

SUBJECT:

Testing of uPVC pipe

TESTED FOR:

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

Attn: Steven Eu

SAMPLE RECEIVED DATE:

12 Sep 2024

TEST DATE:



16 Sep 2024

METHOD OF TEST:

SS 141: 2013 - Specification for unplasticised PVC pipe for cold water services and industrial uses

TEST CONDUCTED:

1. Measurement of dimensional
2. Softening point
3. Heat reversion
4. Impact strength
5. Tensile
6. Opacity

		The results reported herein have been performed in accordance with the laboratory's terms of accreditation under the Singapore Accreditation Council
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SAMPLE DESCRIPTION:

One lot of uPVC pipes were received. The descriptions are as follow:

Size	Markings
155mm Ø	SNOW 155mm uPVC PIPE SS141: 2013 BS 3506 CLASS C PPC1506S (1) LEAD FREE
250mm Ø	SNOW SS141 2013 BS3505 250mm PN9 CLASS C UPVC PIPE 5.8M LEAD FREE

TEST RESULTS:

Table 1 - Dimensional measurements

Sample Reference & Sizes	Results		SS 141: 2013 Requirements PN 9 (Class C)	
	155mm Ø	250mm Ø	155mm Ø	250mm Ø
Mean outside diameter (mm)	168.1	272.8	168.0 min. 168.5 max.	272.6 min. 273.4 max.
Thickness individual value (mm) Min.	7.1	10.5	6.6	9.7
Thickness individual value (mm) Max.	7.5	10.9	7.6	11.2
Thickness average value (mm) Max	7.3	10.8	7.5 max.	10.9 max.

Table 2 – Vicat Softening Temperature Tests

Sample Reference & Sizes	Results	SS 141: 2013 Requirements
	155mm Ø	
Softening temperature °C	80	≥ 80

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TEST RESULTS (CONT'D):

Table 3- Longitudinal reversion Tests

Sample Reference & Sizes	Results	SS 141: 2013 Requirements
	155mm Ø	
Heat reversion, (%) (Hot air oven)	3.5	5 max.

Table 4 – Impact Tests

Sample Reference & Sizes	Results		SS 141: 2013 Requirements
	155mm Ø	250mm Ø	
Impact test	Passed		Clause D.5

Table 5 –Tensile Tests

Sample Reference & Sizes	Results	SS 141: 2013 Requirements Table 5
	155mm Ø	
Uniaxial tensile test (MPa) Average	48.0	≥ 45
Strain at break (%) Average	169	≥ 80

Table 6 – Opacity Tests

Sample Reference & Sizes	Results	SS 141: 2013 Requirements
	155mm Ø	
Opacity	Passed	Shall not transmit more than 0.2% of visible light failing on it


Ong Yeo Chuan
Testing Officer


Chua Peck Cheong
Senior Manager

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