Gyptone QUATTRO 46

Product Data Sheet

Introduction

Gyptone QUATTRO 46 is a perforated gypsum acoustic board used in conjunction with CasoLine MF, CasoLine curve or GypLyner UNIVERSAL systems. It creates a monolithic surface in acoustic ceilings, islands or vertical wall absorbers where aesthetic design and reverberation control are desired.

Product description

Gyptone QUATTRO 46 comprises a 12.5mm gypsum core, with a geometric array of 12mm square perforations. The reverse of the board incorporates an acoustic fleece which provides sound absorption performance. As with all products in the Gyptone range, Gyptone QUATTRO 46 is supplied with ACTIVair technology as standard, which absorbs and converts formaldehyde into non-harmful inert compounds.

Board performance

Sound absorption

Gyptone boards provide sound absorption when used in conjunction with an air space behind the ceiling or wall. Tests have been carried out to *BS EN 20354: 1993* and *ISO 354: 1985*.

Increased levels of sound absorption can be achieved by including Isover insulation over the back of the ceiling. The single figure rating practical sound absorption coefficients $\alpha_{\rm w}$, and sound absorption classes, are calculated in accordance with *BS EN ISO 11654*: 1997. The Noise Reduction Coefficient (NRC) is calculated in accordance with *ASTM C423-90a*: 1992.

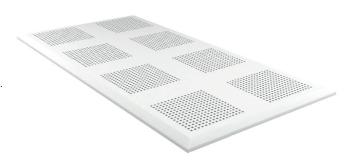
ACTIVair technology

Though we don't notice them, impurities such as VOCs are often present in the air we breathe - emitted from furniture, carpets and building materials. Long-term exposure to these can potentially cause health problems and reduce general well-being. Clean air, on the other hand, can speed up patient recovery in hospitals, reduce absence at work, and increase pupils' concentration at school. ACTIVair is our latest technology designed specifically to convert formaldehyde, a common VOC, into non-harmful inert compounds, removing up to 70% of the formaldehyde concentration in the indoor air. This clever technology continues to work over 50 years, and whilst alternative solutions absorb formaldehyde, they don't decompose like ACTIVair risking re-emission at a later date.

Formaldehyde reduction is based on experimental data following ISO16000-23 standards from 0.4m² to 1.4m² installed/m³ room. Lifetime is based on a calculation assuming constant formaldehyde reduction with indoor formaldehyde concentration of 25µg/m³ for ceiling, drywall or combined drywall and ceiling configurations.

CasoLine curve

Gyptone boards can be used in conjunction with the CasoLine curve system to form a curved finish with a minimum radius of 6000mm.



Declaration of Performance

Declaration of Performance is available for download from **british-gypsum.com**

Physical properties

Dimensions	2400mm x 1200mm
Thickness	12.5mm
Perforation size	12mm x 12mm square
Perforation spacing	25mm cc
Perforated area	10%
Edge type	4 tapered edge
Colour	Natural - painted on-site
Reaction to fire	A2-s1, d0
Weight (approx)	8kg/m²
Moisture resistance	Up to 70% RH

Sound Absorption Performance

System Reference		Isover Acoustic	Practical absorption coefficient $lpha_{ m p}$								
	Plenum (mm)	Partition Roll (APR 1200) (mm)	125	250	500	1000	2000	4000	a_{w}	Class	NRC
C10A014	400	_	0.65	0.6	0.55	0.45	0.4	0.35 (L)	0.45	D	0.5
C10A015	400	100	0.6	0.6	0.65	0.55	0.45	0.4 (L)	0.5	D	0.55



Application and installation

Handling and storage

Gyptone boards should be stored flat on a level surface and protected from dampness. To avoid damage to the special acoustic tissue bonded to the back face, Gyptone boards should not be pulled over the edges of the stack of boards below.

Jointing and finishing

Ensure that all required components, jointing equipment, accessories and tools are available prior to commencing installation of the board. Gyptone boards have an untreated surface which should be primed using Gyproc Drywall Primer, then matt emulsion painted with a short hair paint roller. Do not use a spray system as this will affect the acoustic properties of the board.

For full instructions regarding installation of Gyptone boards refer to the **British Gypsum Ceilings Installation Guide**.

Fixtures

Fixings to the system should always be made into the metal grid or to supplementary framing. Adjustment of the primary grid may be required to support particularly heavy loads. Refer to the **British Gypsum White Book** for full design information regarding the relevant system.

Environment

Gyptone boards are unsuitable for use in areas subject to continuously damp or humid conditions above 70% RH, or in elevated temperatures consistently above 49°C. They can be exposed to freezing temperatures without risk of damage.

Recyclability

The gypsum core of Gyptone boards is 100% recyclable. CasoLine MF, CasoLine curve and GypLyner UNIVERSAL are also 100% recyclable.

Date of previous version: first edition.

Product standards

All British Gypsum ceiling products are manufactured under management systems which have been independently audited and certified as conforming with *ISO 9001: 2001*. All Gyptone products conform to *EN 14190: 2014* gypsum plasterboard from reprocessing - requirements and test methods.

Maintenance

Gyptone boards can be redecorated using a short haired roller and suitable matt emulsion paint. The paint should not be applied with a spray diffuser as this will impair the acoustic performance.

Warranty

Gyptone QUATTRO 46 is covered by British Gypsum's SpecSure® lifetime system warranty. SpecSure® confirms British Gypsum systems will perform to the parameters published in our current literature for the period of time that the system is used for its originally designed purpose. Systems must be specified and installed in line with the current British Gypsum White Book, and comprise only genuine branded British Gypsum components.

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British Gypsum reserves the right to revise product specification without notice. The information herein should not be read in isolation as it is meant only as guidance for the user, who should always ensure that they are fully conversant with the products and systems being used and their subsequent installation prior to the commencement of work. For a comprehensive and up-to-date library of information is the British Gypsum website at: british-gypsum.com. For information about products supplied by Artex Limited or Saint-Gobain Issore please see their respective websites.

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