



TEST REPORT 2020716/01-MBM

Date 23 JUL 2020

Singapore Test Lab Pte Ltd, 10B Enterprise Road, Singapore 629828, Tel: +65 6353 6393, Fax: +65 6353 6395

SUBJECT:

Testing of uPVC pipe

TESTED FOR:

Aliaxis Singapore Pte Ltd
15A Tuas Ave 18, #03-01,
Singapore 638905

Attn: Mr Steven Eu

SAMPLE RECEIVED DATE:

06 Jul 2020

TEST DATE:

07 Jul 2020

DESCRIPTION OF SAMPLE:

One lot of uPVC pipe of size 110mm Ø was received. The descriptions are as follow:

Size	Markings
110mm Ø	SNOW 110mm UPVC PIPE SINGAPORE TELECOM SS 272 : 2012 TCP 1006S 1



The results reported herein have been performed in accordance with the laboratory's terms of accreditation under the Singapore Accreditation Council – Singapore Laboratory Accreditation Scheme.

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METHOD OF TEST:

SS 272: 2012 – Specification for unplasticised PVC pipes and fittings below ground for drainlines and sewers

TEST CONDUCTED:

1. Dimensional measurement
2. Heat reversion
3. Impact
4. Hydrostatic pressure
5. Opacity
6. Tensile
7. Softening point

TEST RESULTS:

Table 1 – Dimensional Measurements

Sample Reference & Sizes		Results	SS 272: 2012 Requirements
		110mm Ø	110mm Ø
Mean outside diameter (mm)		110.2	110.0 min. 110.4 max.
Outside diameter (mm)	Min.	110.1	109.6 min.
	Max.	110.6	110.8 max.
Wall thickness (mm)	Min.	3.4	3.2 min.
	Max.	3.6	3.6 max.

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TEST RESULTS (CONT'D):

Table 2 – Heat Reversion Test

Sample Reference & Sizes	Results	SS 272: 2012 Requirements
	110mm Ø	
Heat reversion, (%) (Hot air oven)	2.5	5% max.

Table 3 – Impact Test

Sample Reference & Sizes	Results	SS 272: 2012 Requirements
	110mm Ø	
Impact test	Pass	Clause F.5

Table 4 – Hydrostatic Pressure Test

Sample Reference & Sizes	Results	SS 272: 2012 Requirements
	110mm Ø	
Hydrostatic pressure test	Pass	Shall show no signs of leakage or any defects

Table 5 – Opacity Test

Sample Reference & Sizes	Results	SS 272: 2012 Requirements
	110mm Ø	
Opacity test (%)	0	Shall not transmit more than 0.2% of visible light falling on it

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TEST RESULTS (CONT'D):

Table 6 – Tensile Test

Sample Reference & Sizes	Results	SS 272: 2012 Requirements
	110mm Ø	
Uniaxial tensile test (MPa) Average	49	45
Strain at break (%) Average	188	≥ 80

Table 7 – Softening Point Test

Sample Reference & Sizes	Results	SS 272: 2012 Requirements
	110mm Ø	
Softening point test (°C) Average	81.6	Shall have a softening point of not less than 81°C

Marzuki Bin Mohamed
Senior Engineer

Chua Peck Cheong
Senior Manager

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