NUTEK SYSTEMS, LTD.
Unit B, 13/F., Universal Ind. Ctr.,
23-25 Shan Mei Street,
Fo Tan, Shatin, N.T., Hong Kong.
Tel: (852) 2605 5736 Fax: (852) 2692 0798

TEST REPORT

TITLE : Testing of fire hose

OUR REFERENCE : J11064-1

DESCRIPTION OF SAMPLE : Ø1½" Layflat canvas fire service delivery hose

SAMPLE SUBMITTED BY : Wah Hung Fire Prevention Equipment Co., Ltd.
Unit 14, 9/F., Tonic Industrial Centre, Block A,
No.26, Kai Cheung Road, Kowloon Bay,
Kowloon, Hong Kong.

ORIGIN : China

BODY MARKINGS : WAH HUNG FIRE HOSE 1½ X 60FT BS6391

METHOD OF TEST : BS6391: 1983

PERIOD OF TESTS : 14th to 23rd December 2005

RESULTS: - (apply only to the sample tested)

1. DIMENSIONS AND MASS (BS6391 Cl.5 and Cl.6)

		Sample	BS Requirement
Minimum bore	(mm)	38.25	≥ 38.1
Mass	(kg/m)	0.274	≤ 0.32

2. HYDRAULIC PRESSURE TEST (BS6391 Cl.7)

2.1. Dimensional stability (BS6391 Cl.7.1.1)

Test pressure	Test result			
	Change in length between two reference marks		Change in outside diameter	
	Sample	BS Requirement	Sample	BS Requirement
1) increased to 0.7bar	+1% of the length at unpressurized stage	length contraction not exceeding 1% of the length at unpressurized stage	/	no requirement
2) further increased to 12 bar	+3.9% of the length measured at 0.7 bar	≤ +5% of the length measured at 0.7 bar	+1.6% of the original outside diameter	≤ +10% of the original outside diameter
3) returned to 0.7bar	+0.8% of the length measured originally at 0.7bar	≤ 1% of the length measured originally at 0.7bar	/	no requirement

Remark : Pass

/.....P.2

NUTEK SYSTEMS, LTD.
Unit B, 13/F., Universal Ind. Ctr.,
23-25 Shan Mei Street,
Fo Tan, Shatin, N.T., Hong Kong.
Tel: (852) 2605 5736 Fax: (852) 2692 0798

TEST REPORT

2.2. Kink test (BS6391 Cl.7.1.2)

	Test pressure (bar)	Duration (minute)	Remark
Sample	22.5	1	Pass
BS Requirement	22.5	1	/

Note :the sample showed no sign of bursting, leakage or other kinds of damage during the test.

2.3. Burst pressure test (BS6391 Cl.7.1.3)

		Test pressure (bar)	Result	Remark
Sample	1st	35	The sample did not burst	Pass
	2nd	35	The sample did not burst	Pass
	3rd	35	The sample did not burst	Pass
	4th	35	The sample did not burst	Pass
	5th	35	The sample did not burst	Pass
BS Requirement		1) The average burst pressure value for five test pieces ≥ 35 bar. 2) Individual test piece shall not burst at a pressure less than 33 bar.		/

3. MOISTURE ABSORPTION (BS6391 Cl.7.3)

	Water immersion		Amount of moisture (Kg/m²)	Remark
	Temperature (°C)	Duration (h)		
Sample	18 – 20	6	0.155	Pass
BS Requirement	20 ±5	6	≤ 0.17 (for type 2 hose)	/

Note :the sample showed no sign of leakage or other kinds of failure.

4. FLEXIBILITY TEST (BS6391 Cl.7.4)

4.1. At a temperature above 5 °C, the sample was found capable of being laid in flakes and coiled into a smooth roll without any straight section.

4.2. After being conditioned at -20 °C ±1°C, the hose was found capable of being unrolled immediately. A section of the length of hose was then immediately folded through 180°, hydraulic test pressure was applied:

	Test pressure (bar)	Duration (minute)	Remark
Sample	22.5	1	Pass
BS Requirement	22.5	1	/

Note :the sample showed no sign of bursting, leakage or other kinds of damage during the test.

/.....P.3

NUTEK SYSTEMS, LTD.
Unit B, 13/F., Universal Ind. Ctr.,
23-25 Shan Mei Street,
Fo Tan, Shatin, N.T., Hong Kong.
Tel: (852) 2605 5736 Fax: (852) 2692 0798

TEST REPORT

OUR REFERENCE NO.J11064-1 (P.3)

5. PRODUCTION TEST (BS6391 Cl.8)

	Test pressure (bar)	Duration (minute)	Remark
Sample	22.5	1	Pass
BS Requirement	22.5	1	/

Note :the sample showed no sign of bursting, leakage or other kinds of damage during the test.

6. SUMMARY OF RESULTS (apply only to the sample tested)

Dimensions and mass	- Satisfactory	
Hydraulic pressure tests	- dimensional stability	- Satisfactory
	- kink test	- Satisfactory
	- burst pressure test	- Satisfactory
Moisture absorption	- Satisfactory	
Flexibility test	- Satisfactory	
Production test	- Satisfactory	

Date : 24th December 2005 Authorized signature : _____

Nutek Systems is a testing agency, approved by the Water Authority and Government Supplies Department, for testing water supply fittings.

Samson W.K. Yiu

(Director)