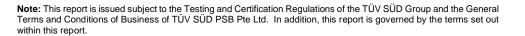
#### Test Report No. 7191259894-MEC21/01-LJY Dated 10 JUN 2021



#### 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.

LA-2007-0380-A

LA-2007-0381-F LA-2007-0382-B

LA-2007-0383-G

LA-2007-0384-G

LA-2007-0385-F

- 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)



Laboratory: TÜV SÜD PSB Pte. Ltd. 15 International Business Park TÜV SÜD @ IBP Singapore 609937



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LA-2007-0386-C

LA-2010-0464-D LA-2018-0702-B

LA-2018-0703-G

LA-2020-0747-L



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the Singapore Accreditation Council.

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



## **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> <li>Dimensional measurements</li> <li>Impact test</li> <li>Heat reversion test</li> <li>Opacity test</li> <li>Tensile test</li> </ol>	SNOLI 155mm UPUC PIPE SS141+2013 BS 3508 4

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



## 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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