

Test Report 3414925 (Issue 2).

Mould Master Limited

Introduction.

This report has been prepared by Lucie McGill and Alex Honeywell and relates to the activity detailed below:

Job/Registration Details	Client Details
Job number: 3414925 Job type: Testing Samples Submitted Start Date: 26/05/2021 Test type: Direct Sample ID: 10197097	Mould Master Limited Unit 18 Douglas Road Industrial Park Douglas Rd Bristol BS15 8PD United Kingdom

The report has been approved for issue by Floyd Merrison – Laboratory Manager

Issue 2. This issue supersedes all previous issues. The amendment giving rise to the issue of this report is as follows: material type corrected detailed on pages 2, 3 and 8.

Approved For Issue	
	Issue Date: 22 July 2021

Objectives.

Direct test

Product Scope.

25mm red PVC pipe
25mm white PVC pipe
25mm grey PVC pipe
27mm red PVC pipe

Report Summary.

The samples were received on 21 April 2021 and the testing was started on 13 May 2021.

The samples submitted complied with the requirements of the test work conducted.

Test Samples.

Sample Id	ER Number	Description
1	10197097	PVC Pipes

Description of Test Samples.

Sample Description
20 off 200mm lengths of 25mm red pipe
20 off 200mm lengths of 25mm white pipe
20 off 200mm lengths of 25mm grey pipe
20 off 200mm lengths of 27mm red pipe

Test Requirements.

BS EN 54-20:2006 Clause 5.7 (BS EN 61386-1:2008 Clauses 10.2, 10.3 and 12.2) + Results Table

Clause	Requirements
10	Mechanical properties
10.2	Compression PASS
10.3	Impact test PASS
12	Thermal properties
12.2	Resistance to heat PASS
Results table	Actual test results <i>See Table A - BS EN 54-20:2006 Clause 5.7 (BS EN 61386-1:2008 Clauses 10.2, 10.3 and 12.2)</i>

Glossary of Terms.

PASS: Complies. Tested by BSI engineers at BSI laboratories.

Conditions of Issue.

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BSI
Kitemark House
Maylands Avenue
Hemel Hempstead
Hertfordshire
HP2 4SQ

Table A - BS EN 54-20:2006 Clause 5.7 (BS EN 61386-1:2008
Clauses 10.2, 10.3 and 12.2)

Test Results.

CLAUSE

10. MECHANICAL PROPERTIES

10.2 Compression test

The plastics pipes were tested in accordance with the method described in this clause. When a force of 125N (Very light grade) was applied the samples did not exceed 25% of the initial outside diameter

Test Item	Sample	Change in diameter (%)
25mm Red	1	0.60
	2	1.50
	3	1.50
	Mean	1.20
25mm White	1	1.60
	2	1.90
	3	2.40
	Mean	1.97
25mm Grey	1	1.10
	2	1.10
	3	1.20
	Mean	1.13
27mm Red	1	1.50
	2	1.70
	3	1.60
	Mean	1.60

Test Results (Continued).

CLAUSE

10. MECHANICAL PROPERTIES (CONTINUED)

10.2 Compression test (Continued)

The plastics pipes were tested in accordance with the method described in this clause. When a force of 125N (Very light grade) was applied the sample did not exceed 25% of the initial outside diameter

The Force and the intermediate piece are then removed and, 60s after removal, the outside diameter of the samples, where they have flattened, should be measured again

The difference between the initial diameter and the diameter of the flattened samples did not exceed 10% of the outside diameter, measured before test.

Nominal Size	Sample	Change in diameter (%)
25mm Red	1	0.40
	2	0.10
	3	0.10
	Mean	0.20
25mm White	1	0.00
	2	0.40
	3	0.70
	Mean	0.37
25mm Grey	1	0.10
	2	0.00
	3	0.40
	Mean	0.17
27mm Red	1	0.10
	2	0.10
	3	0.10
	Mean	0.10

10.2.8 After the test the samples showed no cracks visible to normal or corrected vision

Test Results (Continued).

CLAUSE

10. MECHANICAL PROPERTIES (CONTINUED)

10.3 Impact test

The plastics pipes were tested at -15°C in accordance with Clause 5.7 of BS EN 54-20:2006. After the test, the samples shall show no cracks visible to normal or corrected vision without magnification. It should be possible to pass the appropriate gauges through the samples

Sample	Mass Used (kg)	Drop height (mm)	No. out of failures 12
25mm Red	0.5	100 (Very light grade)	0
25mm White	0.5	100 (Very light grade)	0
25mm Grey	0.5	100 (Very light grade)	0
27mm Red	0.5	100 (Very light grade)	0

Test Results (Continued).

CLAUSE

12. THERMAL PROPERTIES

12.2 Resistance to heat

The plastics pipes were tested in accordance with the method described in this clause and Clause 5.7 of BS EN 54-20:2006.

The PVC pipes retained the load of 0.5 kg for the duration of 24 hours at a temperature of 60 °C. The pipes were deemed to have passed the resistance to heat test if the crushing of the pipe did not reduce the diameter to 80% of its original diameter.

Sample	% of Original Diameter (%)
25mm Red	83.5
25mm White	96.6
25mm Red	98.0
27mm Red	84.1

*** End of Report ***