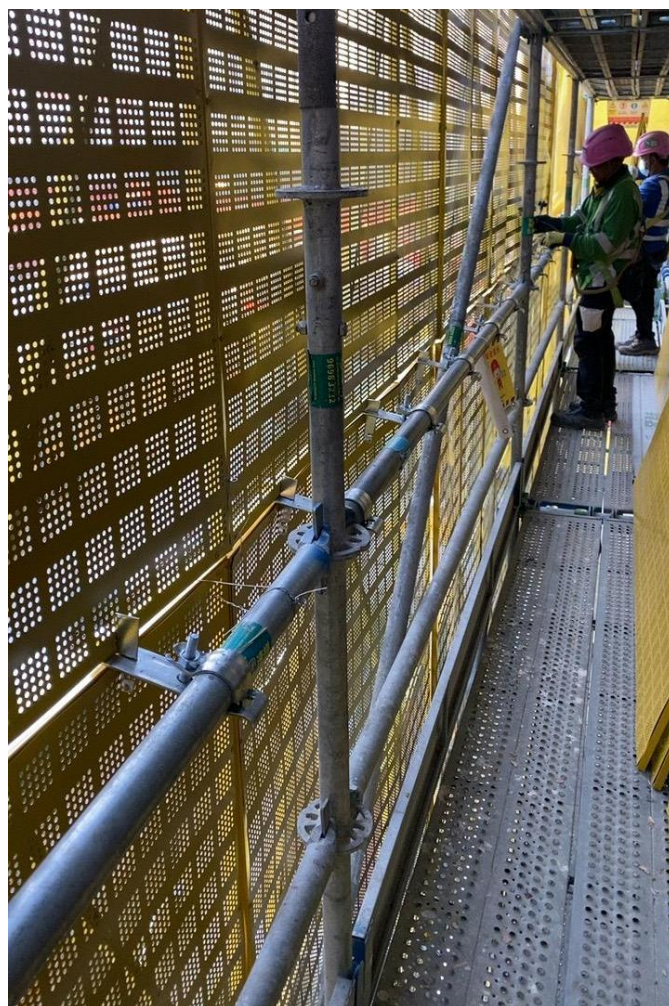




永達棚架工程有限公司
WINXTER SCAFFOLDING WORKS COMPANY LIMITED

新型金屬棚架外層保護鐵網





永達棚架工程有限公司
WINXTER SCAFFOLDING WORKS COMPANY LIMITED

前言:

鑑於早前本港大型維修工程 (大埔-宏福苑) 發生嚴重五級火災，火災位置涉及大範圍棚架棚網，懷疑因阻燃棚網未達到安全阻燃要求，導致災情迅速蔓延至無法收拾。

社會對上述工業安全問題相當關注，有關政府部門如屋宇署及地盤主判人亦非常重視，近期亦針對棚網制定監管措施，但仍存在操作繁複及對質量保證等問題

為長遠保障工程安全及有效率地進行，我們以解決安全風險，配合能實際施工使用為目的，以現有金屬棚架結構為基礎，設計出金屬棚架 - 新型外層保護鐵網



永達棚架工程有限公司
WINXTER SCAFFOLDING WORKS COMPANY LIMITED

外層保護鐵網-安裝流程



Step 1: 將鐵網及專用扣運輸到施工現場



Step 2: 物料傳送到施工範圍, 需於上下
兩層工作台安排準備



永達棚架工程有限公司
WINXTER SCAFFOLDING WORKS COMPANY LIMITED

金屬棚架 - 新型外層保護鐵網配件



鐵網 2000mm x 500mm x 50mm (可定制)



橫杆專用扣



柱環專用扣



永達棚架工程有限公司
WINXTER SCAFFOLDING WORKS COMPANY LIMITED

外層保護鐵網安裝流程



Step 3: 工友先在於上下兩層工作台的橫杆上，安裝鐵網用的橫杆專用扣



Step 4: 將鐵網掛出棚外

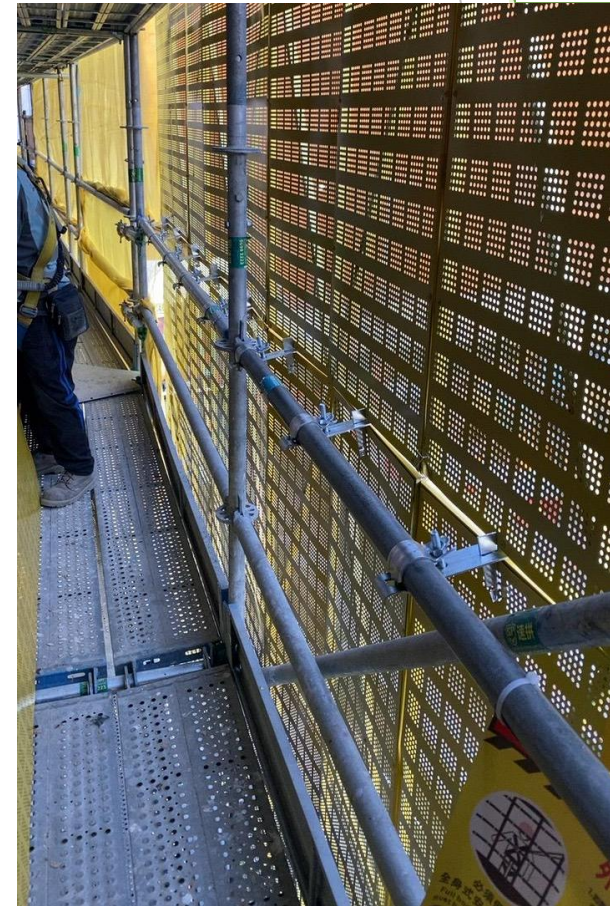
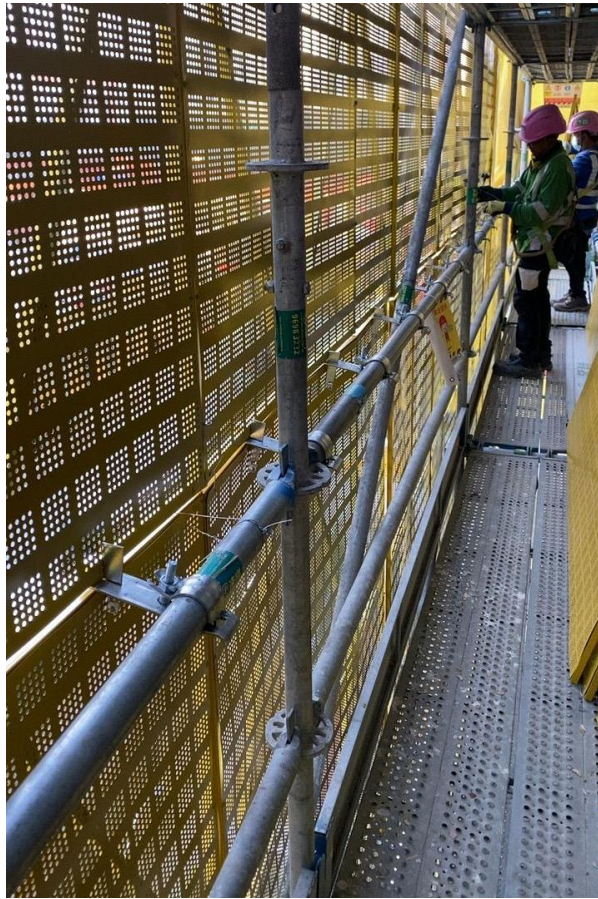
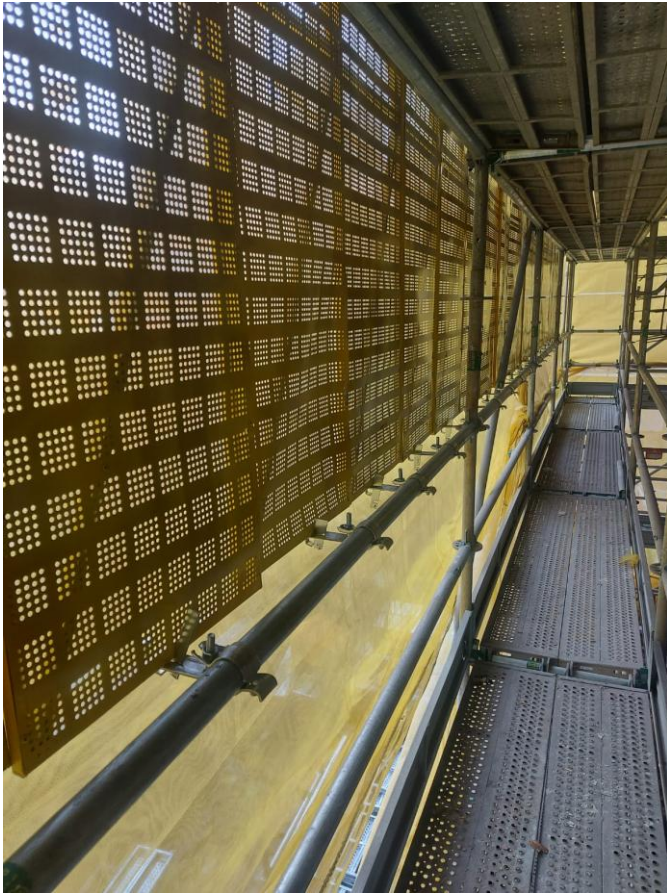


Step 5: 將鐵網掛到專用扣上，利用轉用扣上的卡扣及掛勾，於上下層工作台上同時固定，完成安裝



永達棚架工程有限公司
WINXTER SCAFFOLDING WORKS COMPANY LIMITED

外層保護鐵網安裝流程

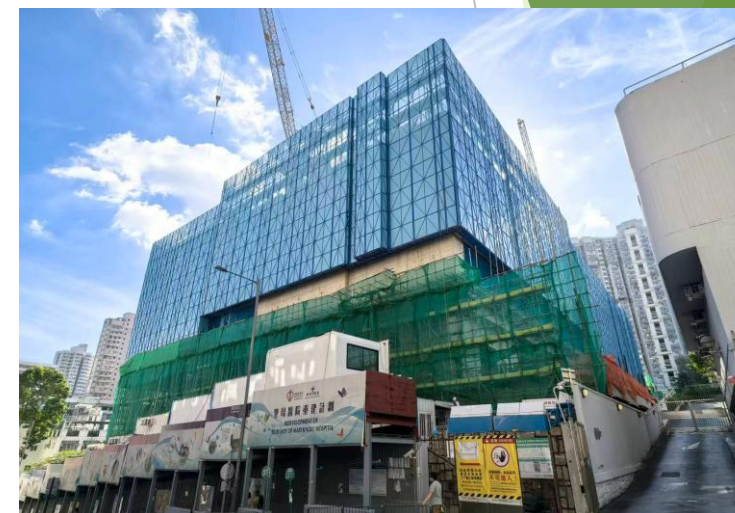
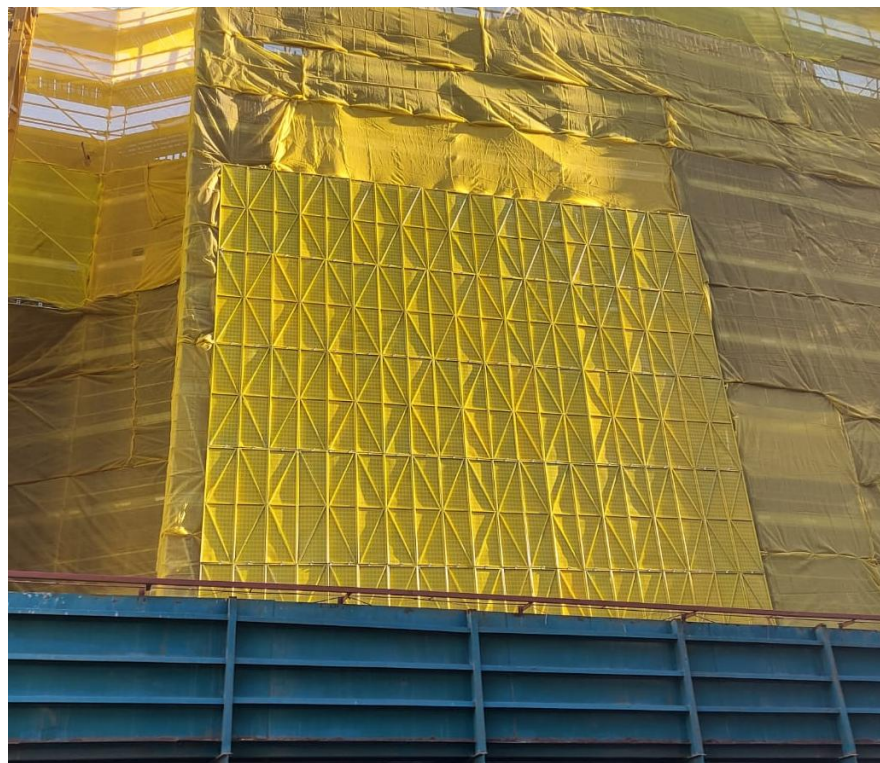


完成效果

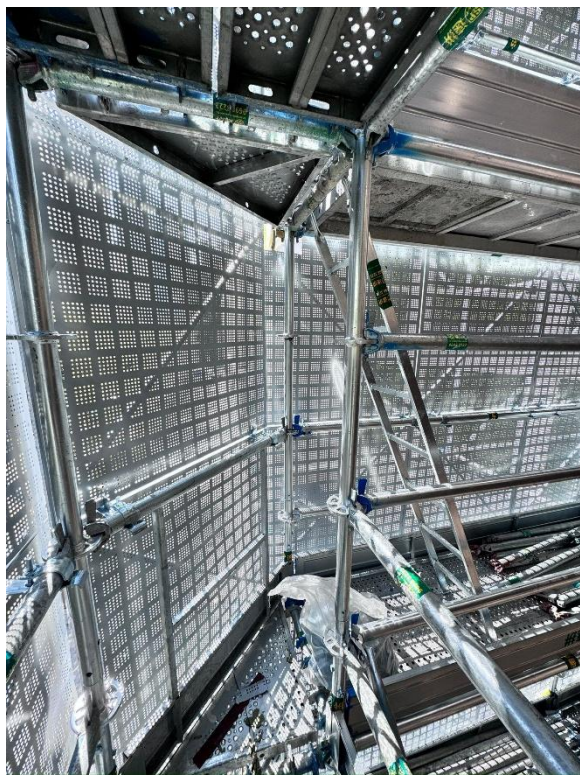


永達棚架工程有限公司
WINXTER SCAFFOLDING WORKS COMPANY LIMITED

外層保護鐵網-使用案例



外層保護鐵網-使用案例



永達棚架工程有限公司
WINXTER SCAFFOLDING WORKS COMPANY LIMITED



永達棚架工程有限公司
WINXTER SCAFFOLDING WORKS COMPANY LIMITED

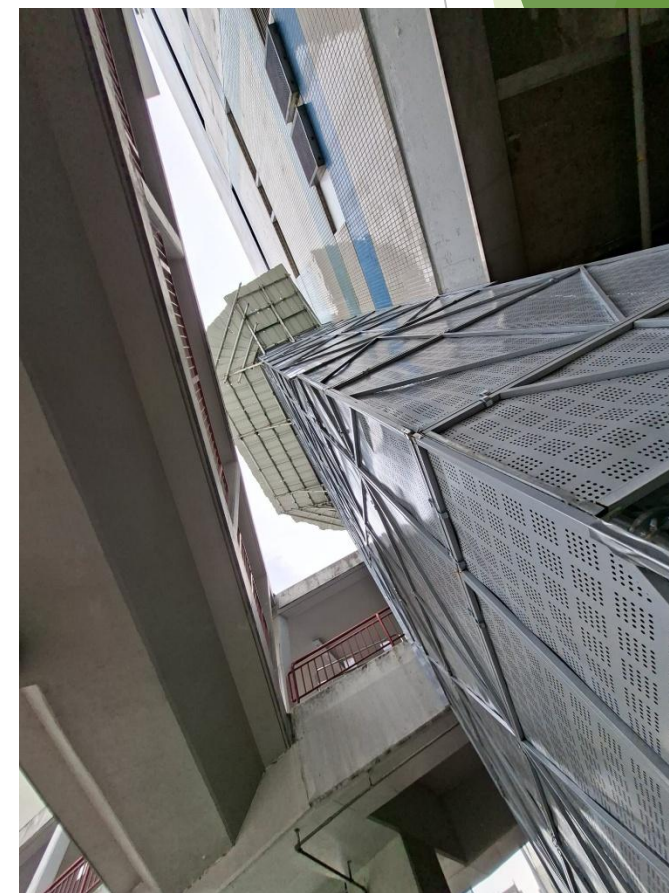
外層保護鐵網-使用案例





永達棚架工程有限公司
WINXTER SCAFFOLDING WORKS COMPANY LIMITED

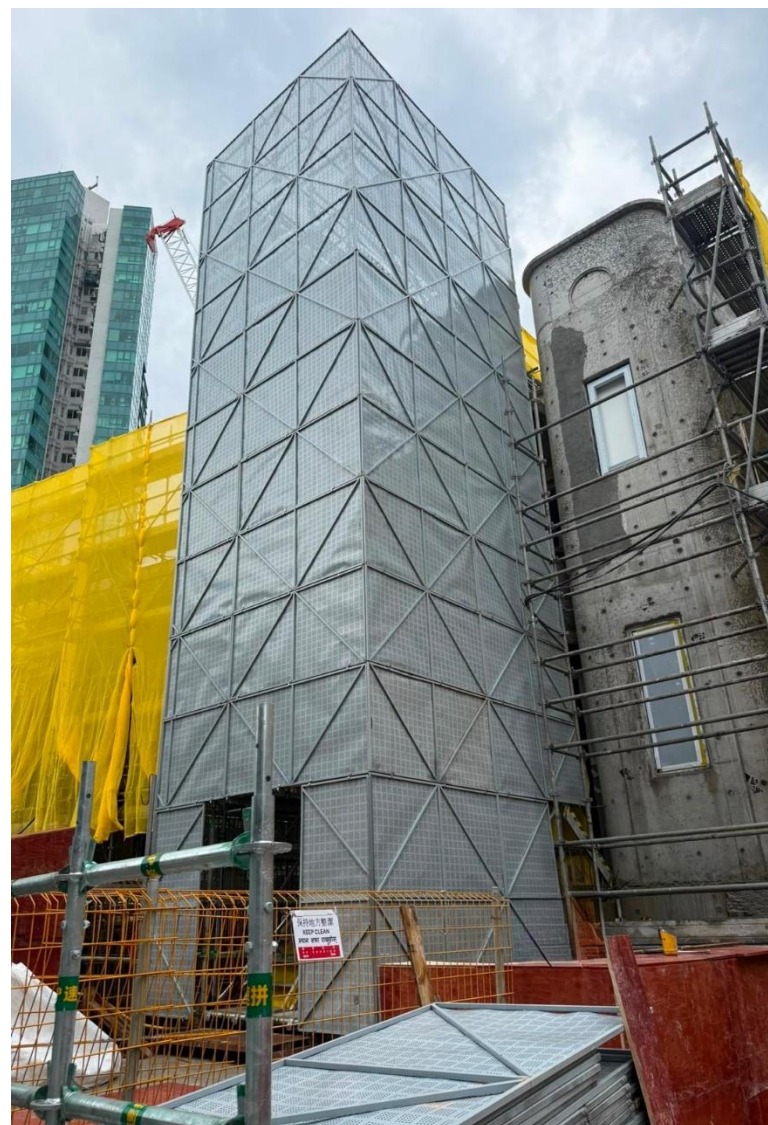
外層保護鐵網-使用案例





永達棚架工程有限公司
WINXTER SCAFFOLDING WORKS COMPANY LIMITED

外層保護鐵網-使用案例



外層保護鐵網-阻燃報告



FUGRO TECHNICAL SERVICES (GUANGZHOU) LIMITED
No.6, Nongye Gongsi Road
Caotang, Hualong, Panyu
Guangzhou
China

Page 1 of 7

REPORT ON TEST TO DETERMINE THE CLASSIFICATION OF THE SURFACE SPREAD OF FLAME OF PRODUCTS

Client : Winxter Scaffolding Works Company Limited
Project : --
Test Standard : BS 476-7:1997+ Corr.1:2014
Sample Description : Metal Scaffolding Mesh-0.7 mm steel
Report No. : G25616FU267278
G25616FU267278
Date of Report Issue : 10 March 2026

This Laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017). The decision rule for statement(s) of conformity is based on Binary Statement for Simple Acceptance Rule specified in Decision Rules Clause 4.2.1 in ILAC-G8:09/2019.

The copyright of this report is owned by Fugro Technical Services (Guangzhou) Limited. This report shall not be reproduced except in full.
T +86 20 3482 8832 | F +86 20 3482 8831 | E ftszg@fugro.com | W fugro.com
FU-R-57(28/02/2020)

GZ114/1004



FUGRO TECHNICAL SERVICES (GUANGZHOU) LIMITED
No.6, Nongye Gongsi Road
Caotang, Hualong, Panyu
Guangzhou
China

Client Ref. : --
Report No. : G25616FU267278

Page 2 of 7

REPORT ON TEST TO DETERMINE THE CLASSIFICATION OF THE SURFACE SPREAD OF FLAME OF PRODUCTS

1.0 Introduction

Fugro Technical Services (Guangzhou) Limited was commissioned by Winxter Scaffolding Works Company Limited to conduct a test to determine the classification of the surface spread of flame of Metal Scaffolding Mesh-0.7 mm steel in accordance with BS 476-7: 1997 Incorporating Corrigendum No.1: 2014, "Fire tests on building materials and structures Part 7. Method of test to determine the classification of the surface spread of flame of products".

The test specimens were received by Fugro Technical Services (Guangzhou) Limited on 28 February 2026 and given Lab. Sample I.D.: FU267278.

The test was conducted on 6 March 2026 to 9 March 2026.

2.0 Classification

In accordance with the class definitions given in BS 476-7: 1997 Incorporating Corrigendum No.1: 2014, the specimens tested are classified as **Class 1**.

The test results relate only to the behaviour of the test specimens of the product under the particular conditions of test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.

The test results relate only to the specimens of the product in the form in which they were tested. Small differences in the composition or thickness of the product may significantly affect the performance during the test and may therefore invalidate the test results. Care should be taken to ensure that any product which is supplied or used is fully represented by the specimens which were tested.

Check by:
Wu Liao Yuan
(Supervisor)

Approved Signatory:
Yan Cai Sheng
(Deputy General Manager)

Date of Report Issue : 10 March 2026

The copyright of this report is owned by Fugro Technical Services (Guangzhou) Limited. This report shall not be reproduced except in full.
T +86 20 3482 8832 | F +86 20 3482 8831 | E ftszg@fugro.com | W fugro.com
FU-R-57(28/02/2020)

GZ114/1004



永達棚架工程有限公司
WINXTER SCAFFOLDING WORKS COMPANY LIMITED

外層保護鐵網-阻燃報告



FUGRO TECHNICAL SERVICES (GUANGZHOU) LIMITED
No.6, Nongye Gongsi Road
Caotang, Hualong, Panyu
Guangzhou
China

Client Ref. : --
Report No. : G25616FU267278

Page 3 of 7

3.0 Description of Test Specimens

Unless stated otherwise, all values are nominal, and all information in this Description of Test Specimens is supplied by the client.

Name and address of sponsor		Winxter Scaffolding Works Company Limited Unit 8, 23/F Metropole Square, 2 On Yiu Street, Sha Tin, Hong Kong
Name and address of supplier		KaiPing City Hong Qiang Machinery & Equipment Co., Ltd
General description of overall product		Metal Scaffolding Mesh-0.7 mm steel
Product reference of overall product		--
Generic type of product		Metal Scaffolding Mesh
Nominal thickness		0.7 mm
Nominal density		--
Nominal mass per unit area		--
Colour reference of overall product		Grey, Blue, Yellow, Green
Flame retardant details of overall product		--
Materials & composition for composite product		Steel Mesh + Surface Paint Coating
Surface Paint Coating	Product reference	--
	Generic type	Spray paint
	Manufacturer	KaiPing City Hong Qiang Machinery & Equipment Co., Ltd
	Thickness	Approx 0.02 mm
	Density/Mass per unit area	--
	Colour reference	Grey, Blue, Yellow, Green
	Flame retardant details	--
	Other information	Coating on metal mesh surface
Steel Mesh	Product reference	0.7 mm scaffolding mesh
	Generic type	Metal scaffolding mesh
	Manufacturer	KaiPing City Hong Qiang Machinery & Equipment Co., Ltd
	Thickness	0.7 mm
	Density/Mass per unit area	--
	Colour reference	Natural steel
	Flame retardant details	--
	Other information	Scaffolding mesh

The copyright of this report is owned by Fugro Technical Services (Guangzhou) Limited. This report shall not be reproduced except in full.
T +86 20 3482 8832 | F +86 20 3482 8831 | E ftszg@fugro.com | W fugro.com
FU-R-57(28/02/2020)

GZ114/1024



FUGRO TECHNICAL SERVICES (GUANGZHOU) LIMITED
No.6, Nongye Gongsi Road
Caotang, Hualong, Panyu
Guangzhou
China

Client Ref. : --
Report No. : G25616FU267278

Page 4 of 7

4.0 Test Details

Prior to the tests, all of the specimens were conditioned to constant mass at a temperature of 23±2°C and a relative humidity of 50±5%, and maintained in this condition until required for testing.

The form of the tested specimen was composite, as a combination of materials which are generally recognized in building constructions as discrete entities, e.g. coated or laminated materials. 12 mm thick calcium silicate board was used as the backing board during the test.

The exposed surface was the blue coated surface and shown in the photo in Appendix.

5.0 Calibration and Test Procedures

The apparatus was calibrated in accordance with the requirement of clause 8 of the standard. The irradiance of the radiometer is as given in Table 1.

Table 1 - Irradiance along horizontal reference line on the calibration board

Distance along reference line from inside edge of specimen holder (mm)	Irradiance (kW/m ²)		
	specified	min.	max.
75	32.5	32.0	33.0
225	21.0	20.5	21.5
375	14.5	14.0	15.0
525	10.0	9.5	10.5
675	7.0	6.5	7.5
825	5.0	4.5	5.5

The test was conducted in accordance with the procedure specified in clause 9.1 of the standard.

Throughout the test, observations were made following clause 9.2 of the standard.

The behaviour of the product which results in the exposed surface not being available for the measurements of the spread of flame shall render the test on that specimen invalid, as explained in the clause 9.2.3 of the standard.

If one or more invalid test results are obtained, no more than nine specimens shall be tested in order to obtain the required six valid test results.

The copyright of this report is owned by Fugro Technical Services (Guangzhou) Limited. This report shall not be reproduced except in full.
T +86 20 3482 8832 | F +86 20 3482 8831 | E ftszg@fugro.com | W fugro.com
FU-R-57(28/02/2020)

GZ114/1024



永達棚架工程有限公司
WINXTER SCAFFOLDING WORKS COMPANY LIMITED

外層保護鐵網-阻燃報告



FUGRO TECHNICAL SERVICES (GUANGZHOU) LIMITED
No.6, Nongye Gongsi Road
Caotang, Hualong, Panyu
Guangzhou
China

Client Ref. : --
Report No. : G25616FU267278

Page 5 of 7

6.0 Test Results

Sample I.D.	FU267278/01	FU267278/02	FU267278/03	FU267278/04	FU267278/05	FU267278/06
Distance (mm)	Time of spread of flame to indicated distance (mm:ss)					
75	--	--	--	--	--	--
165	--	--	--	--	--	--
190	--	--	--	--	--	--
215	--	--	--	--	--	--
240	--	--	--	--	--	--
265	--	--	--	--	--	--
290	--	--	--	--	--	--
375	--	--	--	--	--	--
455	--	--	--	--	--	--
500	--	--	--	--	--	--
525	--	--	--	--	--	--
600	--	--	--	--	--	--
675	--	--	--	--	--	--
710	--	--	--	--	--	--
750	--	--	--	--	--	--
785	--	--	--	--	--	--
825	--	--	--	--	--	--
Maximum distance travelled at 1.5 min (mm)	--	--	--	--	--	--
Maximum distance travelled during the whole test (mm)	--	--	--	--	--	--
Time to reach maximum distance travelled (mm:ss)	--	--	--	--	--	--

Observations made during the test and comments on any difficulties encountered during the test	Blackening of the specimen surface was observed.
--	--

Note: 1. "--" indicates that the flame did not reach the reference line.
2. Six specimens were tested and six valid test results were obtained.



FUGRO TECHNICAL SERVICES (GUANGZHOU) LIMITED
No.6, Nongye Gongsi Road
Caotang, Hualong, Panyu
Guangzhou
China

Client Ref. : --
Report No. : G25616FU267278

Page 6 of 7

7.0 Classification Criteria

The results recorded in the test shall be used to obtain a classification for the product according to the criteria specified in table 2. At least five of the six test specimens for which valid test results have been obtained shall have a spread of flame which does not exceed the 1.5 min limit and the final limit specified for the designated class.

The remaining specimen shall not exceed this limit by more than the tolerances given in table 2.

Table 2 - Classification of spread of flame

Classification	Spread of flame at 1.5 min		Final spread of flame	
	Limit (mm)	Limit for one specimen in sample (mm)	Limit (mm)	Limit for one specimen in sample (mm)
Class 1	165	165 ± 25	165	165 ± 25
Class 2	215	215 ± 25	455	455 ± 25
Class 3	265	265 ± 25	710	710 ± 25
Class 4	Exceeding the limits for class 3			

Explanation of prefix and suffixes which may be added to the classification:

1. A suffix "R" is added to the classification if more than six specimens are required in order to obtain six valid test results (e.g. class 2R).
2. A prefix "D" is added to the classification of any product which does not comply with the surface characteristics specified in the standard and has therefore been tested in a modified form (e.g. class D3).
3. A suffix "Y" is added to the classification if any softening and/or other behaviour that may affect the flame spread occurs (e.g. class 3Y).

For example, a material could have a classification of D3RY indicating:

- a) a modified surface has been used;
- b) a class 3 result has been obtained;
- c) additional specimens have been used to obtain six valid results; and
- d) softening and/or other behaviour has occurred which is considered to have affected the test result.



永達棚架工程有限公司
WINXTER SCAFFOLDING WORKS COMPANY LIMITED

外層保護鐵網-阻燃報告



FUGRO TECHNICAL SERVICES (GUANGZHOU) LIMITED
No.6, Nongye Gongsi Road
Caotang, Hualong, Panyu
Guangzhou
China

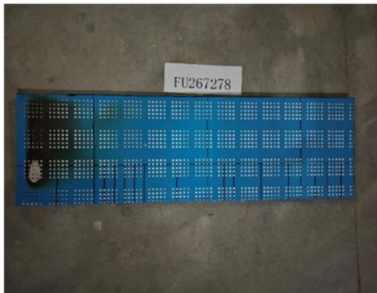
Client Ref. : --
Report No. : G25616FU267278

Page 7 of 7

Appendix Photograph of Test Specimens



before test - Sample I.D.: FU267278



after test - Sample I.D.: FU267278

** End of Report **



永達棚架工程有限公司
WINXTER SCAFFOLDING WORKS COMPANY LIMITED