

Test Report No.: Page 1 of 7 19302159 001 Seite 1 von 7 Prüfbericht - Nr.:

Client: Second Life Plastics Pty Ltd

Auftraggeber: PO BOX 222, 41 Tiro Tiro Rd, Levin, Horowhenua 5540, New Zealand

Test item: Dig Stop™ Cable Cover

Gegenstand der Prüfung:

Identification: Serial No.: No Serial Number (refer to markings) Bezeichnung: Serien-Nr.:

Receipt No.: Date of receipt: 1113008329 2-Nov-2015 Wareneingangs-Nr.: Eingangsdatum:

Condition of test item at delivery: New production sample

Zustand des Prüfgegenstandes bei Anlieferung:

Testing location: TÜV Rheinland Australia Pty. Ltd. Prüfort: 182 Dougharty Road, Heidelberg West, Australia VIC 3081

Test specification: Testing to AS 4702:2000 Prüfgrundlage: Polymeric cable protection covers

The test item passed the above mentioned test specifications. **Test Result:**

Der vorstehend beschriebene Prüfgegenstand wurde geprüft und entspricht oben Prüfergebnis: genannter Prüfgrundlage.

Testing Laboratory/ TÜV Rheinland Australia Ptv. Ltd.

182 Dougharty Road, Heidelberg West, Australia VIC 3081 Prüflaboratorium:

Compiled by/ zusammengestellt:

Reviewed by kontrolliert:

Test engineer/

22-Mar-Julb Grant Li

Datum Name/Stellung Date Name/Position

Unterschrift Signature

Roy Luo

Datum Name/Stellung Name/Position Date

Reviewer/

Unterschrift Signature

Other Aspects/ Sonstiges:

N/T

Abkürzungen: entspricht Prüfgrundlage P(ass)

entspricht nicht Prüfgrundlage F(ail) nicht anwendbar nicht getestet

Abbreviations:

P(ass) passed

failed F(ail) not applicable

This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.

Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.

Revision 5.0





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Test Report AS 4702:2000 Polymeric cable protection covers

Test item particulars:

Dimensions: Width: 100, 150, 200, 250 and 300 mm Thickness: appr. 6.26 mm

General remarks:

- 1. This report shall not be reproduced, except in full.
- 2. Details in test data / test plan no. 1113008329
- 3. Specification applied:

AS 4702:2000

- 4. Reporting of results herein is in accordance with NATA recommendations taking into account U of M. (a) For minimum limits - Where measurement is on the limit or above the limit it is deemed to comply. Where measurement is below the limit it is deemed not to comply.
 - (b) For maximum limits Where measurement is on the limit or below the limit it is deemed to comply. Where measurement is above the limit it is deemed not to comply.
- For reporting of results the estimated uncertainty for measurement taken into account at 95% confidence level
- 6. This test report is based on assessment and tests applied to the specific test item(s) as submitted by the client. TÜV Rheinland Australia disclaims any and all responsibility or obligation for any other item.

Description of the test item:

Black polymeric cable protection cover with marking on one side submitted for testing by the Client.

Markings on 150 mm sample:



Options/accessories/ancillary equipment:

The equipment was tested without any optional accessory installed. Hence, this report does not cover parameters that are influenced by the installation of optional accessory that might affect safety in the meaning of this standard.

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AS 4702:2000				
Clause	Requirement + Test	Result - Remark	Verdict	

4	CONSTRUCTION		P
4.1	Material		Р
	Cable protection covers shall be made from a polymeric material that meets the requirement of this standard. Cable protection covers shall have a minimum thickness of 3 mm.	Measured 6.26 mm thickness	Р
4.2	Finish		Р
	Covers shall be reasonable free of sharp edges, burrs or surface projections that are likely to injure the installer.		Р
5	DIMENSIONS		Р
5.1	Standard widths		Р
	Cable protection covers shall be made available in rolls or slabs with widths of 100, 150, 200, 250 or 300 mm. All widths shall have a tolerance of –0% to +5%	All widths Comply	Р
5.2			
0.2	Standard length Preferred lengths for polymeric cable protection		N/A
	cover slabs are 1.2, 2, 3 m. Polymeric cable protection cover rolls shall be made available in lengths of 20 or 25 m. Lengths shall be at least the minimum stated on the packaging.	25m marked roll measured 25.2m	Р
6	IDENTIFICATION		
6.1	Method of identification		Р
	Polymeric cable protection covers shall be identified by		-
	(a) being coloured throughout		N/A
	(b) painting with a durable paint		N/A
	(c)co-extruding on the surface intended to face upwards a material compatible with the base material		N/A
	(d) by marking with marker tape(s) which shall - be bonded to the surface intended to face upwards		Р
	- be centrally positioned along the longitudinal axis of the cover		
	- cover at least 67% of the surface to which it is applied.		
6.2	Colour of identifying material		Р
7	MARKINGS		Р

8.2.3

Conditioning

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AS 4702:2000			
Clause	Requirement + Test	Result - Remark	Verdict
	Polymeric cable covers shall be marked on at least the side intended to face upwards in a lengthwise direction repeated at intervals of not more than 1 m.	Repeated at 0.75 m	Р
	(a) The words 'DANGER ELECTRIC CABLES BELOW' in block letters of not less than 40 mm		Р
	(b) The manufacturer's name or trademark – shall be not less than 15 mm in height		Р
8	TESTS		Р
8.1	Test requirements		-
8.2	Penetration test		Р
8.2.1	General		-
	The purpose of this test is to assess the ability of the material to limit the penetration of general hand-digging implements used at typical operating temperatures. The test is performed on one sample cover.		Р
8.2.2	Apparatus		-
	The apparatus shall comprise a falling weight machine consisting of the following:		-
	(a) A main frame assembly that can be rigidly fixed in the true vertical position, and which has guide rails that may be adjusted so as to maintain them parallel and vertical.		Р
	(b) A fixed weight striker, which may fall freely within the guide rails and is equipped with a striking surface as illustrated in Figure 1. It shall be centrally located on the vertical axis of the striker.		Р
	(c) A specimen support consisting of a block of Class VH Rigid Cellular Polystyrene moulded to all details of AS 1366.3. The block shall be not less than 200 mm deep and its length and width shall be at least the same as the test specimen. The specimen support shall be positioned directly below the guide rails.		Р
	(d) A holding device to hold the striker at the specified distance above the specimen. The holding device shall incorporate a release mechanism to allow the striker to fall freely within the guides, thus striking the cable cover in a reproducible manner.		Р
	The apparatus shall be adjusted such that, when the striker is released, it will fall freely within the guide rails without any impediments.		Р

8.4

8.4.1

8.4.2

Resistance to Unroll Test

General

Conditioning

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Р

Р

AS 4702:2000			
Clause	Requirement + Test	Result - Remark	Verdict
	The specimen shall be conditioned at the test temperature of 20° ±2°C for a period of not less than 2 h prior to conducting the test.		Р
8.2.4	Procedure		-
	The test procedure shall be as follows:		-
	(a) Lay the specimen flat onto the specimen support, below the striker.		Р
	(b) Adjust the height of the striker, measured from the bottom tip of the striker to the top surface of the cable cover, such that, when the striker is dropped, a minimum energy of 125 J is injected into the test specimen.		Р
	(c) The striker shall be allowed to fall freely, within the guides, onto the specimen.		Р
	(d) Measure the penetration (P) of the striker and record it. Penetration shall be taken as the distance from the undeformed lower surface of the cable protection cover to the tip of the striker (measured in mm).		Р
	(e) Subject the cable cover sample to five test drops.		Р
8.2.5	Criteria of acceptance		Р
	The test specimen subject to this test shall satisfy the following criteria:		Р
	(a) Penetration of the striker shall not exceed 50 mm for any of the test drops.	Measured penetration: #1 37.75 mm #2 36.39 mm #3 39.05 mm #4 38.14 mm #5 42.06 mm	Р
	(b) The specimen shall not show any signs of cracking or breaking when using normal, or corrected to normal, vision.	No sign of cracking or breaking.	Р
8.3	Markings		Р
	Shall be checked by inspection and by rubbing by hand for 15 s with a piece of cloth soaked with water and again with petroleum spirit. The colour and markings shall still comply with appropriate clause.		Р

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	AS 4702:2000		
Clause	Requirement + Test	Result - Remark	Verdict
	The resistance to unroll test shall not be performed until at least 10 days after manufacture. A complete roll shall be conditioned at 10 ±1°C in either a water bath or air for a period of at least 2 h prior to conducting the test. The test shall be conducted within 2 min of removing the roll from the conditioning environment.	Considered	Р
8.4.3	Procedure		-
	(a) Select one complete, full length roll, as delivered and condition in accordance with Clause 8.4.2.		
	(b) Untie the roll and restrain the leading (outer) end to a flat level surface.		
	(c) Uncoil the roll with the marking face up for its entire length across the flat level surface. If the cover is marked on both sides then this test shall be done twice, once with each side face up.		
	(d) Hold the lagging (inner) end of the roll against the flat level surface for 1 min.	A full length of roll was tested. Marked on one side only.	Р
	(e) Place an approximately 100 mm diameter mass of 8 +0.2/-0 kg mass on the lagging end. The mass shall be centrally located and not overlap the end of the roll.		
	(f) Immediately release the lagging end from against the surface.		
	(g) Wait 30 s after releasing the lagging end of the roll and then measure the height that the lagging end is above the flat level surface.		
8.4.4	Criteria of acceptance		-
	To be acceptable, the maximum height that the lagging end of the roll shall rise above the level surface is 10 mm for nominal 100 mm, or less, wide rolls with this height increasing by 10 mm for each additional 50 mm, or part thereof, of nominal standard width.	Width: 100mm Limit: max 10 mm rise above level surface Measured 6.05 mm rise on the inner side of the roll upwards.	Р

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Photos:



300mm cable cover after penetration test