Test Report

Report No	2381/7453753 This Report consists of 3 pages
Client	Fire Suppression Ltd Unit 18 Douglas Road Industrial Park Douglas Road Kingswood Bristol BS15 8PD
Authority & date	BSI Quotation Acceptance Form Number BSI0000228087 Dated 14 October 2009
Items tested	Plastics Pipe
Specification	BS EN 54-20:2006 Clause 5.7 (BS EN 61386-1:2004 Clauses 10.2, 10.3 and 12.2) Independent Test
Results	See Summary of Results on page 2
Prepared by	L J Carrington Test Engineer
Authorized by	G R Essam Principal Engineer
Issue Date	18 November 2009
Conditions of issue	This Test Report is issued subject to the conditions stated in current issue of CP0322 'Conditions of Contract for Testing'. The results contained herein apply only to the particular sample/s tested and to the specific tests carried out, as detailed in this Test Report. The issuing of this Test Report does not indicate any measure of Approval, Certification, Supervision, Control or Surveillance by BSI of any product. No extract, abridgement or abstraction from a Test Report may be published or used to advertise a product without the written consent of the Managing Director, BSI Testing Services, who reserves the absolute right to agree or reject all or any of the details of any items or publicity for which consent may be sought.

TESTING, EXAMINATION AND ASSESSMENT OF PLASTICS CONDUITS SUBMITTED AS INDEPENDENT TEST SAMPLES

INTRODUCTION

At the request of Fire Suppression Ltd the plastics pipes, detailed below and received on 23 October 2009, were tested and assessed against the requirements of BS EN 54-20:2006 Clause 5.7 (BS EN 61386-1:2004 Clauses 10.2, 10.3 and 12.2) from 3 November 2009, as indicated on the following page of this Report. This request was made in a BSI Quotation Acceptance Form Number BSI0000228087 dated 14 October 2009.

It is emphasized that assessments were not made against the other clauses of the Specifications.

This Report only relates to the actual samples which have been tested and assessed. The results obtained do not necessarily relate to samples from the production line and in no way imply that the performance or quality of the continuing production will be maintained.

TEST ITEMS

6 off 1 metre lengths 25mm diameter red plastics pipes

SUMMARY OF RESULTS

The plastics pipes met the requirements of all clauses against which assessments were made.

EXAMINATION AND TEST

BS EN 54-20:2006 CLAUSE 5.7 (BS EN 61386-1:2004)

CLAUSE **ASSESSMENT**

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) the sample shall not exceed 25% of the initial outside diameter.

Nominal Size	Sample	Compression (%)	
25mm	1	5.2	Pass
	2	4.7	Pass
	3	4.9	Pass

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

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

Nominal Size	Sample	Change in diameter (%)	
25mm	1	2.8	Pass
	2	2.4	Pass
	3	3.9	Pass

10.3 Impact test

The plastics pipes were tested at -15℃ in accordance with the method described in this clause. 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.

Nominal Size	Mass Used (kg)	Drop height (mm)	No. failures out of 12	
25mm	0.5	100 (very light grade)	0	Pass

12. THERMAL PROPERTIES

12.2 Resistance to heat

The plastics pipes were tested in accordance with the method described in this clause.
The plastics pipes retained the load of 2.0 kg for the duration of 24 hours at a temperature of 60 ℃.
The pipe was deemed to have passed the resistance to heat test as the crushing of the pipe reduced the diameter to 98.3% of its original diameter. Pass