

CLASSIFICATION OF REACTION TO FIRE PERFORMANCE IN ACCORDANCE WITH BS EN 13501-1:2018

Test Sponsor:

Panel Technology Factory (Technopanel)
Al Mashael Riyadh, Saudi Arabia
T: +966 920 006 292
Website: www.technopanel.com.sa

Test Material / Assembly:

4mm thick Aluminium Composite Panel-FR A2



**THOMAS BELL-WRIGHT
INTERNATIONAL CONSULTANTS**

Issue Date: 04-Jan-23

Classification Report Reference No: WC029-8

PO BOX 26385, DUBAI UAE

T +971 (0)4 821 5777

fire@bell-wright.com

www.bell-wright.com

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1. INTRODUCTION

This classification report defines the classification assigned to 4mm thick Aluminium Composite Panel-FR A2 in accordance with the procedures given in BS EN 13501-1:2018: Fire classification of construction products and building elements — Part 1: Classification using data from reaction to fire tests.

2. SPONSOR

Name: Panel Technology Factory (Technopanel)
Address: Al Masha'el Riyadh, Saudi Arabia
T: +966 920 006 292
Website: www.technopanel.com.sa

3. TESTING LABORATORY

Name: Thomas Bell-Wright International Consultants (TBWIC)
Address: Corner of 46th and 47th Streets,
Jebel Ali Industrial Area 1
Dubai, UAE
T: T: +971 04 821 5777
Website: www.bell-wright.com

6. REPORT & TEST RESULTS IN SUPPORT OF THIS CLASSIFICATION

6.1. Reports

| Name of Laboratory | Test Sponsor | Test Report No. | Test Method/Field of Application Rules |
|--|--|-----------------|--|
| Thomas Bell-Wright International Consultants (TBWIC) | Panel Technology Factory (Technopanel) | WC029-6 | BS EN 13823:2020 |
| | | WC029-7 | BS EN ISO-1716:2018 |

6.2. Results

| Test Method | Test Parameters | No. of tests | Results | |
|-------------|-----------------|--------------|-------------------------------|-----------------------|
| | | | Continuous parameter-mean (m) | Compliance parameters |



| | | | | |
|-----------------------------|---|---|--------------------|-----------|
| BS EN 13823:2020 | FIGRA _{0.2MJ} ≤ 120 W/s | 3 | 5 | Compliant |
| | THR600s ≤ 7.5 MJ | 3 | 0.8 | Compliant |
| | Lateral Flame Spread < Edge of specimen | 3 | < Edge of specimen | Compliant |
| | CRITERIA for subclass "s1" | | | |
| | SMOGR _A ≤ 30 m ² /s ² <i>Note1</i> | 3 | 0 | Compliant |
| | TSP600s ≤ 50 m ² <i>Note1</i> | 3 | 16 | Compliant |
| | CRITERIA for subclass "d0" | | | |
| | Flaming droplets/Particles within 600s | 3 | Nil | Compliant |

| Test Method | Parameter | | No. of tests | Results | |
|----------------------------|---|------------------|--------------|-------------------------------|-----------------------|
| | | | | Continuous parameter-mean (m) | Compliance parameters |
| BS EN ISO-1716:2018 | PCS ≤ 4.0 MJ/m ² (for External Non-Substantial component) | Topcoat + Primer | 3 | 0.7 | Compliant |
| | | Back coat | 3 | 0.2 | Compliant |
| | PCS ≤ 3.0 MJ/kg (for Substantial component) | Aluminium Skin | 0 | 0.0 | Compliant |
| | | A2 Core | 3 | 1.4 | Compliant |
| | PCS ≤ 4.0 MJ/m ² (for Internal Non-Substantial component) | Adhesive | 3 | 3.6 | Compliant |
| | PCS ≤ 3.0 MJ/kg (For product as a whole) | | | | 1.9 |

7. CLASSIFICATION & FIELD OF APPLICATION

7.1. Reference of classification

This classification has been carried out in accordance with clause 8 of EN 13501-1:2018.

7.2. Classification

The product, 4mm thick Aluminium Composite Panel-FR A2 in relation to its reaction to fire behavior are classified;



| Fire behavior | | Smoke Production | | | Flaming droplets | |
|---------------|---|------------------|---|---|------------------|---|
| A2 | - | s | 1 | , | d | 0 |

Reaction to fire classification: A2 – s1, d0

7.3. Field of application

This classification is valid for the following end use applications:

- i. Construction applications

This classification is also valid for the following product parameters:

| | |
|---------------------------|---|
| Overall Product Thickness | No variation allowed |
| Product Density | No variation allowed |
| Product Composition | No variation allowed |
| Product Construction | No variation allowed |
| Joints | Results valid for material with or without vertical & horizontal joints of ≤ 15mm |
| Colors | No variation allowed |

8. LIMITATIONS

This document does not represent type approval or certification of the product. Similarly, the BS EN 13823 / BS EN ISO 1716 fire tests and related work which are a subject of this classification report have been conducted under Thomas Bell-Wright International Consultant’s ISO 17025 UKAS accreditation scheme and quality management system. However, pursuant to UKAS Technical Bulletin *BS EN 13501 & BR 135 Classification Documents (Dated 02-Feb-2022)*, classification documents are completed on an unaccredited basis because they are not themselves test procedures. As such, this document is prepared on an unaccredited basis.

This report and all records of the test to which it relates may be not be retained by TBWIC further than 5 years from the date of testing.

This test report is respectfully submitted by: Thomas Bell-Wright International Consultants

Prepared by:

Sam Sancho Thomas
Fire Testing Engineer

Reviewed and Authorized by:

Suketa Tyagi
Manager – Reaction to Fire



| Report Revision Tracking | | |
|--------------------------|-------------|---|
| Revision No. | Date Issued | Notes & Amendments |
| Rev. 00 | 04-Jan-23 | This is the first issue of the report. No revisions are included. |