# Rigitone acoustic ceilings

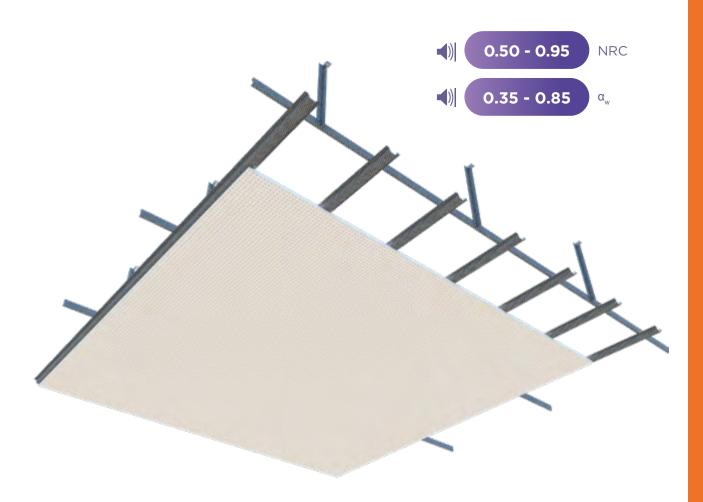
Perforated acoustic solution with set or random design with borderless pattern and Activ'Air functionality



# Rigitone acoustic ceilings

Rigitone boards are premium-quality perforated plasterboards with detailed design combining function and aesthetics: In addition to their wide range of perforation patterns, Rigitone Activ'Air boards also demonstrate optimum acoustic properties, particularly in the frequency range of the human voice.

This range enables the creation of seamless ceiling systems with harmonious and architecturally appealing ceiling patterns, and outstanding acoustic properties.



# **Key Benefits**



Sound absorbing solutions with high reverberation control



Monolithic appearance with set or random patterns



Sustainable & 100% recyclable



Robust design



Improves indoor air quality



Simple accommodation of access panels



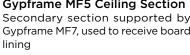
800 GYPROC (497762) www.gyproc.ae/literature 271

# System components

#### **Gypframe metal components**



**Gypframe MF5 Ceiling Section** Secondary section supported by Gypframe MF7, used to receive board









**Gypframe GA1 Steel Angle** 

Primarily used as a perimeter wall angle and ceiling hanger in the Gyproc MF Ceiling system



**Gypframe Soffit Cleat** with Nut & Bolt

Cleat for suspending MF ceiling Gypframe GA1 Steel Angle hangers from soffit

#### **Board products**



#### Rigitone 6/18

(12.5mm)

Achieves high levels of acoustic absorption with 6mm regular round perforations at 18mm c/c distance giving a total perforated area of 8.7%



#### Rigitone 8-15-20 Super

(12.5mm)

Achieves high levels of acoustic absorption with 8, 15 and 20mm dia. irregular scattered round perforations giving a total perforated area of 10%



#### Rigitone 8/18

(12.5mm)

Achieves high levels of acoustic absorption with 8mm regular round perforations at 18mm c/c distance giving a total perforated area of 15.5%



#### Rigitone 12-20/66

(12.5mm)

Achieves high levels of acoustic absorption with 12 and 20mm dia. regularly staggered round perforations at 66mm c/c distance giving a total perforated area of 19.6%



#### Rigitone 8/18 Q

(12.5mm)

Achieves high levels of acoustic absorption with 8mm regular square perforations at 18mm c/c distance giving a total perforated area of 19.8%



#### Rigitone 12/25 Q

(12.5mm)

Achieves high levels of acoustic absorption with 12mm regular square perforations at 25mm c/c distance giving a total perforated area of 23.0%



#### **Rigitone 8-15-20**

(12.5mm)

Achieves high levels of acoustic absorption with 8, 15 and 20mm dia. irregular scattered round perforations giving a total perforated area of 6%



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# System components (continued)

#### **Fixing products**



#### **Gyproc Drywall Screws**

Corrosion resistant self-tapping steel screws for fixing board to metal framing less than 0.8mm thick



#### **Gyproc Waferhead Screws**

Corrosion resistant self-tapping steel screws for fixing metal to metal framing less than 0.8mm thick



#### **Gyproc Jack-Point Screws**

Corrosion resistant self-drilling steel screws for fixing boards to Gypframe metal framing 0.8mm thick or greater



#### Gyproc Waferhead Jack-Point Screws

Corrosion resistant self-drilling steel screws for fixing metal to metal framing 0.8mm thick or greater



#### **Gyproc Wedge Anchor**

Corrosion resistant anchor used for fixing fire rated partition and ceiling systems into masonry



#### **Gyproc Hammer Fix**

Corrosion resistant nail, screw engaged in a nylon plug, suitable for fixing non fire rated partition systems and ceiling perimeters into masonry

#### **Corners**



#### **Gyproc Drywall Corner Bead**

Provides corner reinforcement and protection to plasterboards and plasters



#### Levelline Flex

Adjustable corner reinforcement that flexes to any angle and gives high levels of impact protection



#### **Gyproc Metal Corner Tape**

High quality paper joint tape strengthened with two corrosionresistant galvanised steel strips for the finishing of internal and external angles in drywall construction



#### Gyproc Drywall Metal Edge Bead

A galvanised steel channel used to protect plasterboard edges and to form a defined edge commonly used around window reveals

#### **Rigitone accessories**



#### Rigitone Mix 600ml

Rigitone Mix is a ready filler for Rigitone perforated panel joints. It forms part of the Rigitone Ready Mix Set and is used in the Joint Filling Technique



#### Rigitone Installation Kit

Installation aid to ensure the boards are properly aligned. Should be selected as per the board perforation



#### Rigitone ReadyMix Set

The set contains 1 pistol, 2 ReadyMix adapters, 2 Fix joint nozzles, 1 scraper and 1 screw head template

#### **Insulation products**



# ISOVER Eco Acoustic Partition Roll (APR)

(75mm)\*

Non-combustible glass mineral wool roll for sound insulation in partitions, linings and ceiling systems

Minimum density: 16 kg/m³

<sup>\*</sup> Available in other thickness and density

### Installation overview

Please refer to Gyproc MF ceiling installation guidelines for basic framing instructions and refer to the steps below for installation instructions of Rigitone boards.



Install the Gypframe ceiling framework as described in the Gyproc MF ceiling section ensuring that Gypframe MF5's are installed at approximately 330mm centres see Table 1 for guidance. Set out the ceiling ensuring Rigitone boards are installed perpendicular to the MF5's and the Rigitone patterns are aligned using the Rigitone Installation Kit to correctly space the boards.



Fix Rigitone boards using 25mm Gyproc Drywall Screws at a maximum of 170mm centres. Screw fix the board perimeter prior to fixing the field of the board.



Rigitone Installation Kit.



Cut the end of Rigitone Mix 600ml tube.



Insert the Rigitone Mix 600ml tube in the Rigitone ReadyMix pistol.



Screw the Rigitone Fix joint nozzle onto the adapter. Screw the Rigitone Fix joint nozzle and attached adapter tightly onto the Rigitone ReadyMix pistol.



Screw heads are then filled with Gyproc Joint Compound using the Rigitone screw head template to help ensure no jointing compound enters into the perforations of the board.



Once the Rigitone Mix between the boards has begun to harden, remove any excess carefully using the Rigitone scraper. Pass the scraper back over the joints in the other direction to smooth the surface.



The joints and covered screw heads can be sanded after 24 hours. Further finishing work may be continued once the Rigitone Mix has fully dried.

#### Table 1 - Rigitone sound absorption performance based on ISO 354

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Rigitone ceiling beneath basic floor. Ceiling linings as in table.

Rigitone ceiling suspended beneath basic floor, with Insulation in the cavity. Ceiling linings as in table.

#### Suspension frame work:

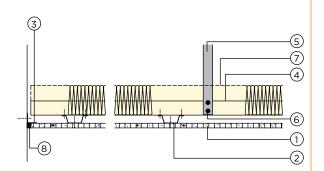
- Gypframe MF7 Primary Support Channel: 1000mm centres
- Gypframe GA1 Hangers fixed to soffit using Gypframe Soffit Cleat: 900mm centers

Detail	Board type	Insulation	MF5 centres	Plenum depth	Perforated area	Sound absorption	
						NRC	$\alpha_{w}$
		mm	mm	mm	%		
	Rigitone 6/18	-	333	200	15.5	0.65	0.45
		75		200		0.70	0.50
	Rigitone 8/18	-	333	200	15.5	0.70	0.65
2		75		200		0.80	0.75
	Rigitone 12-20/66	-	330	200	19.6	0.75	0.65
		75		200	13.0	0.85	0.75
	Rigitone 8-15-20	-	327	200	6.0	0.50	0.35
		75		200	6.0	0.50	0.40
	Rigitone 8-15-20 Super	-	327	200	10.0	0.60	0.50
		75		200		0.65	0.50
	Rigitone 8/18Q	-	333	200	19.8	0.65	0.60
		75		200		0.80	0.80
	Rigitone 12/25Q	-	333	200	23.0	0.75	0.65
		75		200		0.95	0.85

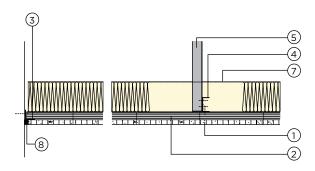
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## **Construction details**





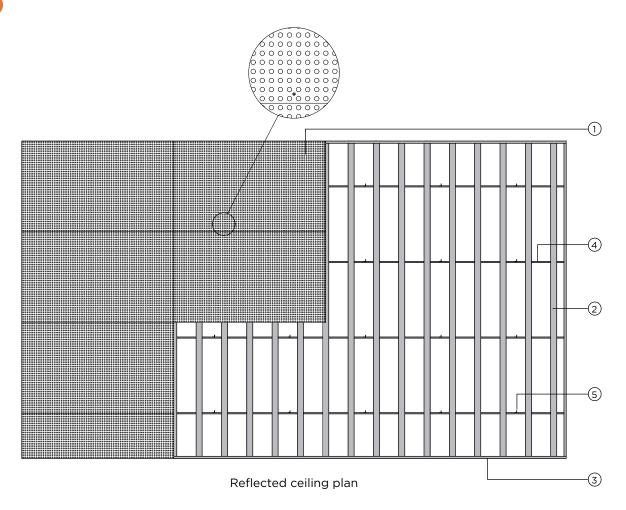




Perimeter detail parallel to Gypframe MF5

Perimeter detail perpendicular to Gypframe MF5





- 1. Rigitone board
- 2. Gypframe MF5 Ceiling Section
- 3. Gypframe GA1 Perimeter Angle
- 4. Gypframe MF7 Primary Support Channel
- 5. Gypframe GA1 Steel Angle Hanger
- 6. Gyproc Waferhead Jack-Point Screw
- 7. ISOVER Eco APR
- 8. Rigitone Mix 600ml

# **Notes**

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