

Test Report No. 7191259894-MEC21/01-LJY
Dated 10 JUN 2021



PSB Singapore

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SUBJECT:

Testing of uPVC pipes

TESTED FOR:

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

Attn : Herman Chan

TEST LOCATION:

TÜV SÜD PSB Pte Ltd
60 Tuas South Street 1
Singapore 639925

DATE OF TEST:



20 May 2021 & 10 June 2021

TEST METHOD / TEST SPECIFICATION:

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

- Clause 6.2: Dimensional measurements (Table 1)
- Clause 8.1: Impact test (Annex D)
- Clause 7.2: Heat reversion test (Table 5 – ISO 2505:2005)
- Clause 7.5: Opacity test (ISO 7686)
- Clause 7 : Tensile test (Table 5 – ISO 6259-1:2015 & ISO 6259-2:2020)



 	<p>LA-2007-0380-A LA-2007-0386-C LA-2007-0381-F LA-2010-0464-D LA-2007-0382-B LA-2018-0702-B LA-2007-0383-G LA-2018-0703-G LA-2007-0384-G LA-2020-0747-L LA-2007-0385-E</p>	<p>The results reported herein have been performed in accordance with the terms of accreditation under the Singapore Accreditation Council. Inspections/Calibrations/Tests marked "Not SAC-SINGLAS Accredited" in this Report are not included in the SAC-SINGLAS Accreditation Schedule for our inspection body/laboratory.</p>
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SAMPLE DESCRIPTION:

The following nominal size of uPVC pipe (Brand:SNOW) was submitted for testing on 18 May 2021.

Nominal Size	Tests Conducted	Printed markings on uPVC pipes submitted
155mm	<ol style="list-style-type: none"> 1. Dimensional measurements 2. Impact test 3. Heat reversion test 4. Opacity test 5. Tensile test 	

TEST RESULTS:

Table 1: Dimensional Measurements

Nominal diameter	155mm				SS 141:2013 Clause 6.2 Requirement	
					155mm	
Mean outside diameter (mm)	168.2				Min. 168.0, Max. 168.5	
Wall thickness (mm)	Readings	5.1	5.1	5.1	5.2	Min. 4.5, Max. 5.2
	Average	5.1				Max. 5.2

Table 2: Impact Test

Nominal Diameter	155mm	SS 141: 2013 Clause 8.1 & Annex D Requirement
Results	Comply (No failure was observed on the first 14 strikes)	If the first 14 strikes are made without failures, the pipes shall be deemed to have passed the test.

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TEST RESULTS (Cont'd):

Table 3: Heat Reversion Test

Nominal Diameter	155mm	SS 141:2013 Clause 7.2 Requirement
Percentage change in length (%)	3	Maximum 5%

Table 4: Opacity Test

Nominal Diameter	155mm	SS 141:2013 Clause 7.5 Requirement
Opacity (%)	0	Transmit not more than 0.2%

Table 4: Tensile Test

Nominal Diameter	155mm	SS 141:2013 Clause 7 Requirement
Tensile Strength (MPa)	59.7	≥ 45 MPa
Elongation (%)	194	≥ 80%

Lim Jia Yi
Associate Engineer

Cha Ming Yang
Assistant Vice President
Industrial Group
Mechanical Centre



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Effective 26 January 2021

