

## PRODUCT DATA SHEET

# GYPTONE BIG™ QUATTRO 41

Acoustic Board with  
Square Perforations

## Product Description

The Gyptone acoustic ceiling range is designed to improve a room's acoustic environment with optimised reverberation time and improved speech intelligibility in a given room, like in schools, kindergartens, offices, retail and the health sector. All Gyptone products are with the Activ'Air technology that will improve the indoor air quality by reducing the formaldehyde level.

The Gyptone BIG range includes many different perforation designs: BIG Line 6, Quattro 41, Quattro 46, Quattro 47 and Line 6 CURVE, all with 4 tapered edges (edge B1).

Gyptone acoustic ceilings have durable and low maintenance surfaces with long lifespan and minimal maintenance costs. Gyptone acoustic ceilings are made from natural materials and contain no harmful substances.

The environmental impacts of Gyptone boards have been assessed over their whole life cycle. Their Environmental Product Declaration, EPD, is in accordance with *EN 15804* and *ISO 14025* and has been verified by an independent third party.

## Characteristics

**Activ'Air:** Gyptone Activ'Air technology is designed to decompose formaldehyde emissions from emitting building materials, paint, furniture, carpets etc., into non-harmful inert compounds. Gyptone Activ'Air ceilings can reduce formaldehyde concentrations by up to 70%. Gyptone boards are compliant with LEED, BREEAM and the EU taxonomy for low VOC emissions by virtue of certification under M1 and Danish Indoor Climate Labelling.\*

**Sustainability:** Gyptone acoustic ceilings are made of gypsum and carton and boards contain a minimum average of 25% recycled content. The carton is produced from recycled cardboard and paper. The used gypsum consists of natural gypsum in combination with recycled gypsum collected from construction sites and recycling centres.

**Dimensional stability:** Gyptone BIG should be installed and used in areas with a relative humidity not exceeding 70% for prolonged periods or temperature exceeding 45°C.

**Installation:** Gyptone BIG is suitable for direct or suspended screw fixing and the system is not demountable. See Gyptone BIG installation manual for further details.

**Construction height:** The smallest possible standard construction height with MF grid in one level is 145mm including the board. For smaller construction heights contact our technical department.

**Surface:** Gyptone BIG is supplied unpainted. The surface finish is done on site after jointing is completed. Ceilings must be painted with a shorthaired roller. The boards must not be spray-painted as this considerably impairs sound absorption.

**Maintenance:** Repainting must be done with a shorthaired roller. The tiles must not be spray-painted, as this impairs sound absorption.

**Cleaning:** Depends on the surface treatment.

\*The effectiveness of the Activ'Air technology has been tested by the accredited Eurofins laboratory. The tests show that a Gyptone ceiling with Activ'Air reduces up to 70% of the formaldehyde in a controlled test environment.

## Edge B1

Concealed metal grid



## Edge B1

Concealed wooden beam



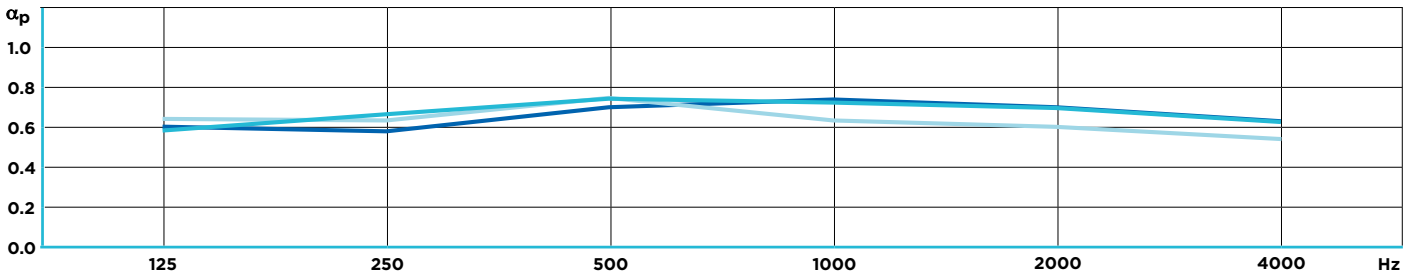
Gyptone QUATTRO 41 classified as a Class C absorber.

Shared or common spaces in an internal part of a building which provide direct access to a dwelling must be designed and constructed in such a way as to limit reverberation in those common parts to a reasonable level under Building Regulations – Technical Guidance Booklet G in Northern Ireland and Technical Guidance Document E in the Republic of Ireland.

Common areas are traditionally constructed using highly reflective (durable) materials and can often generate significant noise disturbance due to the extended reverberation of hard surfaces. In order to meet these requirements, absorptive materials of Class C absorption or better must be used on an area equal or greater than the floor area. For stairwells, absorptive materials of Class D absorption must be used in the combined area (of floor, including landings and treads plus ceiling) OR absorptive materials of Class C absorption or better used in 50% of the combined area.

## Acoustics

Practical absorption coefficient  $\alpha_p$



SUSPENSION DISTANCE	MINERAL WOOL	FREQUENCY						$\alpha_w$ VALUE	NRC VALUE	ABSORPTION CLASS
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz			
58mm	50mm	0.58	0.66	0.74	0.72	0.69	0.62	0.70	0.70	C
200mm	-	0.64	0.63	0.75	0.63	0.60	0.53	0.65	0.65	C
400mm	50mm	0.61	0.58	0.70	0.74	0.74	0.63	0.75	0.65	C

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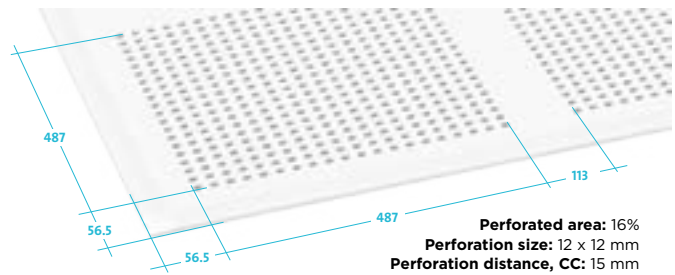
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TECHNICAL DATA	VALUE
Tissue Colour	White
Edge Type	Tapered edge on the two long sides, edge B1
Modular Size	1200x2400mm
Thickness	12.5mm
Weight	Approx. 8 kg/m <sup>2</sup>
Colour	Unpainted
Fire Performance	B-s1, d0 (Reference standard: EN 14190)



## Acoustic properties

The acoustic measurements meet the requirements of ISO 354. The construction height specifies the distance between the undersides of the suspended ceiling and the existing floor/ceiling construction. The sound absorption is affected by construction height and by any mineral wool installed behind them.