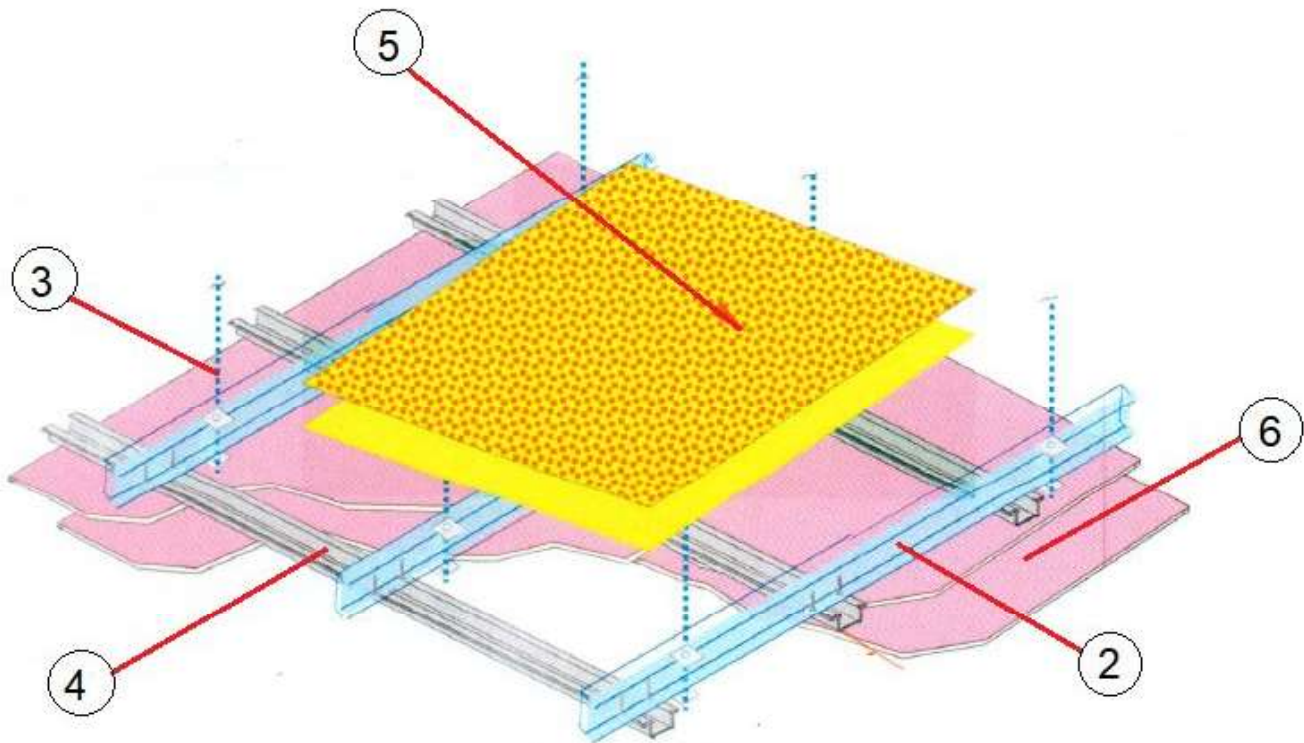


**Mada Gypsum Company**  
**Design No. MGC/GBF 60-09**  
**Non-Loadbearing Double-layered Suspended Ceiling Assembly**  
**16mm thick MADA Plus Fire Resistant (FR) Plasterboard**  
**EN 1364-2**  
**Integrity (E) and Insulation (I): 1 Hour**



1. **WALL ANGLE (Not Shown):** 25mm x 25mm x 0.55mm (leg x leg x thickness) galvanized steel MADA wall angle is fixed around the perimeter wall construction using 6 x 40mm (dia x l) anchors (Ref: MADA Wedge Anchor, not shown), spaced nominally at 50mm from the ends and 600mm on center (oc).
2. **MAIN CHANNEL:** The 38mm x 12mm 0.9mm (web width x flange height x thickness) galvanized steel MADA Main Channels are fixed to supporting steel beams using 6mm threaded steel rods and C-clamps. Alternative hanger mechanisms can be used when suspending the

ceiling from a concrete slab provided that the mechanism is able to structurally hold the ceiling weight. This must be confirmed by the manufacturer. The main channels can be spliced over a length of 600mm joined using M4.2 x 13mm MADA wafer-head screws applied on the web of the main channel at the splice location. The main channels are spaced 900mm oc distance and 200mm from the ends.

3. **THREADED ROD and C-CLAMP:** The main channels are fixed to the supporting beams via the threaded rod and C-clamp with the aid of a nut and washer.



Alternative hanger mechanisms can be used when suspending the ceiling from a concrete slab provided that the mechanism is able to structurally hold the ceiling weight. This must be confirmed by the manufacturer.

4. **FURRING CHANNEL:** The 68 x 22 x 35 x 0.55mm (web x flange x base x thickness) galvanized steel MADA Furring Channels are fixed to the main channels (Item 2) and the wall angles (Item 1, not shown) using M4.2 x 13mm MADA wafer-head screws. The main channels can be spliced over a length of 400mm joined using M4.2 x 13mm MADA wafer-head screws. The furring channels are spaced 400mm oc distance and 400mm to 450mm from the ends.
5. **INSULATION:** Install a layer of non-combustible stone wool or mineral wool insulation (min. thickness of 50mm and a min. density of 40 kg/m<sup>3</sup>) on the top of the furring channels and the main channels creating an air-void above the gypsum board layers.
6. **CERTIFIED MANUFACTURER:** MADA Gypsum Company

**CERTIFIED PRODUCT:** 16mm thick MADA Plus Fire Resistant (FR) Plasterboard

**MODEL:** 16mm MADA Plus FR

**GYPSUM BOARD:** Two layers of 16mm thick gypsum boards are fixed to the underside of the furring channels with the orientation of the

boards staggered between adjacent layers. The first layer boards are fixed on to the furring channels using M3.5 x 35mm (dia x l) MADA bugle-head, self-tapping screws spaced nominally 400mm oc along the board centers and 300mm oc along the board edges. The screws are fixed 15mm from the edges. The second layer boards are fixed on to the first layer boards using M3.5 x 45mm (dia x l) MADA bugle-head, self-tapping screws spaced nominally 300mm oc along the board centers and 200mm oc along the board edges. The screws are fixed 15mm from the edges.

7. **JOINT TAPE (Not Shown):** 50mm wide fiberglass woven joint tape (Ref: MADA Fiber Glass Joint Tape), embedded within the joint compound, is applied on the board joints.
8. **JOINT COMPOUND (Not Shown):** The board joints on the exposed face of the second layer boards are pre-filled with MADA Multi-use Joint Compound. Fiber tape is then embedded into the joint compound and smoothed over with a trowel. Once dry, a second application of joint compound is applied over the fiber tape to achieve a satisfactory smooth and level finish. Screw heads are also covered with a thin layer of the joint compound.
9. **SEALANT (Not Shown):** Use MADA Fire Guard Acrylic Sealant from MADA Gypsum Company and extrude it smoothly to fill the 8mm gap between the perimeter of the ceiling system and supporting wall construction.

Consult the listing report on the Directory of Building Products (<https://bpdirectory.intertek.com>) for the edition of the standard(s) evaluated.