



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

to

Global Gypsum Board Co. L.L.C

*P.O. Box 485, PC-211, Salalah Free Zone, Salalah,
Sultanate of Oman*

for

**Non-Loadbearing Double-layered “Gypcore FR”
12.5 mm Plasterboard Partition Wall Assembly
Test Method: ASTM E119-15**

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 27th day of August 2021



Sandy Dweik

Sandy Dweik
Chief Executive Officer

Nicholas Purcell

Nicholas Purcell
Director of Certification

Certificate Number: TBW0200360

Initial registration: August 27, 2018
File Name: VF044_CRT_SD02RF_(f)

Issued: August 27, 2021

Expiration: August 26, 2024
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 Double-layered “Gypcore FR” 12.5 mm Plasterboard Partition Wall Assembly

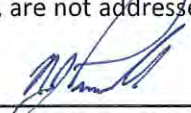
- A. Certification is given for non-loadbearing double-layered “Gypcore FR” 12.5 mm plasterboard partition wall assembly, installed in accordance with the manufacturer’s instructions and subject to the limitations herein, to provide Fire Resistance Rating with hose stream application in accordance with test standard ASTM E119-15. The summary of the scope of this Certification is listed in Table 1 below.

Table 1. Summary of the scope of certification

Product Name/System Reference	Fire Resistance Rating	Report Reference
Double-layered “Gypcore FR” 12.5 mm Plasterboard Partition Wall Assembly	Up to 2 Hours	PI010 Rev.0, PJ085 (Rev.01)

- B. Readers of this document should be familiar with Resistance 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 this product is not so listed.
- C. The product is approved based on TBWIC Product Certification Scheme SD02 – Scheme Document for Fire Resistant Separating Assemblies, which includes pre-test sampling, evidence of performance (under report references mentioned in Table 1), Technical Verification and Proof of Performance, compliance to Factory Production Control requirements and surveillance & Re-certification Inspection/ Audits.
- D. The non-loadbearing partition wall system assembly consists of two layers of “Gypcore FR” 12.5 mm thick plasterboards with staggered joints fixed onto both sides of a galvanised steel framing system. The cavity within the framing system shall be filled with un-faced mineral wool slabs of 50 mm thickness and density 30 kg/m³. The metal framing system shall be composed of Gypcore C-studs, Gypcore floor track, Gypcore horizontal fixing channel and Gypcore ceiling track. The joints between adjacent plasterboards shall be filled with Gyproc Jointing Compound in conjunction with Gyproc Fibre Tape embedded within the jointing compound. Exposed screw heads on inner and outer layer “Gypcore FR” plasterboards shall be covered with the same jointing compound. A gap of 8 mm shall be maintained between the structural opening and the perimeter of the wall assembly; and filled with “Gyproc Sealant” extruded smoothly onto both sides of the wall assembly. Refer to Section F for component descriptions and further details.
- E. Limitations:
- E.1. The fire resistance of the wall system covered under this certification is as 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.
- E.2. The wall system is non-load-bearing.
- E.3. The thicknesses of the steel components are minimum and shall not be reduced.
- E.4. The density, thickness, dimensions of plasterboard panels and method of fixing the panels to the frame shall not be changed. The design and components of the non-loadbearing partition wall system are not intended to be substituted, eliminated, or interchanged unless recognized and approved by this certification.
- E.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.

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- E.6. Service penetrations are not permitted unless otherwise tested with an adequate sealing or firestop system on an identical wall assembly configuration, which achieves an equal or higher fire-resistance rating.
- E.7. The treatment of gaps/joints in the construction of the wall assembly shall be as per Section F. The specification and condition of materials used and the method of application shall not be changed.
- E.8. Installation guidance in the manufacturer's Method Statement shall be referred to in conjunction with system configuration details stated hereunder.

F. System Configuration:

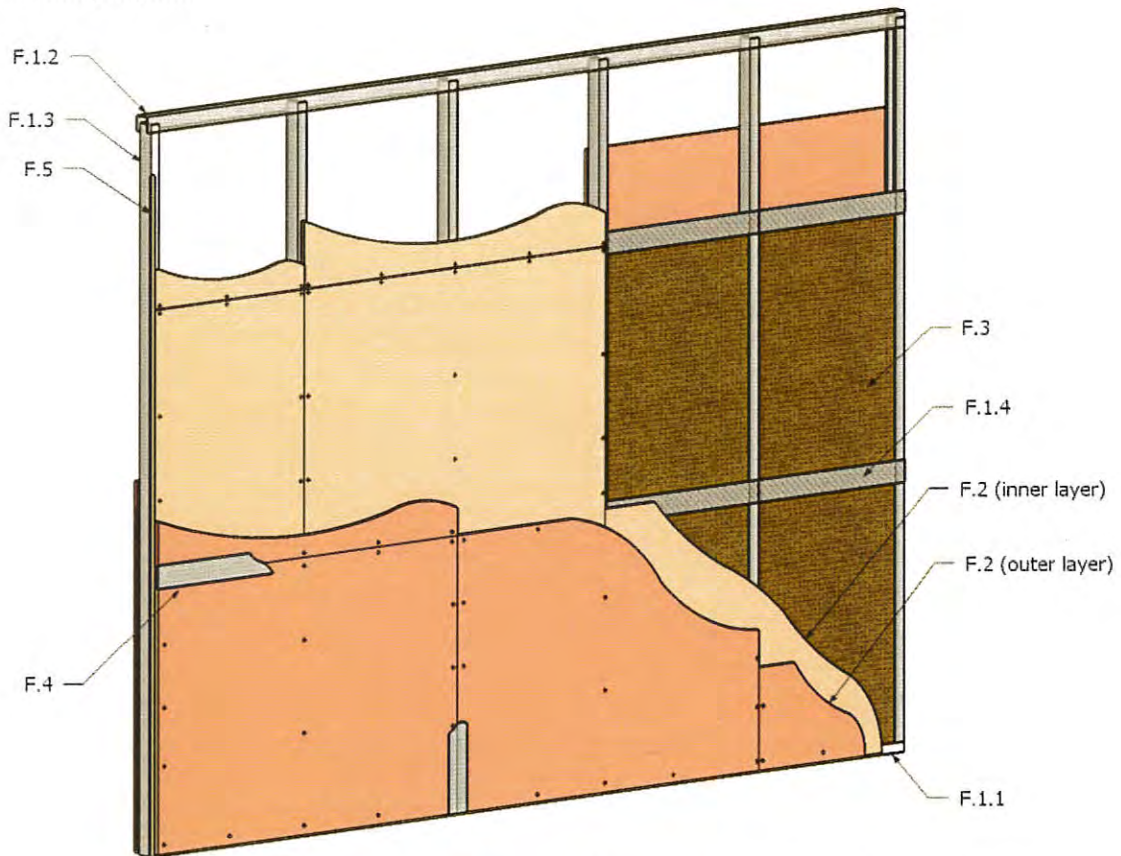


Figure 1. Non-loadbearing Double-layered 12.5 mm thick "Gypcore FR" Plasterboard Partition Wall Assembly (2-Hours Fire Resistance rating)

F.1. Framing System

F.1.1. Floor track

Material: Hot-dipped galvanised steel

Specification: EN 14195:2005, EN 10162:2003, ASTM C645, Z140 (zinc coating)

Manufacturer reference: "Gypcore WT"

Dimension: 50 x 32 x 0.55 mm (web x flange x thk.)

Manufacturer: Global Gypsum Board Co. LLC

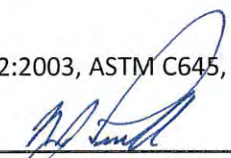
Fixing details: Fixed along the bottom of the structural opening using Knauf Wedge Anchors of size $\varnothing 6 \times 40$ mm (dia. x length) located 50 mm from ends and spaced at 600 mm centres.

F.1.2. Ceiling track

Material: Hot-dipped galvanised steel

Specification: EN 14195:2005, EN 10162:2003, ASTM C645, Z140 (zinc coating)

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Manufacturer reference: "Gypcore CT"

Dimension: 50 x 50 x 0.55 mm (web x flange x thk.)

Manufacturer: Global Gypsum Board Co. LLC

Fixing details: Fixed along the ceiling of the structural opening using Knauf Wedge Anchors of size $\varnothing 6 \times 40$ mm (dia. x length) located 50 mm from ends and spaced at 600 mm centres.

F.1.3. Vertical stud

Material: Hot-dipped galvanised steel

Specification: EN 14195:2005, EN 10162:2003, ASTM C645, Z140 (zinc coating)

Manufacturer reference: "Gypcore VS"

Dimension: 50 x 32 x 34 x 6 x 0.55 mm (web x flange 1 x flange 2 x lip x thk.)

Manufacturer: Global Gypsum Board Co. LLC

Fixing details:

- Vertical studs at the extremities of the partition wall assembly shall be secured to the structural opening using Knauf Wedge Anchors of size $\varnothing 6 \times 40$ mm (dia. x length) fixed at 50 mm from ends and located at 600 mm centres. Intermediate studs shall be spaced at 610 mm centres and fixed onto the floor track using Gyproc Wafer Head screws of size M4.2 x 13 mm (dia. x length).
- The studs shall be free-floating along the ceiling track; and trimmed short by 18 mm to accommodate thermal expansion.

F.1.4. Horizontal fixing channel

Material: Hot dipped galvanised steel

Manufacturer reference: "Gypcore FHC"

Dimension: 72 x 0.7 mm (width x thk.)

Manufacturer: Global Gypsum Board Co. LLC

Fixing details:

- On both sides of the wall assembly, 2 nos. of horizontal channels shall be fastened onto the vertical studs using Gyproc Wafer Head screws of size M4.2 x 13 mm (dia. x length). Channel shall be spaced at 1228 mm centres above the floor, and top channel shall be located 600 mm below the ceiling.

F.2. Partition wall facing

Material: Paper-faced gypsum board (plasterboard)

Reference: "Gypcore FR" 12.5 mm thick

Specification: "2440 x 1220 x 12.5 mm TE/FR (2 hr)"

Density: 962.4 ± 30 kg/m³

Standard board width (w): 1220 (+ 0 mm, -3 mm)

Standard board height (h): 2440 ± 6 mm

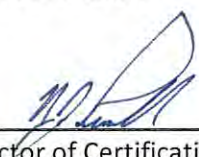
Board thickness: 12.5 ± 0.4 mm

Manufacturer: Global Gypsum Board Co. L.L.C, Oman

Fixing details:

- Fixed in two layers (inner base layer and outer face layer) onto both sides of the framing system with the staggered alignment of joints between layers. Plasterboards shall be cut from standard size and fixed in a vertical orientation (w x h).
- The inner base layer shall be fixed directly onto the framing members using self-tapping Gyproc Drywall screws of size $\varnothing 3.5 \times 25$ mm (dia. x length) at a nominal spacing between 400 to 600 mm and within 50 mm from the edges of the boards.
- The outer layer of plasterboards shall be fixed using Gyproc Drywall screws of size $\varnothing 3.5 \times 42$ mm (dia. x length) at a nominal spacing between 200 to 300 mm, and within 50 mm from the edges of the boards.

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F.3. Insulation

Material: Mineral wool (un-faced)

Manufacturer: Fujairah Rockwool Factory

Minimum Density: 30 kg/m³

Thickness: 50 mm

Fixing method: Single layer of un-faced mineral wool slabs shall be tightly packed into the void space within the stud frame cavity.

F.4. Board joint filling

F.4.1. Jointing compound

Description: "Premixed ready-to-use compound for filling and finishing plasterboard joints"

Reference: "Gyproc Jointing Compound"

Manufacturer: Saint Gobain Gyproc Middle East FZE

Application:

- Applied over the exposed fixing screw heads on inner and outer layer boards on both sides of the partition wall assembly facing.
- Applied in three passes along the joints of outer layer boards in conjunction with self-adhesive "Gyproc Fibre tape".

F.4.2. Jointing tape

Material: Self-adhesive fibreglass mesh tape

Reference: "Gyproc Fibre tape" – 50 mm wide

Manufacturer: Saint Gobain Gyproc Middle East FZE

F.5. Sealant

Material: Water-based acrylic dispersion with fillers

Reference: "Gyproc Sealant" (white)

Manufacturer: Saint Gobain Gyproc Middle East FZE


Sealant application: Shall be applied on both sides of the wall assembly by extruding smoothly into the 8 mm gap between the structural opening and the perimeter of the wall assembly framing.

G. Approved Manufacturing Location

P.O. Box 485, PC-211,
Salalah Free Zone, Salalah,
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