United Arab Emirates
Ministry of interior
Civil Defense G.H.Q
Fire intentional Lab & House
Of Expertise & Training Center
Approval Committee



دولة الامارات العربية المتحدة وزارة الداخلية القيادة العامة للدفاع المدني لجنة اعتماد المختبرات العالمية وبيوت الخبرة ومعاهد التدريب

Date - May 24, 2024

# **CERTIFICATE OF COMPLIANCE – WHI24-39132908-UAE**

This certificate of compliance validates the following				
TEST REPORT NUMBER 'Assessment Reports' are not acceptable	XK120-1B&2B	CERTIFICATE NUMBER	WHI24-39132908	
DATE OF ISSUE	January 29, 2024	DATE OF ISSUE	February 29, 2024	
DATE OF EXPIRY	Not applicable	DATE OF EXPIRY	December 31, 2024	
	Manu	ıfacturer details		
NAME OF FACTORY/ MANUFACTURER	Al Talah Board Manufacturing Company Ltd	NAME OF THE BRAND	Al Talah Board Manufacturing Company Ltd	
FACTORY ADDRESS / REGION (STREET / TOWN / CITY / COUNTRY)	P.O. Box 41543, Plot No. KHIA4-05, Abu Dhabi Free Zone (KIZAD)	MODEL / NO	Al Talah - Desert Board - 54mm Thick Palm Strand Board Fire Door Core - 60- Minute - UL 10C/UL 10B/NFPA	
WEBSITE	desertboard.ae	LOGO ON THE PRODUCT	N/A	
TEL	+971 2 2467042	EMAIL	Mariappan Subramanian mariappan.subramanian@desertboard.ae	



Product Details From Test Report				
Product Covered  Al Talah - Desert Board - 54mm Thick Palm Strand Board Fire Door Core - 60-Minute - UL 10C/UL 10B/NFPA 252  Product Description Fire door core type 1 (Desert board PSB door with PSB frame): Door core is bonded with four layers of 9mm thick calcium silicate board (density - 900 kg/m³) with 9mm thick Palm Strand Board (density - 880 kg/m³) facing, Overall leaf thickness: 54mm.  Tested Door Size: 1000 x 2300 x 54mm (w x h x thk.)  Fire door core type 2 (Desert board PSB door with PSB frame): Door core is bonded with 18mm thick palm strand board core (density - 880 kg/m³), 18mm thick calcium silicate board (density - 900 kg/m³) perimeter and mid-stiles & rails and 9mm thick palm strand board core (density - 880 kg/m³) facing, Overall leaf thickness: 54mm.  Tested Door Size: 1000 x 2300 x 54mm (w x h x thk.)  Full details are available in the test report XK120-1B&2B and Intertek Spec ID: 77218.		Page 4-5		
TEST STANDARD (SUCH AS ASTM/BS EN/ DN ETC)	UL 10C: Edition 3 June 9, 2016; Positive Pressure Fire Tests of Door Assemblies	Page 4		
Test Report XK120-1B&2B: The specimen consisted of two sample types:  Type 1: Latched, single acting, single leaf wooden doorset with 9mm Fire Pro board on the exposed face of the frame. The overall dimensions of the doorset were 1084 x 2350 x 150mm (w x h x jamb depth).  Type 2: Latched, single acting, single leaf wooden doorset incorporating stiles and rails within the door leaf. The overall dimensions of the doorset were 1084 x 2350 x 150mm (w x h x jamb depth).  Supporting Construction: The specimens were installed within a rigid supporting construction made of solid blocks with a nominal density of 2350kg/m3 and a structural opening of size 1104 x 2360 x 150mm, (w x h x thk.) for each specimen. A 150 x 200mm (thk x depth) reinforced concrete lintel was used along the head of the structural opening. The space between the lintel and test frame head was filled with aerated concrete blocks of density 550kg/m3.		Page 4-7		



The supporting construction was in turn installed within a rigid test frame made of steel and dense refractory castable with a density of 2000kg/m3 and opening size of 3050 x 3050 x 300mm (w x h x thk).

### **Conditions and Test Situation:**

In accordance with section 9.1 of UL 10C:2016, the doors were installed with the leaves opening into the furnace.

Both doors were latched but not locked with a single point latch. The latch of type 1 had a total throw of 19.4mm and engaged at 16.4mm into the catch. The latch of type 2 had a total throw of 19.4mm and engaged at 15.8mm into the catch. Door handles were installed on both the exposed and unexposed faces of both the doorsets and a double lock cylinder was installed on the unexposed face of both doorsets. A nominal 10mm gap was maintained between the fixed edges of the framing system and the supporting construction and filled with expanding foam and topped off with sealant.

The moisture content, prior to the test, of the type 1 & 2 were measured and the values are as tabulated below:

Location	Moisture Measurements (in %)				
	Leaf	Frame	Lipping	Door Stop	Architrave
Type 1	13.7	11.9	7.3	10.9	12.2
Type 2	12.4	12.2	6.7	10.5	10.4

A surface mounted door closer was installed on the door leaves of both the doorset on the exposed face as decided by the sponsor of the test. The average value of retention force measure on the door leaf of the type 1 was 92.9N, and on the door leaf of type 2 was 83N. Gaps between the fixed and moveable components of the specimen have been measured in accordance with section 9.3 of UL 10C:2016 as also mentioned in section 7.2 of this report, and certain measurements were found to fall outside of the tolerances specified within the standard.

#### **Specimen Installation & Conditioning:**

Installation of the specimen: Abanos Furniture & Decoration Industry L.L.C.

The specimen was delivered on 13-Dec-23 and installed between 13-Dec-23 and 14-Dec-23. The specimen stored in ambient conditions after installation at temperatures ranging between 18°C and 29°C and 25% to 65% humidity.

### Measurements:

The time-temperature curve has been controlled using nine thermocouples distributed in the furnace. The furnace thermocouples were placed at 6in. (152mm) from the exposed face of the specimen and this distance has been maintained throughout the entire test duration. Unexposed surface thermocouple measurements have been recorded in accordance with section 6 of UL 10C:2016. The neutral





		pressure plane in the furnace has been established at 40 inches (1016mm) from the sill with an additional reference probe placed at the head top of the doorset, in accordance with sections 7 and 11.2 of UL 10C:2016. Deflections have been measured before and during the test, as well as gaps between the fixed and moveable components before the test and warpage after the test.  Hose Stream Test: Following the fire endurance test within 3 minutes, in accordance with section 12 of the UL 10C:2016 standard, the specimen was subjected to	
		the impact, erosion, and cooling effects of a hose stream directed first to the bottom center of the exposed face of the specimen and then to all parts of the exposed face of the specimen.  As per section 12 of the UL 10C standard, the hose stream was delivered through a 2.5in (63.5mm) hose discharging through a play pipe as described in the Standard for Play Pipes for Water Supply Testing in Fire Protection Service, UL 385. The minimum water pressure at the base of the play pipe was 30 psi and the duration of application was 1 minute 3 seconds as prescribed in table 12.1 of UL 10C:2016. The	
		total hose stream application area was measured as 6.3m <sup>2</sup> .  Full details are available in the test report XK120-1B&2B and Intertek Spec ID: 77218.	
	SPECIFICATION OF TEST SPECIMEN	Palm Strand Board (PSB) Frame Material: Palm Strand Board (PSB) Manufacturer: Al Talah Board Manufacturing Co. LTD Density: 880kg/m³ Frame dimension: 54 x 150mm (thk. x depth) - (two layers of 27mm thick) Face: 54mm  39mm Rebate: 58mm Soffit: 92mm Core - Calcium Silicate Board Material: Palm Strand Board (PSB) Manufacturer: Soben International (Asia Pacific) Ltd Density: 900kg/m³ Thickness: 9mm Fixing method: The vertical and horizontal frame jambs of both the doorsets were joined together by applying the adhesive at the interface of each jamb and were screwed using 3 Nos. of screws of size M4.8 x 50mm at each interface. A 9mm Fire Pro board was fixed on the exposed face of the door frame of the doorset A using the same adhesive.	Page 10-13
		Intumescent Seal (Frame) Material: Intumescent seal Manufacturer: LORIENT Ref: LP2004 Dimension: 20 x 4mm (w x thk.) Quantity: 2 nos	

United Arab Emirates
Ministry of interior
Civil Defense G.H.Q
Fire intentional Lab & House
Of Expertise & Training Center
Approval Committee



دولة الامارات العربية المتحدة وزارة الداخلية القيادة العامة للدفاع المدني لجنة اعتماد المختبرات العالمية وبيوت الخبرة ومعاهد التدريب

### Gasket

Material: Elastomer Silicone Synthetic Rubber

Manufacturer: Emirates Technotrade

Ref: ETT 4718

### **Architrave**

Material: Palm Strand Board (PSB)

Manufacturer: Al Talah Board Manufacturing Co. LTD

Dimension: 18 x 60mm Density: 880kg/m³ (stated)

#### Door Leaf:

## Core - Palm Strand Board (PSB)

Material: Palm Strand Board (PSB)

Manufacturer: Al Talah Board Manufacturing Co. LTD

Density: 880kg/m³ Thickness: 9mm

### Core - Calcium Silicate Board

Material: Palm Strand Board (PSB)

Manufacturer: Soben International (Asia Pacific) Ltd

Density: 900kg/m³ Thickness: 9mm

Fixing Method: The core of doorset was formed by bonding 4 Nos. of 9mm FR Soban Board which was bonded to the facings and lippings using adhesive 2 and pressure pressed against each other using a hydraulic pressing machine and was done in the factory prior to

delivery to the laboratory.

### Adhesive:

Kleiberit 501 adhesive used to joint the PSB board layers.

3 bottes (0.5kg each) used between each layer 100 bar pressure for Half hour in Cold press Same glue used for lipping

Lipping

Material: Mahogany Wood Density: 640kg/m³ (stated)

Thickness: 5mm

#### Intumescent Seal (Frame)

Material: Intumescent seal Manufacturer: LORIENT

Ref: LP2004

Dimension: 20 x 4mm (w x thk.)

Quantity: 1 nos

### Intumescent Seal (Leaf - bottom edges)

Material: Intumescent seal Manufacturer LORIENT Dimension: 50 x 2mm (w x thk.)





Quantity: 1 no

Doorset type 2 (Desert board PSB door with PSB Frame):

Metal Frame:

Material: Palm Strand Board (PSB)

Manufacturer: Al Talah Board Manufacturing Co. LTD

Density: 880kg/m3

Frame dimension: 54 x 150mm (thk. x depth) - (two layers of 27mm

thick)

Face: 54mm |39mm Rebate: 58mm Soffit: 92mm

Intumescent Seal (Frame)

Material: Intumescent seal Manufacturer: LORIENT

Ref: LP2004

Dimension: 20 x 4mm (w x thk.)

Quantity: 2 nos

Gasket

Material: Elastomer Silicone Synthetic Rubber

Manufacturer: Emirates Technotrade

Ref: ETT 4718

**Architrave** 

Material: Palm Strand Board (PSB)

Manufacturer: Al Talah Board Manufacturing Co. LTD

Dimension: 18 x 60mm Density: 880kg/m³ (stated)

Door Leaf:

Core

Material: Palm Strand Board (PSB)

Manufacturer: Al Talah Board Manufacturing Co. LTD

Density: 880kg/m³ Thickness: 18mm Calcium silicate board:

Material: Calcium silicate board

Manufacturer: Soben International (Asia Pacific) Ltd

Reference: Soben board Density: 900kg/m³ Thickness: 9mm

Stile and Rail

Material: Calcium silicate board

Manufacturer: Soben International (Asia Pacific) Ltd

Reference: Soben board Density: 900kg/m<sup>3</sup>

Dimension: 100 x 18mm (w x thk.)



United Arab Emirates
Ministry of interior
Civil Defense G.H.Q
Fire intentional Lab & House
Of Expertise & Training Center
Approval Committee



دولة الامارات العربية المتحدة وزارة الداخلية القيادة العامة للدفاع المدني لجنة اعتماد المختبرات العالمية وبيوت الخبرة ومعاهد التدريب

Fixing Method: The core of doorset was bonded to the stiles, rails, facings and lippings using the same adhesive and pressure pressed against each other using a hydraulic pressing machine. #6 x 1" drywall screws are used to additionally fix the internal Soben board layers of the doors at a nominal spacing of 60mm from ends, 200mm C/C vertically and horizontally (5 vertical rows of screw per leaf on each side). The door leaves were fabricated in the factory prior to delivery to the laboratory.

### Intumescent Seal (Leaf - Top and vertical edges)

Material: Intumescent seal Manufacturer LORIENT

Dimension 20 x 4mm (w x thk.)

Quantity: 2 nos

Fixing Method: The intumescent seals were inserted into the slots on the door frame rebate along the top horizontal and both vertical jambs of both the doorsets. The intumescent seal was inserted into the slot at the top and both vertical edges of thedoor leaves.

### Ironmongery

#### Mortise lockset

Manufacturer: Hafele (Ref: LMDS0) | FALCON (Ref: M Series Mortise

Lock with Handle) Latch Throw: 19mm

### Handle:

Manufacturer: Hafele Reference: 903.92.070

### Lock cylinder:

Manufacturer: Hafele (Ref: LX220) | FALCON (ref: M.CONV CYLINDERÑ)

38.2K.1R

### Strike Plate:

Manufacturer: Hafele Reference: LMD50

# Door closer:

Manufacturer: Hafele (Ref: 931.67.039)) | Falcon (SC81A)

# Hinges:

Manufacturer: Hafele (Ref: 926.43.07X/41) | IVES (Ref: 5BB1)

### **Intumescent Fire Protection Kits:**

Manufacturer: Hafele

For door hinges - Ref: 950.11.107 For mortice lock - Ref: 950.11.011

Or

Manufacturer: Lorient





	For door hinges - Ref: LP12000 (2mm thick) For mortice lock - Ref: LP12000	
	The product noted above has been evaluated in accordance with UL10c: Edition 3 June 2016; Positive Pressure Fire Tests of Door Assemblies, and achieved the following ratings;	Page 9
TEST RESULT (SUCH AS PASSED CRITERIA/ COMPLIED TO/ DURATION/OBSERVATION/ETC)	Fire protection rating:  Type 1 - Fire Rating: 60 Minutes (1 Hours)  Type 2 - Fire Rating: 60 Minutes (1 Hours)  The test specimen withstood the fire test as required by the standard UL10c: Edition 3 June 2016; Positive Pressure Fire Tests of Door Assemblies.	

	Product Covered	
	Al Talah - Desert Board - 54mm Thick Palm Strand Board Fire Door Core	
	- 60-Minute - UL 10C/UL 10B/NFPA 252	
	Product Description	
	Fire door core type 1 (Desert board PSB door with PSB frame):	
	Door core is bonded with four layers of 9mm thick calcium silicate	
	board (density - 900 kg/m³) with 9mm thick Palm Strand Board (density	
	- 880 kg/m³) facing, Overall leaf thickness: 54mm.	
	Tested Door Size: 1000 x 2300 x 54mm (w x h x thk.)	
PRODUCT APPLICATION		
GUIDELINE	Fire door core type 2 (Desert board PSB door with PSB frame):	
(END USE)	Door core is bonded with 18mm thick palm strand board core (density -	
(CLEARLY STATE THE END USE WITH SPECIFIC APPLICATION, SUCH AS	880 kg/m³), 18mm thick calcium silicate board (density - 900 kg/m³)	
EXACT FIRE RATING/TO BE INSTALLED	perimeter and mid-stiles & rails and 9mm thick palm strand board core	Not Applicable
IN/TO BE INSTALLED AT/TO BE	(density - 880 kg/m³) facing, Overall leaf thickness: 54mm.	ног Аррисавіе
CONNECTED WITH/TO BE INSTALLED WITH ETC ALONG WITH		
ANY WARNINGS SUCH AS NOT TO BE	Tested Door Size: 1000 x 2300 x 54mm (w x h x thk.)	
USED IN/NOT TO BE INSTALLED  AT / NOT TO BE INSTALLED		
WITHETC.	Fire Ratings	
	The products noted above has been evaluated according to the	
	requirements of the standard UL 10C and has qualified for up to 60	
	minutes (1 hour) positive pressure fire rating.	
	Also meets the requirements of UL 10B (Neutral Pressure Fire Rating)	
	and NFPA 252 (Positive Pressure Fire Rating).	
	Full details are available in the test report XK120-1B&2B and Intertek	
	Spec ID: 77218.	
	Product should be Installed as per the Installation Instruction from the	
	Manufacturer.	



Laboratory and Certification body details				
NAME OF CERTIFICATION BODY	Intertek Testing Services NA. Inc.	NAME OF TEST FACILITY	Thomas bell wright International consultants	
CERTIFICATION BODY ADDRESS / REGION (STREET / TOWN / CITY / COUNTRY)	545 E. Algonquin Rd. Arlington Hts, IL 60005 USA	TEST FACILITY ADDRESS / REGION (STREET / TOWN / CITY / COUNTRY)	PO Box 26385 Corner of 46th and 47th Streets, Jebel Ali Industrial Area 1 Dubai	
WEBSITE	www.intertek.com	WEBSITE	www.bell-wright.com	
TEL	(847) 439-5667	TEL	+97143332692	
EMAIL	jp.kayl@intertek.com	EMAIL	fire@bell-wright.com	
ACCREDITED BY (NAME OF ACCREDITATION BODY WHICH ISSUED ACCREDITATION TO THE CERTIFICATION BODY, ALONG WITH WEBSITE)	International Accreditation Services (IAS) (http://iasonline.org)	ACCREDITED BY  (NAME OF ACCREDITATION BODY WHICH ISSUED ACCREDITATION TO THE LABORATORY, ALONG WITH WEBSITE)	United Kingdom Accreditation Services (UKAS)	
AS PER (STANDARD TO WHICH THE CERTIFICATION BODY IS ACCREDITED TO)	ISO 17065	AS PER (STANDARD TO WHICH YOUR ORGANIZATION IS ACCREDITED TO)	ISO 17025	
VALIDITY (EXPIRY DATE OF CERTIFICATION BODY ACCREDITATION)	From 11/03/2016 expiry date not specified	VALIDITY (EXPIRY DATE OF LABORATORY ACCREDITATION)	From 18/10/2016 expiry date not specified	
REFERENCE NUMBER: (CERTIFICATION BODY ACCREDITATION REFERENCE NUMBER TO VERIFY ON THE ACCREDITOR'S WEBSITE)	PCA-101	REFERENCE NUMBER: (THE LABORATORY ACCREDITATION REFERENCE NUMBER TO VERIFY ON THE ACCREDITOR'S WEBSITE)	4439	
CERTIFICATION MARK	Intertek			



(ENDORSEMENT) TO BE SIGNED BY MANUFACTURER				
NAME OF MANUFACTURER'S SIGNATORY	Mr. Mariappan Subramanian	SIGNATURE		
EMAIL / TEL	mariappan.subramanian@desertboard.ae +971 2 2467042	FACTORY OFFICIAL SEAL		
NOTES: I Undertake that all data and information provided are genuine and accurate				

(ENDORSEMENT) TO BE SIGNED BY CERTIFICATION BODY				
NAME OF CERTIFICATION BODY SIGNATORY	Mr. Alireza Tabatabaei	SIGNATURE	S A Tabatabaei	
EMAIL / TEL	alireza.tabatabaei@intertek.com +971 4 317 8777	CERTIFICATION BODY OFFICIAL SEAL	Arlington Heights, Minois, USA Reviewed and Approved  Intertek   Reviewed Reviewed	
NOTES: I Undertake that all data and information provided are genuine and accurate				

### **ATTACHMENTS:**

• COPY OF 'CERTIFICATE OF COMPLIANCE' ISSUED BY CERTIFICATION BODY (OLD OR NEW)