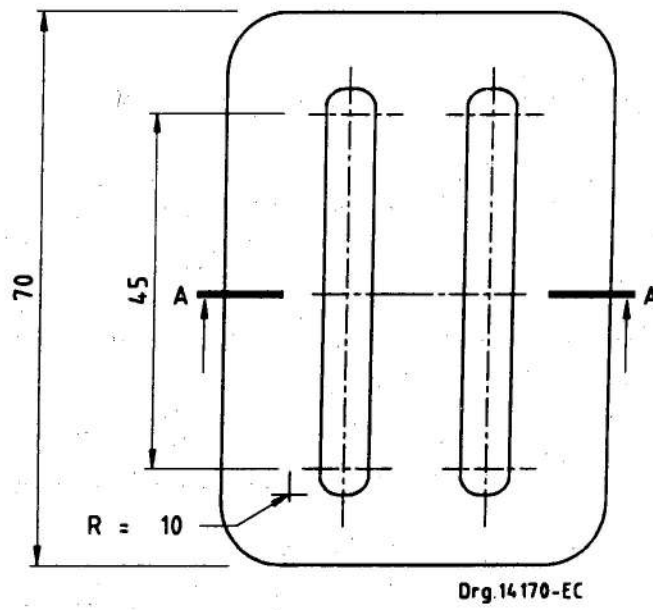


Figure 3 — Central part of the standard belt configuration

Annex 14

Description of "newborn" test manikin

The manikin comprises a head, torso, arms and legs as a single unit. The torso, arms and legs are a single moulding of sorbothane-type material covered with a PVC skin and containing a steel spine. The head is a polyurethane foam moulding covered by a PVC skin and is permanently attached to the torso. The manikin is provided with a close-fitting stretch cotton/polyester suit.

The dimensions and mass distribution of the manikin are based on those of a 50th percentile newborn baby and are given in tables 1 and 2 and in figure 1.

Table 1 — Principal dimensions of the "newborn" test manikin

1	2	3	1	2	3
	Dimensions	mm		Dimensions	mm
A	Rump - Crown	250	F	Chest width	105
B	Rump - Sole (with straight	105	G	Chest depth	100
C	leg)	125	H	Hip width	105
D	Head width	150	I	C of G from top to head	235
E	Head depth				
	Shoulder width				

Table 2 — Mass distribution of the "newborn" manikin*

1	2
Head and neck	0,7 kg
Torso	1,1 kg
Arms	0,5 kg
Legs	1,1 kg
Total mass	3,4 kg
* The thickness of the PVC skin should be $1 \text{ mm} + 0,5 \text{ mm}$, and to specific gravity should be $0,865 \pm 0,1$.	

Calibration of "newborn" manikin

1 Shoulder stiffness

1.1 Place the manikin on its back on a horizontal surface and support the torso on one side, to prevent movement (see figure 2).

1.2 Apply a load of 150 N, on a 40 mm diameter flat-faced plunger, horizontally, in a direction perpendicular to the manikin's superior-inferior axis. The axis of the plunger should be on the centre of the manikin's shoulder and adjacent to point A on the shoulder (see figure 2). The lateral deflection of the plunger from the point of first contact with the arm should be between 30 mm and 50 mm.

1.3 Repeat on the opposite shoulder — reversing the support.

2 Leg joint stiffness

2.1 Place the manikin on its back on a horizontal plane (see figure 3) and strap the two lower legs together, bringing the inside of the knees into contact.

2.2 Apply a vertical load over the knees with a 35 mm x 95 mm flat-faced plunger, with the centre-line of the plunger over the highest point of the knees.

2.3 Apply sufficient force to the plunger to bend the hips until the face of the plunger is 85 mm above the support plane. This force should be between 30 N and 70 N. Ensure that the lower limbs do not contact any surface during the test.

3 Temperature

Calibration should be carried out of a temperature between 15 °C and 30 °C.

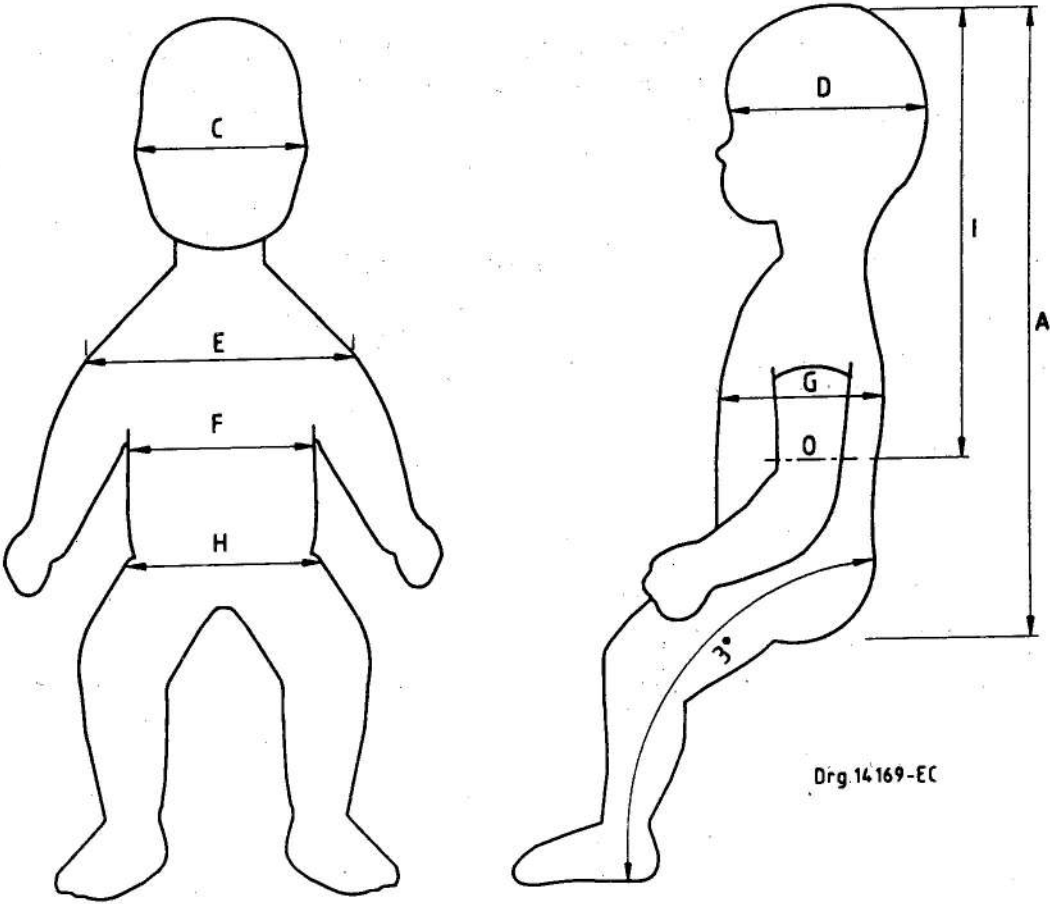


Figure 1

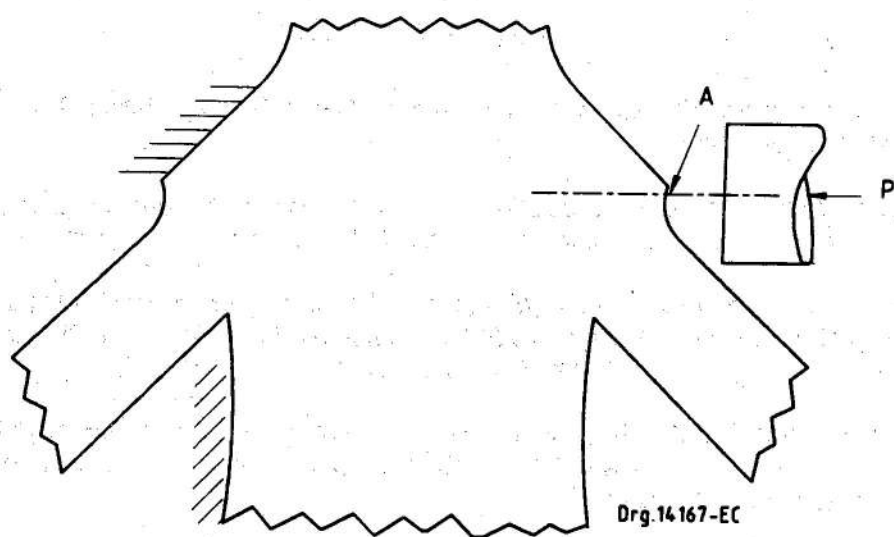


Figure 2

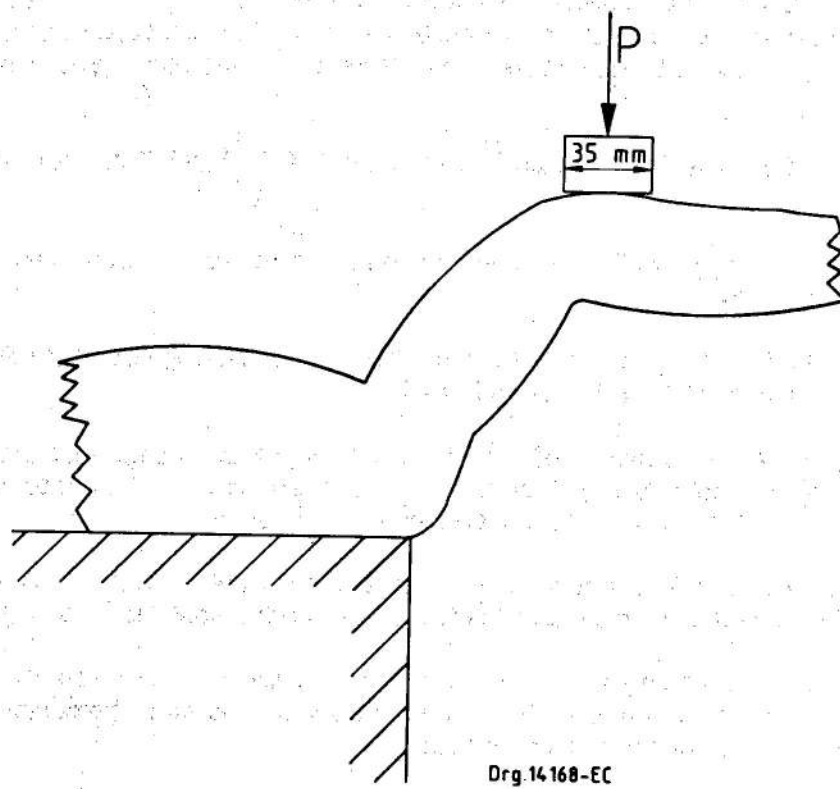


Figure 3

Annex 15

Explanatory notes

The explanatory notes given in this annex concern difficulties with interpretation. They are meant as a guide for the testing authority.

Subsection 2.19.2: A semi-universal restraint specified for fitting to the rear seat in both a saloon and an estate type vehicle in which the entire belt assembly is identical, is one "type".

Subsection 2.19.3: The significance of changes in the dimensions or mass (or both) of the seat, padding or impact shield and the energy-absorbing characteristics or colour of the material are to be considered when deciding whether a new type has been created.

Subsection 2.19.4 and 2.19.5: These subsections shall not apply to any safety belts that have been separately approved in accordance with SABS 1080 and that are necessary to anchor the child restraint to the vehicle or to restrain the child.

Subsection 6.2.4: This shall be assessed by examination of the high-speed film results where visible penetration of the abdomen by any part of the restraint, or riding up of any lap strap onto the chest, shall constitute a failure. (Twisting of the manikin out of the shoulder strap before the point of maximum displacement shall itself also be considered as a failure, but at the manufacturer's request, two further tests may be performed with the appropriate manikin. All test requirements shall be met in full during these tests.)

Subsection 7.1.4.3.1: "Visible signs of penetration" means penetration of the clay by the abdominal insert (under pressure from the restraint) but not bending of the clay without compression in a horizontal direction as, for instance, is brought about by simple bending of the spine. (See also the interpretation of 6.2.4.)

Subsection 7.2.1.5: The first sentence is complied with if the hand of the manikin could reach the buckle.

Subsection 7.2.2.1: This shall be used to ensure that separately approved guide-straps are easily attached and detached.

Subsection 7.2.4.1.1: Two straps are required. Measure the breaking load of the first strap. Measure the width of the second strap at 75 % of this load.

Subsection 8.1.2.2: "Fastened to the seat" means the test seat as prescribed in annex 6. "Specific vehicles may" means that a "specific" restraint would normally be tested for overturning when installed in the test seat, but that testing in the vehicle seat was allowed.

Subsection 8.2.2.1.1: "Having regard for the normal conditions of use" means that this test should be performed with the restraint mounted on the test seat or vehicle seat, but without the manikin.

The manikin shall be used only to position the adjusting device. In the first instance, the straps should be adjusted in accordance with 8.1.3.6.3.2 or 8.1.3.6.3.3 (whichever is appropriate). The test should then be conducted after removal of the manikin.

Subsection 8.2.5.2.6: This subsection shall not apply to guide straps that are approved separately under this specification.

No. 1976

6 Desember 1996

WET OP STANDAARDE, 1993

**VOORGESTELDE WYSIGINGS VAN DIE VERPLIGTE SPESIFIKASIE VIR KINDERKEERTOESTELLE
VIR GEBRUIK IN MOTORVOERTUIE**

Hierby word kragtens artikel 22 (3) van die Wet op Standaarde, 1993 (Wet No. 29 van 1993), bekendgemaak dat die Minister van Handel en Nywerheid van voorneme is om die verpligte spesifikasie vir kinderkeertoestelle vir gebruik in motor-voertuie, gepubliseer by Goewermentskennisgewing No. 238 van 14 Februarie 1986, te wysig deur dit in te trek en te vervang deur die spesifikasie in die Bylae vervat.

Die doel van die wysiging is om al die wysigings van die EKE-regulasie waarop die verpligte spesifikasie gebaseer is, in die verpligte spesifikasie in te lyf.

Enige persoon wat beswaar wil maak teen die Minister se voorneme om die verpligte spesifikasie te wysig, moet sy skriftelike beswaar voor of op die datum twee (2) maande na publikasie van hierdie kennisgewing indien by die President, Suid-Afrikaanse Buro vir Standaarde, Privaatsak X191, Pretoria, 0001.

BYLAE

VOORGESTELDE WYSIGING VAN DIE VERPLIGTE SPESIFIKASIE VIR KINDERKEERTOESTELLE VIR GEBRUIK IN MOTORVOERTUIE

1 Bestek

Hierdie spesifikasie is van toepassing op kinderkeertoestelle wat geskik is vir installering in kraggedrewe voertuie wat drie of meer wiele het en aan die vereistes van SABS 1429:1987, *Motorvoertuig-veiligheidspesifikasie vir sterkte van sitplekke en hul verankerings* en SABS 1430:1987, *Motorvoertuig-veiligheidspesifikasie vir verankerings vir keertoestelle in motorvoertuie* voldoen en wat nie vir gebruik met voutsitplekke (opklapsitplekke) of met sywaarts gerigte sitplekke bedoel is nie.

OPM

1 Hierdie veiligheidspeisifikasie is gegrond op ECE-regulasie No 44 van 22 Januarie 1981, *Uniform provisions concerning the approval of restraining devices for child occupants of power-driven vehicles ("Child restraints")*, met inbegrip van

Hersiening 1/Addendum 43/Wysiging 1 van 16 November 1982,
Hersiening 1/Addendum 43/Wysiging 1/Corrigendum 1 van 19 Maart 1984,
Hersiening 1/Addendum 43/Wysiging 2 van 18 April 1986,
Hersiening 1/Addendum 43/Wysiging 3 van 15 Desember 1987,
Hersiening 1/Addendum 43/Wysiging 4 van 16 Februarie 1989,
Hersiening 1/Addendum 43/Wysiging 4/Corrigendum 1 van 9 Oktober 1992,
Hersiening 1/Addendum 43/Wysiging 5 van 17 April 1991, en
Hersiening 1/Addendum 43/Corrigendum 1 van 9 Oktober 1992.

2 Vir maklike kruisverwysing is die nommeringstelsel wat in die ECE-regulasie gebruik word, behou. Die teks van die klousules/subklousules wat nie op Suid-Afrikaanse toestande van toepassing is nie, is geskrap en deur die woord "Gereserveer" vervang.

2 Woordbepaling

Die volgende woordbepalings geld vir die doel van hierdie spesifikasie:

2.1 kinderkeerstelsel; keertoestel: 'n Samestel van komponente wat uit 'n kombinasie van bande of buigsame komponente met 'n vasmaakgespe, verstellers, hegstukke en, in sommige gevalle, 'n bykomende toestel soos 'n drawieg, 'n babadraer, 'n bykomende stoel of 'n slagskerm of albei kan bestaan en wat in 'n kraggedrewe voertuig veranker kan word. Dit is só ontwerp dat dit die gevaar van besering van die draer in die geval van 'n botsing of skielike spoedvermindering van die voertuig sal verminder deur die beweegbaarheid van die draer se liggaam te beperk.

2.1.1 Kinderkeertoestelle word in vier massagroepes ingedeel:

2.1.1.1 Groep 0 vir kinders met 'n massa van minder as 10 kg;

2.1.1.2 Groep I vir kinders met 'n massa van 9 kg tot 18 kg;

2.1.1.3 Groep II vir kinders met 'n massa van 15 kg tot 25 kg;

2.1.1.4 Groep III vir kinders met 'n massa van 22 kg tot 36 kg.

2.1.2 Kinderkeertoestelle word in drie kategorieë ingedeel:

2.1.2.1 'n Universele kategorie vir gebruik in alle tipes voertuie;

2.1.2.2 'n Semi-universele kategorie vir gebruik in sekere gespesifiseerde tipes voertuie;

2.1.2.3 'n Voertuigspesifieke kategorie vir gebruik in een bepaalde tipe voertuig wat toegerus is met die verankerings wat deur die fabrikant van die voertuig of deur die fabrikant van die kinderkeerstelsel ontwerp is.

2.1.3 Kinderkeerstelsels word in twee klasse verdeel:

- 'n **Integrerende klas** wat uit 'n kombinasie van bande of buigsame komponente met 'n vasmaakgespe, 'n versteller, hegstukke en, in sommige gevalle, 'n bykomende stoel of 'n slagskerm of albei bestaan, wat deur sy eie integrerende band of bande veranker kan word;
- 'n **Nie-integrerende klas** wat uit 'n gedeeltelike keertoestel (kyk 2.1.3.1) kan bestaan wat, wanneer dit saam met 'n sitplekgordel vir volwassenes om die liggaam van die kind gaan of die toestel teëhou waarin die kind geplaas word, 'n volledige keerstelsel uitmaak.

2.1.3.1 gedeeltelike keertoestel: 'n Toestel soos 'n steunkussing (kyk 2.1.3.2) wat, wanneer dit saam met 'n sitplekgordel vir volwassenes om die liggaam van die kind gaan of die toestel teëhou waarin die kind geplaas word, 'n volledige keerstelsel uitmaak.

2.1.3.2 steunkussing: 'n Stewige kussing wat saam met 'n sitplekgordel vir volwassenes gebruik kan word en wat deur óf daardie sitplekgordel óf deur afsonderlike middele teëgehou word.

2.1.3.3 leiband: 'n Band wat die skouerband van die sitplekgordel vir volwassenes in 'n posisie hou wat die kind pas en waar die effektiewe posisie waarby die skouerband van rigting verander, verstel kan word deur middel van 'n toestel wat op en af met die band langs tot by die draer se skouer beweeg kan word en dan in daardie posisie gesluit kan word.

OPM – Hierdie leiband is nie bedoel om 'n beduidende deel van die dinamiese las te dra nie.

2.2 kinderveiligheidstoel: 'n Kinderkeertoestel wat 'n stoel insluit waarin die kind vasgehou word.

2.3 gordel: 'n Kinderkeertoestel wat uit 'n kombinasie van bande met 'n vasmaakgespe, verstellers en hegstukke bestaan.

2.4 stoel: 'n Struktuur wat 'n samestellende deel van die kinderkeertoestel is en bedoel is om 'n kind in 'n sitposisie te akkommodeer.

2.4.1 drawieg: 'n Keerstelsel wat bedoel is om die kind op die rug of op die maag liggend te akkommodeer en teë te hou, met die kind se ruggraat loodreg op die mediaanlangsvlak van die voertuig, en wat so ontwerp is dat in die geval van 'n botsing van voor of skielike spoedvermindering, die teëhoukragte oor die kind se kop en liggaam (uitgesonderd die ledemate) versprei sal word.

2.4.2 drawiegkeertoestel: 'n Toestel wat gebruik word om 'n drawieg teë te hou deur dit aan die voertuigstruktuur te bevestig.

2.4.3 babadraer: 'n Keerstelsel wat bedoel is om die kind in 'n agtertoe gerigte halfliggende posisie te akkommodeer en wat so ontwerp is dat in die geval van 'n botsing of skielike spoedvermindering, die teëhoukragte oor die kind se kop en liggaam (uitgesonderd die ledemate) versprei sal word.

2.5 stoelsteunstuk: Die deel van 'n kinderkeertoestel waardeur die stoel gelig kan word.

2.6 kindersteunstuk: Die deel van 'n kinderkeertoestel waardeur die kind binne die kinderkeertoestel gelig kan word.

2.7 slagskerm: 'n Toestel wat voor die kind bevestig is en wat ontwerp is om in die geval van 'n frontale slag die teëhoukragte oor die grootste deel van die hoogte van die kind se liggaam te versprei.

2.8 band: 'n Buigsame komponent wat ontwerp is om kragte oor te dra.

2.8.1 skootband: 'n Band wat óf in die vorm van 'n volledige gordel óf in die vorm van 'n komponent van sodanige gordel oor die voorkant van 'n kind se bekkendeel strek en bedoel is om dié deel teë te hou.

2.8.2 skouerkeerder: Die deel van 'n gordel wat bedoel is om die kind se bolyf teë te hou.

2.8.3 mikband: 'n Band (of verdeelde bande, in gevalle waar twee of meer stukke webband die band vorm) wat aan die kinderkeertoestel en die skootband bevestig is en so geplaas is dat dit tussen die kind se dye deurloop; dit is ontwerp om te verhoed dat die kind tydens normale gebruik onder die skootgordel uitgyl en om te verhoed dat die skootgordel tydens 'n slag van die bekken af opskuif.

2.8.4 kinderkeerband: 'n Band wat 'n samestellende deel van 'n gordel uitmaak en wat bedoel is om slegs die liggaam van die kind teë te hou.

2.8.5 vashegband van kinderkeertoestel: 'n Band wat die kinderkeertoestel aan die struktuur van die voertuig heg en wat deel van die vashoutoestel van die voertuigsitplek kan uitmaak.

2.8.6 tuiggordel: 'n Gordelsamestel wat uit 'n skootband, skouerkeerders en, indien aangebring, 'n mikband bestaan.

2.8.7 Y-vormige gordel: 'n Gordel waarby die bandkombinasie gevorm word deur 'n band wat tussen die kind se bene deur gelei moet word en 'n band vir elke skouer.

2.9 gespe: 'n Snelloosser wat die keertoestel in staat stel om die kind teë te hou of die struktuur van die voertuig in staat stel om die keertoestel teë te hou en wat maklik oopgemaak kan word. Die gespe kan die versteller insluit.

2.9.1 omslote gespevrymaakknop: 'n Gespevrymaakknop wat sodanig is dat dit nie moontlik is om die gespe met behulp van 'n sfeer met 'n diameter van 40 mm vry te maak nie.

2.9.2 nie-omslote gespevrymaakknop: 'n Gespevrymaakknop wat sodanig is dat dit moontlik is om die gespe met behulp van 'n sfeer met 'n diameter van 40 mm vry te maak.

2.10 versteller: 'n Toestel wat bedoel is om dit moontlik te maak om 'n keertoestel of sy hegstukke volgens die liggaamsbou van die draer of die voertuigkonfigurasie of albei te verstel. Die versteller kan 'n deel van die gespe wees of kan 'n terugtrekker of enige ander deel van die veiligheidsgordel wees.

2.10.1 snelversteller: 'n Versteller wat in een gelykmatige beweging met een hand verstel kan word.

2.11 hegstukke: Dele van die kinderkeertoestel, met inbegrip van vasmaakkomponente, wat dit moontlik maak om die kinderkeertoestel, hetsy regstreeks of deur die voertuigsitplek, stewig aan die voertuigstruktuur te bevestig.

2.12 energieabsorbeerder: 'n Toestel wat ontwerp is om energie onafhanklik van of in samewerking met 'n band te versprei en wat deel van 'n kinderkeertoestel uitmaak.

2.13 terugtrekker: 'n Toestel wat ontwerp is om 'n deel van die band of die hele band van 'n kinderkeertoestel te akkommodeer. Die term dek die volgende toestelle:

2.13.1 selfsluiterugtrekker: 'n Terugtrekker wat toelaat dat die gewenste lengte van 'n band uitgetrek kan word en wat, as die gespe vasgemaak is, die band outomaties by die draer se liggaamsbou aanpas en wat voorkom dat die band verder uittrek tensy die draer dit doelbewus doen.

2.13.2 noodsluiterugtrekker: 'n terugtrekker wat nie die bewegingsvryheid van die draer van die gordel in gewone rytoestande beperk nie. So 'n toestel het lengteverstellers wat die band outomaties by die liggaamsbou van die draer aanpas, asook 'n sluitmeganisme wat in 'n noodgeval geaktueer word deur:

2.13.2.1 spoedvermindering van die voertuig, uittrek van die band uit die terugtrekker of op enige ander outomatiese wyse (enkelgevoeligheid); of

2.13.2.2 'n kombinasie van enige hiervan (meervoudige gevoeligheid).

2.14 keertoestelverankerings: Die dele van die voertuigstruktuur of sitplekstruktuur waaraan die hegstukke van die kinderkeertoestel bevestig word.

2.14.1 bykomende verankering: 'n Deel van die voertuigstruktuur of -sitplekstruktuur of enige ander deel van die voertuig waaraan 'n kinderkeertoestel bedoel is om bevestig te word en wat bykomend is by die verankering wat deur SABS 1430:1987, *Motorvoertuigveiligheidspesifikasie vir verankerings vir keertoestelle in motorvoertuie*, gedek word.

2.15 vorentoe gerig: In die normale beweegrigting van die voertuig gerig.

2.16 agtertoe gerig: In die teenoorgestelde rigting as die normale beweegrigting van die voertuig gerig.

2.17 skuins posisie: 'n Spesiale posisie van die stoel wat die kind toelaat om agteroor te leun.

2.18 lêposisie/op die rug liggend/op die maag liggend: 'n Posisie waarin minstens die kind se kop en liggaam op 'n horisontale oppervlak is as die kind in die keertoestel rus.

2.19 kinderkeertoesteltipe: Beskryf kinderkeertoestelle wat nie in die volgende wesenlike opsigte verskil nie:

2.19.1 die kategorie en die massagroep(e) waarvoor en die posisie en rigting (soos omskryf in 2.15 en 2.16) waarin, die keertoestel bedoel is om gebruik te word;

2.19.2 die geometrie van die kinderkeertoestel;

2.19.3 die afmetings, massa, materiaal en kleur van:

- die sitplek,
- die stoffeersel; en
- die slagskerm;

2.19.4 die materiaal, binding, afmetings en kleur van die bande;

2.19.5 die onbuigsame komponente (gespe, hegstukke, ens).

2.20 voertuigsitplek: 'n Struktuur, met inbegrip van die bekleding, wat 'n integrerende deel van die voertuigstruktuur kan wees of nie en wat bedoel is om sitplek aan een volwassene te bied. In hierdie verband beteken:

2.20.1 groep voertuigsitplekke: 'n banksitplek of meer as een sitplek wat afsonderlik maar langs mekaar is (dws só bevestig dat die voorste verankerings van een sitplek op dieselfde lyn is as die voorste of agterste verankerings van 'n ander sitplek of op 'n lyn wat tussen dié verankerings deurloop) en wat elk sitplek aan een of meer volwassenes bied.

2.20.2 banksitplek van voertuig: 'n struktuur wat bedoel is om sitplek aan meer as een volwassene te bied;

2.20.3 voorste sitplekke van voertuig: die groep voertuigsitplekke wat heel voor in die passasiers-kompartement geleë is, dws wat geen ander sitplek reg voor hulle het nie.

2.20.4 agterste sitplekke van voertuig: vaste, vorentoe gerigte voertuigsitplekke wat agter 'n ander groep voertuigsitplekke geplaas is.

2.21 verstelstelsel: Die volledige inrigting waardeur 'n voertuigsitplek of dele daarvan verstel kan word om by die liggaamsbou van die volwasse insittende te pas; hierdie inrigting kan in die besonder voorsiening maak vir een of meer van die volgende:

2.21.1 oorlangse verskuiwing;

2.21.2 vertikale verskuiwing;

2.21.3 hoekverskuiwing.

2.22 voertuigsitplekverankering: Die stelsel, met inbegrip van die betrokke dele van die voertuigstruktuur, waardeur 'n voertuigsitplek in sy geheel aan die voertuigstruktuur bevestig word.

2.23 sitplektype: Beskryf 'n kategorie voertuigsitplekke wat nie in die volgende wesenlike opsigte verskil nie:

2.23.1 die fatsoen, afmetings en materiaal van die sitplekstruktuur;

2.23.2 die tipe en afmetings van die sitplekverstel-en-sitplekstelsels; en

2.23.3 die tipe en afmetings van die verankering aan die sitplek vir 'n veiligheidsgordel vir 'n volwassene, van die sitplekverankering en van die betrokke dele van die voertuigstruktuur.

2.24 verplasingstelsel: 'n Inrigting wat dit moontlik maak om 'n voertuigsitplek of een van die dele daarvan deur 'n hoek of oorlangs te verskuif, sonder 'n vaste tussenposisie, om die inklim en uitklim van passasiers en die laai en aflaai van voorwerpe makliker te maak.

2.25 sluitstelsel: 'n Inrigting wat verseker dat 'n voertuigsitplek en die dele daarvan in die gebruiksposisie gehou word.

2.26 afsluittoestel: 'n Toestel wat sluit, en beweging van een deel van die webband van dieselfde gordel verhoed. Die toestel voldoen aan 6.2.9 indien dit saam met keertoestelle van groep I verskaf word.

3 Gereserveer

4 Merke

4.1 Die fabrikant se naam, handelsnaam of handelsmerk en onderdeelnommer en 'n wyse van identifikasie vir opspoordoelindes moet duidelik en onuitwisbaar op elke kinderkeertoestel aangebring wees.

4.2 Die jaar van vervaardiging moet duidelik (en onuitwisbaar) op een van die plastiekdele van die kinderkeertoestel (soos die dop, slagskerm, steunkussing, ens, uitgesonderd die gordel(s) of harnas) aangebring wees.

4.3 Indien die keertoestel saam met 'n veiligheidsgordel vir volwassenes gebruik gaan word, moet die korrekte webbandroetering duidelik aangedui word deur middel van 'n skets wat permanent aan die keertoestel bevestig is.

5 Gereserveer

6 Algemene vereistes

6.1 Posisie in en bevestiging aan die voertuig

6.1.1 Die gebruik van kinderkeertoestelle van die "universele" en "voertuigspesifieke" kategorieë word by voorste en agterste sitplekposisies toegelaat indien die keertoestelle in ooreenstemming met die fabrikant se aanwysings aangebring word.

6.1.2 Die gebruik van kinderkeertoestelle van die "semi-universele" kategorie word toegelaat soos in 6.1.2.1 en 6.1.2.2 voorgeskryf word:

6.1.2.1 In die geval van vorentoe gerigte toestelle, in die agterste sitplekposisies vir volwassenes.

6.1.2.2 In die geval van agtertoe gerigte toestelle, in die voorste sitplekposisies vir volwassenes.

6.1.3 Na gelang van die kategorie waaronder dit ressorteer, moet die kinderkeertoestel aan die voertuigstruktuur of aan die sitplekstruktuur bevestig wees:

6.1.3.1 in die geval van die "universele" kategorie: slegs deur middel van die verankerings voorgeskryf in SABS 1430:1987 (kyk 2.14.1);

6.1.3.2 in die geval van die "semi-universele" kategorie: deur middel van die onderste verankerings voorgeskryf in genoemde SABS 1430 en bykomende verankerings wat aan die aanbeveling in byvoegsel 11 van hierdie spesifikasie voldoen;

6.1.3.3 in die geval van die "voertuigspesifieke" kategorie: deur middel van die verankerings wat deur die fabrikant van die voertuig of die fabrikant van die kinderkeertoestel ontwerp is.

6.1.3.4 In die geval van kinderkeerbeande of vashegbeande vir kinderkeertoestelle wat gebruik maak van gordelverankerings waaraan 'n gordel of gordels vir volwassenes reeds aangebring is, moet die toetsowerheid nagaan of:

- Die doeltreffende verankeringsposisie vir volwassenes aan genoemde SABS 1430 voldoen;
- Doeltreffende werking van elke toestel nie deur die ander belemmer word nie;
- Die gespes van die stelsel vir volwassenes en die bykomende stelsel nie verwisselbaar is nie.

In die geval van kinderkeerstelsels wat gebruik maak van stawe (of ekstra toestelle wat bevestig is aan die verankerings wat aan genoemde SABS 1430 voldoen) en wat die doeltreffende verankeringsposisie buite die bestek van SABS 1430 verskuif, geld die volgende punte:

- Die toetsowerheid moet die vereistes in byvoegsel 11 van hierdie spesifikasie op die staaf en op die hefters toepas;

- Die staaf moet by die dinamiese toets ingesluit word, terwyl die las op die middel van die staaf by sy grootste verlenging opgelê word, indien die staaf verstelbaar is;
- Daar mag nie aan die effektiewe posisie en die werking van enige verankering vir volwassenes waardeur die staaf bevestig is, afbreuk gedoen word nie.

6.1.4 Die kinderkeertoestel self kan deur 'n sitplekgordel vir volwassenes met of sonder 'n terugtrekker bevestig word, maar sodanige sitplekgordel vir volwassenes moet voldoen aan die vereistes van SABS 1080:1983, *Keertoestelle (veiligheidsgordels) in motorvoertuie vir insittendes van volwasse bou (Hersiene vereistes)*, of van 'n ekwivalente standaard wat van krag is.

6.1.5 Die fabrikant van die kinderkeertoestel moet skriftelik verklaar dat die toksisiteit van die materiaal wat by die vervaardiging van keerstelsels gebruik word en wat vir die kind wat teëgehou word toeganklik is, in ooreenstemming met die toepaslike dele van CEN *Safety of toys* (Junie 1982) is. Toetse om die geldigheid van die verklaring te bevestig, kan na goeddunke van die toetsowerheid uitgevoer word. Hierdie onderafdeling is nie op keertoestelle van groep II en III van toepassing nie.

OPM – Die toepaslike CEN-spesifikasies kan van CEN, 2 Rue Bréderode B.P.5, B 1000 Bruxelles, Belgique, of van die SABS verkry word.

6.1.6 Die fabrikant van die kinderkeertoestel moet skriftelik verklaar dat die vlambaarheid van die materiaal waarvan die keertoestel gemaak is in ooreenstemming met die toepaslike paragrawe van die Gekonsolideerde ECE-besluit oor die konstruksie van voertuie (R.E.3)(dokument TRANS/SC1/WP29/78, paragraaf 1.42) is. Toetse om die geldigheid van die verklaring te bevestig, kan na goeddunke van die toetsowerheid uitgevoer word.

6.2 Konfigurasie

6.2.1 Die konfigurasie van die keertoestel moet sodanig wees dat:

6.2.1.1 die keertoestel in enige bedoelde posisie van die keerstelsel die vereiste beskerming verleen;

6.2.1.2 die kind maklik en vinnig ingesit en uitgehaal kan word; in die geval van 'n kinderkeerstelsel waarin die kind deur middel van 'n tuiggordel of 'n Y-vormige gordel sonder 'n terugtrekker teëgehou word, moet elke skouerkeerder en skootband tydens die prosedure wat in 7.2.1.4 voorgeskryf word, met betrekking tot mekaar kan beweeg.

In hierdie gevalle kan die gordelsamestel van die kinderkeerstelsel met twee of meer verbindingsdele ontwerp wees;

6.2.1.3 indien dit moontlik is om die keertoestel skuins te stel, dit sonder verstelling van die bande uitgevoer kan word. 'n Doelbewuste handeling moet nodig wees om die keertoestel in 'n skuins posisie te plaas;

6.2.1.4 'n keerstelsel van groep I die kind in so 'n posisie sal hou dat die vereiste beskerming verleen word, selfs al slaap die kind.

6.2.2 In die geval van groep I, II en III moet alle keerstelsels sodanig wees dat hulle die bekke van die kind in die geval van botsing steun.

6.2.3 Alle bande van die keertoestel moet so geplaas wees dat hulle nie ongemak vir die kind tydens gewone gebruik sal veroorsaak nie en nie 'n gevaarlike konfigurasie sal aanneem nie. Die afstand tussen die skouerbande in die nabyheid van die nek moet minstens die breedte van die nek van die toepaslike toetspop wees.

6.2.4 Die samestel mag nie swak dele van die kind se liggaam (buik, mik, ens) aan oormatige spanning blootstel nie. Die ontwerp moet sodanig wees dat geen druklas op die kroon van die kind se kop in die geval van botsing uitgeoefen word nie.

6.2.5 Die kinderkeertoestel moet so ontwerp en geïnstalleer wees dat:

6.2.5.1 die gevaar van besering van die kind en van ander insittendes van die voertuig as gevolg van, byvoorbeeld, skerp rande of uitsteeksels (soos omskryf in SABS 1047:1984, *Motorvoertuigveiligheidsstandaardspesifikasie vir binnetoehore (passasiersmotors)*) tot die minimum beperk word;

6.2.5.2 dit nie skerp rande of uitsteeksels het wat moontlik voertuigsitplekbekledings of die klere van insittendes kan beskadig nie;

6.2.5.3 dit nie swak dele van die kind se liggaam (buik, mik, ens) onderwerp aan bykomende inersiekrag wat deur die keertoestel veroorsaak word nie;

6.2.5.4 daar verseker word dat die onbuigsame dele van die keertoestel nie by punte waar hulle met bande in aanraking is, skerp rande het wat die bande kan skuur nie.

6.2.6 Enige deel wat afhaalbaar gemaak is sodat komponente aangeheg of afgehaal kan word, moet só ontwerp wees dat die gevaar dat hulle verkeerd saamgestel en gebruik word, so ver moontlik uitgeskakel is. Toestelle wat die sitplekgordels vir volwassenes sluit, indien daar is, moet permanent bevestig wees aan die keerstelsel waarvoor hulle bedoel is.

6.2.7 Indien 'n kinderkeertoestel van groep I en groep II en van groep I en II gekombineer, 'n stoelrugleuning insluit, moet die binnehoogte van die stoelrugleuning, volgens die diagram in byvoegsel 12 van hierdie spesifikasie bepaal, minstens 500 mm wees.

6.2.8 Slegs selfsluit- of noodsluiterugtrekkers mag gebruik word.

6.2.9 In die geval van keertoestelle van groep I mag dit nie vir die kind moontlik wees om dié deel van die stelsel wat die bekken teëhou, maklik los te maak nadat die kind ingesit is nie; 'n toestel wat ontwerp is om die bekken teë te hou, moet blywend aan die kinderkeerstelsel bevestig wees.

6.2.10 'n Kinderkeertoestel kan vir meer as een massagroep ontwerp wees, mits dit aan die voorgeskrewe vereistes vir elk van die betrokke groepe voldoen.

6.2.11 Kinderkeertoestelle met terugtrekker

In die geval van 'n kinderkeertoestel wat 'n terugtrekker insluit, moet die terugtrekker aan die vereistes van 7.2.3 voldoen.

6.2.12 In die geval van steunkussings moet die gemak waarmee die bande en tong van 'n gordel vir volwassenes deur die hegpunte gaan, ondersoek word. Dit geld in die besonder vir steunkussings wat vir die voorste sitplekke van motors ontwerp is en wat lang halfstye stiele kan hê. Die bevestigde gespe moet nie deur die hegpunte van steunsitplekke kan gaan of die gordel heeltemal anders as in die geval van die toetswaentjie laat lê nie.

6.2.13 tot 6.2.20 Gereserveer

7 Besondere vereistes

7.1 Bepalings van toepassing op die saamgestelde keertoestel

7.1.1 Korrosiebestandheid

7.1.1.1 'n Volledige kinderkeertoestel of die dele daarvan wat moontlik kan roes, moet aan die korrosietoets in 8.1.1 onderwerp word.

7.1.1.2 Na afloop van die korrosietoets wat in 8.1.1.1 en 8.1.1.2 voorgeskryf word, mag daar geen teken van agteruitgang wat moontlik aan die behoorlike funksionering van die kinderkeertoestel afbreuk kan doen en geen noemenswaardige korrosie met die blote oog vir 'n gekwalifiseerde waarnemer sigbaar wees nie.

7.1.2 Energleabsorpsie

7.1.2.1 Alle oppervlakke van 'n keertoestel wat moontlik deur die kop of gesig getref kan word, moet aan die vereistes van genoemde SABS 1047 voldoen (kyk 6.2.5.1).

7.1.3 Omgooi

7.1.3.1 Die kinderkeertoestel moet getoets word soos in 8.1.2 voorgeskryf word; die toetspop mag nie uit die keertoestel val nie en as die toetssitplek onderstebo is, mag die toetspop se kop nie meer as 300 mm in 'n vertikale rigting met betrekking tot die toetssitplek uit die oorspronklike posisie beweeg nie.

7.1.4 Dinamiese toets

7.1.4.1 Algemeen

Die kinderkeertoestel moet aan die dinamiese toetse onderwerp word wat in 8.1.3 voorgeskryf word.

7.1.4.1.1 Kinderkeertoestelle van die "universele" en "semi-universele" kategorieë moet met behulp van die toetssitplek wat in byvoegsel 6 van hierdie spesifikasie voorgeskryf word en in ooreenstemming met 8.1.3.1 op die toetswaentjie getoets word.

7.1.4.1.2 Kinderkeertoestelle van die "voertuigspesifieke" kategorie moet óf in 'n voertuigbakdop op die toetswaentjie getoets word soos in 8.1.3.2 voorgeskryf word, óf in 'n volledige voertuig soos in 8.1.3.3 voorgeskryf word.

7.1.4.1.3 Die dinamiese toets moet uitgevoer word op kinderkeertoestelle wat nie voorheen belas is nie.

7.1.4.1.4 Tydens die dinamiese toets mag geen deel van die kinderkeertoestel wat help om die kind in posisie te hou, breek nie, en mag geen gespes of sluitstelsel of verplasingstelsel losgaan nie.

7.1.4.1.5 In die geval van 'n keertoestel van die "nie-integrerende klas" moet die sitplekgordel wat gebruik word die standaardgordel wees en sy verankeringsstukke moet wees soos in byvoegsel 13 van hierdie spesifikasie voorgeskryf word.

7.1.4.2 Borsversnelling

7.1.4.2.1 Die resulterende borsversnelling mag nie 540 m/s^2 oorskry nie, behalwe tydens tydperke waarvan die som nie 3 ms oorskry nie.

7.1.4.2.2 Die vertikale komponent van die versnelling vanaf die buik na die kop mag nie 295 m/s^2 oorskry nie, behalwe gedurende tydperke waarvan die som nie 3 ms oorskry nie.

OPM – Borsversnellingsgrense geld nie as die "pasgebore" toetspop gebruik word nie.

7.1.4.3 Buikindringing

7.1.4.3.1 By die verifiëring wat in 5.3 van byvoegsel 8 van hierdie spesifikasie beskryf word, mag daar geen sigbare teken wees van indringing in die modelleerklei in die buikdeel wat deur enige deel van die keertoestel veroorsaak is nie.

OPM – Aangesien die "pasgebore" toetspop nie met 'n buikinvoegsel toegerus is nie, kan slegs 'n subjektiewe ontleding as riglyn vir buikindringing gebruik word.

7.1.4.4 Verskuiwing van toetspop

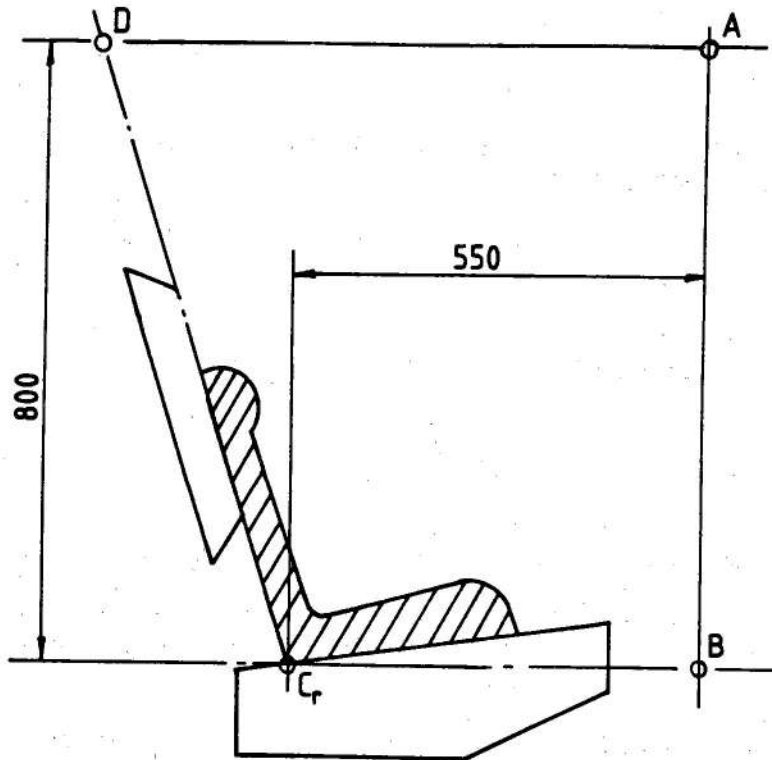
7.1.4.4.1 Kinderkeertoestelle van die "universele" en "semi-universele" kategorieë:

7.1.4.4.1.1 Groep I, II en III

7.1.4.4.1.1.1 Vorentoe gerigte keertoestelle

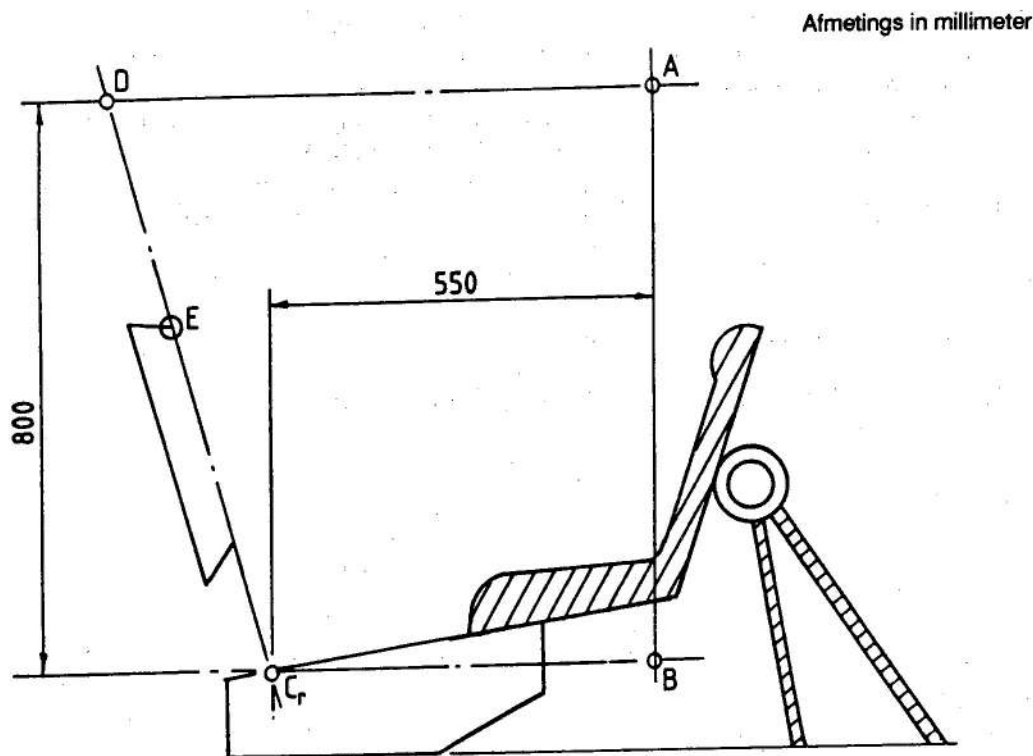
Die kop van die toetspop mag nie verby die vlakke BA en DA wat in die figuur hieronder aangedui word, beweeg nie.

Afmetings in millimeter



7.1.4.4.1.2 Agtertoe gerigte keertoestelle

Die kop van die toetspop mag nie verby die vlakke AD en DC, wat in die figuur hieronder aangedui word, beweeg nie.



7.1.4.4.1.2 Groep 0

Die toetspop, sonder inagneming van die ledemate, moet in die keerstelsel teëgehou word en mag nie die vlakke wat hieronder aangedui word, oorskry nie:

- In die geval van agtertoe gerigte toestelle wat teen die instrumentpaneel gemonteer is:

Vlak AD en DC,

- In die geval van agtertoe gerigte toestelle wat nie teen die instrumentpaneel gemonteer is nie, en in die geval van drawiegies:

Vlak AB, AD en DE

7.1.4.4.2 Kinderkeertoestelle van die "voertuigspesifieke" kategorie: by die toets van 'n kinderkeertoestel van hierdie kategorie in 'n volledige voertuig of 'n voertuigbakdop, mag die kop van die toetspop nie met enige deel van die voertuig in aanraking kom nie, behalwe soos volg: Indien daar sodanige aanraking deur die kop van die toetspop is, moet die spoed waarteen die kop die deel tref minder as 24 km/h wees en die deel waarmee die kop in aanraking kom, moet aan die vereistes vir energieverstrooiingsmateriaal in genoemde SABS 1047 (kyk 6.2.5.1) voldoen.

7.2 Bepalings van toepassing op afsonderlike komponente van die keertoestel

7.2.1 Gespe

7.2.1.1 Die gespe moet só ontwerp wees dat dit enige moontlikheid van verkeerde gebruik uitsluit. Dit beteken onder andere dat dit nie moontlik mag wees om die gespe in 'n gedeeltelik toe posisie te laat nie; dit mag nie moontlik wees om die dele van die gespe onopsetlik om te ruil as die gespe gesluit word nie; die gespe mag slegs sluit as al die dele ingeskakel is. Waar die gespe ook al met die kind in aan-

raking kom, mag dit nie smaller wees as die minimum bandbreedte wat in 7.2.4.1.1 gespesifiseer word nie. Hierdie onderafdeling is nie van toepassing op gordelsamestelle wat reeds volgens SABS 1080:1983, *Keertoestelle (veiligheidsgordels) in motorvoertuie vir insittendes van volwasse bou (Hersiene vereistes)* of 'n ekwivalente standaard wat van krag is, goedgekeur is nie.

7.2.1.2 Die gespe moet selfs as dit nie onder spanning is nie, steeds vergrendel bly ongeag die posisie daarvan. Dit moet maklik gebruik en raakgevat kan word. Die gespe moet oopgemaak kan word deur 'n knop of soortgelyke inrigting te druk. Die oppervlak waarop dié druk aangewend word, moet in die werklike ontsluitposisie, in die geval van omslote inrigtings, 'n oppervlakte van minstens $4,5 \text{ cm}^2$ en 'n breedte van minstens 15 mm hê; en, in die geval van nie-omslote inrigtings, 'n oppervlakte van $2,5 \text{ cm}^2$ en 'n breedte van minstens 10 mm. Die oppervlak van die gespelosmaker moet rooi wees. Geen ander deel van die gespe mag hierdie kleur hê nie.

7.2.1.2.1 Geskrap

7.2.1.2.2 Geskrap

7.2.1.3 Die oppervlak van die gespelosmaker moet rooi wees; geen ander deel van die gespe mag hierdie kleur hê nie.

7.2.1.4 Dit moet moontlik wees om die kind met 'n enkele druk op een gespe uit die keertoestel los te maak. In die geval van 'n groep 0-keertoestel mag die kind saam met toestelle soos 'n babadraer/drawieg/drawiegkeertoestel uitgehaal word, mits die kinderkeerstelsel losgemaak kan word deur op hoogstens twee gespes te druk.

7.2.1.5 In die geval van groep II- en III-keertoestelle moet die gespe so geplaas wees dat die insittende kind dit kan bykom. Hierbenewens moet die gespe in die geval van alle groepe só geplaas wees dat die doel en werking daarvan in 'n noodgeval onmiddellik vir 'n redder duidelik sal wees.

7.2.1.6 Die oopmaak van die gespe moet dit moontlik maak om die kind onafhanklik van die "stoel", "stoelsteunstuk" of "slagskerm", indien dit aangebring is, uit te haal. Die mikband moet deur die werking van dieselfde gespe losgemaak word.

7.2.1.7 Die gespe moet herhaalde gebruik kan deurstaan en moet voor die dinamiese toetse wat in 8.1.3 voorgeskryf word, 'n toets ondergaan wat uit 5 000 oop-en-toemaak-siklusse in normale gebruikstoestande bestaan.

7.2.1.8 Die gespe moet aan die volgende oopmaaktoetse onderwerp word:

7.2.1.8.1 Toets onder las

7.2.1.8.1.1 'n Kinderkeertoestel wat reeds die dinamiese toetse voorgeskryf in 8.1.3 ondergaan het, moet vir hierdie toets gebruik word.

7.2.1.8.1.2 Die krag wat vereis word om die gespe in die toets voorgeskryf in 8.2.1.1 oop te maak, mag nie 60 N oorskry nie.

7.2.1.8.2 Nullastoets

7.2.1.8.2.1 'n Gespe wat nie voorheen aan 'n las onderwerp is nie, moet vir hierdie toets gebruik word. Die krag wat nodig is om die gespe oop te maak as dit nie onder las is nie, moet minstens 10 N wees in die toets wat in 8.2.1.2 voorgeskryf word.

7.2.2 Versteller

7.2.2.1 Die verstelbestek moet toereikend wees om korrekte verstelling van die kinderkeertoestel toe te laat vir die hele massagroep waarvoor die keertoestel bedoel is en om bevredigende installering in alle gespesifiseerde voertuigmodelle moontlik te maak.

7.2.2.2 Alle verstellers moet van die "snelverstell tipe" wees, maar verstellers wat slegs vir die aanvanklike installering van die keertoestel in die voertuig gebruik word, kan van 'n ander tipe as die "snelverstell tipe" wees.

7.2.2.3 Inrigtings van die "snelverstell tipe" moet maklik bereikbaar wees as die kinderkeertoestel korrek geïnstalleer is en die kind of toetspop in posisie is.

7.2.2.4 'n Inrigting van die "snelverstell tipe" moet maklik by die kind se liggaamsbou aangepas kan word. Veral in die geval van die toets wat volgens 8.2.2.1 uitgevoer word, moet die krag wat vereis word om 'n handgewerkte versteller te gebruik, nie 50 N oorskry nie.

7.2.2.5 Twee monsters van die kinderkeertoestelverstellers moet getoets word soos in 8.2.3 voorgeskryf word.

7.2.2.5.1 Die mate van bandglyding mag nie 25 mm vir een versteller of 40 mm vir al die verstellers oorskry nie.

7.2.2.6 By die toets van die versteller soos in 8.2.2.1 voorgeskryf word, mag dit nie breek of losraak nie.

7.2.3 Terugtrekkers

7.2.3.1 Selfsluiterugtrekkers

7.2.3.1.1 Die band van 'n gordel wat van 'n selfsluiterugtrekker voorsien is, mag hoogstens 30 mm tussen die sluitposisies van die terugtrekker afrol. As die draer agtertoe beweeg, moet die gordel óf in die oorspronklike posisie bly óf outomaties na dié posisie terugkeer as die draer daarna vorentoe beweeg.

7.2.3.1.2 Indien die terugtrekker deel van 'n skootband is, moet die terugtrekkrag van die band minstens 7 N wees gemeet in die vry lengte tussen die toetspop en die terugtrekker soos in 8.2.4.1 voorgeskryf word. Indien die terugtrekker deel van 'n skouerkeerder is, moet die terugtrekkrag van die band, op soortgelyke wyse gemeet, minstens 2 N en hoogstens 7 N wees. Indien die band deur 'n leier of oor 'n katrol gaan, moet die terugtrekkrag in die vry lengte tussen die toetspop en die leier of katrol gemeet word. Indien die samestel 'n inrigting insluit, hetsy handgewerk of outomaties, wat verhoed dat die band heeltemal terugtrek, mag dié inrigting nie in werking wees wanneer dié metings gedoen word nie.

7.2.3.1.3 Die band moet herhaaldelik in die toestand wat in 8.2.4.2 voorgeskryf word uit die terugtrekker getrek en toegelaat word om terug te trek totdat 5 000 siklusse voltooi is. Die terugtrekker moet dan aan die korrosietoets in 8.1.1 en aan die stofbestandheidstoets in 8.2.4.5 onderwerp word. Dit moet dan nog 5 000 uit-en-terugtrek-siklusse bevredigend deurstaan. Na afloop van bogemelde toetse moet die terugtrekker steeds korrek werk en aan die vereistes van 7.2.3.1.1 en 7.2.3.1.2 voldoen.

7.2.3.2 Noodsluiterugtrekkers

7.2.3.2.1 By die toets van 'n noodsluiterugtrekker soos in 8.2.4.3 voorgeskryf word, moet dit aan die voorwaardes hieronder voldoen:

7.2.3.2.1.1 Dit moet gesluit wees as die spoedvermindering van die voertuig $4,4 \text{ m/s}^2$ bereik.

7.2.3.2.1.2 Dit mag nie sluit by bandversnellings, gemeet in die as van banduittrekking, van minder as $7,8 \text{ m/s}^2$ nie.

7.2.3.2.1.3 Dit mag nie sluit as die sensor daarvan deur hoogstens 12° gekantel word in enige rigting uit die installeringsposisie wat die fabrikant van die terugtrekker spesifiseer nie.

7.2.3.2.1.4 Dit moet sluit as die sensor daarvan deur meer as 27° gekantel word in enige rigting uit die installeringsposisie wat die fabrikant van die terugtrekker spesifiseer.

7.2.3.2.2 Indien die werking van 'n terugtrekker van 'n eksterne sein of kragbron afhang, moet die ontwerp verseker dat die terugtrekker in geval van faling of onderbreking van dié sein of kragbron outomaties sluit.

7.2.3.2.3 'n Noodsluiterugtrekker met meervoudige gevoeligheid moet aan die vereistes hierbo voldoen. Hierbenewens, indien een van die gevoeligheidsfaktore op banduittrekking betrekking het, moet sluiting voorgekom het by 'n bandversnelling van $14,7 \text{ m/s}^2$, gemeet in die as van banduittrekking.

7.2.3.2.4 In die toetse in 7.2.3.2.1.1 en 7.2.3.2.3 genoem, mag die mate van banduittrekking wat voorkom voordat die terugtrekker sluit, nie 50 mm oorskry nie, gemeet vanaf die afrollelengte wat in 8.2.4.3.1 gespesifiseer word. In die toets wat in 7.2.3.2.1.2 genoem word, mag sluiting nie voorkom gedurende die 50 mm van banduittrekking nie, gemeet vanaf die afrollelengte wat in 8.2.4.3.1 gespesifiseer word.

7.2.3.2.5 Indien die terugtrekker deel van 'n skootband is, moet die terugtrekkrag van die band minstens 7 N wees, gemeet in die vry lengte tussen die toetspop en die terugtrekker soos in 8.2.4.1 voorgeskryf word. Indien die terugtrekker deel van 'n skouerkeerder is, moet die terugtrekkrag van die band, op soortgelyke wyse gemeet, minstens 2 N en hoogstens 7 N wees. Indien die band deur 'n leier of oor 'n katrol gaan, moet die terugtrekkrag in die vry lengte tussen die toetspop en die leier of katrol gemeet word. Indien die samestel 'n inrigting insluit, hetsy handgewerk of outomaties, wat verhoed dat die band heeltemal terugtrek, mag dié inrigting nie in werking wees wanneer dié metings gedoen word nie.

7.2.3.2.6 Die band moet herhaaldelik in die toestand wat in 8.2.4.2 voorgeskryf word uit die terugtrekker getrek en toegelaat word om terug te trek totdat 40 000 siklusse voltooi is. Die terugtrekker moet dan aan die korrosietoets in 8.1.1 en aan die stofbestandheidstoets in 8.2.4.5 onderwerp word. Dit moet daarna nog 5 000 uit-en-terugtrek-siklusse (dws altesaam 45 000 siklusse) bevredigend deurstaan. Na afloop van bogemelde toetse moet die terugtrekker steeds korrek werk en aan die vereistes van 7.2.3.2.1 tot 7.2.3.2.5 voldoen.

7.2.4 Bande

7.2.4.1 Breedte

7.2.4.1.1 Die bande van 'n kinderkeertoestel moet minstens 25 mm breed wees in die geval van keertoestelle van groep 0 en I en minstens 38 mm breed in die geval van keertoestelle van groep II en III.

Hierdie afmetings moet gemeet word gedurende die toets vir bandsterkte wat in 8.2.5.1 voorgeskryf word, sonder om die masjien te stop en onder 'n las gelyk aan 75 % van die breeklas van die band.

7.2.4.2 Sterkte na kamerkondisionering

7.2.4.2.1 Die breeklas van die band, bepaal soos in 8.2.5.1.2 voorgeskryf word op twee monsterbande wat gekondisioneer is soos in 8.2.5.2.1 voorgeskryf word, moet minstens 4,8 kN wees in die geval van keertoestelle van groep 0 en I en minstens 9,6 kN in die geval van keertoestelle van groep II en III.

7.2.4.2.2 Die verskil tussen die breeklaswaardes van die twee monsters mag nie 10 % van die hoogste van die twee breeklaswaardes wat gemeet is, oorskry nie.

7.2.4.3 Sterkte na spesiale kondisionering

7.2.4.3.1 In die geval van twee bande wat gekondisioneer is soos in een van die bepalings van 8.2.5.2 (uitgesonderd 8.2.5.2.1) voorgeskryf word, moet die breeklas van die band minstens 75 % wees van die gemiddelde van die breeklaswaardes wat bepaal is in die toets wat in 8.2.5.1 genoem word.

7.2.4.3.2 Hierbenewens moet die breeklas minstens 3,6 kN wees vir keertoestelle van groep 0 en I, 1,5 kN vir dié van groep II en 7,2 kN vir dié van groep III.

7.2.4.3.3 Die toetsowerheid kan een of meer van hierdie toetse laat vaar indien die samestelling van die materiaal wat gebruik word of inligting wat reeds beskikbaar is, die toets of toetse onnodig maak.

7.2.4.3.4 Die skuurkondisioneringsprosedure van tipe 1 wat in 8.2.5.2.6 omskryf word, moet slegs uitgevoer word as die mikroglytoets in 8.2.3 'n resultaat lewer wat hoër as 50 % is van die grens wat in 7.2.2.5.1 voorgeskryf word.

7.2.4.4 Skrap

7.2.4.5 Skrap

7.2.4.6 Skrap

7.2.5 Afsluiter

7.2.5.1 Die afsluiter moet permanent aan die kinderkeertoestel bevestig wees.

7.2.5.2 Die afsluiter mag nie die duursaamheid van die gordel vir volwassenes benadeel nie.

7.2.5.3 Die afsluiter mag nie verhoed dat die kind vinnig losgemaak kan word nie.

8 Beskrywing van toetse

8.1 Toetse op die saamgestelde keertoestel

8.1.1 Korrosie

8.1.1.1 Die metaalkomponente van die kinderkeertoestel moet in 'n toetskamer geplaas word soos in byvoegsel 4 van hierdie spesifikasie voorgeskryf word. In die geval van 'n kinderkeertoestel wat 'n terugtrekker insluit, moet die band tot die volle lengte minus 100 mm $\pm$ 3 mm afgerol word. Afgesien van kort onderbrekings wat dalk nodig kan wees, bv om die soutoplossing na te gaan en aan te vul, moet die blootstellingstoets oor 'n aaneenlopende tydperk van 50 h uitgevoer word.

8.1.1.2 Na afloop van die blootstellingstoets moet die metaalkomponente van die kinderkeertoestel versigtig in skoon lopende water by 'n temperatuur van hoogstens 38 °C gewas word of gedoop word om enige soutneerslag wat moontlik gevorm het, te verwyder. Daarna moet dit 24 h by kamertemperatuur gelaat word om droog te word voordat dit volgens 7.1.1.2 ondersoek word.

8.1.2 Omgooi

8.1.2.1 Die toetspop moet in die keertoestel geplaas word wat volgens hierdie spesifikasie geïnstalleer is en met inagneming van die fabrikant se aanwysings en met die standaardspeling soos in 8.1.3.6 gespesifiseer word.

8.1.2.2 Die keertoestel moet aan die toetssitplek of voertuigsitplek bevestig word. Die hele sitplek moet teen 'n spoed van 2° tot 5° per sekonde deur 'n hoek van 360° gedraai word om 'n horisontale as wat in die mediaanlangsvlak van die sitplek geleë is. Vir die doel van hierdie toets kan 'n keertoestel wat vir gebruik in spesifieke voertuie bedoel is, aan die toetssitplek beskryf in byvoegsel 6 van hierdie spesifikasie, bevestig word.

8.1.2.3 Hierdie toets moet weer uitgevoer word deur die sitplek in die teenoorgestelde rigting te draai nadat die toetspop, indien nodig, in die aanvanklike posisie teruggeplaas is. Die prosedure moet, met die draai-as in die horisontale vlak en met 'n hoek van 90° ten opsigte van die vorige twee toetse, in albei draairigtings herhaal word.

8.1.2.4 Hierdie toetse moet uitgevoer word met die kleinste sowel as die grootste toepaslike toetspop van die groep of groepe waarvoor die keertoestel bedoel is.

8.1.3 Dinamiese toetse

8.1.3.1 Toetse op die waentjie en toetssitplek

8.1.3.1.1 Vorentoe gerig

8.1.3.1.1.1 Die waentjie en toetssitplek wat in die dinamiese toets gebruik word, moet aan die vereistes van byvoegsel 6 van hierdie spesifikasie voldoen.

8.1.3.1.1.2 Die waentjie moet tydens spoedvermindering deurgaans horisontaal bly.

8.1.3.1.1.3 Die spoedvermindering van die waentjie moet verkry word met gebruik van die apparaat wat in byvoegsel 6 van hierdie spesifikasie voorgeskryf word of met gebruik van enige ander toestel wat dieselfde resultate lewer. Dié apparaat moet die prestasie kan lewer wat in 8.1.3.4 en in byvoegsel 7 van hierdie spesifikasie gespesifiseer word.

8.1.3.1.1.4 Die volgende metings en ondersoeke moet gedoen word:

8.1.3.1.1.4.1 die waentjiespoed onmiddellik voor die slag;

8.1.3.1.1.4.2 die stilhou-afstand;

8.1.3.1.1.4.3 die verplasing van die toetspop se kop in die vertikale en horisontale vlakke in die geval van keertoestelle van groep I, II en III en die verskuiwing van die toetspop (uitgesonderd die ledemate) in die geval van keertoestelle van groep 0;

8.1.3.1.1.4.4 die borsversnelling in drie rigtings haaks op mekaar, behalwe in die geval van die "pasgebore" toetspop; en

8.1.3.1.1.4.5 enige sigbare tekens van indringing in die modelleerleerle in die buikdeel (kyk 7.1.4.3.1), behalwe in die geval van die "pasgebore" toetspop.

8.1.3.1.1.5 Die toetse moet teen 'n frekwensie van minstens 500 raampies per sekonde verfilm word.

8.1.3.1.1.6 Ná die slag moet die kinderkeertoestel visueel ondersoek word sonder om die gespe oop te maak ten einde te bepaal of enige faling of breuk voorgekom het.

8.1.3.1.2 Agtertoe gerig

8.1.3.1.2.1 Die toetssitplek moet deur 'n hoek van 180° gedraai word as dit volgens die vereistes van die toets vir slag van agter getoets word.

8.1.3.1.2.2 By die toets van 'n agtertoe gerigte kinderkeertoestel wat vir gebruik in die voorste sitplek-posisie bedoel is, moet die instrumentpaneel van die voertuig verteenwoordig word deur 'n stewige staaf wat op so 'n wyse aan die waentjie bevestig is dat al die energieabsorpsie in die kinderkeertoestel plaasvind.

8.1.3.1.2.3 Die spoedverminderingstoestand moet aan die vereistes van 8.1.3.4 voldoen.

8.1.3.1.2.4 Die metings wat gedoen moet word, is dieselfde as dié in 8.1.3.1.1.4.

8.1.3.1.2.5 Die toetse moet teen 'n frekwensie van minstens 500 raampies per sekonde verfilm word.

8.1.3.1.2.6 Ná die slag moet die kinderkeertoestel visueel ondersoek word sonder om die gespe oop te maak ten einde te bepaal of enige faling of breuk voorgekom het.

8.1.3.2 Toets op waentjie en voertuigbakdop

8.1.3.2.1 Vorentoe gerig

8.1.3.2.1.1 Die metode waarvolgens die voertuig tydens die toets bevestig word, mag nie sodanig wees dat die verankerings van die voertuigsitplekke, veiligheidsgordels vir volwassenes of enige bykomende verankerings wat vir die bevestiging van die kinderkeertoestel vereis word, versterk word of dat die normale vervorming van die struktuur verminder word nie. Daar mag geen deel van die voertuig aanwesig wees wat, deurdat dit die beweging van die toetspop beperk, die las wat tydens die toets op die kinderkeertoestel geplaas word, verminder nie. Die dele van die struktuur wat verwyder is, kan deur dele van dieselfde sterkte vervang word, mits hulle nie die beweging van die toetspop strem nie.

8.1.3.2.1.2 'n Bevestigingstoestel word as bevredigend beskou indien dit geen uitwerking het oor 'n oppervlakte wat oor die hele breedte van die struktuur strek nie en indien die voertuig of struktuur aan die voorkant minstens 500 mm van die verankering van die keerstelsel af vasgehou of bevestig word. Agter moet die struktuur ver genoeg agter die verankerings bevestig wees om te verseker dat daar aan al die vereistes van 8.1.3.2.1.1 voldoen word.

8.1.3.2.1.3 Die voertuigsitplek en kinderkeertoestel moet aangebring word op 'n plek wat deur die toetsowerheid (wat die toetse uitvoer) gekies word ten einde die ongunstigste toestande ten opsigte van sterkte te verkry wat met die installering van die toetspop in die voertuig versoenbaar is. Die posisie van die rugleuning van die voertuigsitplek en die kinderkeertoestel moet in die verslag aangegee word. Indien die skuinste van die rugleuning van die voertuigsitplek verstelbaar is, moet die rugleuning gesluit word soos die fabrikant spesifiseer of, indien dit nie gespesifiseer word nie, teen 'n werklike rugleuninghoek wat so na moontlik aan 25° is.

8.1.3.2.1.4 Tensy daar volgens die aanbring- en gebruiksaanwysings anders vereis word, moet die voorste sitplek in die heel voorste posisie geplaas word wat gewoonlik gebruik word by kinderkeertoestelle wat vir die voorste sitplekposisie bedoel is en in die heel agterste posisie wat gewoonlik gebruik word by kinderkeertoestelle wat vir die agterste sitplekposisie bedoel is.

8.1.3.2.1.5 Die spoedverminderingstoestande moet aan die vereistes van 8.1.3.4 voldoen. Die toetsitplek is die sitplek van die werklike voertuig.

8.1.3.2.1.6 Die volgende metings en ondersoeke moet gedoen word:

8.1.3.2.1.6.1 die waentjiespoed onmiddellik voor die slag;

8.1.3.2.1.6.2 die stilhou-afstand;

8.1.3.2.1.6.3 enige aanraking van die toetspop se kop (in die geval van groep 0, die toetspop sonder inagneming van die ledemate) met die binnekant van die voertuigbakdop;

8.1.3.2.1.6.4 die borsspoedvermindering in drie rigtings haaks op mekaar, behalwe in die geval van die "pasgebore" toetspop;

8.1.3.2.1.6.5 enige sigbare tekens van indringing in die modelleerklêi in die buikdeel (kyk 7.1.4.3.1), behalwe in die geval van die "pasgebore" toetspop.

8.1.3.2.1.7 Die toetse moet teen 'n frekwensie van minstens 500 raampies per sekonde verfilm word.

8.1.3.2.1.8 Ná die slag moet die kinderkeertoestel visueel ondersoek word sonder om die gespe oop te maak ten einde te bepaal of enige faling of breuk voorgekom het.

8.1.3.2.2 Agtertoe gerig

8.1.3.2.2.1 In die geval van toetse vir slag van agter moet die voertuigbakdop deur 'n hoek van 180° op die toetswaentjie gedraai word.

8.1.3.2.2 In alle ander opsigte geld die vereistes vir slag van voor.

8.1.3.3 Toets met volledige voertuig

8.1.3.3.1 Die spoedverminderingstoestande moet aan die vereistes van 8.1.3.4 voldoen.

8.1.3.3.2 By toetse vir slag van voor moet die prosedure wees soos in byvoegsel 9 van hierdie spesifikasie uiteengesit word.

8.1.3.3.3 By toetse vir slag van agter moet die prosedure wees soos in byvoegsel 10 van hierdie spesifikasie uiteengesit word.

8.1.3.3.4 Die volgende metings en ondersoeke moet gedoen word:

8.1.3.3.4.1 die spoed van die voertuig/slagstuk onmiddellik voor die slag;

8.1.3.3.4.2 enige aanraking van die toetspop se kop (in die geval van groep 0, die toetspop sonder inagneming van die ledemate) met die binnekant van die voertuig;

8.1.3.3.4.3 die borsversnelling in drie rigtings haaks op mekaar, behalwe in die geval van die "pasgebore" toetspop;

8.1.3.3.4.4 enige sigbare tekens van indringing in die modelleerlei in die buikdeel (kyk 7.1.4.3.1), behalwe in die geval van die "pasgebore" toetspop.

8.1.3.3.5 Die toetse moet teen 'n frekwensie van minstens 500 raampies per sekonde verfilm word.

8.1.3.3.6 Indien die skuinste van die rugleuning van die voorste sitplekke verstelbaar is, moet dit gesluit word soos die fabrikant spesifiseer of, indien dit nie gespesifiseer word nie, teen 'n werklike rugleuninghoek wat so na moontlik aan 25° is.

8.1.3.3.7 Ná die slag moet die kinderkeertoestel visueel ondersoek word sonder om die gespe oop te maak ten einde te bepaal of daar enige faling of breuk voorgekom het.

8.1.3.4 Die toestande vir dinamiese toetse word in die tabel op die volgende bladsy saamgevat.

8.1.3.5 Kinderkeertoestelle wat die gebruik van bykomende verankerings vereis

8.1.3.5.1 In die geval van "semi-universele" kinderkeertoestelle wat die gebruik van bykomende verankerings vereis, moet die vereiste vir 'n toets vir slag van voor volgens 8.1.3.4 soos volg uitgevoer word:

8.1.3.5.2 In die geval van keertoestelle met kort boonste vashegbande, wat bv bedoel is om aan die agterste pakkiesrak bevestig te word, moet die boonste verankeringskonfigurasie op die toetswaentjie wees soos in byvoegsel 6, aanhangsel 4 van hierdie spesifikasie voorgeskryf word.

8.1.3.5.3 In die geval van keertoestelle met lang boonste vashegbande, wat bv bedoel is vir gebruik waar daar geen vaste pakkiesrak is nie en waar die boonste verankeringsbande aan die voertuigvloer vasgeheg word, moet die verankerings op die toetswaentjie wees soos in byvoegsel 6, aanhangsel 4 van hierdie spesifikasie voorgeskryf word.

8.1.3.5.4 In die geval van keertoestelle wat vir gebruik in albei konfigurasies bedoel is, moet die toets uitgevoer word wat die verankeringskonfigurasies voorgeskryf in 8.1.3.5.2 en 8.1.3.5.3 gebruik, maar wanneer die toets uitgevoer word wat die verankeringskonfigurasies voorgeskryf in 8.1.3.5.3 gebruik, moet slegs die swaarste toetspop gebruik word.

8.1.3.5.5 In die geval van agtertoe gerigte keertoestelle moet die onderste verankeringskonfigurasie op die toetswaentjie wees soos in byvoegsel 6, aanhangsel 4 van hierdie spesifikasie voorgeskryf word.

1	2	3	4	5	6	7	8
Toets	Keertoestel	Slag van voor			Slag van agter		
		Spoed	Toets-puls	Stilhou-afstand tydens toets	Spoed	Toets-puls	Stilhou-afstand tydens toets
		km/h		mm	km/h		mm
Waentjie met toetssitplek	Vorentoe gerigte agterste sitplek semi-universeel*	50 + 0 - 2	1	650 ± 50	—	—	—
	Agtertoe gerigte voorste sitplek semi-universeel**	50 + 0 - 2	1	650 ± 50	30 + 2 - 0	2	275 ± 25
Waentjie met toetssitplek	Vorentoe gerigte voorste en agterste sitplek universeel*	50 + 0 - 2	1	650 ± 50	—	—	—
	Agtertoe gerigte voorste en agterste sitplek universeel**	50 + 0 - 2	1	650 ± 50	30 + 2 - 0	2	275 ± 25
Voertuigbak op waentjie	Vorentoe gerigte voorste en agterste sitplek*	50 + 0 - 2	1	650 ± 50	—	—	—
	Agtertoe gerigte voorste en agterste sitplek*	50 + 0 - 2	1	650 ± 50	30 + 2	2	275 ± 25
Versperrings-toets	Vorentoe gerigte voorste en agterste sitplek	50 + 0 - 2	3	Nie gespesifiseer nie	—	—	—
	Agtertoe gerigte voorste en agterste sitplek	50 + 0 - 2	3	Nie gespesifiseer nie	30 + 2 - 0	4	Nie gespesifiseer nie
VERKLARING							
Toetspuls no 1 — Soos voorgeskryf in byvoegsel 7 van hierdie spesifikasie — slag van voor.							
Toetspuls no 2 — Soos voorgeskryf in byvoegsel 7 van hierdie spesifikasie — slag van agter.							
Toetspuls no 3 — Spoedverminderingspuls van voertuig onderwerp aan slag van voor.							
Toetspuls no 4 — Spoedverminderingspuls van voertuig onderwerp aan slag van agter.							
OPM — Alle keerstelsels van groep 0 moet volgens die "agtertoe gerigte" toestande by slag van voor en slag van agter getoets word.							
* Tydens kalibrering moet die stilhou-afstand 650 mm ± 30 mm wees.							
** Tydens kalibrering moet die stilhou-afstand 275 mm ± 20 mm wees.							

8.1.3.6 Toetspoppe

8.1.3.6.1 Die kinderkeertoestel en toetspoppe moet so geïnstalleer word dat daar aan die vereistes van 8.1.3.6.3.1 voldoen word.

8.1.3.6.2 Installering van die toetspop

8.1.3.6.3 Die kinderkeertoestel moet getoets word met gebruik van die toetspoppe wat in byvoegsel 8 van hierdie spesifikasie voorgeskryf word.

8.1.3.6.3.1 Vir slag van voor met vorentoe gerigte keertoestelle en slag van agter met agtertoe gerigte keertoestelle moet die toetspop so geplaas word dat die gaping tussen die voorkant van die toetspop en die keertoestel is; vir slag van voor met agtertoe gerigte keertoestelle moet die toetspop so geplaas word dat die gaping tussen die agterkant van die toetspop en die keertoestel is. In die geval van drawiegies moet die toetspop in 'n reguit horisontale posisie so na moontlik aan die hartlyn van die drawieg geplaas word.

8.1.3.6.3.2 Kinderkeertoestel sonder 'n stoel

Plaas die toetspop in die voertuigsitplek of toetssitplek.

Plaas 'n plank wat 25 mm dik en 200 mm breed is tussen die rug van die toetspop en die rugleuning van die voertuigsitplek of toetssitplek.

Verstel die gordel volgens die fabrikant se aanwysings wat deur die toetsowerheid verantwoord is.

8.1.3.6.3.3 Kinderkeertoestel met 'n afsonderlik verankerde stoel

Plaas die toetspop in die kinderstoel.

Plaas 'n plank wat 25 mm dik en 60 mm breed is tussen die toetspop en die rugleuning van die stoel.

Verstel die gordel volgens die fabrikant se aanwysings wat deur die toetsowerheid verantwoord is.

Plaas die toetspop en die stoel op die toetssitplek en verstel die bande van die keertoestel volgens die fabrikant se aanwysings wat deur die toetsowerheid verantwoord is. Haal die plank uit.

8.1.3.6.3.4 Die langsvlak wat deur die hartlyn van die toetspop gaan, moet halfpad tussen die twee onderste gordelverankerings geplaas word; daar moet egter ook gelet word op 8.1.3.2.1.3. In die geval van steunkussings wat met die toetspop getoets moet word wat 'n kind van 10 jaar oud verteenwoordig, moet die langsvlak wat deur die hartlyn van die toetspop gaan 75 mm $\pm$ 5 mm na die linker- of regterkant geplaas word ten opsigte van die punt halfpad tussen die twee onderste gordelverankerings.

8.1.3.6.3.5 In die geval van keertoestelle wat die gebruik van 'n standaardgordel vereis, kan die skouerband voor die aanvang van die dinamiese toets op die toetspop geplaas word met behulp van liggewigmaskeerband wat breed en lank genoeg is. In die geval van agtertoe gerigte toestelle kan die kop van die toetspop teen die rugleuning van die keerstelsel gehou word met behulp van liggewigmaskeerband wat breed en lank genoeg is.

8.1.3.7 Kategorie toetspop wat gebruik moet word

8.1.3.7.1 Groep 0-keertoestel: toets met gebruik van 'n "pasgebore" toetspop en 'n toetspop met 'n massa van 9 kg.

8.1.3.7.2 Groep I-keertoestel: toets met gebruik van toetspoppe met 'n massa van onderskeidelik 9 kg en 15 kg.

8.1.3.7.3 Groep II-keertoestel: toets met gebruik van toetspoppe met 'n massa van onderskeidelik 15 kg en 22 kg.

8.1.3.7.4 Groep III-keertoestel: toets met gebruik van toetspoppe met 'n massa van onderskeidelik 22 kg en 32 kg.

8.1.3.7.5 Indien die kinderkeerstelsel vir twee of meer massagroepes geskik is, moet die toets uitgevoer word met gebruik van die ligste en die swaarste toetspoppe wat hierbo vir al die betrokke groepe gespesifiseer word. Indien die konfigurasie van die keertoestel egter aansienlik van een groep na die volgende verander, bv as die konfigurasie van die harnas of die lengte van die harnas verander word, kan die toetsowerheid wat die toets uitvoer, indien hy dit raadsaam ag, 'n toets met 'n toetspop van intermediêre massa byvoeg.

8.2 Toets op afsonderlike komponente

8.2.1 Gespe

8.2.1.1 Oopmaaktoets onder las

8.2.1.1.1 'n Kinderkeertoestel wat reeds aan die dinamiese toets gespesifiseer in 8.1.3 onderwerp is, moet vir hierdie toets gebruik word.

8.2.1.1.2 Die kinderkeertoestel moet van die toetswaentjie of van die voertuig afgehaal word sonder dat die gespe oopgemaak word. 'n Spanning van 200 N moet op die gespe aangewend word. Indien die gespe aan 'n onbuigsame deel vasgeheg is, moet die krag aangewend word wat die hoek weergee wat tydens die dinamiese toets deur die gespe met dié onbuigsame deel gevorm word.

8.2.1.1.3 'n Las moet teen 'n spoed van 400 mm/min $\pm$ 20 mm/min op die geometriese middelpunt van die gespelosmaakknop opgeleë word langs 'n vaste as wat parallel met die aanvanklike beweegrigting van die knop loop. Die geometriese middelpunt geld vir daardie deel van die oppervlak van die gespe waarop die losmaakdruk aangewend moet word. Die gespe moet tydens die aanwending van die oopmaakrag teen 'n vaste steunstuk bevestig wees.

8.2.1.1.4 Die gespe-oopmaakrag moet met behulp van 'n dinamometer of soortgelyke toestel op dieselfde wyse en in dieselfde rigting as by normale gebruik aangewend word. Die kontakpunt moet 'n gepoleerde metaalhalfsteer met 'n radius van 2,5 mm $\pm$ 0,1 mm wees.

8.2.1.1.5 Die gespe-oopmaakrag moet gemeet word en enige faling moet aangeteken word.

8.2.1.2 Oopmaaktoets onder nullas

8.2.1.2.1 'n Gespesamestel wat nie voorheen aan 'n las onderwerp is nie moet in 'n "nullastoestand" gemonteer en geposisioneer word.

8.2.1.2.2 Die metode waarvolgens die gespe-oopmaakrag gemeet word, moet dié wees wat in 8.2.1.1.3 en 8.2.1.1.4 voorgeskryf word.

8.2.1.2.3 Die gespe-oopmaakrag moet gemeet word.

8.2.2 Versteller

8.2.2.1 Verstelgerief

8.2.2.1.1 As 'n handgewerkte versteller getoets word, moet die band, met inagneming van die normale gebruikstoestande, egalig deur die versteller getrek word teen 'n tempo van ongeveer 100 mm/s. Die maksimum krag moet tot die naaste newton gemeet word na die eerste 25 mm van bandbeweging.

8.2.2.1.2 Die toets moet in albei beweegrigtings van die band deur die versteller uitgevoer word en die band moet 10 keer aan die volle beweegsiklus onderwerp word voordat die meting gedoen word.

8.2.3 Mikroglytoets (kyk byvoegsel 5, figuur 3)

8.2.3.1 Die komponente en verstellers wat aan die mikroglytoets onderwerp moet word, moet voor die toets minstens 24 h lank in 'n atmosfeer met 'n temperatuur van $20\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$ en 'n relatiewe humiditeit van $(65 \pm 5)\%$ gehou word. Die toets moet by 'n temperatuur van tussen $15\text{ }^{\circ}\text{C}$ en $30\text{ }^{\circ}\text{C}$ uitgevoer word.

8.2.3.2 Die vry ent van die band moet in dieselfde konfigurasie wees as dié waarin dit is as die versteller in die voertuig in gebruik is en mag nie aan enige ander deel vasgeheg wees nie.

8.2.3.3 Die versteller moet op 'n vertikale stuk band geplaas word waarvan een ent 'n las van 50 N dra (wat so gelei word dat daar voorkom word dat die las swaai en die band draai). Die vry ent van die band wat by die versteller uitsteek, moet vertikaal opwaarts of afwaarts gemonteer word, soos in die voertuig. Die ander ent moet oor 'n deflekteerroller loop waarvan die horisontale as parallel is met die vlak van die bandgedeelte wat die las dra. Die bandgedeelte wat oor die roller loop, moet horisontaal wees.

8.2.3.4 Die versteller wat getoets word, moet so geplaas word dat die versteller se middelpunt in die hoogste posisie waartoe die versteller gelig kan word $300\text{ mm} \pm 20\text{ mm}$ bokant 'n steuntafel is en dat die las van 50 N op 'n hoogte van $100\text{ mm} \pm 20\text{ mm}$ bo die steuntafel is.

8.2.3.5 Voordat daar met die toets begin word, moet twintig siklusse voltooi word. Daarna moet 1 000 siklusse teen 'n frekwensie van 0,5 siklusse per sekonde voltooi word, met 'n totale amplitude van $300\text{ mm} \pm 20\text{ mm}$ of soos in 8.2.5.2.6.2 gespesifiseer. Die las van 50 N moet slegs aangewend word tydens die tydperk wat ooreenstem met 'n verskuiwing van $100\text{ mm} \pm 20\text{ mm}$ vir elke halfperiode. Mikroglyding moet gemeet word vanaf die posisie aan die einde van die 20 siklusse voor die toets.

8.2.4 Terugtrekker

8.2.4.1 Terugtrekkrag

8.2.4.1.1 Die terugtrekkrag moet gemeet word met 'n toetspop in die kinderkeertoestel aangebring soos vir die dinamiese toets wat in 8.1.3 voorgeskryf word. Die bandspanning moet net voor die punt van aanraking met die toetspop gemeet word terwyl die band teen 'n spoed van ongeveer 0,6 m/min teruggetrek word.

8.2.4.2 Duursaamheid van terugtrekkermeganisme

8.2.4.2.1 Die band moet teen 'n tempo van hoogstens 30 siklusse per minuut vir die vereiste getal siklusse uitgetrek word en toegelaat word om terug te trek. In die geval van noodsluiterugtrekkers moet daar elke vyfde siklus 'n pluk gegee word om die terugtrekker te sluit. Dieselfde getal plukke moet op elk van vyf verskillende uittrekafstande gegee word, nl 90 %, 80 %, 75 %, 70% en 65 % van die totale lengte van die band op die terugtrekker. Indien die band egter langer as 900 mm is, geld bogenoemde persentasies ten opsigte van die laaste 900 mm band wat uit die terugtrekker uitgetrek kan word.

8.2.4.3 Sluit van noodsluiterugtrekkers

8.2.4.3.1 Die sluitwerking van die terugtrekker moet een maal getoets word as die band afgerol is tot sy volle lengte minus $300\text{ mm} \pm 3\text{ mm}$.

8.2.4.3.2 In die geval van 'n terugtrekker wat deur bandbeweging geaktueer word, moet die band uitgetrek word in die rigting waarin dit gewoonlik gedoen word as die terugtrekker in 'n voertuig geïnstalleer is.

8.2.4.3.3 By die toets van terugtrekkers vir gevoeligheid vir voertuigversnellings, moet hulle getoets word op die bogenelde uittrekafstand, in albei rigtings langs twee asse haaks op mekaar wat horisontaal is as die terugtrekkers in 'n voertuig geïnstalleer gaan word soos die fabrikant van die kinderkeertoestel spesifiseer. Indien dié posisie nie gespesifiseer is nie, moet die toetsowerheid die fabrikant van die kinderkeertoestel raadpleeg. Die toetsowerheid (wat die toets uitvoer) moet een van hierdie toetsrigtings so kies dat dit die ongunstigste toestande met betrekking tot die aktuering van die sluitmeganisme verteenwoordig.

8.2.4.3.4 Die ontwerp van die apparaat wat gebruik word, moet sodanig wees dat die vereiste versnelling teen 'n gemiddelde versnellingstoenametempo van minstens 245 m/s^2 verkry word.

8.2.4.3.5 By die toets vir voldoening aan die vereistes van 7.2.3.2.1.3 en 7.2.3.2.1.4 moet die terugtrekker op 'n horisontale tafel gemonteer word en moet die tafel teen 'n spoed van hoogstens $2^\circ/\text{s}$ gekantel word totdat sluiting plaasgevind het. Die toets moet met kanteling in ander rigtings herhaal word ten einde seker te maak dat daar aan die vereistes voldoen word.

8.2.4.4 Korrosietoets

8.2.4.4.1 Die korrosietoets moet uitgevoer word soos in 8.1.1 beskryf word.

8.2.4.5 Stofbestandheidstoets

8.2.4.5.1 Die terugtrekker moet in 'n toetskamer geplaas word soos in byvoegsel 3 van hierdie spesifikasie aangetoon word. Dit moet in dieselfde posisie gemonteer word as dié waarin dit in die voertuig gemonteer word. Die toetskamer moet stof bevat soos in 8.2.4.5.2 gespesifiseer word. 'n Lengte van 550 mm van die band moet uit die terugtrekker uitgetrek word en uitgetrek gehou word, behalwe dat dit binne 1 min of 2 min na elke stofroering aan 10 volledige terugtrek-en-uittrek-siklusse onderwerp moet word. Die stof moet oor 'n tydperk van 5 uur elke 20 min 5 s lank geblaas word met druklug wat vry van olie en vog is en wat teen 'n meterdruk van $550 \text{ kPa} \pm 50 \text{ kPa}$ deur 'n opening met 'n diameter van $1,5 \text{ mm} \pm 0,1 \text{ mm}$ ingelaat word.

8.2.4.5.2 Die stof wat gebruik word in die toets wat in 8.2.4.5.1 beskryf word, moet uit ongeveer 1 kg droë kwartsstof bestaan. Die deeltjiegrootteverspreiding moet soos volg wees:

- a) korrels wat deur 'n sif met 'n openinggrootte van $150 \mu\text{m}$ en 'n draaddikte van $104 \mu\text{m}$ gaan: 99 % tot 100 %;
- b) korrels wat deur 'n sif met 'n openinggrootte van $105 \mu\text{m}$ en 'n draaddikte van $64 \mu\text{m}$ gaan: 76 % tot 86 %;
- c) korrels wat deur 'n sif met 'n openinggrootte van $75 \mu\text{m}$ en 'n draaddikte van $52 \mu\text{m}$ gaan: 60 % tot 70 %.

8.2.5 Statiese toets vir bande

8.2.5.1 Toets vir bandsterkte

8.2.5.1.1 Elke toets moet uitgevoer word op twee nuwe monsters van die band wat gekondisioneer is soos in 7.2.4 gespesifiseer word.

8.2.5.1.2 Elke band moet tussen die klampe van 'n trektoetsmasjien vasgekleem word. Die klampe moet so ontwerp wees dat breuk van die band by of naby die klampe verhoed word. Die beweegspoed moet ongeveer 100 mm/min wees. Die vry lengte van die eksemplaar tussen die klampe van die masjien aan die begin van die toets moet $200 \text{ mm} \pm 40 \text{ mm}$ wees.

8.2.5.1.3 Die spanning moet verhoog word totdat die band breek en die breeklas moet aangeteken word.

8.2.5.1.4 Indien die band by of binne 10 mm van een van die klampe af gly of breek, moet daar geag word dat die toets ongeldig is en moet 'n nuwe toets op 'n ander eksemplaar uitgevoer word.

8.2.5.2 Eksemplare wat uit bande gesny is, moet soos in 8.2.5.2.1 tot 8.2.5.2.6 gekondisioneer word.

8.2.5.2.1 Kamerkondisionering

8.2.5.2.1.1 Die band moet 24 h lank in 'n atmosfeer met 'n temperatuur van $20^{\circ}\text{C} \pm 5^{\circ}\text{C}$ en 'n relatiewe humiditeit van $(65 \pm 5)\%$ gehou word. Indien die toets nie onmiddellik ná kondisionering uitgevoer word nie, moet die eksemplaar in 'n hermeties verseëelde houer geplaas word totdat die toets begin. Die breekklas moet bepaal word binne 5 min nadat die band uit die kondisioneeratmosfeer of uit die houer gehaal is.

8.2.5.2.2 Ligkondisionering

8.2.5.2.2.1 Die apparaat beskryf in SABS-metode 405, *Tekstielstowwe – Kleurvastheid teen kunsmatige lig – Xenonbooglamp-verbleiktoets*, moet gebruik word en die toetsband moet minstens 1,3 m lank wees.

'n Middelgedeelte van die band, wat minstens 200 mm lank is, moet aan lig blootgestel word vir die tydperk wat nodig is om verbleiking van ligvastheidsstandaard no 7 tot 'n kontras gelyk aan graad no 4 op die grysskaal teweeg te bring.

8.2.5.2.2.2 Na blootstelling moet die band minstens 24 h lank in 'n atmosfeer met 'n temperatuur van $20^{\circ}\text{C} \pm 5^{\circ}\text{C}$ en 'n relatiewe humiditeit van $(65 \pm 5)\%$ gehou word. Die breekklas moet bepaal word binne 5 min nadat die band uit die kondisioneerapparaat gehaal is.

8.2.5.2.3 Kouekondisionering

8.2.5.2.3.1 Die band moet minstens 24 h lank in 'n atmosfeer met 'n temperatuur van $20^{\circ}\text{C} \pm 5^{\circ}\text{C}$ en 'n relatiewe humiditeit van $(65 \pm 5)\%$ gehou word.

8.2.5.2.3.2 Die band moet dan 1,5 h lank op 'n gelyk oppervlak gehou word in 'n laetemperatuurkamer waarin die lugtemperatuur $-15^{\circ}\text{C} \pm 5^{\circ}\text{C}$ is. Dit moet dan gevou word en die vou moet belas word met 'n massastuk van 2 kg wat vooraf tot $-15^{\circ}\text{C} \pm 5^{\circ}\text{C}$ afgekoel is. Nadat die band 30 min lank in dieselfde laetemperatuurkamer onder belasting gehou is, moet die massastuk verwyder word en moet die breekklas gemeet word binne 5 min nadat die band uit die laetemperatuurkamer gehaal is.

8.2.5.2.4 Hittekondisionering

8.2.5.2.4.1 Die band moet 3 h lank in 'n verhittingskabinet in 'n atmosfeer met 'n temperatuur van $60^{\circ}\text{C} \pm 5^{\circ}\text{C}$ en 'n relatiewe humiditeit van $(65 \pm 5)\%$ gehou word.

8.2.5.2.4.2 Die breekklas moet bepaal word binne 5 min nadat die band uit die verhittingskabinet gehaal is.

8.2.5.2.5 Blootstelling aan water

8.2.5.2.5.1 Die band moet 3 h lank heeltemal ondergedompel gehou word in gedistilleerde water by 'n temperatuur van $20^{\circ}\text{C} \pm 5^{\circ}\text{C}$, waarby 'n spoor van benattingsmiddel gevoeg is. Enige benattingsmiddel wat geskik is vir die vesel wat getoets word, kan gebruik word.

8.2.5.2.5.2 Die breekklas moet bepaal word binne 10 min nadat die band uit die water gehaal is.

8.2.5.2.6 Skuurkondisionering

8.2.5.2.6.1 Die komponente of toestelle wat aan die skuurtoets onderwerp moet word, moet minstens 24 h lank voor die toets in 'n atmosfeer met 'n temperatuur van $20^{\circ}\text{C} \pm 5^{\circ}\text{C}$ en 'n relatiewe humiditeit van $(65 \pm 5)\%$ gehou word. Die kamertemperatuur tydens die toets moet tussen 15°C en 30°C wees.

8.2.5.2.6.2 Die algemene toestande vir elke toets word in die tabel hieronder uiteengesit:

1	2	3	4	5
	Las N	Frekwensie Hz	Siklusse Getal	Verskuiwing mm
Tipe 1-prosedure	10	30	1 000	300 ± 20
Tipe 2-prosedure	5	30	5 000	300 ± 20

Indien daar nie voldoende band is om die toets oor 'n verskuiwing van 300 mm uit te voer nie, kan die toets oor 'n korter lengte uitgevoer word, mits dit minstens 100 mm is.

8.2.5.2.6.3 Besondere toetstoestande

8.2.5.2.6.3.1 Tipe 1-prosedure (vir gevalle waar die band deur die snelversteller gaan)

Die las van 10 N moet vertikaal en ononderbroke op een van die bande aangewend word. Die ander band, wat in 'n horisontale stand is, moet bevestig word aan 'n toestel wat die band heen en weer kan laat beweeg. Die versteller moet so geplaas word dat die horisontale band onder spanning bly (kyk figuur 1 van byvoegsel 5 van hierdie spesifikasie).

8.2.5.2.6.3.2 Tipe 2-prosedure (vir gevalle waar die band van rigting verander as dit deur 'n onbuigsame deel gaan)

Tydens hierdie toets moet die hoeke van albei bande wees soos in figuur 2 van byvoegsel 5 van hierdie spesifikasie aangetoon word. Die las van 5 N moet ononderbroke aangewend word. Vir gevalle waar die band meer as een keer van rigting verander as dit deur 'n onbuigsame deel gaan, kan die las van 5 N verhoog word om die voorgeskrewe 300 mm bandbeweging deur dié onbuigsame deel te bereik.

8.3 Geskrap

8.4 Hoëspoedfilms

8.4.1 Die gedrag van die toetspop en die verskuiwing daarvan moet met behulp van 'n hoëspoed-kamera bepaal word.

8.4.2 'n Kalibreerskerm moet stewig op die waentjie of in die voertuigstruktuur gemonteer word sodat die verskuiwing van die toetspop bepaal kan word.

9 tot 13 Gereserveer

14 Aanwysings

14.1 Elke kinderkeertoestel moet van aanwysings in Engels sowel as in Afrikaans vergesel wees. Die aanwysings moet wees soos in 14.2 en 14.3 uiteengesit word.

14.2 Die installeringsaanwysings moet die volgende insluit:

14.2.1 Die lys voertuie en voertuigmodelle waarvoor die kinderkeertoestel bedoel is, moet duidelik by die verkooppunt sigbaar wees sonder dat die verpakking verwyder word. (Dié lys word nie in die geval van stelsels van die "universele kategorie" vereis nie.) Indien die kinderkeertoestel 'n veiligheids-gordel vir volwassenes vereis, moet die volgende bewoording by hierdie lys gevoeg word: "Slegs geskik vir voertuie toegerus met skoot/3-punt/statiese/terugtrekker-veiligheidsgordels, wat voldoen aan SABS 1080 of ander ekwivalente spesifikasies". (Skrap skoot/3-punt, ens, soos toepaslik.) In die geval van drawieckeertoestelle moet 'n lys van drawiegies waarvoor die toestel geskik is, aangegee word.

14.2.2 Die installeringsmetode, geïllustreer deur middel van foto's of duidelike tekeninge of albei.

14.2.3 Raad aan die gebruiker met die strekking dat die onbuigsame items en plastiekdele van 'n kinderkeertoestel so geplaas en geïnstalleer moet word dat hulle nie tydens alledaagse gebruik van die voertuig deur 'n beweegbare sitplek of in 'n deur van die voertuig vasgevang kan word nie.

14.2.3.1 Die gebruiker moet aangeraai word dat drawiegies loodreg op die langsas van die voertuig gebruik moet word.

14.3 Die gebruiksaanwysings moet die volgende insluit:

14.3.1 Die massagroep(e) waarvoor die toestel bedoel is.

14.3.2 Indien die kinderkeertoestel saam met 'n veiligheidsgordel vir volwassenes gebruik word, die tipe veiligheidsgordel wat gebruik moet word, deur middel van die volgende bewoording: "Slegs geskik vir gebruik in die gelyste voertuie toegerus met skoot/3-punt/statiesse/terugtrekker-veiligheidsgordels wat aan SABS 1080 of ander ekwivalente spesifikasies voldoen". (Skrap skoot/3-punt, ens, soos toepaslik.)

14.3.3 Die gebruiksmetode, geïllustreer deur middel van foto's of duidelike tekeninge of albei.

14.3.4 Die werking van die gespe en verstellers duidelik uiteengesit.

14.3.5 'n Aanbeveling dat bande wat die keertoestel aan die voertuig bevestig, nouseluitend moet pas, dat bande wat die kind teëhou, volgens die kind se liggaam verstel moet word en dat bande nie gedraai moet wees nie.

14.3.6 Die belangrikheid daarvan dat daar verseker word dat 'n skootband laag gedra word sodat die bekken stewig teëgehou word.

14.3.7 'n Aanbeveling dat die keertoestel vervang moet word as dit aan hewige spannings in 'n ongeluk onderwerp was.

14.3.8 Skoonmaakaanwysings.

14.3.9 'n Algemene waarskuwing aan die gebruiker dat dit gevaarlik is om sonder die goedkeuring van die bevoegde owerheid enige veranderings of byvoegings aan die keertoestel aan te bring, en dat dit gevaarlik is om nie die installeringsaanwysings deur die fabrikant van die kinderkeertoestel verskaf, stiptelik te volg nie.

14.3.10 Indien 'n stoel nie van 'n tekstielbedekking voorsien is nie, 'n aanbeveling dat die stoel van sonlig weggehou word, anders kan dit te warm vir die kind se vel wees.

14.3.11 'n Aanbeveling dat kinders nie sonder toesig in kinderkeerstelsels gelaat word nie.

15 Gereserveer

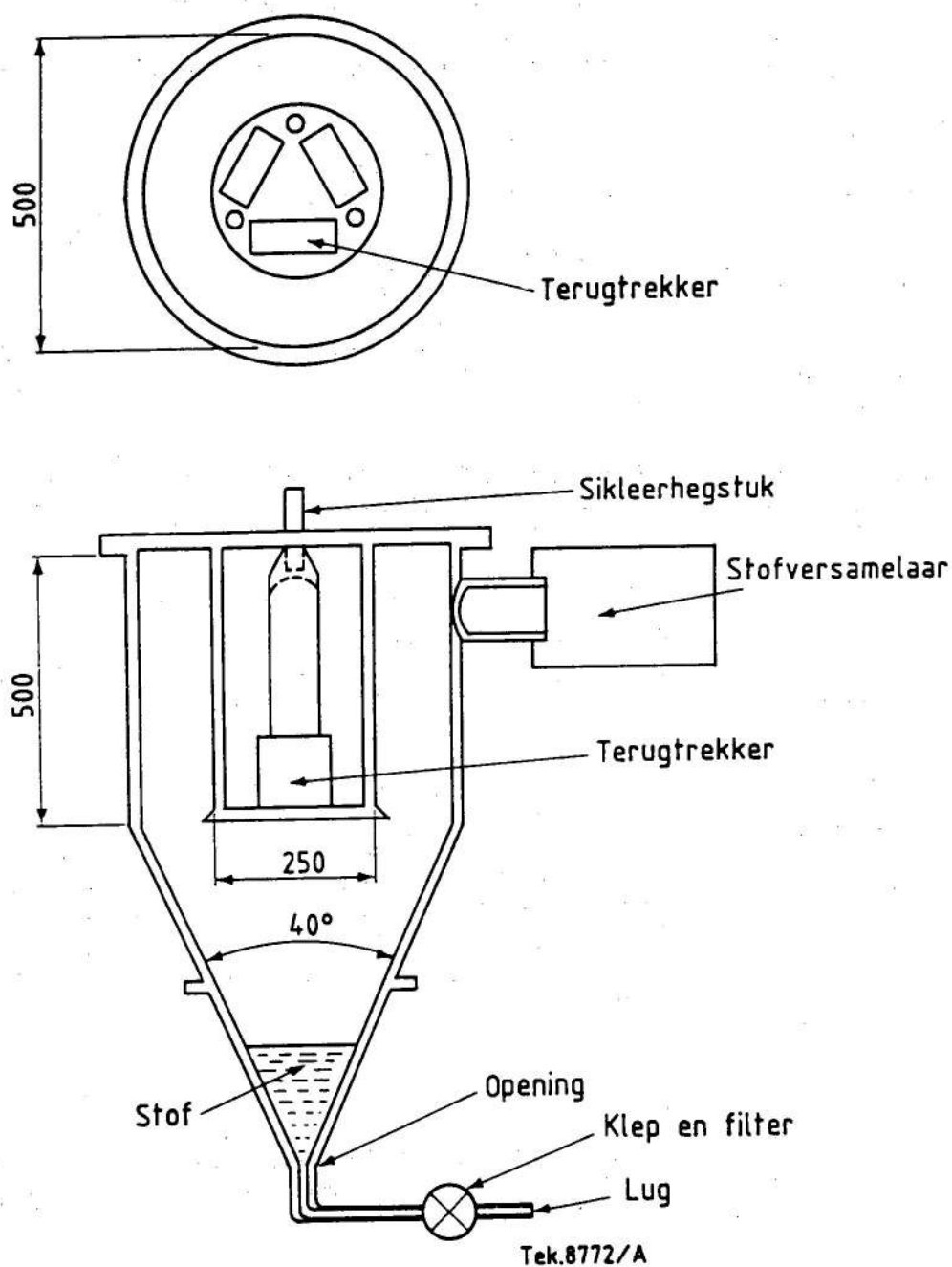
16 Gereserveer

Byvoegsel 1 Gereserveer

Byvoegsel 2 Gereserveer

Byvoegsel 3**Rangskikking van apparaat vir stofbestandheidstoets**

Afmetings in millimeter



Byvoegsel 4

Korrosietoets

1 Toetsapparaat

1.1 Die apparaat moet uit 'n miskamer, 'n soutoplossingsreservoir, 'n toevoer druklug wat op geskikte wyse gekondisioneer is, een of meer verstuiwers, monstersteunstukke, voorsiening vir die verhitting van die kamer en die nodige kontrolemiddele bestaan. Die grootte en konstruksiebesonderhede van die apparaat is opsioneel, mits daar aan die toetstoestande voldoen word.

1.2 Die ontwerp van die apparaat moet sodanig wees dat druppels van die oplossing wat teen die plafon of op die bedekking van die kamer vergaar het, nie op die toetsmonsters val nie.

1.3 Druppels van die oplossing wat van die toetsmonsters afval, mag nie na die reservoir teruggelei word en weer verstui word nie.

1.4 Die apparaat mag nie gemaak wees van materiaal wat 'n invloed op die korrosiewerking van die mis het nie.

2 Plasing van toetsmonsters in die miskamer

2.1 Monsters, uitgesonderd terugtrekkers, moet tussen 15° en 30° uit die vertikaal en verkieslik parallel met die hoofrigting van horisontale vloei van mis deur die kamer, gesteun of opgehang word, gegrond op die dominante oppervlak wat getoets word.

2.2 'n Terugtrekker moet so gesteun of opgehang word dat die as van die tol waarop die band opgerol word, loodreg op die hoofrigting van horisontale vloei van mis deur die kamer is. Die bandopening in die terugtrekker moet ook in dié hoofrigting wys.

2.3 Elke monster moet so geplaas word dat die mis vrylik op alle monsters kan neersak.

2.4 Elke monster moet so geplaas word dat daar verhoed word dat die soutoplossing van een monster op 'n ander drup.

3 Soutoplossing

3.1 Die soutoplossing moet berei word deur 5 ± 1 massadele natriumchloried in 95 dele gedistilleerde water op te los. Die sout moet natriumchloried wees wat wesenlik vry van nikkel en koper is en wat in die droë toestand hoogstens 0,1 % natriumjodied en hoogstens 0,3 % totale onsuiverhede bevat.

3.2 Die oplossing moet sodanig wees dat as dit by 35 °C verstui word, die pH-waarde van die opgevangde oplossing binne die bestek 6,5 tot 7,2 is.

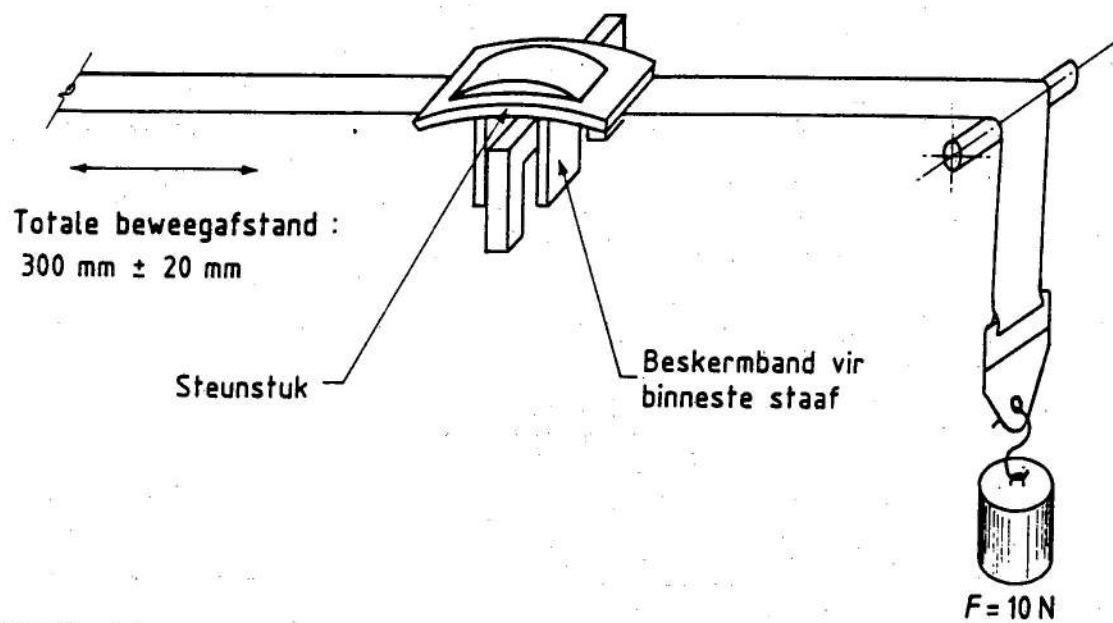
4 Druklu

4.1 Die druklugtoevoer na die sproeikop of sproeikoppe vir die verstuiwing van die soutoplossing moet vry van olie en onsuiverhede wees en moet by 'n druk van tussen 70 kPa en 170 kPa gehou word.

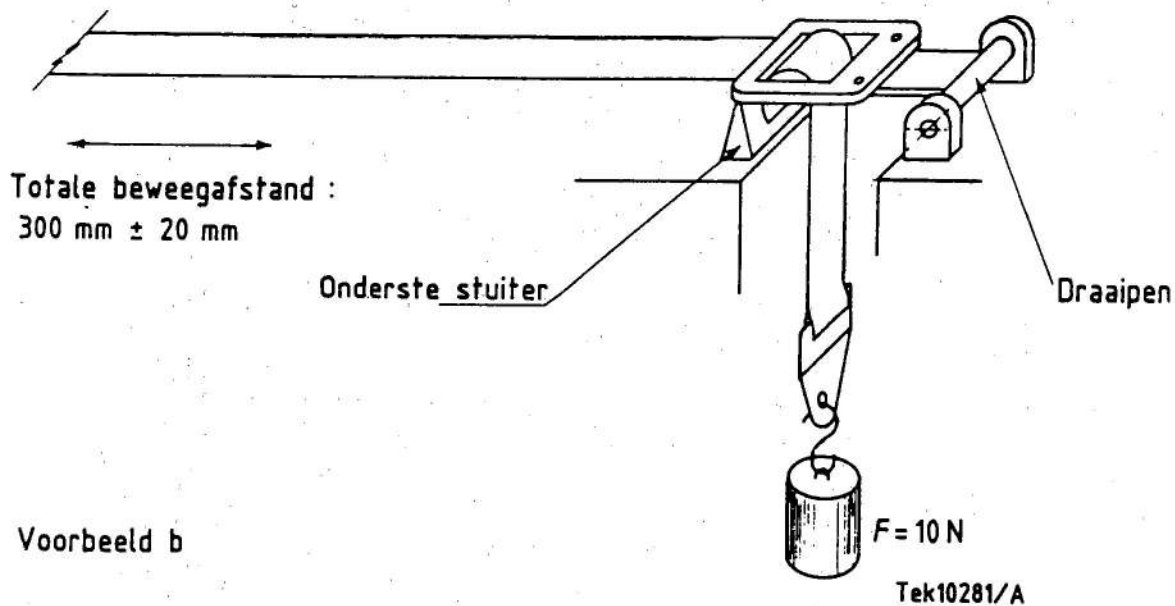
5 Toestande in die miskamer

5.1 Die blootstellingsone van die miskamer moet by $35\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$ gehou word. Minstens twee skoon misopvangers moet in die blootstellingsone geplaas word om te voorkom dat druppels van die oplossing van die toetsmonsters of enige ander bron vergaar. Die opvangers moet naby die toetsmonsters geplaas word, een so naby moontlik aan 'n sproeikop en een so ver moontlik van alle sproeikoppe af. Die mis moet sodanig wees dat, vir elke 80 cm^2 horisontale opvanggebied, tussen $1,0\text{ ml}$ en $2,0\text{ ml}$ van die oplossing per uur in elke opvanger versamel word, gemiddeld oor minstens 16 h gemeet.

5.2 Die sproeikop of sproeikoppe moet so gerig of afgeskerm word dat die sproei die toetsmonsters nie regstreeks tref nie.

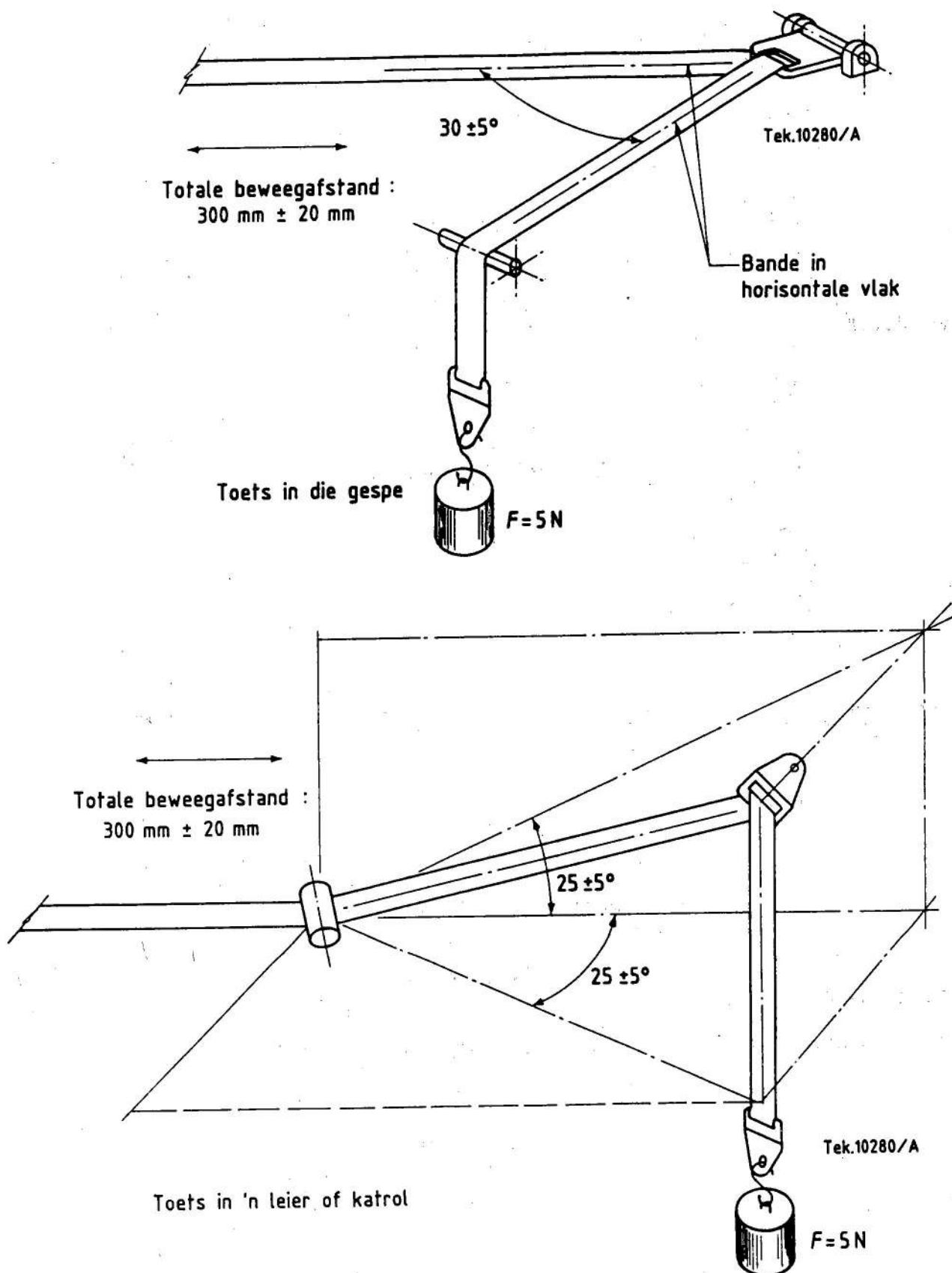
Byvoegsel 5**Skuur- en mikroglytoets**

Voorbeeld a

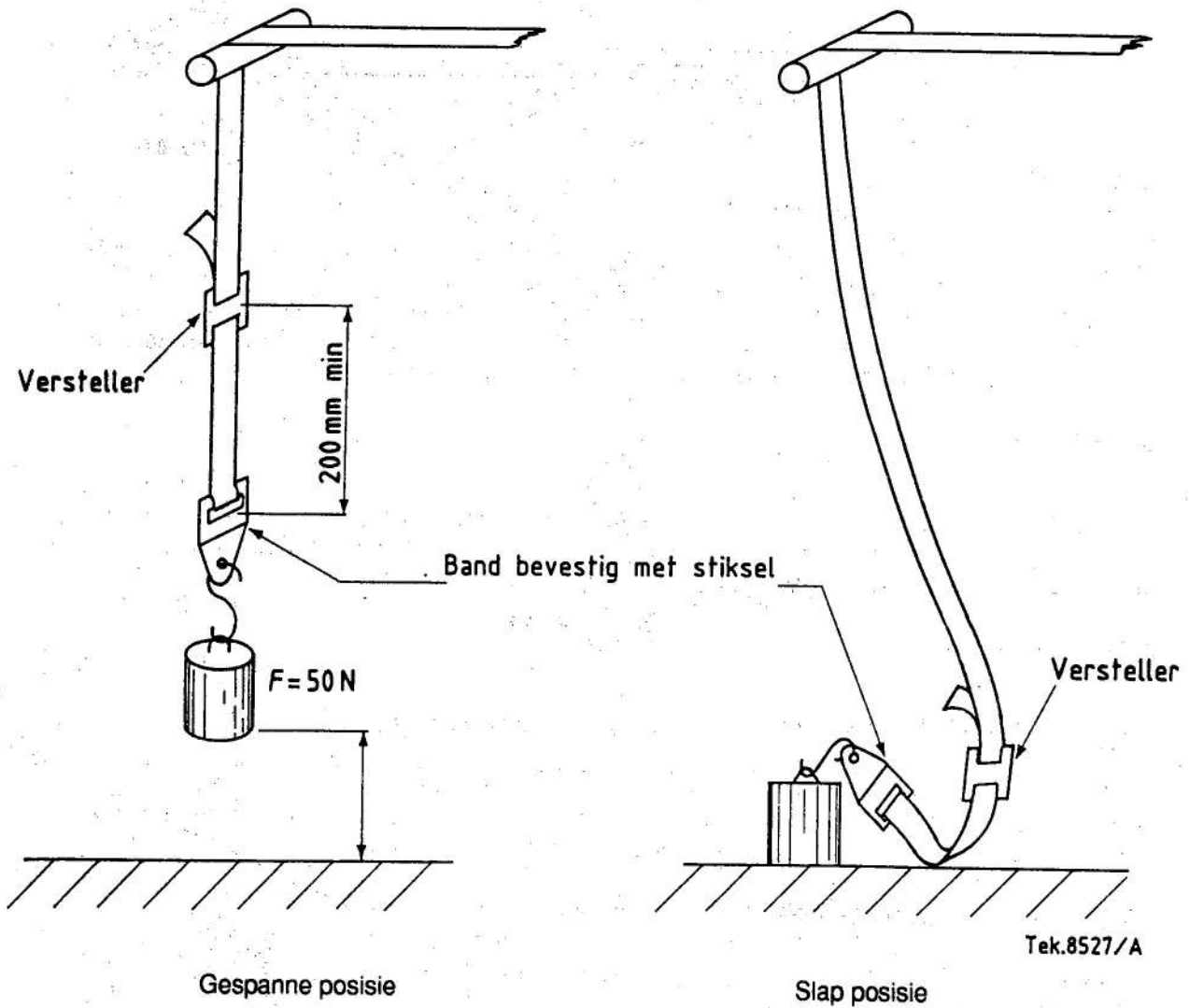


Voorbeeld b

Figuur 1 – Prosedure tipe 1
Voorbeelde van toetsrangskikkings ooreenkomstig die tipe verssteller



Figuur 2 – Prosedure tipe 2



Totale beweegafstand: $300\text{ mm} \pm 20\text{ mm}$

Die las van 50 N op die toetstoestel moet op so 'n wyse vertikaal gelei word dat daar verhoed word dat die las swaai of die band draai.

Die vashegtoestel moet op dieselfde wyse as in die voertuig aan die las van 50 N bevestig word.

Figuur 3 – Mikroglytoets

Byvoegsel 6

Beskrywing van waentjie

1 Waentjie

1.1 In die geval van toetse op kinderkeertoestelle moet die waentjie met slegs die toetssitplek daarop 'n massa van $400 \text{ kg} \pm 20 \text{ kg}$ hê. In die geval van toetse op keerstelsels moet die waentjie met die voertuigstruktuur daarop bevestig 'n nominale massa van 800 kg hê. Indien dit nodig is, kan die totale massa van die waentjie en voertuigstruktuur egter met inkremente van 200 kg verhoog word. Die totale massa mag in geen geval met meer as 40 kg van die nominale waarde verskil nie.

2 Kalibreerskerm

2.1 'n Kalibreerskerm moet stewig aan die waentjie bevestig wees. 'n Bewegingsgrenslyn moet duidelik daarop aangebring wees sodat voldoening aan die maatstawwe vir voorwaartse beweging aan die hand van fotografiese rekords bepaal kan word.

3 Toetssitplek

3.1 Die toetssitplek moet die volgende konstruksie hê (kyk aanhangsel 1):

3.1.1 'n onbuigsame rugleuning, 500 mm hoog, vas, bedek met poliuretaanskuim met 'n dikte van 70 mm (waarvan die eienskappe in die tabel hieronder (kyk 3.1.5) aangegee word) en 20° na agter gekantel. Die onderste deel van die rugleuning is van buis met 'n diameter van 20 mm gemaak;

3.1.2 'n sitgedeelte gemaak van die materiaal wat in aanhangsel 1 van hierdie byvoegsel beskryf word. Die agterste deel van die sitgedeelte is van onbuigsame plaatmetaal, waarvan die borand 'n buis met 'n diameter van 20 mm is. Vir die toetse word die sitgedeelte bedek met ligte tekstielstof wat nie die onbuigsamheid sal beïnvloed nie;

3.1.3 daar is 'n opening gelaat tussen die rugleuning en die kussing van die toetssitplek soos in aanhangsel 1 van hierdie byvoegsel beskryf word;

3.1.4 die breedte van die toetssitplek is 800 mm ;

3.1.5 eienskappe van poliuretaanskuimvulstof:

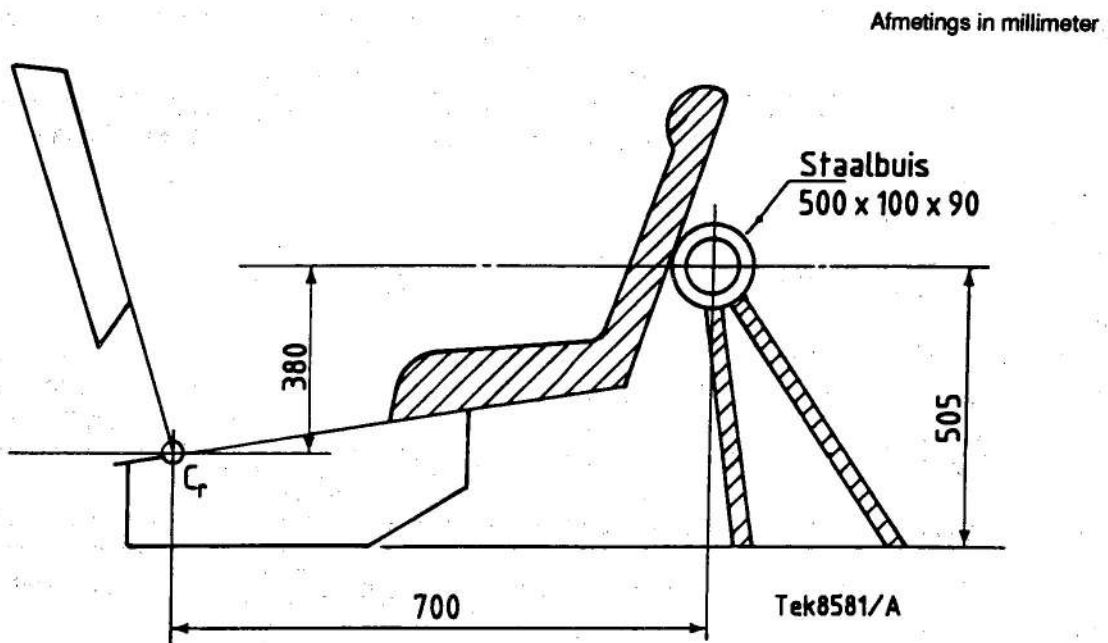
1	2
Digtheid (kg/m^3)	35 - 45
Drasterkte (kPa): *p - 25 % p - 50 % p - 65 %	$2,5 \pm 0,5$ $3,7 \pm 0,5$ $5,0 \pm 0,5$
Drasterktefaktor: p - 65 %/p - 25 %	< 2,5
Permanente drukvervorming (%)	< 15
Skeursterkte (N/m)	≥ 500
Breeksterkte (kPa)	≥ 100
Breekverlenging (%)	≥ 100
*p = aanvanklike dikte van poliuretaanskuim.	

3.2 Toets van agtertoe gerigte keertoestelle

3.2.1 'n Spesiale raamwerk moet op die waentjie aangebring word om die kinderkeertoestel te steun soos in figuur 1 aangetoon word.

3.2.2 'n Staalbuis moet op so 'n wyse stewig aan die waentjie bevestig wees dat 'n las van 5 000 N wat horisontaal op die middel van die buis opgelê word, nie 'n beweging van meer as 2 mm sal veroorsaak nie.

3.2.3 Die afmetings van die buis moet 500 mm x 100 mm (buitediameter) x 90 mm (binnediameter) wees.



Figuur 1 – Rangskikking vir toets van 'n agtertoe gerigte keertoestel

4 Stuiter

4.1 Die stuiter moet bestaan uit twee identiese absorbeërs wat parallel gemonteer is.

4.2 Indien nodig, moet 'n bykomende absorbeër vir elke toename van 200 kg in nominale massa gebruik word. Elke absorbeër moet bestaan uit:

4.2.1 'n buiteomhulsel wat uit 'n staalbuis gevorm is;

4.2.2 'n energieabsorbeerbuis van poliuretaan;

4.2.3 'n olyfvormige knop van gepoleerde staal wat in die absorbeër indring; en

4.2.4 'n stang en 'n slagplaat.

4.3 Die afmetings van die verskillende dele van die absorbeër moet wees soos in die diagramme in aanhangsel 2 en 3 van hierdie byvoegsel aangetoon word.

4.4 Die eienskappe van die absorbeermateriaal moet wees soos in tabel 1 en tabel 2 van hierdie aanhangsel aangegee word.

4.5 Die stuitersamestel moet minstens 12 h lank by 'n temperatuur van tussen 15 °C en 25 °C gehou word voordat dit vir die kalibreertoets beskryf in byvoegsel 7 van hierdie spesifikasie gebruik word. Die stuitersamestel moet ten opsigte van elke tipe toets aan die prestasievereistes voorgeskryf in byvoegsel 7, aanhangsel 1 en 2 voldoen. In die geval van dinamiese toets op 'n kinderkeertoetsel, moet die stuitersamestel minstens 12 h lank tot binne 2 °C by dieselfde temperatuur gehou word as dié waarby dit voor die kalibreertoets gehou word. 'n Ander inrigting waarmee gelykwaardige resultate verkry word, word geag aanneemlik te wees.

Tabel 1

1	2
Eienskappe van die absorbeermateriaal "A" (moet deur geskikte metodes bepaal word ¹⁾)	
Shore-hardheid A:	95 ± 2 by 'n temperatuur van 20 °C ± 5 °C
Breeksterkte:	$R_0 \geq 34,3 \text{ MPa}$
Minimum verlenging:	$A_0 \geq 400 \%$
Modulus by 100 % verlenging:	$\geq 10,8 \text{ MPa}$
by 300 % verlenging:	$\geq 23,5 \text{ MPa}$
Permanente drukvervorming:	22 h by 70 °C $\geq 45 \%$
Digtheid by 25 °C:	1,05 g/cm ³ tot 1,10 g/cm ³
Veroudering in lug (volgens 'n geskikte metode ²⁾), 70 h by 100 °C	Shore-hardheid: maks variasie ± 3 Breeksterkte: vermindering < 10 % van R_0 Verlenging: vermindering < 10 % van A_0 Massa: vermindering < 1 %
Indompeling in olie (met gebruik van geskikte olie ³⁾), 70 h by 100 °C	Shore-hardheid: maks variasie ± 4 Breeksterkte: vermindering < 15 % van R_0 Verlenging: vermindering 10 % van A_0 Volume: uitswelling 5 %
Indompeling in olie (met gebruik van geskikte olie ⁴⁾), 70 h by 100 °C	Breeksterkte: vermindering < 15 % van R_0 Verlenging: vermindering < 15 % van A_0 Volume: uitswelling < 20 %
Indompeling in gedistilleerde water, 1 week by 70 °C	Breeksterkte: vermindering < 35 % van R_0 Verlenging: toename < 20 % van A_0

Tabel 2

1	2
Eienskappe van die absorbeermateriaal "B" (moet deur geskikte metodes bepaal word ¹⁾)	
Shore-hardheid A:	88 ± 2 by 'n temperatuur van $20\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$
Breeksterkte:	$R_0 \geq 29,4\text{ MPa}$
Minimum verlenging:	$A_0 \geq 400\%$
Modulus by 100 % verlenging:	$\geq 6,9\text{ MPa}$
by 300 % verlenging:	$\geq 12,7\text{ MPa}$
Permanente drukvervorming:	22 h by $70\text{ }^{\circ}\text{C} \geq 45\%$
Digtheid by $25\text{ }^{\circ}\text{C}$:	$1,08\text{ g/cm}^3$ tot $1,12\text{ g/cm}^3$
Veroudering in lug (volgens 'n geskikte metode ⁵⁾), 70 h by $100\text{ }^{\circ}\text{C}$	Shore-hardheid: maks variasie ± 3 Breeksterkte: vermindering $< 10\%$ van R_0 Verlenging: vermindering $< 10\%$ van A_0 Massa: vermindering $< 1\%$
Indompeling in olie (volgens 'n geskikte metode ⁶⁾), 70 h by $100\text{ }^{\circ}\text{C}$	Shore-hardheid: maks variasie ± 4 Breeksterkte: vermindering $< 15\%$ van R_0 Verlenging: vermindering 10% van A_0 Volume: uitswelling 5%
Indompeling in olie (volgens 'n geskikte metode ⁷⁾), 70 h by $100\text{ }^{\circ}\text{C}$	Breeksterkte: vermindering $< 15\%$ van R_0 Verlenging: vermindering $< 15\%$ van A_0 Volume: uitswelling $< 20\%$
Indompeling in gedistilleerde water, 1 week by $70\text{ }^{\circ}\text{C}$	Breeksterkte: vermindering $< 35\%$ van R_0 Verlenging: toename $< 20\%$ van A_0

1) Geskikte metodes kan gevind word in ASTM 2000, *Standard classification system for rubber products in automotive applications*. Die toepaslike ASTM-standaard kan van ASTM, 1916 Race Street, Philadelphia, PA 19103, VSA, of van die SABS verkry word.

2) 'n Geskikte metode is ASTM D 573.

3) Geskikte olie is ASTM-verwysingsolie no 1.

4) Geskikte olie is ASTM-verwysingsolie no 3. ASTM-verwysingsolies is verkrygbaar by Penreco, 4426 East Washington Blvd., Los Angeles, CA 90023-4476, VSA.

5) 'n Geskikte metode is ASTM D 573.

6) 'n Geskikte metode is ASTM D 471, met gebruik van olie no 1.

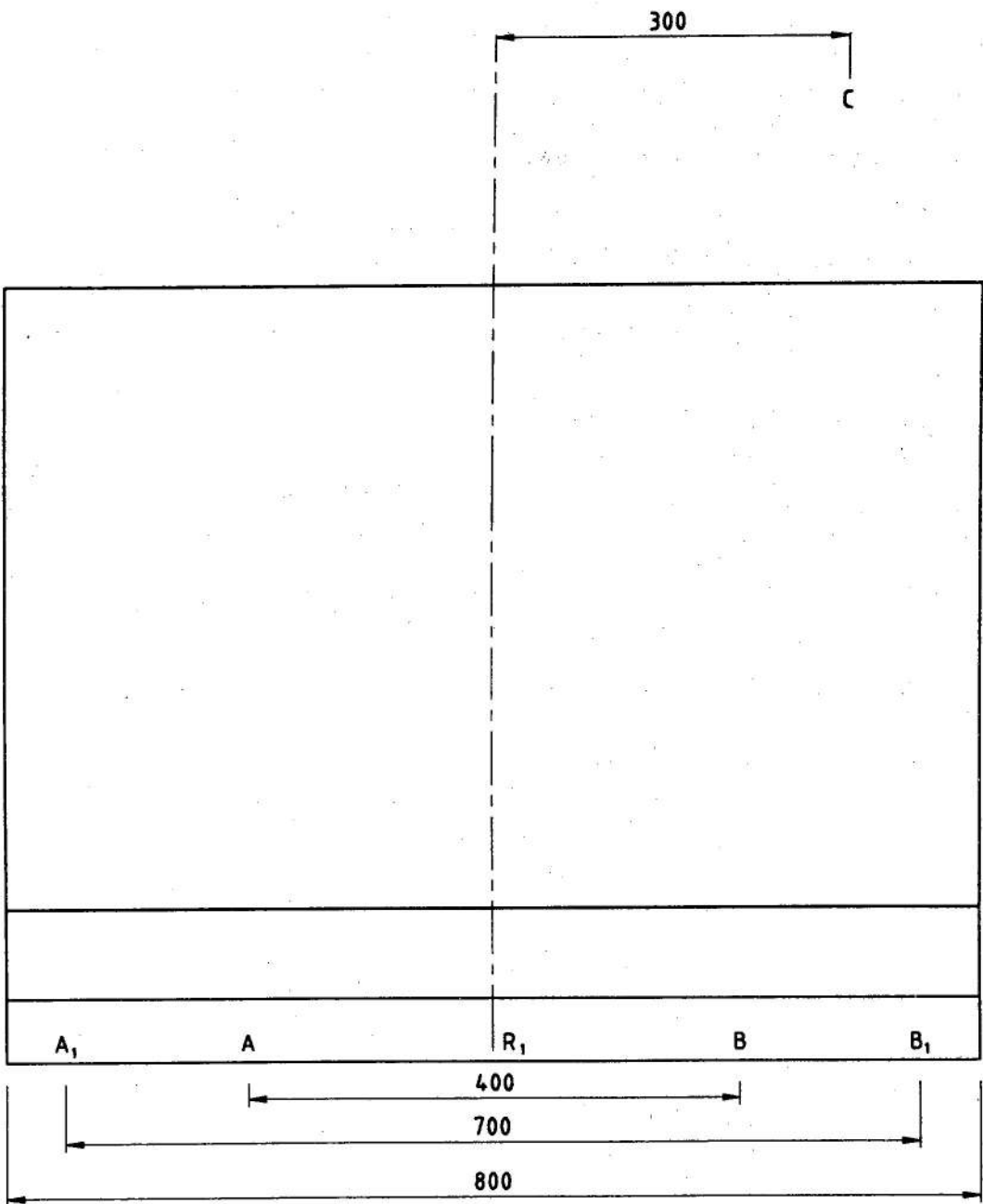
7) 'n Geskikte metode is ASTM D 471, met gebruik van olie no 3.

Byvoegsel 6 — Aanhangsel 1 (vervolg)

Posisie van die sitplek op die waentjie

Agteraansig van sitplek

Afmetings in millimeter

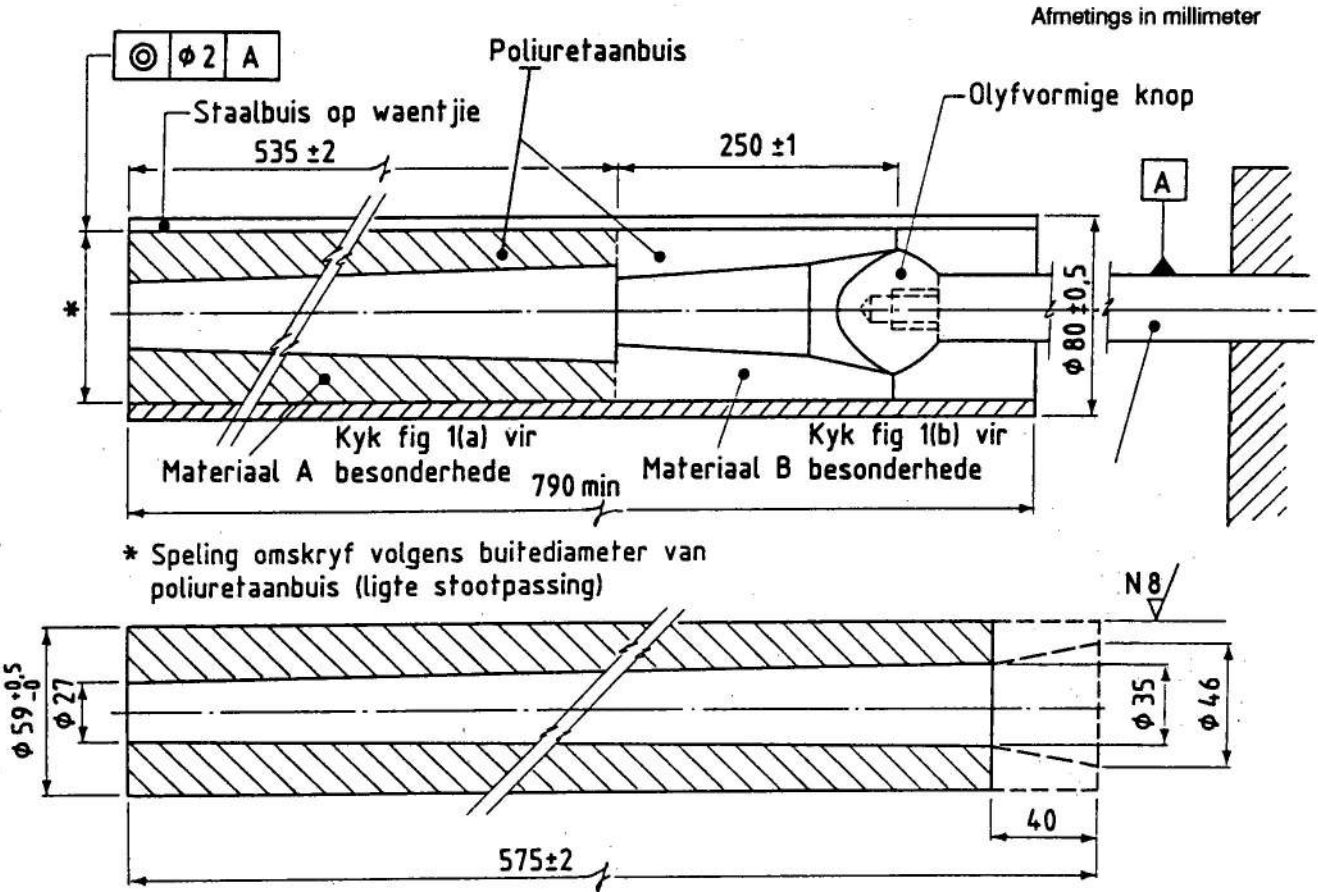


Tek.14174-AC

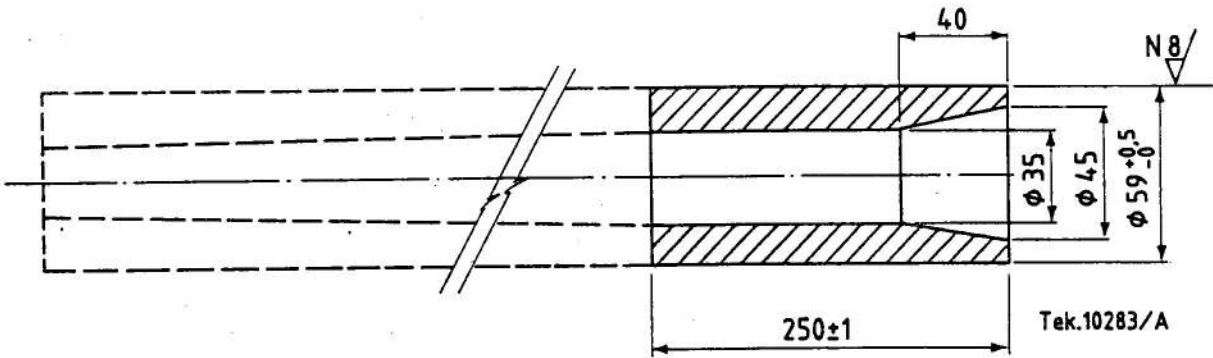
Byvoegsel 6 — Aanhangsel 2

Stuiter

Slag van voor



Figuur 1(a) — Materiaal A



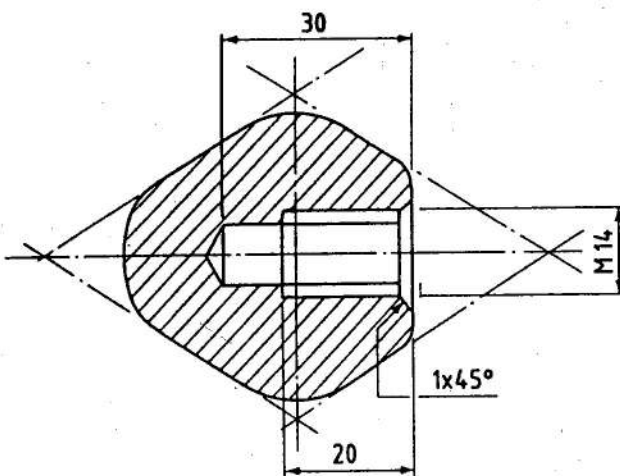
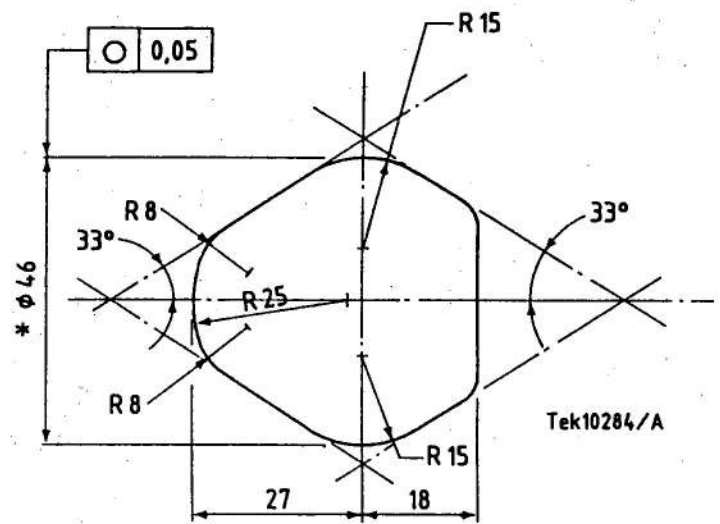
Afmetings in millimeter

Figuur 1(b) — Materiaal B

Byvoegsel 6 — Aanhangsel 2**Stuiter****Olyfvormige knop**

Slag van voor

Afmetings in millimeter

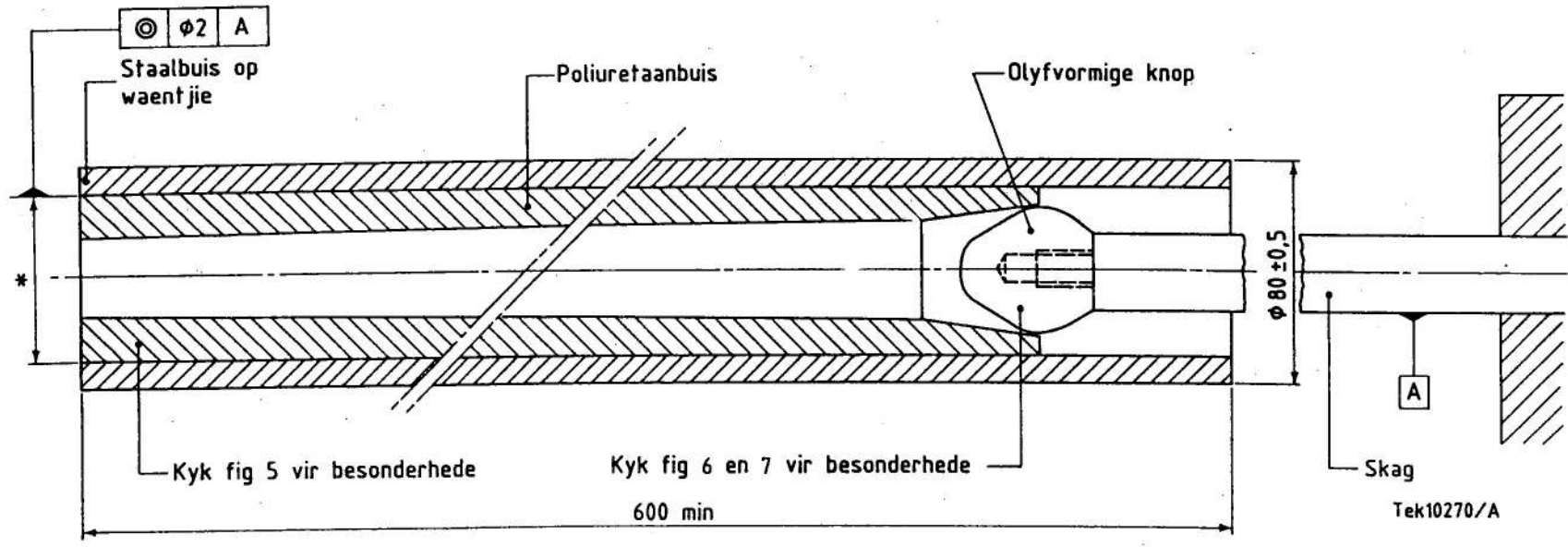
**Figuur 2****Figuur 3**

- * Hierdie afmeting kan effens wissel as gevolg van toleransies by die vervaardiging van poliuretaanbuis.

Byvoegsel 6 — Aanhangsel 3

Stuiter
(saamgestel)
Slag van agter

Afmetings in millimeter



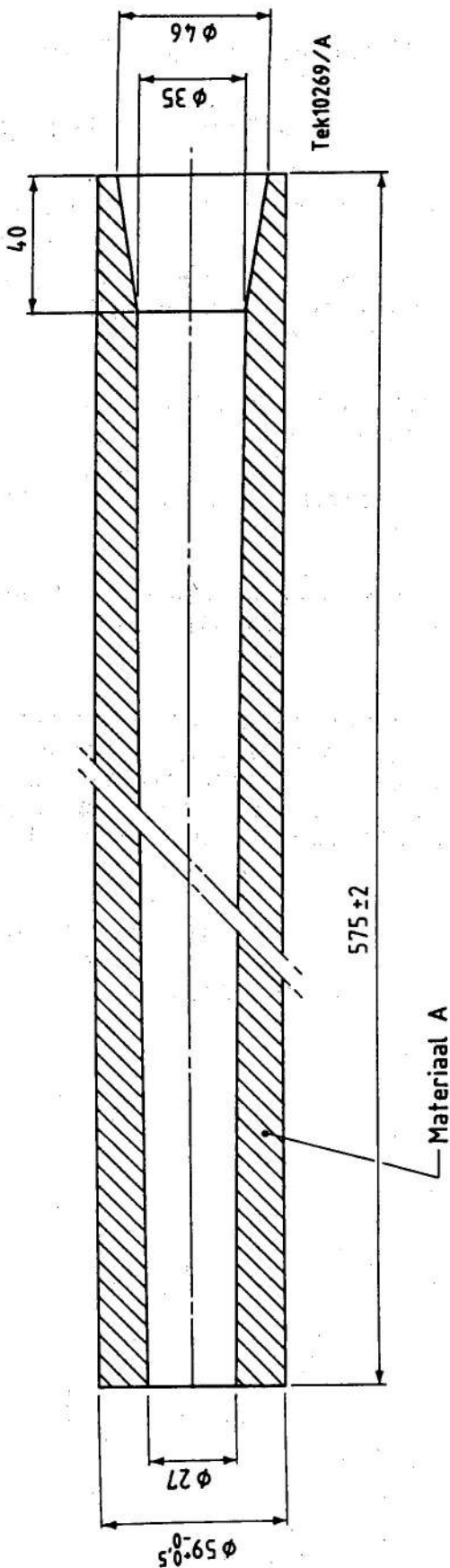
*Speling bepaal volgens buitediameter van die poliuretaanbuis (ligte stootpassing)

Figuur 4

Byvoegsel 6 — Aanhangel 3

Stuiter
Poliuretaanbuis
Slag van agter

Afmetings in millimeter



Figuur 5

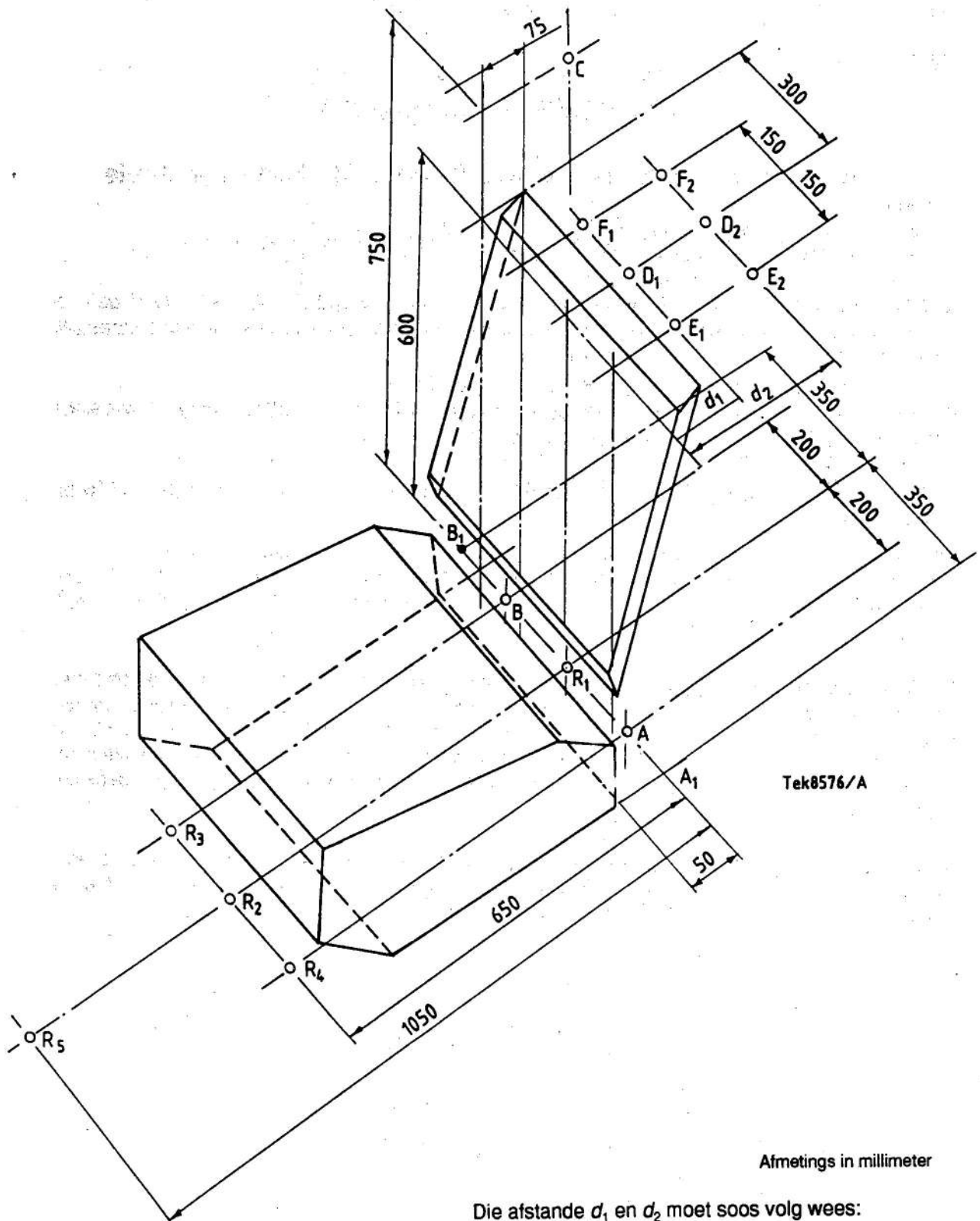
Figuur 6 – Gereserveer

Figuur 7 – Gereserveer

Byvoegsel 6 — Aanhangsel 4

Rangskikking en gebruik van verankerings op die toetswaentjie

- 1** Die verankerings moet geplaas word soos in die figuur hieronder aangetoon word.
- 2** Verankerings A, B en C (C is opsioneel) wat aan die vereistes van SABS 1429:1987, *Motorvoertuig-veiligheidspesifikasie vir sterkte van sitplekke en hul verankerings*, voldoen, moet vir kinderkeertoestelle van die "universele" kategorie gebruik word.
- 3** Verankerings A, B en D moet vir kinderkeertoestelle van die "semi-universele" kategorie wat slegs een bykomende boonste verankerings het, gebruik word.
- 4** Verankerings A, B, E en F moet vir kinderkeertoestelle van die "semi-universele" kategorie wat twee bykomende boonste verankerings het, gebruik word.
- 5** Verankeringspunte R_1 , R_2 , R_3 , R_4 en R_5 is die bykomende verankeringspunte vir agtertoe gerigte kinderkeerstelsels van die "semi-universele" kategorie met een of meer bykomende verankerings (kyk 8.1.3.5.5 van hierdie spesifikasie).
- 6** Die punte, wat met die rangskikking van die verankerings ooreenstem, toon waar die gordelente met die waentjie of met die lasoordraer, wat die geval ook al is, verbind moet word. Die struktuur wat die verankerings dra, moet onbuigsaam wees. Die boonste verankerings mag nie meer as 0,2 mm in die langsrigting verskuif as 'n las van 980 N in daardie rigting daarop aangelê word nie. Die waentjie moet so gemaak wees dat geen permanente vervorming voorkom in die dele wat die verankerings tydens die toets dra nie.
- 7** In die geval van drawiegies van groep 0 wat langer as 400 mm is, kan punt A_1 en B_1 as alternatiewe verankeringspunte gebruik word, soos die fabrikant van die keerstelsels spesifiseer. A_1 en B_1 is op 'n lyn deur A en B en op 'n afstand van 350 mm van R_1 af geleë.



Afmetings in millimeter

Die afstande d_1 en d_2 moet soos volg wees:

d_1 = 200 mm in die geval van voertuie met 'n pakkiesrak (F_1 , D_1 , E_1)

d_2 = 900 mm in die geval van voertuie met agterste sitplekke wat terugvou (stasiewatipe) (F_2 , D_2 , E_2)

Byvoegsel 7

Kromme van die waentjie se spoedvermindering as 'n funksie van tyd

1 Die spoedverminderingskromme van die waentjie wat met inerte massastukke beswaar is sodat 'n totale massa van $455 \text{ kg} \pm 20 \text{ kg}$ verkry word in die geval van kinderkeertoesteltoetse wat volgens 8.1.3.1 van hierdie spesifikasie uitgevoer word en 'n totale massa van $910 \text{ kg} \pm 40 \text{ kg}$ in die geval van kinderkeertoesteltoetse wat volgens 8.1.3.2 van hierdie spesifikasie uitgevoer word waar die nominale massa van die waentjie en voertuigstruktuur 800 kg is, moet in die geval van slag van voor binne die gearseerde deel bly wat in aanhangsel 1 van hierdie byvoegsel aangetoon word en in die geval van slag van agter, binne die gearseerde deel wat in aanhangsel 2 van hierdie byvoegsel aangetoon word.

2 Indien nodig, kan die nominale massa van die waentjie en aangehegte voertuigstruktuur vir elke inkrement van 200 kg met 'n bykomende inerte massa van 28 kg verhoog word. Die totale massa van die waentjie, die voertuigstruktuur en inerte massastukke mag in geen geval met meer as 40 kg van die nominale waarde vir kalibreertoetse verskil nie. Tydens kalibrering van die stuiter moet die stilhouafstand $650 \text{ mm} \pm 30 \text{ mm}$ wees in die geval van slag van voor en $275 \text{ mm} \pm 20 \text{ mm}$ in die geval van slag van agter.

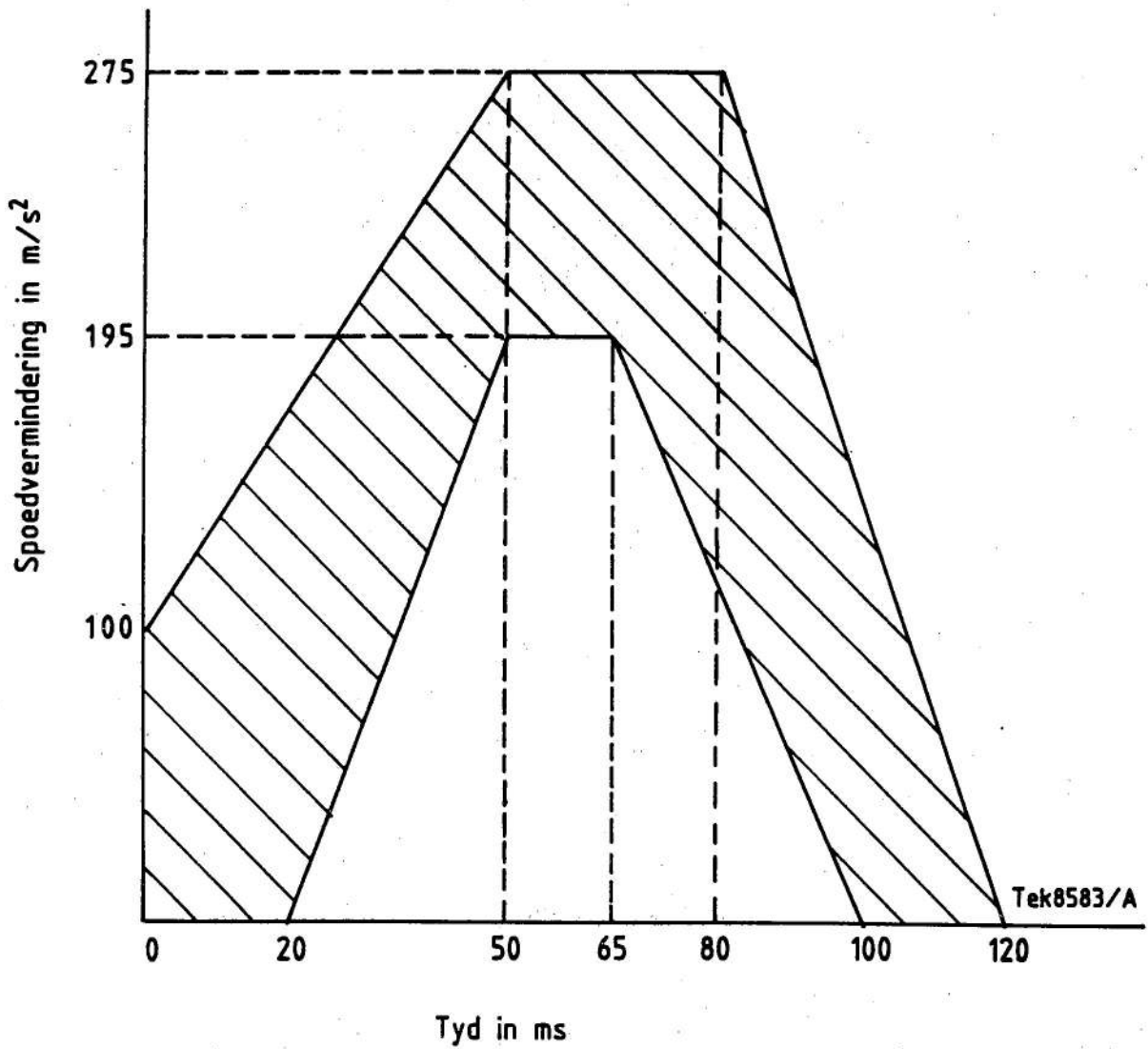
OPM – Die kalibreer- en meetprosedures moet ooreenstem met dié wat in 'n geskikte prosedure¹⁾ omskryf word en die meettoerusting moet ooreenstem met die spesifikasie van 'n datakanaal met 'n kanaalfrekwensieklas (KFK) 60.

1) 'n Geskikte prosedure word in ISO 6487:1980 aangegee.

Byvoegsel 7 — Aanhangsel 1**Krommes van die waentjie se speedvermindering
as 'n funksie van tyd**

(kromme vir kalibrering van stuur)

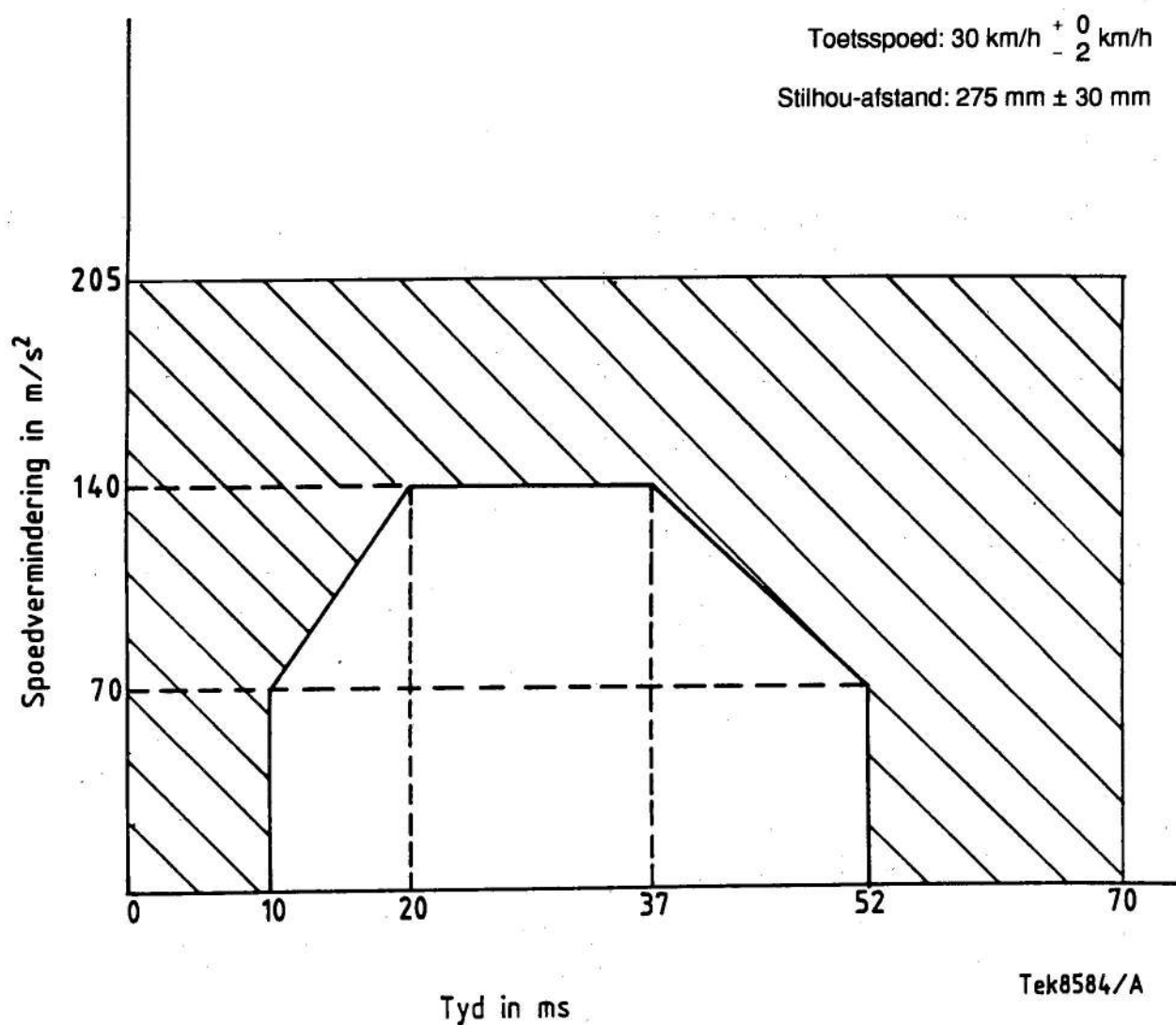
Slag van voor

Toetsspoed: $50 \text{ km/h} + \frac{0}{2} \text{ km/h}$ Stilhou-afstand: $650 \text{ mm} \pm 30 \text{ mm}$ 

Byvoegsel 7 — Aanhangsel 2**Krommes van die waentjie se spoedvermindering
as 'n funksie van tyd**

(kromme vir kalibrering van stuiiter)

Slag van agter



Byvoegsel 8

Beskrywing van toetspoppe

1 Algemeen

1.1 Die afmetings en massawaardes van die toetspoppe is gebaseer op dié van kinders van die 50ste persentiel van nege maande, drie, ses en tien jaar.

1.2 Die toetspoppe bestaan uit 'n metaal-en-poliësterskelet met liggaamskomponente van gegiet poliuretaan.

1.3 Gereserveer

2 Konstruksie (kyk die aanhangsel by hierdie byvoegsel)

2.1 Kop

2.1.1 Die kop is van poliuretaan gemaak en met metaalstroke versterk. Meettoerusting kan binne-in die kop op 'n poliamiedblok by die swaartepunt geïnstalleer word.

2.2 Werwels

2.2.1 Nekwerwels

2.2.1.1 Die nek is gemaak van vyf poliuretaanringe wat 'n kern van poliamiedelemente bevat. Die atlas-aksisblok is van poliamied gemaak.

2.2.2 Lumbale werwels

2.2.2.1 Die vyf lumbale werwels is van poliamied gemaak.

2.3 Bors

2.3.1 Die skelet van die bors bestaan uit 'n buisstaalraam waaraan die armgewrigte gemonteer is. Die rugstring bestaan uit 'n staalkabel met vier skroefdraadeindpunte.

2.3.2 Die skelet is met poliuretaan bedek. Meettoerusting kan in die borsholte aangebring word.

2.4 Ledemate

2.4.1 Die arms en bene is ook van poliuretaan gemaak wat met metaalelemente in die vorm van vierkantbuis, stroke en plate versterk is.

Die knieë en elmboë het verstelbare skarniergewrigte. Die gewrigte van die bo-arm en bopheen bestaan uit verstelbare koeëlgewrigte.

2.5 Bekken

2.5.1 Die bekken is van glasversterkte poliëster gemaak wat met poliuretaan bedek is.

2.5.2 Die fatsoen van die boonste deel van die bekken, wat belangrik is vir die bepaling van gevoeligheid vir buikbelasting, is sover moontlik 'n nabootsing van die fatsoen van 'n kind se bekken.

2.5.3 Die heupgewrigte is net onder die bekken geleë.

2.6 Saamstel van die toetspop

2.6.1 Nek-bors-bekken

2.6.1.1 Die lumbale werwels en die bekken word op die staalkabel ingeryg en die spanning word met behulp van 'n moer verstel. Die nekwerwels word op dieselfde wyse gemonteer en verstel. Aangesien die staalkabel nie vrylik deur die bors moet beweeg nie, moet dit onmoontlik wees om die spanning van die lumbale werwels van die nek af te verstel, of omgekeerd.

2.6.2 Kop-nek

2.6.2.1 Die kop word deur middel van 'n bout en moer deur die atlas-aksis-blok gemonteer en verstel.

2.6.3 Romp-ledemate

2.6.3.1 Die arms en bene word deur middel van koeëlgewrigte op die romp gemonteer en verstel.

2.6.3.2 Die koeëlgedeeltes word in die geval van die armgewrigte op die romp en in die geval van die beengewrigte op die bene aangebring.

3 Hoofeienskappe

3.1 Massa

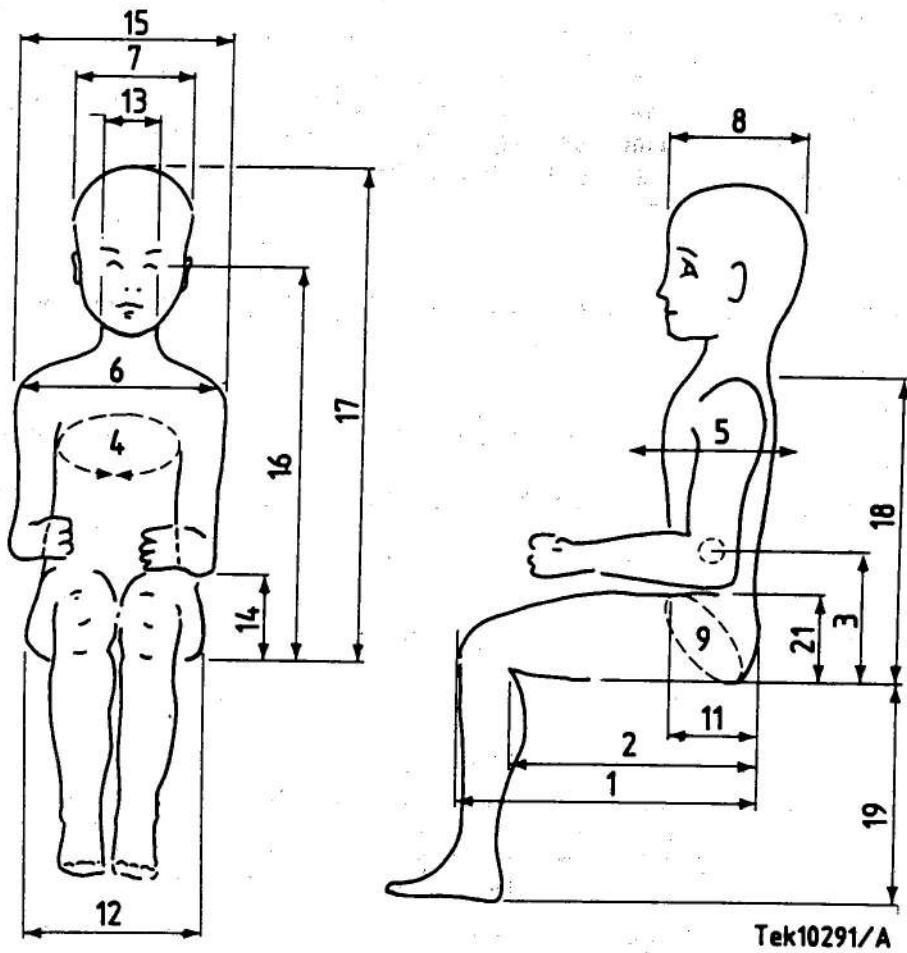
Tabel 1

1	2	3	4	5
Komponent	Massa, volgens ouderdomsgroep kg			
	9 maande	3 jaar	6 jaar	10 jaar
Kop en nek	2,20 ± 0,10	2,70 ± 0,10	3,45 ± 0,10	3,60 ± 0,10
Romp	3,40 ± 0,10	5,80 ± 0,15	8,45 ± 0,20	12,30 ± 0,30
Bo-arm (2 x)	0,70 ± 0,05	1,10 ± 0,05	1,85 ± 0,10	2,00 ± 0,10
Onderarm (2 x)	0,45 ± 0,05	0,70 ± 0,05	1,15 ± 0,05	1,60 ± 0,10
Bobeen (2 x)	1,40 ± 0,05	3,00 ± 0,10	4,10 ± 0,15	7,50 ± 0,15
Onderbeen (2 x)	0,85 ± 0,05	1,70 ± 0,10	3,00 ± 0,10	5,00 ± 0,15
Totaal	9,00 ± 0,20	15,00 ± 0,30	22,00 ± 0,50	32,00 ± 0,70

3.2 Hoofafmetings

3.2.1 Die hoofafmetings, gebaseer op figuur 1 van hierdie byvoegsel, word in tabel 2 aangegee.

Afmetings in millimeter



Figuur 1 — Hoofafmetings van toetspoppe

Tabel 2

1	2	3	4	5	6
No	Afmettings	Afmettings, volgens ouderdomsgroep mm			
		9 maande	3 jaar	6 jaar	10 jaar
1	Agterkant van boude tot voorkant van knie	195	334	378	456
2	Agterkant van boude tot waai van knie, sittend	145	262	312	376
3	Swaartepunt tot sitvlak	180	190	190	200
4	Borsomtrek	440	510	580	660
5	Borsdiepte	102	125	135	142
6	Afstand tussen skouerblaaie	170	215	250	295
7	Kopbreedte	125	137	141	141
8	Koplengte	166	174	175	181
9	Heupomtrek, sittend	510	590	668	780
10	Heupomtrek, staande (nie aangetoon nie)	470	550	628	740
11	Heupdiepte, sittend	125	147	168	180
12	Heupbreedte, sittend	166	206	229	255
13	Nekbreedte	60	71	79	89
14	Sitvlak tot elmboog	135	153	155	186
15	Skouerbreedte	216	249	295	345
16	Ooghoogte, sittend	350	460	536	625
17	Hoogte, sittend	450	560	636	725
18	Skouerhoogte, sittend	280	335	403	483
19	Sool tot waai van knie, sittend	125	205	283	355
20	Lengte (nie aangetoon nie)	708	980	1 166	1 376
21	Dyhoogte, sittend	70	85	95	106

4 Verstelling van gewrigte

4.1 Algemeen

4.1.1 Ten einde reproduceerbare resultate met behulp van die toetspoppe te verkry, moet die wrywing in die verskillende gewrigte, die spanning in die nek- en lumbale kables en die styfheid van die buik-insetsel op die gespesifieerde waardes ingestel word.

4.2 Verstelling van die nekkabel

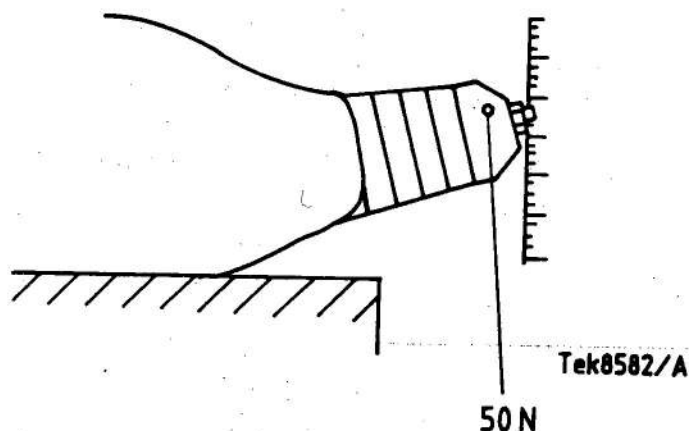
4.2.1 Plaas die romp op sy rug op 'n horisontale vlak.

4.2.2 Monteer die volledige neksamestel sonder die kop.

4.2.3 Draai die spanmoer op die atlas-aksis-blok vas.

4.2.4 Plaas 'n geskikte staaf of bout deur die atlas-aksis-blok.

4.2.5 Draai die spanmoer los totdat die atlas-aksis-blok $10 \text{ mm} \pm 1 \text{ mm}$ sak as 'n las van 50 N in 'n afwaartse rigting op die staaf of bout deur die atlas-aksis-blok opgelê word (kyk figuur 2).



Figuur 2

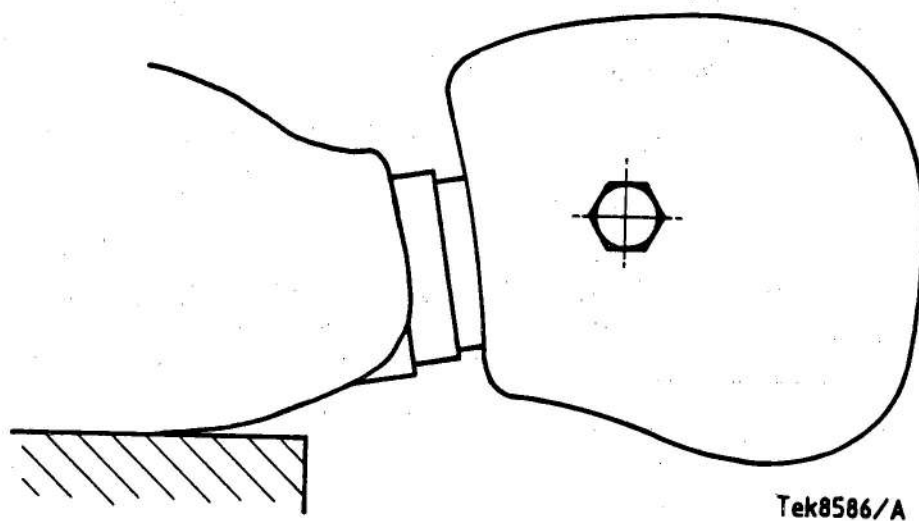
4.3 Atlas-aksis-gewrig

4.3.1 Plaas die romp op sy rug op 'n horisontale vlak.

4.3.2 Monteer die volledige nek-en-kop-samestel.

4.3.3 Draai die bout en stelmoer deur die kop en die atlas-aksis-blok vas met die kop in 'n horisontale posisie.

4.3.4 Draai die stelmoer los totdat die kop beweeg kan word (kyk figuur 3).



Figuur 3

4.4 Heupgewrig

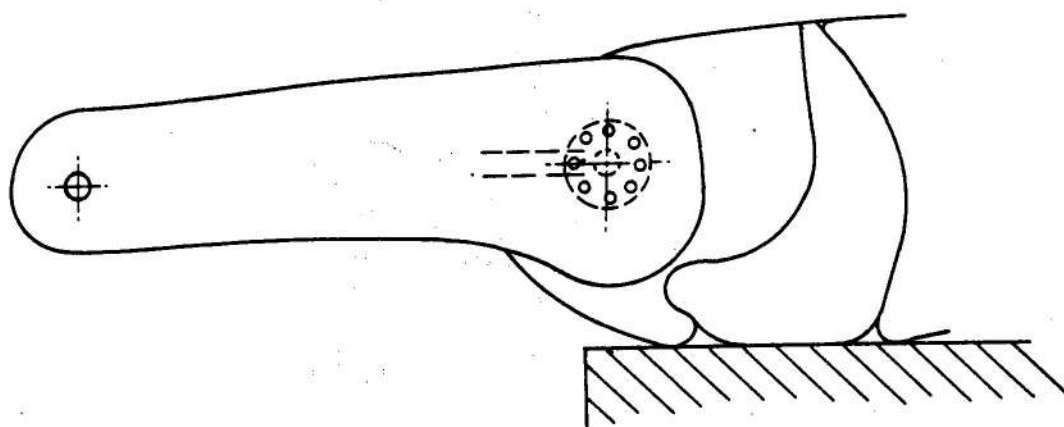
4.4.1 Plaas die bekken op sy voorkant op 'n horisontale vlak.

4.4.2 Monteer die die bobeen sonder die onderbeen.

4.4.3 Draai die stelmoer vas met die bobeen in 'n horisontale posisie.

4.4.4 Draai die stelmoer los totdat die bobeen beweeg kan word (kyk figuur 4).

4.4.5 Gaan die heupgewrigte dikwels in die aanvangstadiums na. (Dit is noodsaaklik vanweë "inloop-probleme".)



Tek8586/A

Figuur 4

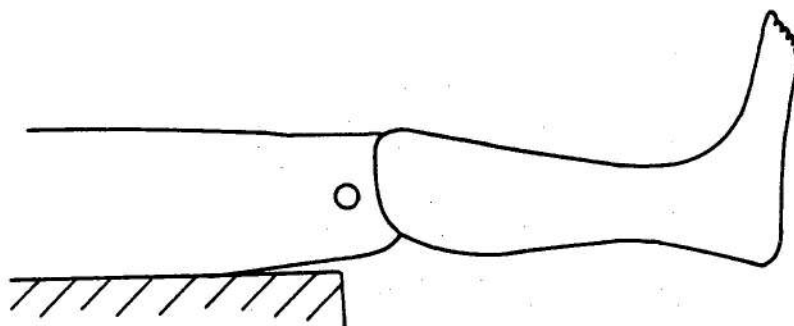
4.5 Kniegewrig

4.5.1 Plaas die bobeen in 'n horisontale posisie.

4.5.2 Monteer die onderbeen.

4.5.3 Draai die stelmoer van die kniegewrig vas met die onderbeen in 'n horisontale posisie.

4.5.4 Draai die stelmoer los totdat die onderbeen beweeg kan word (kyk figuur 5).



Tek8578/A

Figuur 5

4.6 Skouergewrig

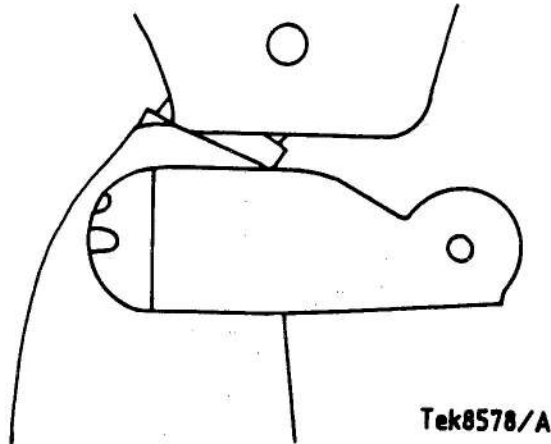
4.6.1 Plaas die romp regop.

4.6.2 Monteer die bo-arm sonder die onderarm.

4.6.3 Draai die stelmoere van die skouer vas met die bo-arm in 'n horisontale posisie.

4.6.4 Draai die stelmoere los totdat die bo-arm beweeg kan word (kyk figuur 6).

4.6.5 Gaan die skouergewigte dikwels in die aanvangstadiums na. (Dit is noodsaaklik vanweë "inloop-probleme".)



Figuur 6

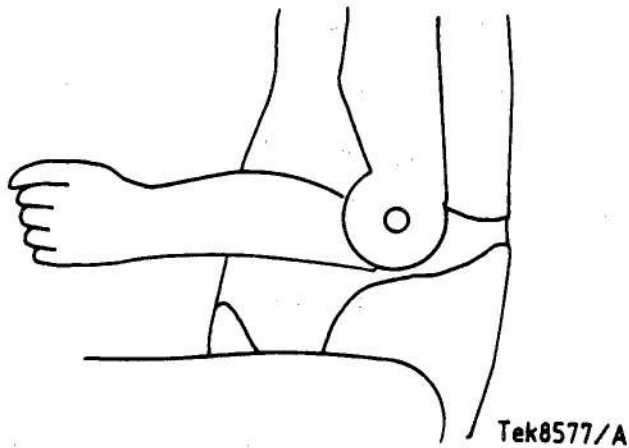
4.7 Elmbooggewrig

4.7.1 Plaas die bo-arm in 'n vertikale posisie.

4.7.2 Monteer die onderarm.

4.7.3 Draai die stelmoer van die elmboog vas met die onderarm in 'n horisontale posisie.

4.7.4 Draai die stelmoer los totdat die onderarm beweeg kan word (kyk figuur 7).

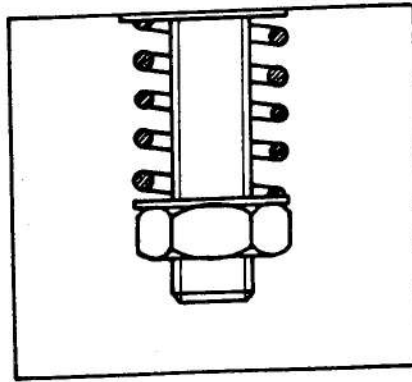


Figuur 7

4.8 Lumbale kabel

4.8.1 Sit die bolyf, lumbale werwels, onderlyf, buikinsetsel, kabel en veer aanmekaar.

4.8.2 Draai die kabelstelmoer in die onderlyf vas totdat die veer tot twee derdes van sy onbelaste lengte saamgedruk is (kyk figuur 8).



Tek8577/A

Figuur 8

4.9 Kalibrering van die buikinsetsel

4.9.1 Algemeen

4.9.1.1 Voer die kalibrering deur middel van 'n geskikte belasmagjien uit.

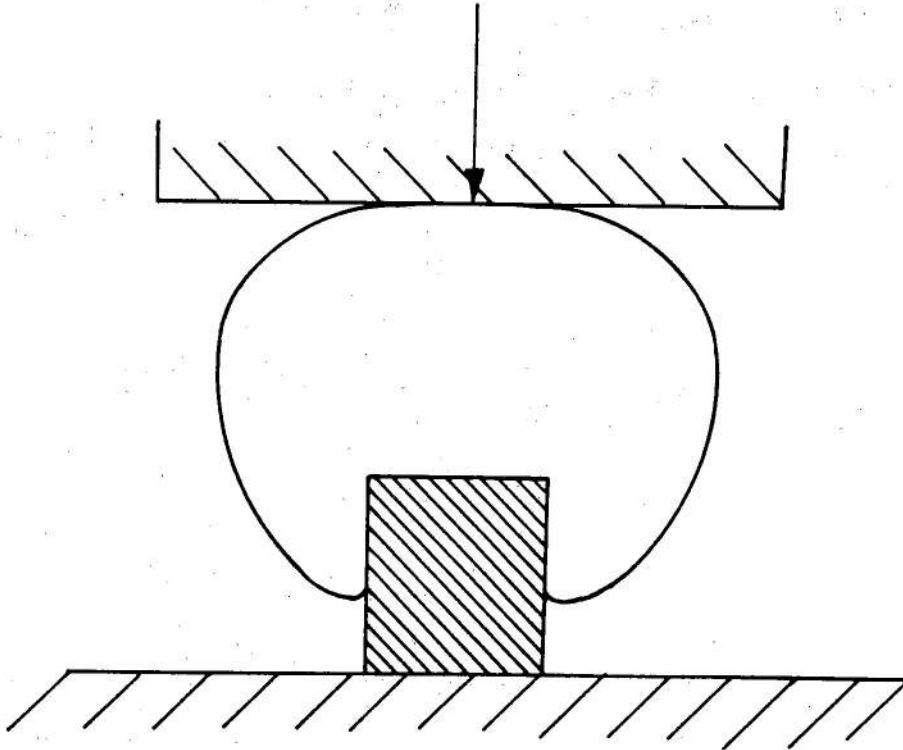
4.9.2 Plaas die buikinsetsel op 'n onbuigsame blok wat net so lank en breed as die lumbale werwelkolom is. Maak seker dat hierdie blok minstens twee maal so dik as die lumbale werwelkolom is (kyk figuur 9).

4.9.3 Lê 'n aanvanklike las van 20 N op.

4.9.4 Lê 'n konstante las van 50 N op.

4.9.5 Maak seker dat die defleksie van die buikinsetsel ná 2 minute onder die konstante las soos volg is:

- 11,5 mm $\pm$ 2,0 mm in die geval van die 9-maande-pop;
- 11,5 mm $\pm$ 2,0 mm in die geval van die 3-jaar-pop;
- 13,0 mm $\pm$ 2,0 mm in die geval van die 6-jaar-pop; en
- 13,0 mm $\pm$ 2,0 mm in die geval van die 10-jaar-pop.



Figuur 9

Tek8585/A

5 Instrumentasie

5.1 Algemeen

5.1.1 Die kalibreer- en meetprosedures moet op 'n geskikte prosedure gebaseer wees (kyk OPM by klousule 2 van byvoegsel 7 van hierdie spesifikasie).

5.2 Installering van die versnellingsmeter in die bors

Monteer die versnellingsmeter in die beskermde holte in die bors.

5.3 Aanduiding van buikindringing

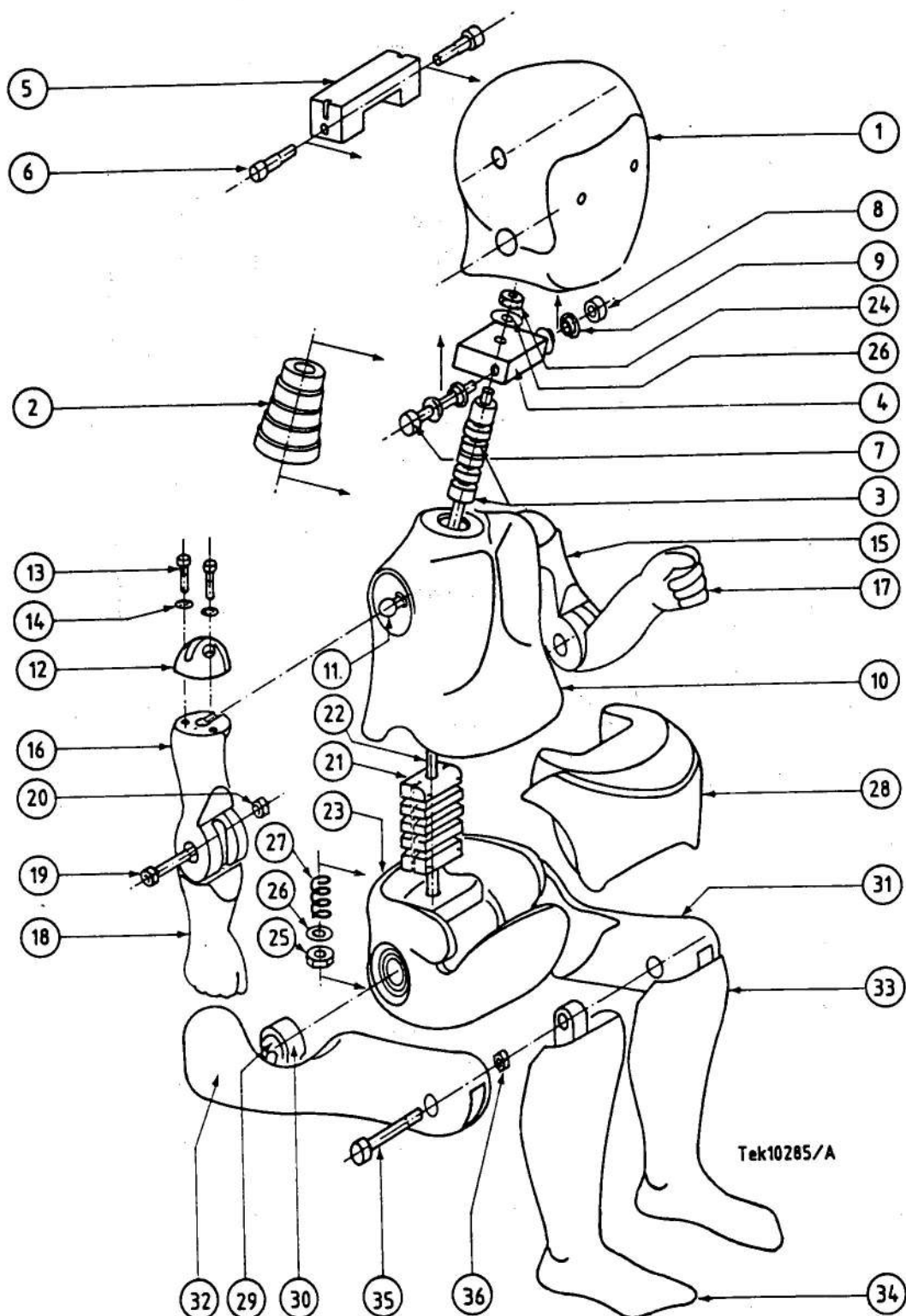
5.3.1 Plak 'n monster modelleerklei met dun kleefband vertikaal op die voorkant van die lumbale werwels vas.

5.3.2 Let daarop dat defleksie van die modelleerklei nie noodwendig beteken dat indringing plaasgevind het nie.

5.3.3 Die modelleerklomonsters moet dieselfde lengte en breedte as die lumbale werwelkolom hê; die monsters moet $25 \text{ mm} \pm 2 \text{ mm}$ dik wees.

5.3.4 Gebruik slegs die modelleerklei wat saam met die toetspoppe verskaf word.

5.3.5 Maak seker dat die temperatuur van die modelleerklei tydens die toets $30^\circ\text{C} \pm 5^\circ\text{C}$ is.

Byvoegsel 8 — Aanhangsel**Uitskuifaansig van die toetspop**

1	2	3
Deelno	Beskrywing	Getal
1	Kop	1
2	Nekelemente	5
3	Nekkernelemente (poliamied)	6
4	Atlas-aksis-blok	1
5	Monteerblok vir oordraer	1
6	Hegbout vir monteerblok vir oordraer	2
7	Kopbout	1
8	Moer	1
9	Waster	4
10	Bolyf	1
11	Koeël van skouergewrig	2
12	Sokhelfte van skouergewrig	2
13	Stelbout vir skouergewrig	4
14	Veenwaster	4
15	Bo-arm links	1
16	Bo-arm regs	1
17	Voorarm links	1
18	Voorarm regs	1
19	Elmboogskarnierbout	2
20	Elmboogskarniermoer	2
21	Lumbale werwels	5
22	Rugstringkabel	1
23	Onderlyf	1
24	Stelmoer vir nek	1
25	Stelmoer vir lumbale werwels	1
26	Waster	3
27	Veer	1
28	Buikinsetsel	1
29	Koeël van heupgewrig	2
30	Stelmoer van heupgewrig	2
31	Bobeen links	1
32	Bobeen regs	1
33	Onderbeen links	1
34	Onderbeen regs	1
35	Knieskarnierbout	2
36	Knieskarniermoer	2
	Bybehore (nie aangetoon nie)	
37	Modelleerlei	1
38	Baadjie	1
39	Broek	1

Byvoegsel 9

Toets vir slag van voor teen 'n versperring

1 Installasies, prosedure en meetinstrumente

1.1 Toetsterrein

Die toetsgebied moet groot genoeg wees om die aanloopspoor, versperring en tegniese installasies wat vir die toets nodig is, te akkommodeer. Die laaste deel van die spoor moet oor minstens 5 m voor die versperring horisontaal, plat en glad wees.

1.2 Versperring

Die versperring moet uit 'n blok gewapende beton bestaan wat voor minstens 3 m breed en minstens 1,5 m hoog is. Die versperring moet so dik wees dat die massa daarvan minstens 70 000 kg is. Die voorvlak moet vertikaal en loodreg op die as van die aanloopspoor wees en moet bedek wees met laaghoutplanke wat 20 mm $\pm$ 1 mm dik en in 'n goeie toestand is. Die versperring moet óf in die grond veranker wees óf op die grond geplaas wees met, indien nodig, bykomende stuiters om verskuiwing daarvan te beperk. 'n Versperring met ander eienskappe maar wat resultate lewer wat minstens net so afdoende is, kan ook gebruik word.

1.3 Voortbeweging van die voertuig

Op die slagmoment moet die voertuig nie meer aan die werking van bykomende stuur- of aandryf-toestelle onderhewig wees nie. Dit moet die versperring bereik op 'n baan wat loodreg op die voorvlak van die versperring is; die maksimum laterale wanrigting wat tussen die vertikale mediaanlyn van die voorkant van die voertuig en die vertikale mediaanlyn van die versperring toegelaat word, is $\pm$ 300 mm.

1.4 Toestand van die voertuig

1.4.1 Die voertuig wat getoets word, moet óf toegerus wees met al die gewone komponente en toerusting waarvan die massa in die onbelaste diensmassa ingesluit is óf dit moet in so 'n toestand wees dat dit ten opsigte van die komponente en toerusting wat met betrekking tot die passasiërskompartement van belang is, asook die verspreiding van die diensmassa van die voertuig in sy geheel, aan hierdie vereiste voldoen.

1.4.2 Indien die voertuig deur eksterne middele aangedryf word, moet die brandstoftank tot minstens 90 % van sy inhoudsvermoë gevul wees met brandstof of met nievlambare vloeistof waarvan die digtheid en viskositeit so na moontlik ooreenstem met dié van die brandstof wat gewoonlik gebruik word. Alle ander stelsels (remvloeistofhouders, verkoeler, ens) moet leeg wees.

1.4.3 Indien die voertuig deur sy eie enjin aangedryf word, moet die brandstoftank minstens 90 % vol wees. Alle ander vloeistofteks moet vol wees.

1.4.4 Indien die fabrikant dit versoek, kan die toetsowerheid wat vir die uitvoer van die toetse verantwoordelik is, toelaat dat dieselfde voertuig wat gebruik is vir toetse wat deur ander spesifikasies voorgeskryf word (met inbegrip van toetse wat 'n uitwerking op die struktuur daarvan kan hê), gebruik word vir die toetse wat in hierdie spesifikasie voorgeskryf word.

1.5 Slagspoed

Die slagspoed moet $50 \text{ km/h} \pm 2 \text{ km/h}$ wees. Indien die toets egter teen 'n hoër slagspoed uitgevoer is en die voertuig aan die voorgeskrewe toestande voldoen het, moet daar geag word dat die toets bevredigend is.

1.6 Meetinstrumente

Die instrument wat gebruik word om die spoed genoem in 1.5 hierbo te registreer, moet tot binne 1 % noukeurig kan meet.

Byvoegsel 10

Toetsprosedure vir slag van agter

1 Installasies, prosedures en meetinstrumente

1.1 Toetsterrein

Die toetsgebied moet groot genoeg wees om die aandryfstelsel van die slagstuk te akkommodeer en om vir die verskuiwing van die voertuig na die slag en vir die installering van die toetstoerusting voorsiening te maak. Die deel waarin die voertuig deur die slag getref en verskuif word, moet horisontaal wees. (Die helling moet minder as 3 % wees, oor 'n lengte van 1 m gemeet.)

1.2 Slagstuk

1.2.1 Die slagstuk moet van staal wees en moet 'n onbuigsame konstruksie hê.

1.2.2 Die slagoppervlak moet plat wees en moet minstens 2 500 mm breed en 800 mm hoog wees. Die rande daarvan moet tot 'n krommingsradius van tussen 40 mm en 50 mm gerond wees. Dit moet beklee wees met 'n laag laaghout wat $20 \text{ mm} \pm 1 \text{ mm}$ dik is.

1.2.3 Op die slagmoment moet daar aan die volgende vereistes voldoen word:

1.2.3.1 Die slagoppervlak moet vertikaal en loodreg wees op die mediaanlangsvlak van die voertuig waarop die slag uitgeoefen word.

1.2.3.2 Die beweegrigting van die slagstuk moet wesenlik horisontaal en parallel met die mediaanlangsvlak wees van die voertuig waarop die slag uitgeoefen word.

1.2.3.3 Die maksimum toelaatbare laterale afwyking tussen die vertikale mediaanlyn van die oppervlak van die slagstuk en die mediaanlangsvlak van die voertuig waarop die slag uitgeoefen word, moet 300 mm wees. Hierbenewens moet die slagoppervlak oor die volle breedte strek van die voertuig waarop die slag uitgeoefen word.

1.2.3.4 Die grondvryhoogte van die onderrand van die slagoppervlak moet $175 \text{ mm} \pm 25 \text{ mm}$ wees.

1.3 Voortbeweging van die slagstuk

Die slagstuk moet óf aan 'n wa (bewegende versperring) bevestig wees óf deel van 'n slinger uitmaak.

1.4 Spesiale bepalings by gebruik van 'n bewegende versperring

1.4.1 Indien die slagstuk deur middel van 'n klemelement aan 'n wa (bewegende versperring) bevestig is, moet die element onbuigsaam wees en moet dit nie deur die slag vervorm kan word nie; die wa moet op die slagmoment vrylik kan beweeg en nie meer aan die werking van die aandryftoestel onderworpe wees nie, en moet 'n snelheid van tussen 30 km/h en 32 km/h hê.

1.4.2 Die gekombineerde massa van die wa en slagstuk moet $1\,100\text{ kg} \pm 20\text{ kg}$ wees.

1.5 Spesiale bepalings by gebruik van 'n slinger

1.5.1 Die afstand tussen die middel van die slagoppervlak en die draai-as van die slinger moet minstens 5 m wees.

1.5.2 Die slagstuk moet vrylik aan onbuigsame arms hang en stewig daaraan bevestig wees. Die slinger wat so gevorm word, moet wesenlik teen vervorming deur die slag bestand wees.

1.5.3 Die slinger moet 'n stuiter bevat om sekondêre slag deur die slagstuk op die toetsvoertuig te verhoed.

1.5.4 Op die slagmoment moet die snelheid van die slagmiddelpunt van die slinger tussen 30 km/h en 32 km/h wees.

1.5.5 Die gereduseerde massa " m_r " by die slagmiddelpunt van die slinger word omskryf as 'n funksie van die totale massa " m ", van die afstand a^2 tussen die slagmiddelpunt en die draai-as en van die afstand " l " tussen die swaartepunt en die draai-as, deur middel van die volgende vergelyking:

$$m_r = m \cdot l/a$$

1.5.6 Die gereduseerde massa " m_r " moet $1\,100\text{ kg} \pm 20\text{ kg}$ wees.

1.6 Algemene bepalings met betrekking tot die massa en snelheid van die slagstuk

Indien die toets uitgevoer is teen 'n hoër slagsnelheid as dié wat in 1.4.1 of 1.5.4 (soos toepaslik) van hierdie byvoegsel voorgeskryf word, of met 'n groter massa as dié wat in 1.4.2 of 1.5.6 (soos toepaslik) van hierdie byvoegsel voorgeskryf word, of met 'n hoër snelheid sowel as 'n groter massa as dié wat voorgeskryf is, en die voertuig aan die voorgeskrewe vereistes voldoen het, word daar geag dat die toets bevredigend is.

1.7 Toestand van die voertuig tydens die toets

Die voertuig wat getoets word, moet óf toegerus wees met al die gewone komponente en toerusting waarvan die massa in die onbelaste diensmassa ingesluit is óf dit moet in so 'n toestand wees dat dit ten opsigte van die verspreiding van die diensmassa van die voertuig in sy geheel aan hierdie vereiste voldoen.

1.8 Die volledige voertuig met die kinderkeertoestel volgens die installeringsaanwysings aangebring, moet op 'n harde, plat en gelyk oppervlak geplaas word, met die handrem los en die voertuig uit rat. Meer as een kinderkeertoestel kan in dieselfde slagtoets getoets word.

2) Die afstand " a " is gelyk aan die lengte van die onderhawige sinchrone slinger.

Byvoegsel 11

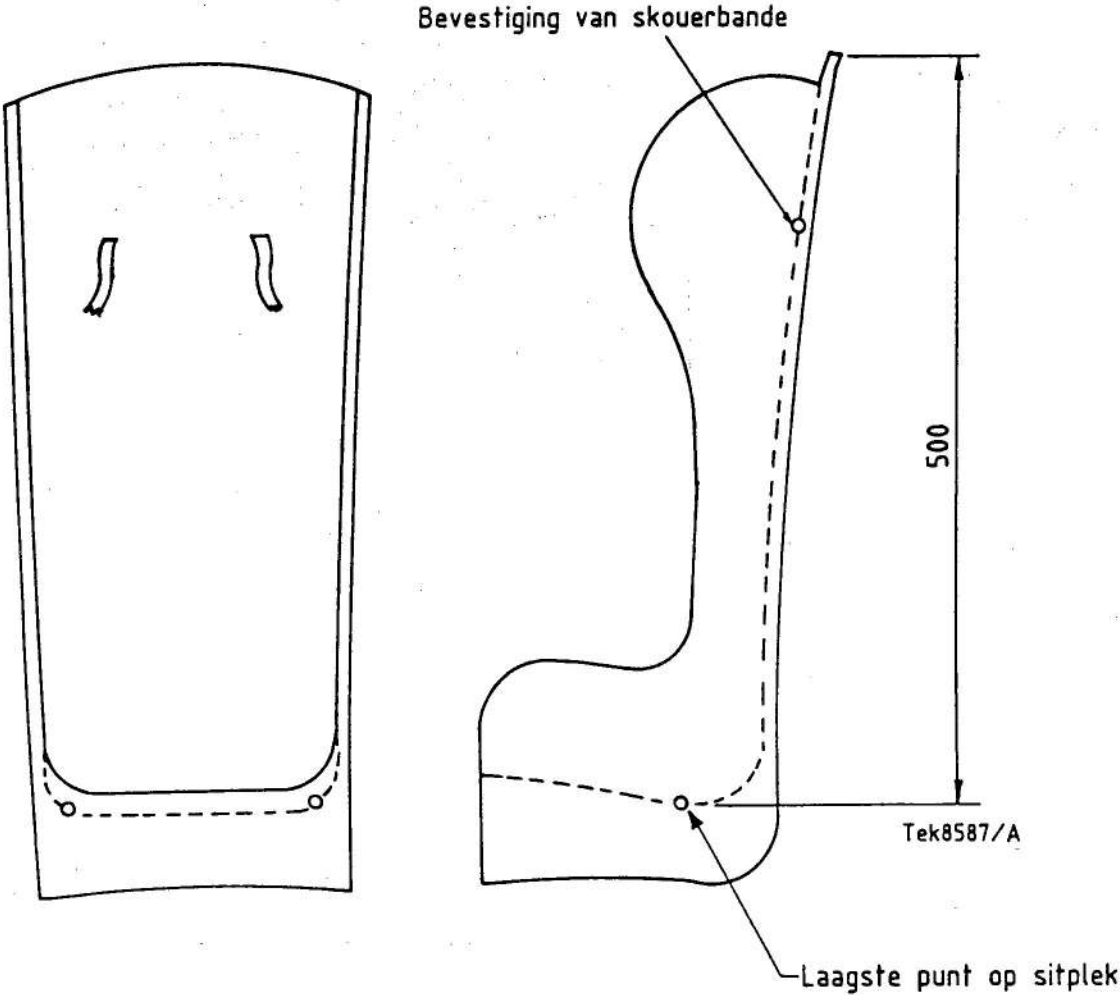
Bykomende verankerings wat vir die bevestiging van kinderkeertoestelle van die semi-universele kategorie in motorvoertuie vereis word

- 1** Hierdie byvoegsel is slegs van toepassing op die bykomende verankerings vir die bevestiging van kinderkeertoestelle van die "semi-universele" kategorie of aan stawe en ander spesiale items wat gebruik word om kinderkeertoestelle aan die bakwerk te bevestig, of hulle van genoemde SABS 1430-verankerings gebruik maak of nie (kyk 2.14.1 van hierdie spesifikasie).
- 2** Die verankerings moet deur die fabrikant van die kinderkeertoestel in oorleg met die voertuigfabrikant bepaal word en besonderhede moet vir goedkeuring voorgelê word aan die toetsowerheid wat die toetse uitvoer. Die toetsowerheid mag besonderhede wat van die voertuigfabrikant verkry is in ag neem.
- 3** Die fabrikant van die kinderkeertoestel moet die nodige onderdele vir die aanbring van die verankerings verskaf, asook 'n spesiale plan vir elke voertuig, waarop die presiese posisie daarvan aangetoon word.
- 4** Die gebruiker is verantwoordelik vir die aanbring van die verankerings in die voertuig in ooreenstemming met die aanwysings wat die fabrikant van die kinderkeertoestel verstrek.

Byvoegsel 12

Stoel

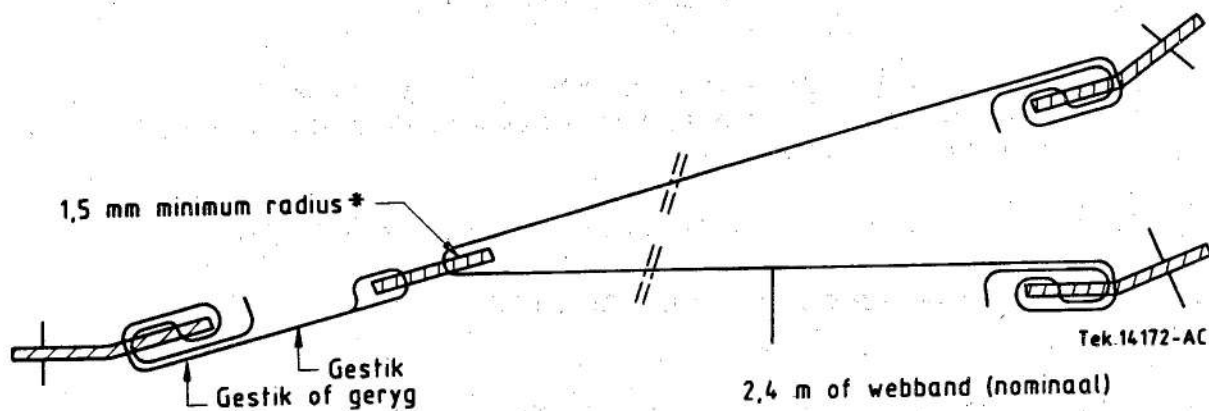
Afmetings in millimeter



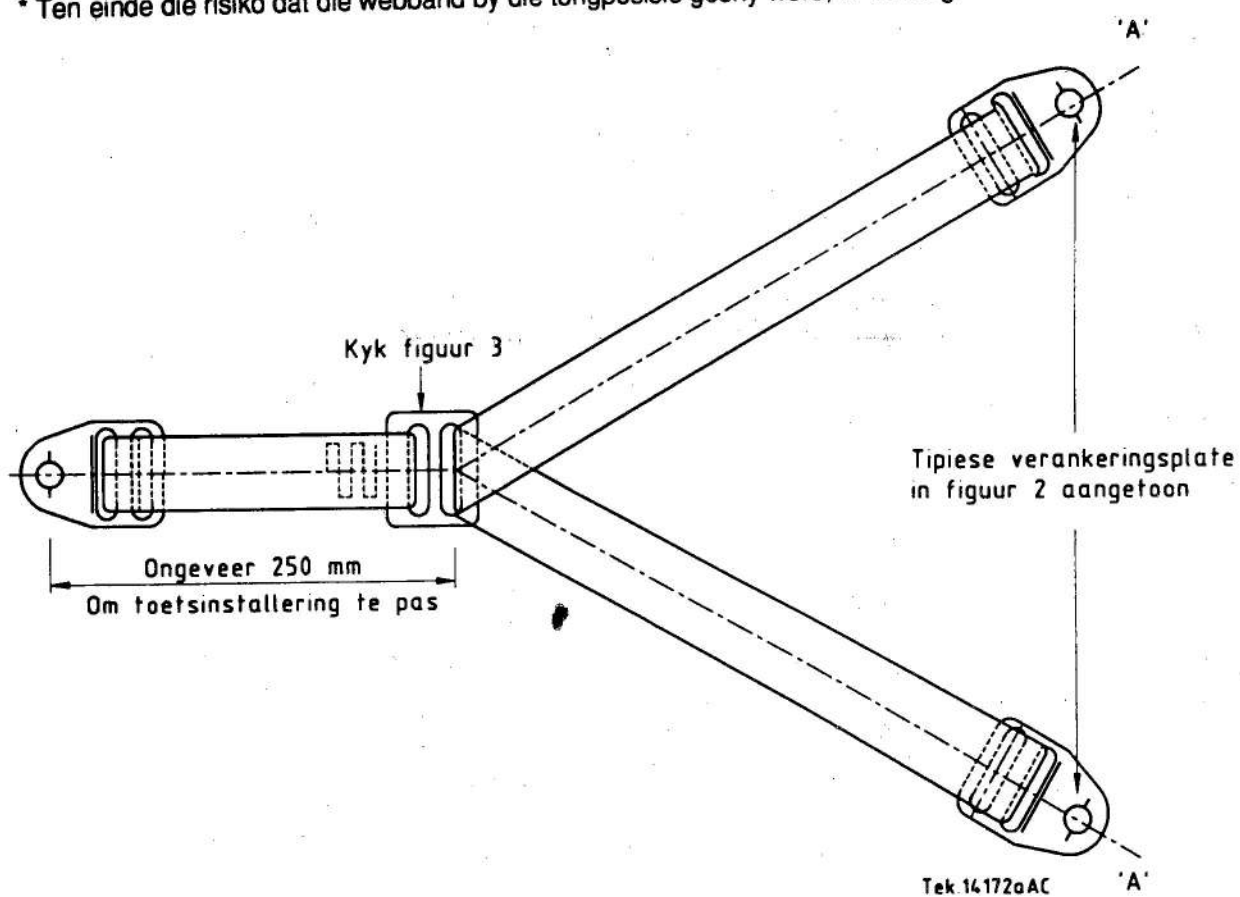
Byvoegsel 13

Standaardsitplekgordel

- 1** Die sitplekgordel moet gemaak wees volgens die konfigurasie wat in figuur 1 aangetoon word en moet sonder voorkondisionering aan die vereistes van die dinamiese toets van genoemde SABS 1080 (kyk 7.2.1.1 van hierdie spesifikasie) voldoen.
- 2** Die breedte van die bande onder 'n las van 8,8 kN moet minstens $48 \text{ mm} \pm 2 \text{ mm}$ wees.
- 3** Die verlenging van die bande onder 'n verdere las van 8,8 kN ná 'n voorbelasting van 0,2 kN moet $(12 \pm 1) \%$ wees.
- 4** Die verlenging van die bande onder 'n verdere las van 5,5 kN ná 'n voorbelasting van 0,2 kN moet $(6 \pm 1) \%$ wees.
- 5** Indien nodig, kan 'n tweepuntstandaardgordel wat bestaan uit twee standaardverankeringsplate (soos in figuur 2 van hierdie byvoegsel aangetoon word) en 'n band gebruik word wat aan bogenoemde vereistes voldoen. Hierdie sitplekgordel moet sonder voorkondisionering aan die vereistes van die dinamiese toets van genoemde SABS 1080 voldoen (kyk 7.2.1.1 van hierdie spesifikasie).

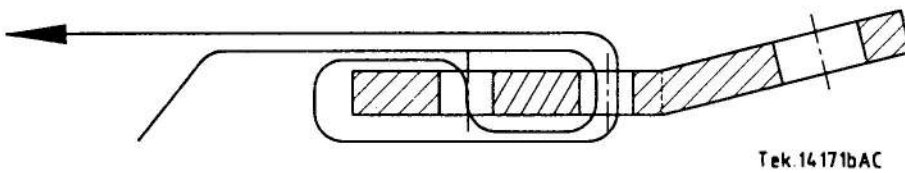
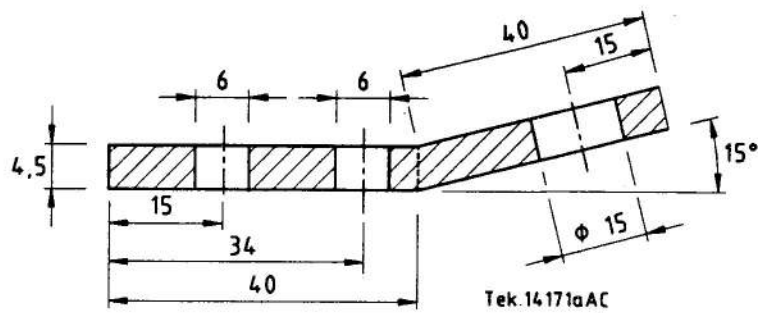
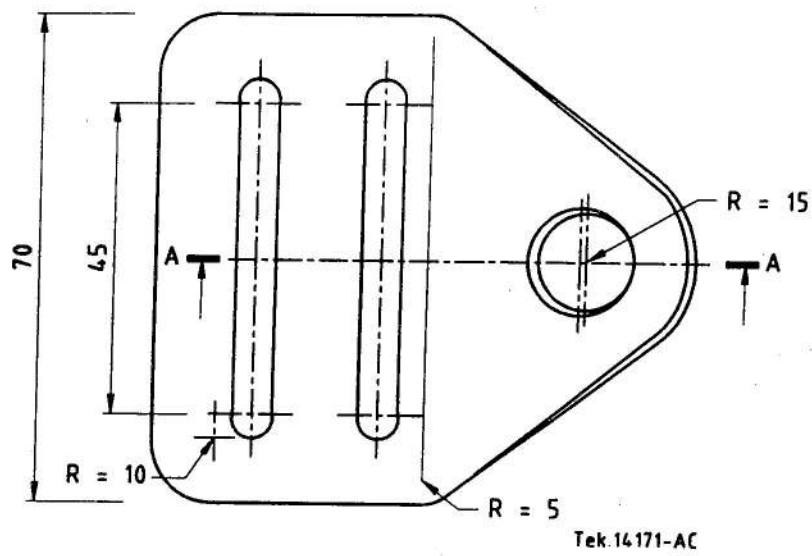


* Ten einde die risiko dat die webband by die tongposisie gesny word, te verlaag.

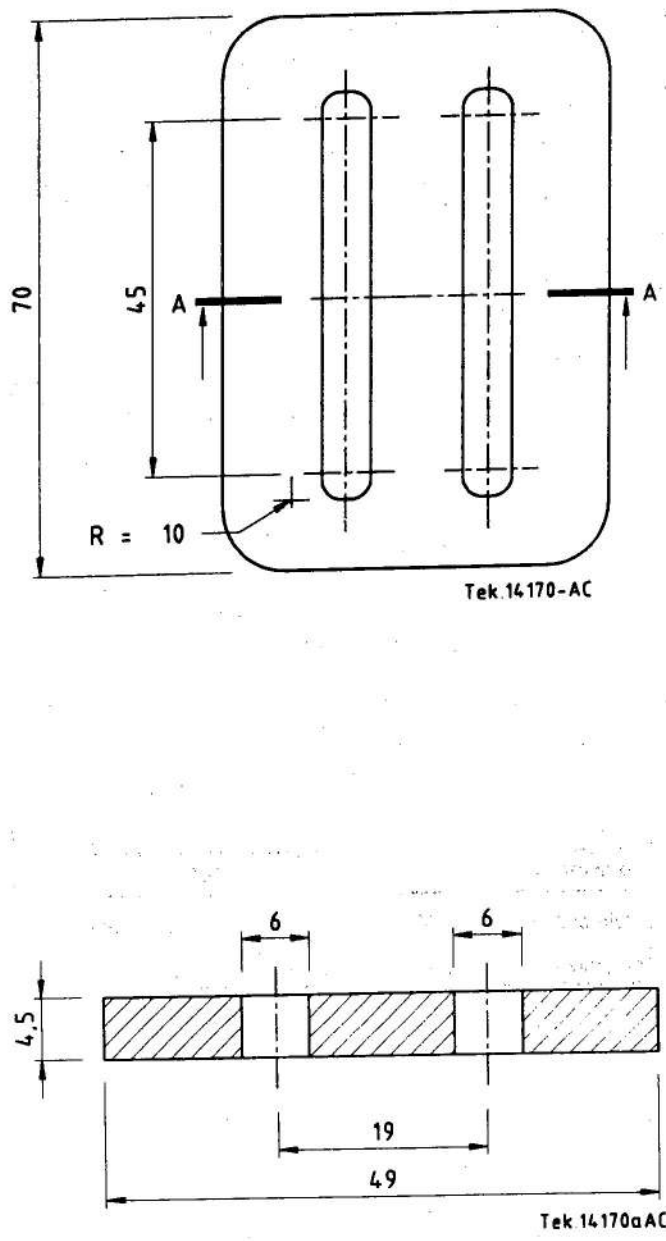


Figuur 1 – Standaardgordelkonfigurasië

Afmetings in millimeter



Figuur 2 – Tipiese standaardverankeringsplaat



Figuur 3 – Middelste deel van die standaardgordelkonfigurasie

Byvoegsel 14

Beskrywing van "pasgebore" toetspop

Die toetspop bestaan uit 'n kop, romp, arms en bene as 'n enkele eenheid. Die romp, arms en bene is 'n enkele vormstuk van sorbotaantipe materiaal wat met 'n PVC-vel bedek is en 'n staalrugstring bevat. Die kop is 'n poliuretaanskuimvormstuk wat met 'n PVC-vel bedek is en permanent aan die romp bevestig is. Die toetspop is van 'n styfpassende rekkatoen/poliësterpak voorsien.

Die afmetings en massaverspreiding van die toetspop is op dié van 'n pasgebore baba van die 50ste persentiel gebaseer en word in tabel 1 en 2 en in figuur 1 aangegee.

Tabel 1 – Hoofafmetings van die "pasgebore" toetspop

1	2	3	1	2	3
	Afmetings	mm		Afmetings	mm
A	Romp – Kroon	250	F	Borsbreedte	105
B	Romp – Sool (met reguit been)	105	G	Borsdiepte	100
C	Kopbreedte	125	H	Heupbreedte	105
D	Kopdiepte	150	I	C van G van bokant na kop	235
E	Skouerbreedte				

Tabel 2 – Massaverspreiding van die "pasgebore" toetspop*

1	2
Kop en nek	0,7 kg
Romp	1,1 kg
Arms	0,5 kg
Bene	1,1 kg
Total mass	3,4 kg
* Die dikte van die PVC-vel moet 1 mm $\pm$ 0,5 mm wees en relatiewe digtheid moet 0,865 mm $\pm$ 0,1 mm wees.	

Kalibrering van "pasgebore" toetspop

1 Skouerstyfheid

1.1 Plaas die toetspop op sy rug op 'n horisontale oppervlak en steun die romp aan een kant om beweging te verhoed (kyk figuur 2).

1.2 Lê 'n las van 150 N horisontaal op 'n platvlakplunjer met 'n diameter van 40 mm op in 'n rigting loodreg op die toetspop se bo-na-onder-as. Die as van die plunjer moet in die middel van die toetspop se skouer en langs punt A op die skouer wees (kyk figuur 2). Die sydelingse defleksie van die plunjer van die punt van eerste kontak met die arm moet tussen 30 mm en 50 mm wees.

1.3 Herhaal op die teenoorgestelde skouer – steun die ander kant.

2 Beengewrigstyfheid

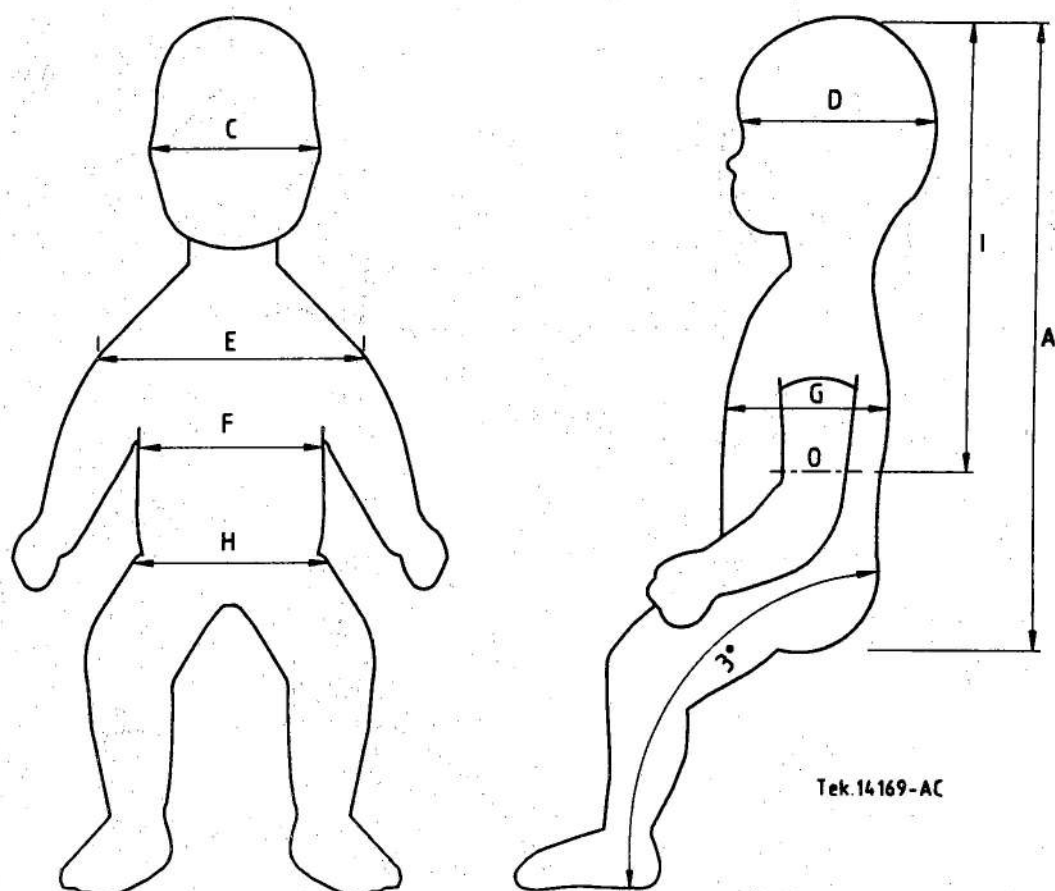
2.1 Plaas die toetspop op sy rug op 'n horisontale vlak (kyk figuur 3) en bind die twee onderbene saam, met die binnekant van die knieë teenmekaar.

2.2 Lê 'n vertikale las met 'n platvlakplunjer van 35 mm x 95 mm oor die knieë op met die hartlyn van die plunjer oor die hoogste punt van die knieë.

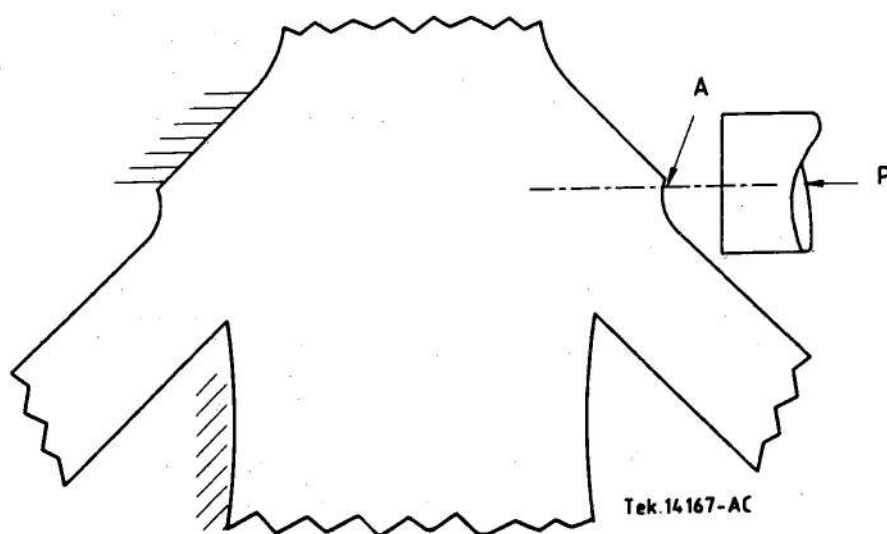
2.3 Wend voldoende krag op die plunjer aan om die heupe te buig totdat die vlak van die plunjer 85 mm bo die steunvlak is. Die krag moet tussen 30 N en 70 N wees. Maak seker dat die onderste ledemate tydens die toets nie met enige oppervlak in aanraking kom nie.

3 Temperatuur

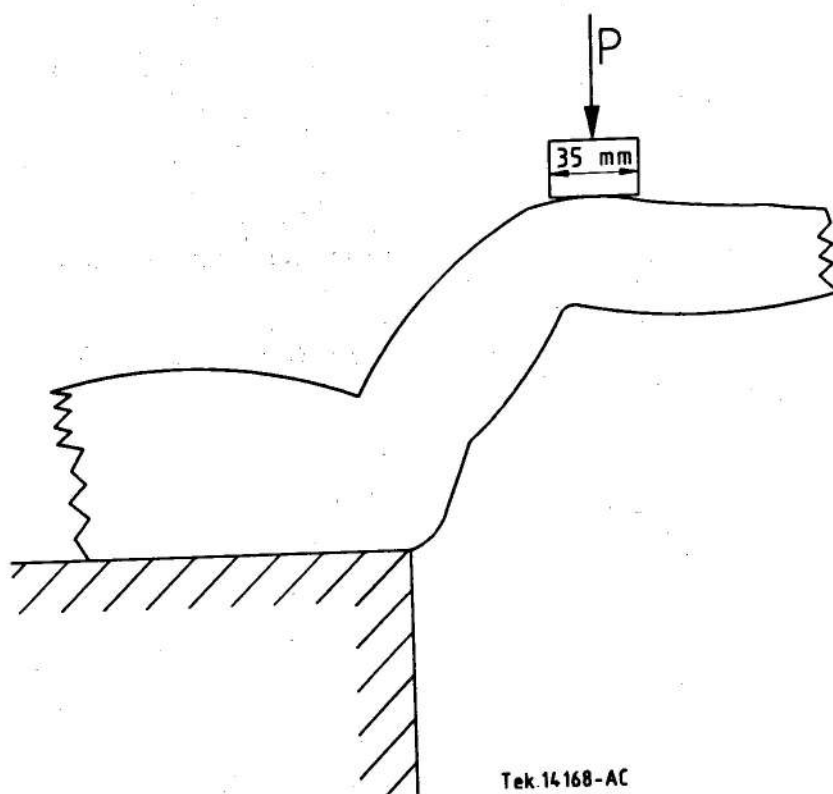
Kalibrering moet by 'n temperatuur tussen 15 °C en 30 °C uitgevoer word.



Figuur 1



Figuur 2



Figuur 3

Byvoegsel 15

Verduidelikende aantekeninge

Die verduidelikende aantekeninge in hierdie byvoegsel het betrekking op vertolkingsprobleme en is as riglyn vir die toetsowerheid bedoel.

Onderafdeling 2.19.2: 'n Semi-universele keertoestel wat vir aanbring op die agterste sitplek van 'n voertuig van die sedantipe en van die stasiewatipe gespesifiseer word waarin die hele gordelsamestel identies is, is een "tipe".

Onderafdeling 2.19.3: Die betekenis van veranderings in afmetings of massa (of albei) van die sitplek, stoffeersel of slagskerm en die energieabsorberende eienskappe of kleur van die materiaal moet in aanmerking geneem word by die bepaling of 'n nuwe tipe geskep is.

Onderafdeling 2.19.4 en 2.19.5: Hierdie onderafdelings geld nie vir veiligheidsgordels wat afsonderlik volgens SABS 1080 goedgekeur is en wat nodig is om die kinderkeertoestel aan die voertuig te veranker of die kind te hou nie.

Onderafdeling 6.2.4: Dit moet beoordeel word deur ondersoek van die hoëspoedfilmresultate waarby sigbare indringing van die buik deur enige deel van die keertoestel of opgly van 'n skootband na die bors faling uitmaak. (Draai van die toetspop uit die skouerband voor die punt van maksimum verplasing moet op sigself ook as faling beskou word, maar op versoek van die fabrikant kan nog twee toetse met die toepaslike toetspop uitgevoer word. Daar moet tydens hierdie toetse ten volle aan alle toetsvereistes voldoen word.)

Onderafdeling 7.1.4.3.1: "Sigbare teken van indringing" beteken indringing in die klei deur die buik-insetsel (onder druk van die keertoestel) maar nie buiging van die klei sonder samedrukking in 'n horisontale rigting, wat byvoorbeeld deur eenvoudige buiging van die rugstring teweeggebring word nie. (Kyk ook die vertolking van 6.2.4.)

Onderafdeling 7.2.1.5: Daar word aan die eerste sin voldoen indien die hand van die toetspop aan die gespe kan raak.

Onderafdeling 7.2.2.1: Dit moet gebruik word om te verseker dat afsonderlik goedgekeurde leibande maklik aangeheg of losgemaak kan word.

Onderafdeling 7.2.4.1.1: Twee bande word vereis. Meet die breekklas van die eerste band. Meet die breedte van die tweede band by 75 % van hierdie las.

Onderafdeling 8.1.2.2: "Aan die sitplek bevestig" beteken die toetssitplek wat in byvoegsel 6 voorgeskryf word. "Spesifieke voertuig" beteken dat 'n "spesifieke" keertoestel normaalweg vir omgooi getoets sou word as dit in die toetssitplek geïnstalleer is, maar dat toetse in die sitplek van die voertuig toegelaat is.

Onderafdeling 8.2.2.1.1: "Met inagneming van die normale gebruikstoestande" beteken dat hierdie toets uitgevoer moet word met die keertoestel op die toetssitplek of voertuigsitplek gemonteer, maar sonder die toetspop.

Die toetspop moet slegs gebruik word om die versteller in posisie te plaas. In die eerste geval moet die bande volgens 8.1.3.6.3.2 of 8.1.3.6.3.3 (wat ook al toepaslik is) verstel word. Die toets moet dan na verwydering van die toetspop uitgevoer word.

Onderafdeling 8.2.5.2.6: Hierdie onderafdeling geld nie vir leibande wat afsonderlik volgens hierdie spesifikasie goedgekeur is nie.

No. 1988

6 December 1996

STANDARDS ACT, 1993

REGULATIONS RELATING TO THE PAYMENT OF LEVY AND THE ISSUE OF SALES PERMITS
IN REGARD TO COMPULSORY SPECIFICATIONS: AMENDMENT

CORRECTION

Government Notice No. R. 1764 of 8 November 1996 is corrected by the substitution of the Schedule to that Government Notice with the Schedule below:

SCHEDULE

Commodity	Levy unit	Tariff per unit, R
Category M ₁ motor vehicles	Item	R1 600,00 per unit for the first five units of any new model; R5,17 per unit thereafter
Category M ₂ and M ₃ motor vehicles	Item	R1 600,00 per unit for the first five units of any new model; R5,17 per unit thereafter
Category N ₁ motor vehicles	Item	R1 600,00 per unit for the first five units of any new model; R5,17 per unit thereafter
Category N ₂ and N ₃ motor vehicles	Item	R1 600,00 per unit for the first five units of any new model; R5,17 per unit thereafter

No. 1988

6 Desember 1996

WET OP STANDAARDE, 1993

REGULASIES BETREFFENDE DIE BETALING VAN HEFFING EN DIE UITREIKING VAN VERKOOPSPERMITTE
TEN OPSIGTE VAN VERPLIGTE SPESIFIKASIES: WYSIGING

VERBETERING

Goewermentskennisgewing No. R. 1764 van 8 November 1996 word verbeter deur die vervanging van die Bylae by daardie Goewermentskennisgewing deur die onderstaande Bylae.

BYLAE

Kommoditeit	Heffings- eenheid	Tarief per eenheid, R
Kategorie M ₁ -motorvoertuie	Item	R1 600,00 vir die eerste vyf eenhede van enige nuwe model; R5,17 per eenheid daarna
Kategorie M ₂ - en M ₃ -motorvoertuie	Item	R1 600,00 vir die eerste vyf eenhede van enige nuwe model; R5,17 per eenheid daarna
Kategorie N ₁ -motorvoertuie	Item	R1 600,00 vir die eerste vyf eenhede van enige nuwe model; R5,17 per eenheid daarna
Kategorie N ₂ - en N ₃ -motorvoertuie	Item	R1 600,00 vir die eerste vyf eenhede van enige nuwe model; R5,17 per eenheid daarna

General Notices Algemene Kennisgewings

NOTICE 1653 OF 1996

The Department of Finance hereby announces that transfer documents for registration in respect of the undermentioned Republic of South Africa Internal Registered Stock must be lodged with the Office of this Department at 301 Abattoir House, Hamilton Street, Arcadia, Pretoria, **not later than 15 December 1996** to qualify for the interest payment on 15 January 1997.

Internal Registered Stock, 8,75 Per Cent, 2001 (R174).

Internal Registered Stock, 9,75 Per Cent, 2008 (R178).

Internal Registered Stock, 9,80 Per Cent, 2001 (R101).

Internal Registered Stock, 12,50 Per Cent, 2002 (R162).

Internal Registered Stock, 13,00 Per Cent, 2005 (R124).

KENNISGEWING 1653 VAN 1996

Die Departement van Finansies maak hiermee bekend dat oordrag-dokumente vir registrasie ten opsigte van die ondergemelde Republiek van Suid-Afrika Binnelandse Geregistreerde Effekte **nie later nie as 15 Desember 1996** by die Departement se kantoor te Abattoirhuis 301, Hamiltonstraat 50, Arcadia, Pretoria, ingelewer moet word ten einde vir die rentebetaling op 15 Januarie 1997 te kwalifiseer.

Binnelandse Geregistreerde Effekte, 8,75 Persent, 2001 (R174).

Binnelandse Geregistreerde Effekte, 9,75 Persent, 2008 (R178).

Binnelandse Geregistreerde Effekte, 9,80 Persent, 2001 (R101).

Binnelandse Geregistreerde Effekte, 12,50 Persent, 2002 (R162).

Binnelandse Geregistreerde Effekte, 13,00 Persent, 2005 (R124).

(6 December 1996)/(6 Desember 1996)

NOTICE 1654 OF 1996

DEPARTMENT OF LABOUR

LABOUR RELATIONS ACT, 1956

CANCELLATION OF REGISTRATION OF AN EMPLOYERS' ORGANISATION

I, Deon Koen, Assistant Industrial Registrar, hereby notify, in terms of section 14 (2) of the Labour Relations Act, 1956, that I have cancelled the registration of the Witwatersrand and Pretoria Wholesale Butchers' Association with effect from 25 November 1996.

D. KOEN

Assistant Industrial Registrar

KENNISGEWING 1654 VAN 1996

DEPARTEMENT VAN ARBEID

WET OP ARBEIDSVARHOUDINGE, 1956

INTREKKING VAN REGISTRASIE VAN 'N WERKGEWERSORGANISASIE

Ek, Deon Koen, Assistentnywerheidsregistrateur, maak hiermee kragtens artikel 14 (2) van die Wet op Arbeidsverhoudinge, 1956, bekend dat ek die registrasie van die Witwatersrand and Pretoria Wholesale Butchers' Association met ingang van 25 November 1996 ingetrek het.

D. KOEN

Assistentnywerheidsregistrateur

(6 December 1996)/(6 Desember 1996)

NOTICE 1655 OF 1996**GENERAL NOTICE IN TERMS OF THE RESTITUTION OF LAND RIGHTS ACT, 1994
(ACT No. 22 OF 1994)**

Notice is hereby given in terms of section 12 (4) of the Restitution of Land Rights Act, 1994 (Act No. 22 of 1994), that the Chief Land Claims Commissioner is of the opinion that the resources of the Commission or the Court would be more effectively utilised if all claims arising from the dispossession of rights in land in respect of the area known as **Highlands, Pretoria District, Gauteng Province**, were to be investigated at the same time. Accordingly all potential claimants are invited to lodge their claims for rights in land within a period of 90 (ninety) days of publication of this notice at:

The Commission on Restitution of Land Rights
Private Bag X833
PRETORIA
0001.

Note:

Please note that this notice applies only to those people who have not yet lodged their claims with the Commission. Please note also that the area known as **Highlands** is shown in the map annexed hereto for purposes of this notice.

W. J. SEREMANE

Chief Land Claims Commissioner

KENNISGEWING 1655 VAN 1996**ALGEMENE KENNISGEWING KRAGTENS DIE WET OP HERSTEL VAN GRONDREGTE, 1994
(WET No. 22 VAN 1994)**

Kennis word hiermee gegee kragtens artikel 12 (4) van die Wet of Herstel van Grondregte, 1994 (Wet No. 22 van 1994), dat die Hoofgrondeisekommissaris van mening is dat die bronne van die Kommissie of die Hof doeltreffender aangewend sal kan word indien alle eise voortspruitend uit die ontneming van regte in grond ten opsigte van die gebied wat bekend is as **Highlands, distrik Pretoria, Gauteng-provinsie**, gelyktydig ondersoek word. Derhalwe word alle potensiele eisers genooi om hul eise om regte in grond binne 90 (negentig) dae vanaf plasing van die kennisgewing in te dien by:

Die Kommissie op Herstel van Grondregte
Privaatsak X833
PRETORIA
0001.

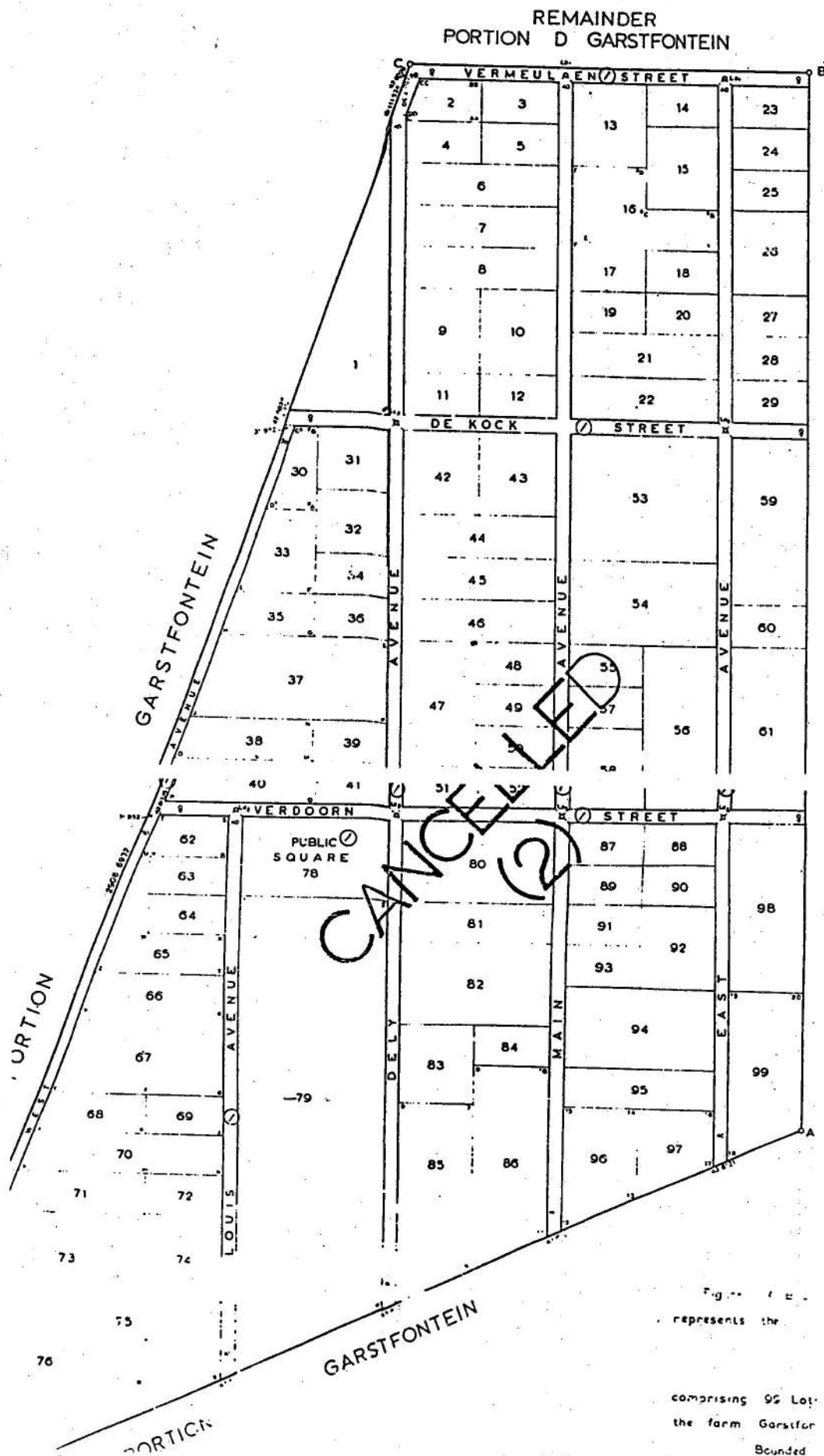
Nota:

Geliewe kennis te neem dat hierdie kennisgewing slegs van toepassing is op persone wat nog nie 'n eis by die Kommissie ingedien het nie. Vir die doeleindes van hierdie kennisgewing word die gebied algemeen bekend as **Highlands** aangetoon op meegaande kaart.

W. J. SEREMANE

Hoofgrondeisekommissaris

(6 Desember 1996)/(6 Desember 1996)



NOTICE 1657 OF 1996 • KENNISGEWING 1657 VAN 1996**DEPARTMENT OF COMMUNICATIONS
DEPARTEMENT VAN KOMMUNIKASIEWESE****STATEMENT OF REVENUE AND EXPENDITURE: SEPTEMBER 1996
STAAT VAN INKOMSTE EN UITGAWE: SEPTEMBER 1996**

	Estimate Begroting 1996-97	Month of September Maand van September		Total: April to September Totaal: April tot September		
		1995	1996	1995	1996	
	R'000	R	R	R	R	
				*	*	
Private radio communi- cations services:						Private radio-kommuni- kasiedienste
Operating Expenditure	71 248	5 150 198	4 051 872	20 328 706	22 677 147	Bedryfsuitgawe
Capital Expenditure.....	11 571	307 793	273 285	1 650 388	922 588	Kapitaalluitgawe
Withdrawal from Post Office Fund.....	49 800	—	—	44 620 000	49 800 000	Onttrekking uit Pos- kantoorfonds
Revenue.....	148 150	737 075	1 601 677	56 042 207	94 531 711	Inkomste

* Neither revenue nor expenditure is evenly spread over the financial year. Certain large operating expenditure payments are made quarterly, half-yearly or annually, whilst capital expenditure payments are related to the execution of specific short and long term projects.

* Nóg inkomste nóg besteding is gelykmatig oor die boekjaar versprei. Sekere groot bedryfsuitgawebetalings geskied kwartaalliks, halfjaarliks of jaarliks, terwyl kapitaalluitgawebetalings saamhang met die uitvoering van bepaalde kort- en langtermynprojekte.

(6 December 1996)/(6 Desember 1996)

NOTICE 1660 OF 1996**DEPARTMENT OF TRADE AND INDUSTRY****ANNOUNCEMENT OF "THE WINNERS OF THE "PRESIDENT'S AWARD FOR EXPORT ACHIEVEMENT—
DIE PRESIDENTSTOEKENNING VIR UITVOERPRESTASIE"**

In terms of Rule 3 of his Warrant, as published in *Government Gazette* No. 9977 of 18 October 1985, the President approves of the following winners of the President's Award for Export Achievement for 1996:

OVERALL WINNER

Consolidated Metallurgical Industries Ltd

MANUFACTURING SECTOR

Winner: Sasol Oil (Pty) Ltd
Merit certificates: Alusaf Ltd
 Consani Engineering (Pty) Ltd
 Marmoran (Pty) Ltd
 SAMES (Pty) Ltd
 Salchain

PRIMARY SECTOR**Agro-Industrial Division**

Winner: Neethlingshof Estate (Pty) Ltd
Merit certificates: Beyerskloof Wines

Mining division

Winner: Consolidated Metallurgical Industries Ltd
Merit certificate: Foskor Ltd

SERVICE SECTOR

Winner: Vinfruco (Pty) Ltd
Merit certificate: Outspan International Ltd

EXPORT TRADING HOUSES

Winner: The Natural Corporation
Merit certificates: Africa Trading

MERIT AWARDS FOR NEW ENTRANT TO THE EXPORT FIELD

Dorbyl Heavy Engineering Container Division
 Fifth Dimension Technologies
 Siemens—Power Transmission and Distribution

MERIT AWARD FOR SOCIAL RESPONSIBILITIES

Samancor Ltd

(6 December 1996)/(6 Desember 1996)

KENNISGEWING 1660 VAN 1996**DEPARTEMENT VAN HANDEL EN NYWERHEID****AANKONDIGING VAN DIE WENNERS VAN "DIE PRESIDENTSTOEKENNING VIR UITVOERPRESTASIE—
THE PRESIDENT'S AWARD FOR EXPORT ACHIEVEMENT"**

Ingevolge Reël 3 van sy Bevelskrif, soos gepubliseer in *Staatskoerant* No. 9977 van 18 Oktober 1985, keur die President die volgende wenners van die Presidentstoekenning vir Uitvoerprestasie vir 1996 goed:

ALGEHELE WENNER

Consolidated Metallurgical Industries Ltd

VERVAARDIGINGSEKTOR

Wenner: Sasol Oil (Edms.) Bpk.
Merietesertifikate: Alusaf Bpk.
 Consani Engineering (Edms.) Bpk.
 Marmoran (Edms.) Bpk.
 SAMES (Edms.) Bpk.
 Salchain

PRIMÊRE SEKTOR**Agro-Industriële afdeling**

Wenner: Beyerskloof Wines
Merietesertifikate: Neethlingshof Estate (Edms.) Bpk.

Mynbou-afdeling

Wenner: Consolidated Metallurgical Industries Bpk.
Merietesertifikaat: Foskor Bpk.

DIENSTESEKTOR

Wenner: Vinfruco (Edms.) Bpk.
Merietesertifikaat: Outspan International Bpk.

UITVOERAGENTE

Wenner: The Natural Corporation
Merietesertifikate: Africa Trading

MERIETETOEKENNING VIR NUWE UITVOERDERS

Dorbyl Heavy Engineering Container Division
 Fifth Dimension Technologies (5DT)
 Siemens—Power Transmission and Distribution

MERIETETOEKENNING VIR SOSIALE VERANTWOORDELIKHEID

Samancor Bpk.

(6 December 1996)/(6 Desember 1996)

NOTICE 1661 OF 1996**DEPARTMENT OF TRANSPORT**

INTERNATIONAL AIR SERVICES ACT, 1993 (ACT No. 60 of 1993)

APPLICATIONS FOR THE GRANT/AMENDMENT OF INTERNATIONAL AIR SERVICE LICENCES

Pursuant to the provisions of section 16 (1) of Act No. 60 of 1993 and regulation 14 (1) and (2) of the International Air Services Regulations, 1994, it is hereby notified for general information that the application, details of which appear in the Schedule hereto, will be considered by the International Air Services Council (Council).

Representations in accordance with section 16 (3) of Act No. 60 of 1993 and regulation 25 (1) of the International Air Services Regulations, 1994, against or in favour of an application, should reach the Chairman of the Council at Private Bag X193, Pretoria, 0001, within 28 days of the date of publication hereof. It must be stated whether the party or parties making such representation is/are prepared to be present or represented at the possible hearing of the application.

The Council will cause notice of the time, date and place of the proceedings to be given in writing to the applicant and all parties who have made representations as aforesaid and who desire to be present or represented at the hearing.

SCHEDULE 2**APPLICATION FOR THE AMENDMENT OF LICENCE**

(A) Full name, surname and trade name of applicant. (B) Full business or residential address of applicant. (C) Class and number of licence in respect of which the amendment is being sought. (D) Type of international air service and amendment thereto for which application is being made. (E) Category or kind of aircraft and the amendment thereto for which application is being made. (F) Airport from and the airport to which flights are undertaken and the amendment thereto for which application is being made. (G) Area served and the amendment thereto for which application is being made. (H) Frequency of flights and the amendment thereto for which application is being made. (I) Condition and the amendment thereto for which application is being made.

(A) Transnet Limited; South African Airways. (B) P.O.Box 7778, Johannesburg, 2000. (C) Class II; No. I/N015. (D) Type N1, N2, N3 and N4. (E) Category A1. (G) In respect of Licence Type N1, N2, and N3: World-wide, excluding the Republic of South Africa. In respect of Licence Type N4, add: unrestricted Angola, Argentina, Australia, Brazil, Comores, France, Germany, Hong Kong, India, Israel, Japan, Kenya, Malawi, Mauritius, Mozambique, Namibia, The Netherlands, Nigeria, Saudi Arabia, Singapore, Switzerland, Taiwan, Thailand, Uganda, United Arab Emirates, United Kingdom, United States of America, Zaire, Zambia and Zimbabwe.

KENNISGEWING 1661 VAN 1996**DEPARTEMENT VAN VERVOER**

WET OP INTERNASIONALE LUGDIENSTE, 1993 (WET No. 60 VAN 1993)

AANSOEKE OM DIE TOESTAAN/WYSIGING VAN INTERNASIONALE LUGDIENSLISENSIES

Hierby word ingevolge die bepalings van artikel 16 (1) van die Wet No. 60 van 1993 en regulasie 14 (1) en (2) van die Regulasies vir Internasionale Lugdiens, 1994, vir algemene inligting bekendgemaak dat die Raad op Internasionale Lugdiens (Raad) die aansoek, waarvan die besonderhede in die Bylae hieronder verskyn, sal oorweeg.

Vertoë ingevolge artikel 16 (3) van Wet No. 60 van 1993 en regulasie 25 (1) van die Regulasies vir Internasionale Lugdiens, 1994, teen of ten gunste van 'n aansoek moet die Voorsitter van die Raad, Privaat Sak X193, Pretoria, 0001, binne 28 dae na die datum van publikasie hiervan bereik. Daarin moet gemeld word of die persoon of persone wat aldus vertoë rig, bereid is om die moontlike verhoor van die aansoek by te woon of om verteenwoordig te word.

Die Raad sal reël dat kennis van die datum, tyd en plek van die verrigtinge skriftelik gegee word aan die aansoeker en al die persone wat aldus vertoë gerig het en wat verlang om aldus teenwoordig of verteenwoordig te wees.

BYLAE 2**AANSOEK OM DIE WYSIGING VAN LISENSIE**

(A) Volle naam, van en handelsnaam van aansoeker. (B) Volle besigheids- of woonadres van aansoeker. (C) Klas en nommer van die lisensie ten opsigte waarvan die wysiging gevra word. (D) Tipe internasionale lugdiens en die wysiging daarvan waarvoor aansoek gedoen word. (E) Kategorie of soort lugvaartuig en die wysiging daarvan waarom aansoek gedoen word. (F) Lughawe van waar en die lughawe waarheen vlugte onderneem word en die wysiging daarvan waarvoor aansoek gedoen word. (G) Gebied wat bedien word en die wysiging daarvan waarvoor aansoek gedoen word. (H) Gereeldheid van vlugte en die wysiging daarvan waarvoor aansoek gedoen word. (I) Voorwaarde en die wysiging daarvan waarvoor aansoek gedoen word.

(A) Transnet Bpk.; Suid-Afrikaanse Lugdiens. (B) Posbus 7778, Johannesburg, 2000. (C) Klas II; No. I/N015. (D) Tipe N1, N2, N3 en N4. (E) Kategorie A1. (G) Ten opsigte van Lisensietipes N1, N2 en N3: Wêreldwyd, uitgesonderd die Republiek van Suid-Afrika. Ten opsigte van Lisensietipe N4, voeg by: Onbeperk Angola, Argentinië, Australië, Brasilië, Comores, Duitsland, Frankryk, Hongkong, Indië, Israel, Japan, Kenia, Malawi, Mauritius, Mosambiek, Namibië, Nederland, Nigerië, Saoedi-Arabië, Singapoer, Switserland, Taiwan, Thailand, Uganda, Verenigde Arabiese Emirate, die Verenigde Koninkryk, die Verenigde State van Amerika, Zaire, Zambië en Zimbabwe.

NOTICE 1662 OF 1996**DEPARTMENT OF TRANSPORT****AIR SERVICE LICENSING ACT, 1990 (ACT No. 115 OF 1990)**

Pursuant to the provisions of section 15 (1) (b) of Act No. 115 of 1990 and regulation 8 of the Domestic Air Services Regulations, 1991, it is hereby notified for general information that the application, details of which appear in the Schedule hereto, will be considered by the Air Service Licensing Council.

Representations in accordance with section 15 (3) of Act No. 115 of 1990 in support of, or in opposition to, an application, should reach the Air Service Licensing Council, Private Bag X193, Pretoria, 0001, within 21 days of the date of publication hereof.

SCHEDULE 1**APPLICATION FOR THE GRANT OF LICENCE**

(A) Full name and trade name of applicant. (B) Full business or residential address of applicant. (C) Class of licence applied for. (D) Type of air service to which application applies. (E) Category of aircraft to which application applies.

(A) Tradeflux 2025 CC, Rand Flight Academy. (B) P.O. Box 18080, Rand Airport, 1419. (C) Class III. (D) Type G9. (E) Category A3 and A4.

KENNISGEWING 1662 VAN 1996**DEPARTEMENT VAN VERVOER****WET OP DIE LISENSIËRING VAN LUGDIENSTE, 1990 (WET No. 115 VAN 1990)**

Hierby word ingevolge die bepalings van artikel 15 (1) (b) van Wet No. 115 van 1990 en regulasie 8 van die Regulasies vir Binnelandse Lugdiens, 1991, vir algemene inligting bekendgemaak dat die Lugdienslisensiëringsraad die aansoek waarvan besonderhede in die Bylae hieronder verskyn, sal oorweeg.

Vertoë ingevolge artikel 15 (3) van Wet No. 115 van 1990 ter ondersteuning of bestryding van 'n aansoek moet die Lugdienslisensiëringsraad, Privaatsak X193, Pretoria, 0001, binne 21 dae na die datum van publikasie hiervan bereik.

BYLAE 1**AANSOEK OM DIE TOESTAAN VAN LISENSIE**

(A) Volle naam en handelsnaam van aansoeker. (B) Volle besigheids- of woonadres van aansoeker. (C) Klas lisensie waarom aansoek gedoen word. (D) Tipe lugdiens waarop aansoek betrekking het. (E) Kategorie lugvaart waarop aansoek betrekking het.

(A) Tradeflux 2025 BK, Rand Flight Academy. (B) Posbus 18080, Rand Airport, 1419. (C) Klas III. (D) Tipe G9. (E) Kategorie A3 en A4.

(6 Desember 1996)/(6 Desember 1996)

NOTICE 1663 OF 1996**BOARD ON TARIFFS AND TRADE****CUSTOMS AND EXCISE TARIFF APPLICATIONS: LIST 34/96**

The following application concerning the Customs and Excise Tariff has been received by the Board on Tariffs and Trade. Any objections to or comments on this representation should be submitted to the Chairman, Board on Tariffs and Trade, Private Bag X753, Pretoria, 0001, within six weeks of the date of this notice. Attention is drawn to the fact that the rate of duty mentioned in the application is that requested by the applicant and that the Board may, depending on its findings, recommend a lower or higher rate of duty.

Rebate of the duty on:

Sewing thread of synthetic staple fibres thread for the manufacture of passports, classifiable under tariff subheading 5508.10, at a rate of duty of 30 per cent *ad valorem*.

[BTT Ref. T5/2/10/2/1 (960249). Enquiries: Miss P. Moopanar. Tel. (012) 310-9776.]

Applicant:

Government Printing Works, Private Bag X85, Pretoria, 0001.

LIST 33/96 WAS PUBLISHED UNDER GENERAL NOTICE 1635 OF 22 NOVEMBER 1996.

KENNISGEWING 1663 VAN 1996**RAAD OP TARIWE EN HANDEL****DOEANE- EN AKSYNSTARIEFAANSOEKE: LYS 34/96**

Onderstaande aansoek betreffende die Doeane- en Aksynstarief is deur die Raad op Tariwe en Handel ontvang. Enige beswaar teen of kommentaar op hierdie versoë moet binne ses weke na die datum van hierdie kennisgewing aan die Voorsitter, Raad op Tariwe en Handel, Privaat Sak X753, Pretoria, 0001, gerig word. Die aandag word daarop gevestig dat die skale van reg wat in die aansoeke genoem word, dié is wat deur die applikant aangevra is en dat die Raad, afhangende van sy bevin-
dinge, hoër of laer skale van reg mag aanbeveel.

Korting van die reg op:

Naaigaring van sintetiese stapelvelsels, vir die vervaardiging van paspoorte, indeelbaar by tariefsubpos 5508.10, teen 'n skaal van reg van 30 persent *ad valorem*.

[RTH-verw. T5/2/10/2/1 (960249). Navrae: Mej P. Moopanar. Tel. (012) 310-9776.]

Applikant:

Government Printing Works, Privaatsak X85, Pretoria, 0001.

LYS 33/96 IS BY ALGEMENE KENNISGEWING 1635 VAN 22 NOVEMBER 1996 GEPUBLISEER.

(6 December 1996)/(6 Desember 1996)

BOARD NOTICE RAADSKENNISGEWING

BOARD NOTICE 122 OF 1996**THE SOUTH AFRICAN DENTAL TECHNICIANS COUNCIL**
**NOTICE CONCERNING THE TARIFF OF FEES IN RESPECT OF WORK DONE BY
DENTAL TECHNICIAN CONTRACTORS FOR DENTISTS**

In terms of section 12 (4) of the Dental Technicians Act, 1979 (Act No. 19 of 1979), I, Johann Adam Swanepoel, Registrar of the South African Dental Technicians Council, hereby publish the amendment of Board Notice 112 of 1996 concerning the Tariff of Fees by replacing the effective date **1 January 1996** with **1 January 1997** and amending the amounts of **rule 007** to read as follows:

Code	R
9451	180,80
9301 (Two models)	8,60
9333	208,90
8008 (15% surcharge on item 9333)	31,34
TOTAL (VAT excluded)	429,64

RAADSKENNISGEWING 122 VAN 1996**DIE SUID-AFRIKAANSE RAAD VIR TANDTEGNICI**
**KENNISGEWING INSAKE GELDETARIEF TEN OPSIGTE VAN DIENSTE GELEWER DEUR
TANDTEGNIKUS-KONTRAKTEURS AAN TANDARTSE**

Kragtens artikel 12 (4) van die Wet op Tandtegnici, 1979 (Wet No. 19 van 1979), publiseer ek, Johann Adam Swanepoel, Registrateur van die Suid-Afrikaanse Raad vir Tandtegnici, die wysiging van Raadskennisgewing 112 van 1996 insake die geldetarief deur die effektiewe datum **1 Januarie 1996** met **1 Januarie 1997** te vervang en wysig ook die bedrae van **reël 007** om as volg te lees:

Kode	R
9451	180,80
9301 (Twee modelle)	8,60
9333	208,90
8008 (15% oorbetalings op item 9333)	31,34
TOTAAL (BTW uitgesluit)	429,64

(6 December 1996)/(6 Desember 1996)

HRC

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HUMAN RIGHTS COMMISSION

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PUBLIC NOTICE

PLEASE NOTE that the Human Rights Commission has established its head office in Johannesburg. The details are as follows:

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ALL communication from the date of publication thereof should be directed to the above address.

N. Barney Pityana
CHAIRPERSON

24 May 1996

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For purposes of reference, all Proclamations, Government Notices, General Notices and Board Notices published are included in the following table of contents which thus forms a weekly index. Let yourself be guided by the Gazette numbers in the righthand column:

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