

**THOMAS BELL-WRIGHT
INTERNATIONAL CONSULTANTS**
In accordance with UKAS accreditation to ISO 17065
Certification is Hereby Granted

to

Kuwait Gypsum Manufacturing and Trading Co.

*Block No. 3, Street No. 1, Plot No. 49,
Shuaiba Industrial Area, Al Ahmadi, Kuwait*

for

**Non-loadbearing Wall Assembly with Two Layers of “Kuwait
Gypsum FR” 12.5 mm thick, Paper-Faced Gypsum Board
Panels on Both Sides
Test Method: ASTM E119-18c**

which, subject to limitations described on the following pages and continued
listing on www.tbwcert.com, complies with Product Certification Scheme
SD02 Fire Resistant Separating Elements Scheme

In witness whereof, this Certificate is issued this 25th day of July 2022



Sandy Dweik

Sandy Dweik
Chief Executive Officer

Nicholas Purcell

Nicholas Purcell
Director of Certification

Certificate Number: TBW0200498

Initial registration: July 25, 2019
File Name: WC055_CRT_SD02RF_(f)

Issued: July 25, 2022

Expiration: July 24, 2025
Issue 2

This certificate and schedules are held in force by regular Factory Inspections by Thomas Bell-Wright International Consultants (TBWIC). Refer to www.tbwcert.com or contact TBWIC Certification Division to validate the current status of Certification. This certificate remains the property of Thomas Bell-Wright International Consultants, PO Box 26385, Dubai, UAE. Tel: +971 4 8215777, Email: certification@bell-wright.com
Web: www.bell-wright.com

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F 19 Scheme Certificate Issue 7 Issued Feb 2020

Non-loadbearing Wall Assembly with Two Layers of “Kuwait Gypsum FR” 12.5 mm thick, Paper-Faced Gypsum Board Panels on Both Sides


- A. Certification is given for non-loadbearing wall assembly with two layers of “Kuwait Gypsum FR” 12.5 mm thick paper-faced gypsum board panels on both sides, installed in accordance with the manufacturer’s instructions to provide Fire Resistance Rating with hose stream application in accordance with test standard ASTM E119-18c, “Standard Test Methods for Fire Tests of Building Construction and Materials”, subject to the limitations stated herein. The summary of the scope of this Certification is listed in Table 1 below.

Table 1. Summary of the scope of certification

Product Name / Reference	Fire Resistance Rating	Report Reference
Non-loadbearing Wall Assembly with Two Layers of “Kuwait Gypsum FR” 12.5 mm thick, Paper-Faced Gypsum Board Panels on Both Sides	Up to 3/4-h	SL159-1 Rev.01

- B. Readers of this document should be familiar with Reaction to Fire Testing and the requirements of ISO/IEC 17065:2012. The Certification will be listed on www.tbwcert.com, while it remains current. This Certification is not valid if it is not listed.
- C. The product is approved on the basis of TBWIC Product Certification Scheme SD02 for Fire Resistant Separating Elements, which includes pre-test sampling, evidence of performance (under report reference(s) mentioned in Table 1), Technical Verification and Proof of Performance, compliance to Factory Production Control requirements and surveillance & Re-certification Inspection/ Audits.
- D. Limitations:
- D.1. The fire resistance of the wall system covered under this certification is a result of the fire test conducted on the system constructed from specific materials and assembled in a particular manner. Substitution of the tested components or deviation from components specification or the methods of assembly could adversely affect the fire resistance of the wall.
- D.2. The wall system is non-load-bearing.
- D.3. The thicknesses of the steel components are minimum and shall not be reduced.
- D.4. The density, thickness, dimensions of gypsum board panels, and method of fixing the panels to the frame shall not be changed.
- D.5. Only the resistance to fire characteristic of the assembly is covered under this Certification; other properties such as (but not limited to) acoustical, weather resistance, durability, the toxicity level of smoke developed during combustion etc., are not addressed.
- D.6. Service penetrations are not permitted unless otherwise tested with an adequate sealing or firestop system in an identical wall assembly configuration and achieve an equal or higher fire-resistance rating.
- D.7. The treatment of gaps/joints in the construction of the wall assembly shall be as per Section E. The specification and condition of materials used and the method of application shall not be changed.
- D.8. Installation guidance in the manufacturer’s general Method Statement (Document ref: “KGM/QMS/F10-09” should be referred to in conjunction with system configuration details stated hereunder.

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Seal number: 102005

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Issued: 25 Jul 2022
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E. System Configuration:

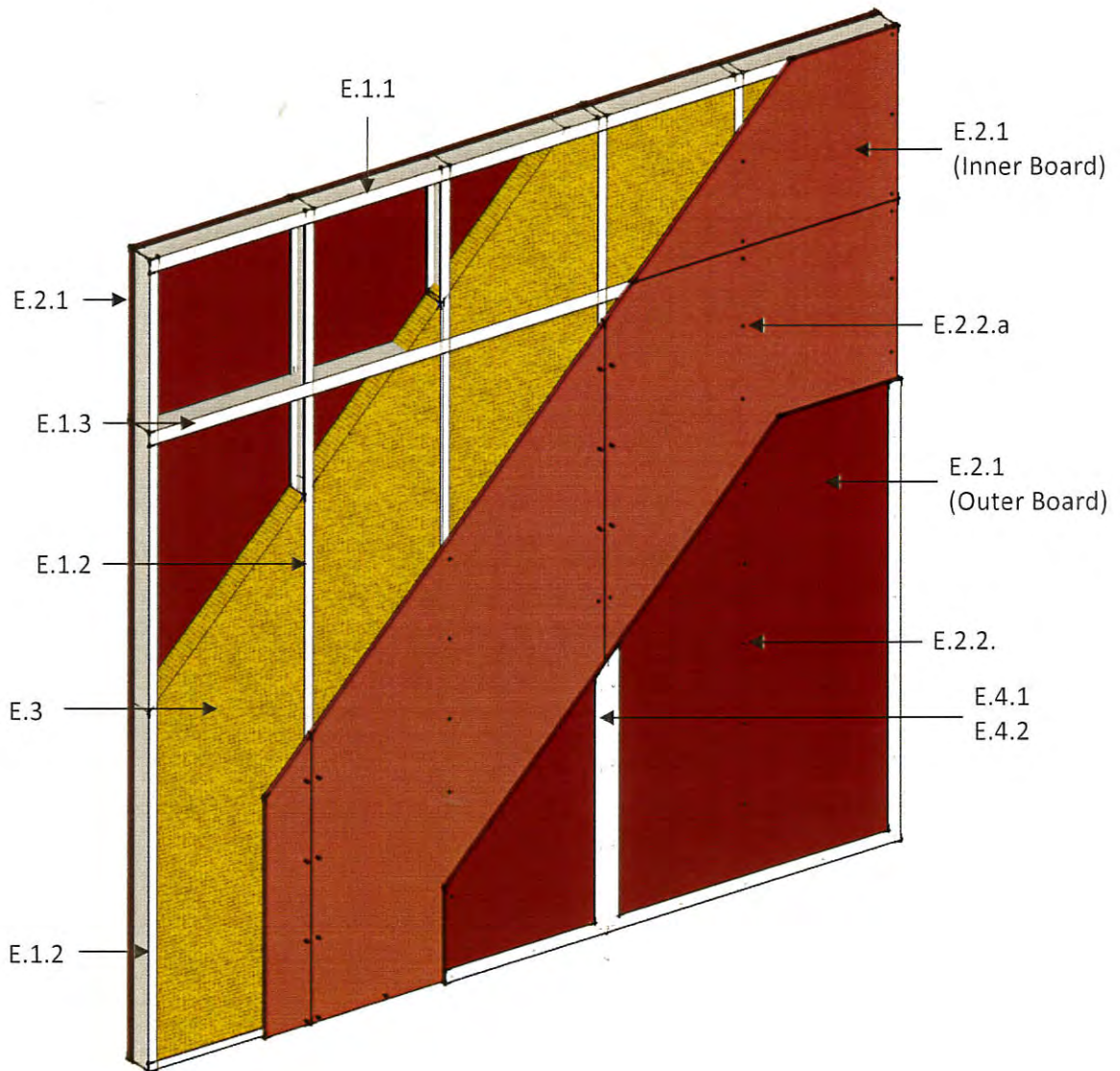


Figure 1. Non-loadbearing wall assembly - Typical Detail

E.1. Framing System

E.1.1. Bottom and Top Track

Material: Hot-dipped galvanised cold-rolled steel

Specification: ASTM A653-94 Grade LFG Z120

Reference: "Track"

Dimension: 62 × 30 × 0.5 mm (web × flange × thickness)

Fabricator: Technomec Building Industries LLC

Fixing details: Fixed using screw fastener with the size of 6 × 46 mm (diameter × length) at a distance of 150 mm from ends and maintaining a maximum spacing of 600 mm centres.

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E.1.2. Vertical Stud

Material: Hot-dipped galvanised cold-rolled steel

Specification: ASTM A653-94 Grade LFC Z120

Reference: "Stud"

Dimension: 60 × 30 × 0.5 × 5 mm (web × flange × thk. × lip)

Fabricator: Technomec Building Industries LLC

Fixing details:

- Fitted into the tracks at nominal spacing 600 to 648 mm centres using "Hilti S-DD08 3.5" Fine single thread, oval head drywall screw of size 3.5mm × 9.5mm (diameter × length).
- Fixed along the vertical edge of the structural opening using an anchor fastener of size Ø6 × 40 mm (dia. × length) at a distance of 90 mm from edges and maintaining a maximum spacing of 640 mm centres.

E.1.3. Intermediate Horizontal Stud

Material: Hot-dipped galvanised cold-rolled steel

Specification: ASTM A653-94 Grade LFC Z120

Reference: "Track"

Dimension: 62 × 30 × 0.5 mm (web × flange × thickness)

Fabricator: Technomec Building Industries LLC

Fixing details: Fixed using "Hilti S-DD08 3.5" Fine single thread, oval head drywall screw of size 3.5mm × 9.5mm (diameter × length). at a nominal distance of 2400 mm from the bottom edge.

E.2. Partition wall facing

E.2.1. Material: Paper-faced gypsum board

Reference: "Kuwait Gypsum FR" (12.5 mm thickness)

Weight per unit area: 9.6 ± 3 kg/m²

Standard board width (w): 1200 ± 3 mm

Standard board height (h): 2400 ± 6 mm

Board thickness: 12.5 ± 0.4 mm

Edge Profile: Tapered

Manufacturer: Kuwait Gypsum Manufacturing and Trading Co.

Fixing details: Fixed in two layers onto both sides of the framing system. Gypsum boards are cut from standard size and fixed in a vertical orientation (w × h).

E.2.2. Gypsum Board Fasteners

a. Fastener 1

Description: Bugle head, fine thread black drywall screws

Reference: "#6 x 1-3/8"

Manufacturer: Kuwait Gypsum Co.

Fixing details: The inner layer is fixed directly onto the framing members using "Drywall Screw #6 x 1-3/8" (Ø6 × 35 mm) at a nominal spacing of 300 mm centres, and within 10 mm from the edges of the boards.

b. Fastener 2

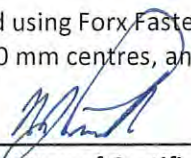
Description: Phillips, bugle head, coarse thread black phosphate coated drywall screw

Reference: "Forx Fastener Drywall Screw #6 x 2"

Manufacturer: Forx Fasteners

Fixing details: The outer layer is fixed using Forx Fastener Drywall Screw #6 x 2" (Ø6 × 50 mm) at a nominal spacing of 300 mm centres, and within 10 mm from the edges of boards.

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E.3. Insulation

Material: Mineral wool with Black Fibre Glass Veil (BFGV) Facing on one side

Reference: SRW Rockwool Board / Panel

Manufacturer: Saudi Rockwool Factory Co.

Density: $70 \pm 4 \text{ kg/m}^3$

Thickness: 35 mm

Fixing details: Single layer of mineral wool slabs with BFGV facing on one side is installed on the void spaces between the studs in the metal framing system.

E.4. Board joint and perimeter filling

E.4.1. Jointing Tape

Material: Self-adhesive fibreglass mesh tape

Reference: "Fibatape Perfect Finish™" – 50 mm wide

Manufacturer: Saint-Gobain Adfors

Application: Applied over panel joint seam on both sides of the partition wall assembly facing. The tape is embedded into the jointing compound.

E.4.2. Jointing Compound

Description: "Ready-mix Calcium Carbonate"

Reference: "Setrock® Brand All Purpose Joint Compound"

Manufacturer: Kuwait Gypsum Manufacturing and Trading Co.

Application:

- Applied over the exposed fixing screw heads on boards on both sides of the partition wall assembly facing.
- Along the joints of the outer layer boards and along the perimeter of the wall assembly in conjunction with self-adhesive fibreglass mesh tape; a jointing compound shall be applied in two passes.

F. Approved Manufacturing Location

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