



Gyptone Boards, Tiles & Planks

Technical Datasheet

Gyptone boards, tiles & planks

Product data sheet



Introduction

Characteristics

Perforated acoustic ceiling and wall products perfectly combine design and technical performance to give a multitude of acoustic and visually striking interior design options.

The Gyptone range covers a broad spectrum of patterns, sizes and solutions - all with their own visual identity. All patterned ceiling and wall products are designed to absorb sound to ensure optimal acoustic performance.

Product Range

Gyptone Boards

Produced in the same standard size as plasterboard, 1200 x 2400mm, Gyptone boards are easy to install and work perfectly with our Gyproc MF ceiling system. They can even be used on wall lining or partition systems. To achieve a seamless finish Gyptone boards come with four tapered edges to ensure no crowned joints are visible, especially important for large ceiling areas. The boards come in a range of perforation styles with a special acoustic fleece backing to provide excellent, balanced acoustic properties.

Applications

The special acoustic fleece backing provides sound absorption across the full range of frequencies - ideal for sound control in classrooms, corridors, hospitals and large open plan areas.

Eligible for the SpecSure warranty from Gyproc



QUATTRO

Product Description	Dimensions	Thickness	Edge	Perforation Size	Centre Between Holes	Perforation Area
QUATTRO 41	1200 x 2400mm	12.5mm	4 Tapered Edge	12 x 12mm	25mm	16%
QUATTRO 42	1200 x 2400mm	12.5mm	4 Tapered Edge	12 x 12mm	25mm	10%
QUATTRO 46	1200 x 2400mm	12.5mm	4 Tapered Edge	12 x 12mm	25mm	10%
QUATTRO 47	1200 x 2400mm	12.5mm	4 Tapered Edge	12 x 12mm	25mm	6%

SIXTO

Product Description	Dimensions	Thickness	Edge	Perforation Size	Centre Between Holes	Perforation Area
SIXTO 63	1200 x 2400mm	12.5mm	4 Tapered Edge	Hexagonal 12mm	19.5mm	13%

LINE

Product Description	Dimensions	Thickness	Edge	Perforation Size	Centre Between Holes	Perforation Area
LINE 6	1200 x 2400mm	12.5mm	4 Tapered Edge	6 x 80mm	N/A	13%
LINE 7 - Bend*	900 x 2400mm	6.5mm	4 Tapered Edge	6 x 80mm	N/A	14%

*LINE 7 - Bend

Manufactured in only 6.5mm thick, LINE 7 Bend is perfect to create arched ceilings and curved wall features. Sound absorption performance varies depending on the plenum depth, bending radius and shape and if any mineral wool is used behind the boards.

Precise absorption figures cannot be provided due to the bespoke nature of these curved installations, however the data for straight / flat boards with similar patterns shown throughout this data sheet function as guidance.

Gyptone boards, tiles & planks

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Gyptone Tiles, Planks & Traps

Available in various modular sizes and four different edge designs, Gyptone tiles and planks are ideal for concealed and exposed grids. They can be fixed in suspended grids or screwed directly onto timber or steel battens.

Gyptone trap is a system for hinged corridor ceilings where the tiles can be let down on the side of choice. This allows for quick and easy access to installation and services behind the tiles.

QUATTRO Tiles

Product Description	Dimensions	Thickness	Edge	Perforation Size	Centre Between Holes	Perforation Area
QUATTRO 20	600 x 600mm	12.5mm/10mm*	A,E15,D1	9 x 9mm	19.5mm	18%
QUATTRO 22	600 x 600mm	12.5mm/10mm*	A,E15,D1	9 x 9mm	19.5mm	9%
QUATTRO 50	600 x 600mm	12.5mm/10mm*	A,E15,D1	12 x 12mm	25mm	18%

QUATTRO Plank

Product Description	Dimensions	Thickness	Edge	Perforation Size	Centre Between Holes	Perforation Area
QUATTRO 55	300 x 1800mm	12.5mm	A,E15	12 x 12mm	25mm	15%
	300 x 2100mm	12.5mm	A,E15	12 x 12mm	25mm	15%
	300 x 2400mm	12.5mm	A,E15	12 x 12mm	25mm	15%

QUATTRO Trap

Product Description	Dimensions	Thickness	Edge	Perforation Size	Centre Between Holes	Perforation Area
QUATTRO 20	600 x 1200mm	12.5mm	A	9 x 9mm	19.5mm	18%
	600 x 1800mm	12.5mm	A	9 x 9mm	19.5mm	18%
QUATTRO 50	600 x 1200mm	12.5mm	A	12 x 12mm	25mm	18%
	600 x 1800mm	12.5mm	A	12 x 12mm	25mm	18%

SIXTO Tile

Product Description	Dimensions	Thickness	Edge	Perforation Size	Centre Between Holes	Perforation Area
SIXTO 60	600 x 600mm	12.5mm/10mm*	A,E15,D1	Hexagonal 11mm	20mm	17%

LINE Tile

Product Description	Dimensions	Thickness	Edge	Perforation Size	Centre Between Holes	Perforation Area
LINE 4	600 x 600mm	12.5mm/10mm*	A,E15,D1	6 x 95mm	N/A	18%

LINE Plank

Product Description	Dimensions	Thickness	Edge	Perforation Size	Centre Between Holes	Perforation Area
LINE 8	300 x 1800mm	12.5mm	A,E15	6 x 80mm	N/A	15%
	300 x 2100mm	12.5mm	A,E15	6 x 80mm	N/A	15%
	300 x 2400mm	12.5mm	A,E15	6 x 80mm	N/A	15%

* All Gyptone tiles in Edge A & Edge E15 will be available in 10mm thickness from October 2012

* All products in Edge D1 will continue to be available in 12.5mm thickness

Gyptone boards, tiles & planks

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LINE Trap

Product Description	Dimensions	Thickness	Edge	Perforation Size	Centre Between Holes	Perforation Area
LINE 4	600 x 1200mm	12.5mm	A	6 x 95mm	15mm	18%
	600 x 1800mm	12.5mm	A	6 x 95mm	15mm	18%

POINT Tiles

Product Description	Dimensions	Thickness	Edge	Perforation Size	Centre Between Holes	Perforation Area
POINT 11	600 x 600mm	12.5mm/10mm*	A,E15,D1	Diameter 6.5mm	15mm	12%
POINT 12	600 x 600mm	12.5mm/10mm*	A,E15,D1	Diameter 6.5mm	15mm	5%

POINT Plank

Product Description	Dimensions	Thickness	Edge	Perforation Size	Centre Between Holes	Perforation Area
POINT 15	300 x 1800mm	12.5mm	A,E15	Diameter 6.5mm	15mm	11%
	300 x 2100mm	12.5mm	A,E15	Diameter 6.5mm	15mm	11%
	300 x 2400mm	12.5mm	A,E15	Diameter 6.5mm	15mm	11%

POINT Trap

Product Description	Dimensions	Thickness	Edge	Perforation Size	Centre Between Holes	Perforation Area
POINT 11	600 x 1200mm	12.5mm	A	Diameter 6.5mm	15mm	12%
	600 x 1800mm	12.5mm	A	Diameter 6.5mm	15mm	12%

BASE Tile

Product Description	Dimensions	Thickness	Edge	Perforation Size	Centre Between Holes	Perforation Area
BASE 31	600 x 600mm	12.5mm/10mm*	A,E15,D1	N/A	N/A	N/A

BASE Plank

Product Description	Dimensions	Thickness	Edge	Perforation Size	Centre Between Holes	Perforation Area
BASE 33	300 x 1800mm	12.5mm	A,E15	N/A	N/A	N/A
	300 x 2100mm	12.5mm	A,E15	N/A	N/A	N/A
	300 x 2400mm	12.5mm	A,E15	N/A	N/A	N/A

BASE Trap

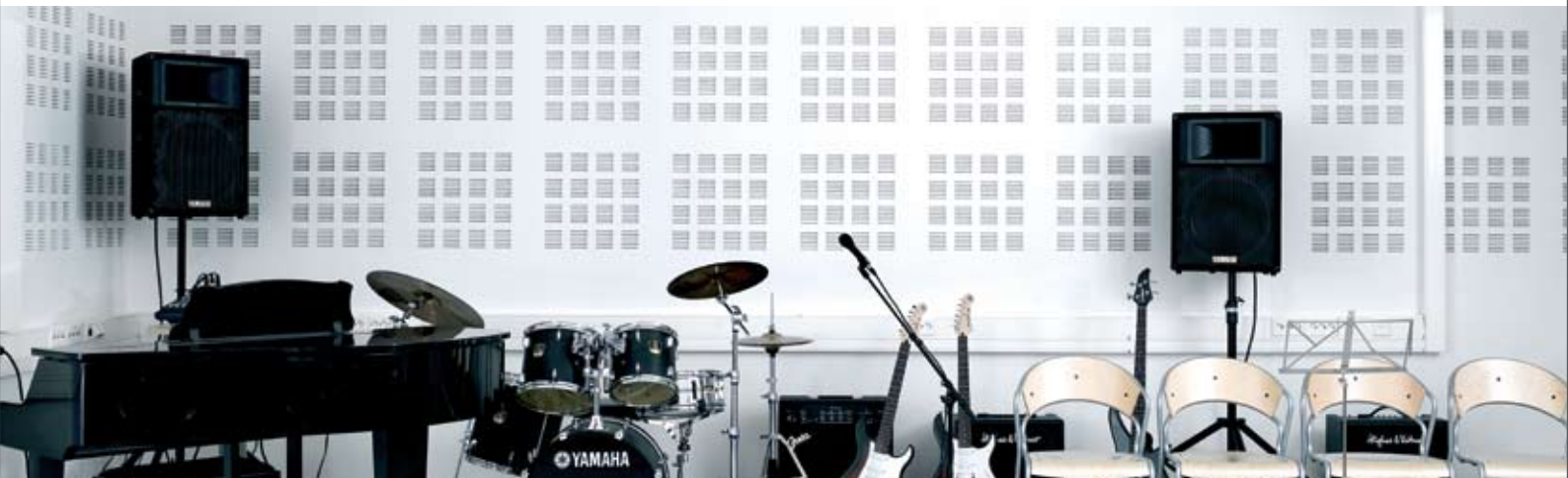
Product Description	Dimensions	Thickness	Edge	Perforation Size	Centre Between Holes	Perforation Area
BASE	600 x 1200mm	12.5mm	A	N/A	N/A	N/A
	600 x 1800mm	12.5mm	A	N/A	N/A	N/A

* All Gyptone tiles in Edge A & Edge E15 will be available in 10mm thickness from October 2012

* All products in Edge D1 will continue to be available in 12.5mm thickness

Gyptone boards, tiles & planks

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Finishing

Product types

4 Tapered Edge (4TE)- Finish with Gyproc Joint Compound and Gyproc Tapes.

Jointing

Gyproc Jointing Compound provides durable joint reinforcement and a smooth, continuous, crack-resistant surface ready for priming and final decoration. A number of jointing specifications are available to suit the board type, method of application, and site preference.

Decoration

Gyptone boards are supplied unpainted. The surface finish is completed on site after jointing. Ceilings must be painted with a short-haired roller. Gyptone tiles, planks and traps are supplied pre-painted white NCS 0500.

Repair

Minor damage - Lightly sand the surface to remove burrs and fill flush with two applications of Gyproc Jointing Compound. When dry, decoration including any decorator's preparatory work should follow.

Deep indents resulting from impact - Check the plasterboard core to ensure that it is not shattered. If intact, apply a coat of Gyproc Jointing Compound, followed by the procedure for repairing minor damage, once set/dry.

Damaged core and/or broken edges (non-fire rated or non-high impact situations only) - Remove the damaged area of core. Score the liner approximately 10mm away from the undamaged core around the damaged area, and peel the paper liner away. Apply PVA to seal the core and surrounding liner. Bulk fill the hole with Gyproc Jointing Compound, and strike off flush. Once the filler is set/dry, follow the procedure for repairing minor damage

Extensive damage - When the damage is more extensive or the partition is fire rated or has a high impact resistant requirement, it may be necessary to replace that area of Plaster board. It is important that the replacement board is of the same type as specified and installed. Cut out the affected area back to the nearest framing member. Replace the Plaster board, accurately cutting and screw fixing the same type and thickness of Plaster board. Fill edge joints, then tape using Gyproc Jointing Tapes and finish in the recommended way. When dry decoration, including any decorator's preparatory work should follow.

Standards

All Gyptone ceiling products are manufactured under management systems which have been independently audited and certified as conforming with ISO 9001: 2000. Gyptone products also conform to BS EN 14190: 2005 Gypsum plasterboard from reprocessing - requirements and test methods. Products can be installed in accordance with relevant standards; in particular, reference should be made to BS 8290: 1991 - Suspended ceilings, which is published in 3 parts:

Part 1: Code of practice for design

Part 2: Specification for performance of components and assemblies

Part 3: Code of practice for installation and maintenance.

Board Performance

Gyptone protection

Plasterboard linings provide good fire protection owing to the unique behaviour of the non-combustible gypsum core when subjected to high temperatures.

Fire resistance

Please refer to the appropriate Middle East WHITE BOOK product or systems section for information on the fire resistance of building elements lined with Gyptone.

Effect of temperature

Gyptone boards, tiles & planks are unsuitable for use in areas subject to continuously damp or humid conditions and must not be used to isolate

dampness. Plasterboards are not recommended to be stored in temperature above 49°C for prolonged period but can be subjected to freezing condition without risk of damage.

Effect of condensation

The designers should take care to eliminate all possibility of problems caused by humidity and condensation.

Gyptone tiles, planks and boards should be installed and used in areas with a relative humidity not exceeding 70% for prolonged periods

Gyptone boards, tiles & planks

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Acoustic Performance

Sound absorption

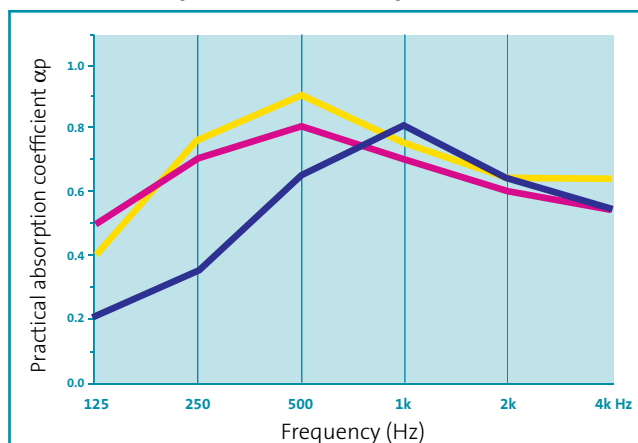
Gyptone SIXTO, QUATTRO, POINT and LINE provide sound absorption when used in conjunction with an air space behind the ceiling. Tests have been carried out to BS EN 20354: 1993 and ISO 354: 1985 with a range of plenum depths. Increased levels of sound absorption can be achieved by including ISOVER glass mineral wool over the back of the ceiling. The single figure rating practical sound absorption coefficients α_w , shown in the tables are calculated in accordance with EN ISO 11654: 1997. The Noise Reduction Coefficient (NRC) figures shown in tables are calculated in accordance with ASTM C423 -90a: 1992.

Sound attenuation

Gyptone SIXTO, QUATTRO, POINT and LINE are perforated tiles, planks and boards with an integral acoustic tissue designed to provide sound absorption within the area they are installed. Where room-to-room sound insulation is required, the sound attenuation D_{ncw} can be increased to 39dB with the inclusion of 100mm ISOVER General Purpose Roll over the back of the ceiling. Alternatively, other design considerations can be adopted, such as extending adjoining partitions into the ceiling void or installing a plenum barrier. Gyptone BASE is an unperforated product and has been tested to BS EN 20140-9: 1994 for room-to-room sound insulation. All products quote a System Reference. This is a unique number we allocate to all products and systems that references all the latest substantiations we hold. By quoting these figures on enquiries about the system, we are able to give you the most accurate and up to date advice and information.

QUATTRO 41

Practical absorption coefficient α_p

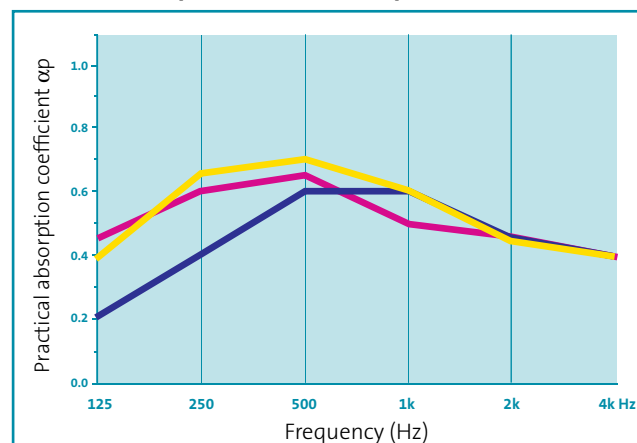


Hz	125	250	500	1K	2K	4K	NRC	α_w
■	0.20	0.35	0.65	0.80	0.65	0.55	0.65	0.60
■	0.50	0.70	0.80	0.70	0.60	0.55	0.70	0.65
■	0.40	0.75	0.85	0.75	0.65	0.65	0.75	0.70

- Plenum Depth 45mm
- Plenum Depth 187mm
- Plenum Depth 45mm with 50mm Isover
- Plenum Depth 287mm
- Plenum Depth 287mm with 75mm Isover
- Plenum Depth 400mm

QUATTRO 42

Practical absorption coefficient α_p



Hz	125	250	500	1K	2K	4K	NRC	α_w
■	0.20	0.40	0.60	0.60	0.45	0.40	0.55	0.40
■	0.45	0.60	0.65	0.50	0.45	0.35	0.55	0.50
■	0.40	0.65	0.70	0.60	0.45	0.40	0.60	0.40

- Plenum Depth 400mm with 100mm Isover
- Plenum Depth 387mm
- Plenum Depth 387mm with 100mm Isover
- Plenum Depth 137mm
- Plenum Depth 137mm with 100mm Isover

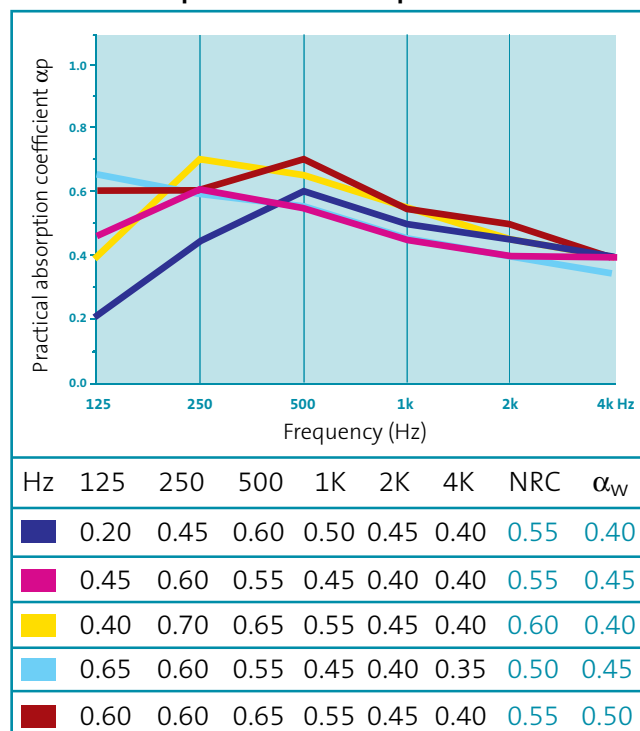
Gyptone boards, tiles & planks

Product data sheet



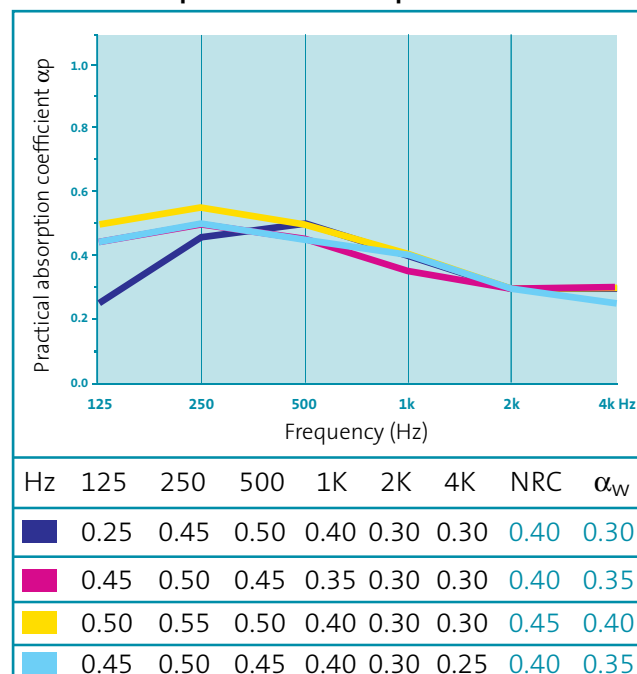
QUATTRO 46

Practical absorption coefficient α_p



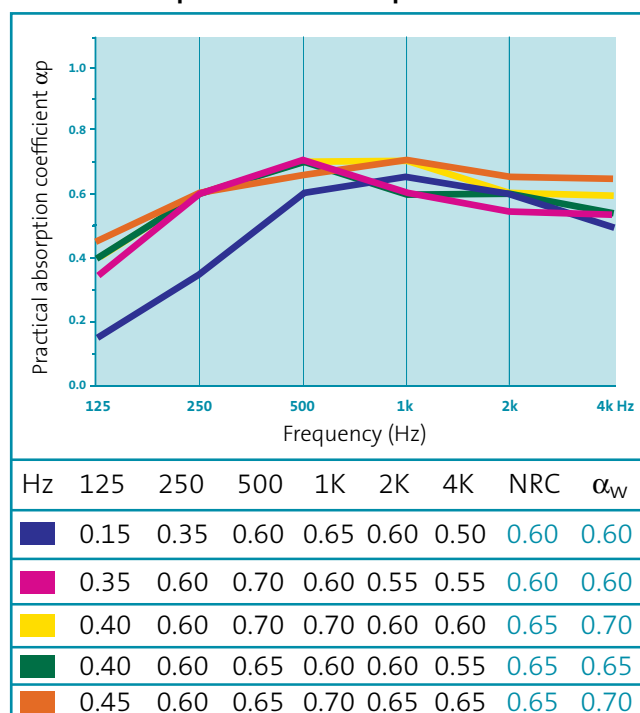
QUATTRO 47

Practical absorption coefficient α_p



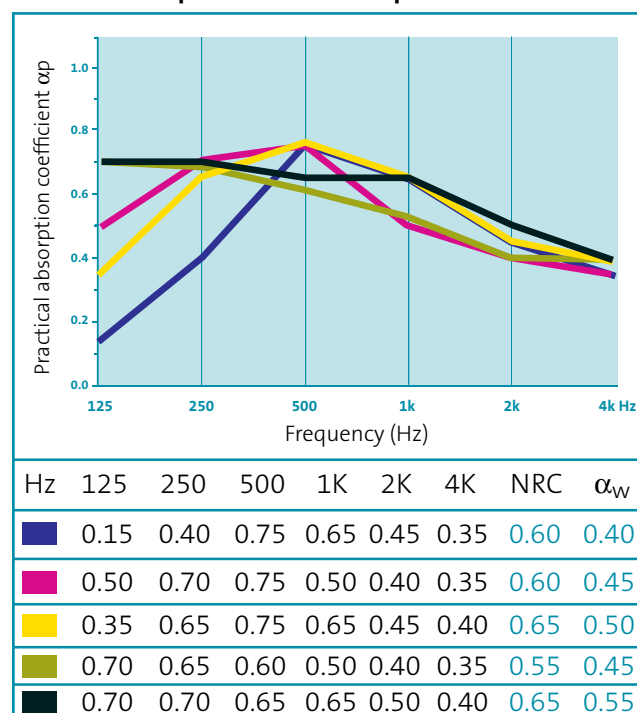
SIXTO 63

Practical absorption coefficient α_p



LINE 6

Practical absorption coefficient α_p



- Plenum Depth 45mm
- Plenum Depth 187mm
- Plenum Depth 45mm with 50mm Isover
- Plenum Depth 287mm
- Plenum Depth 287mm with 75mm Isover
- Plenum Depth 400mm

- Plenum Depth 400mm with 100mm Isover
- Plenum Depth 387mm
- Plenum Depth 387mm with 100mm Isover
- Plenum Depth 137mm
- Plenum Depth 137mm with 100mm Isover

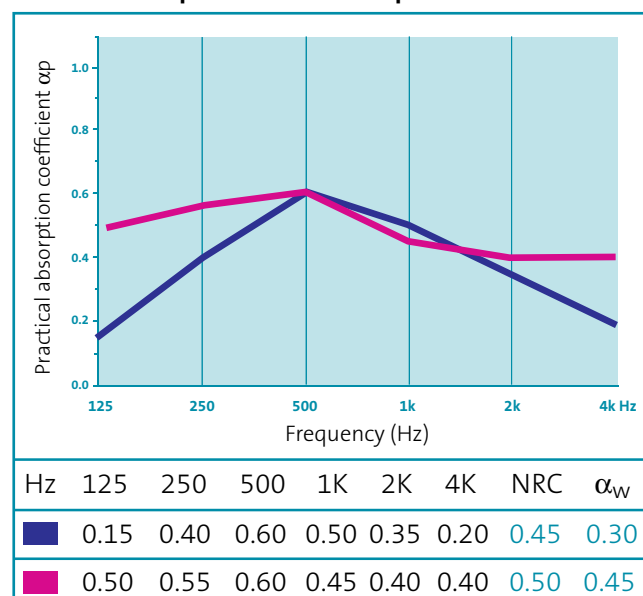
Gyptone boards, tiles & planks

Product data sheet



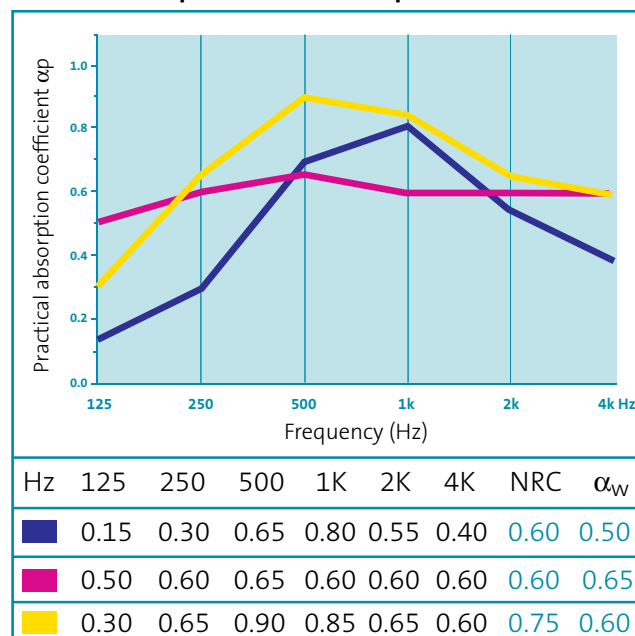
QUATTRO 22

Practical absorption coefficient α_p



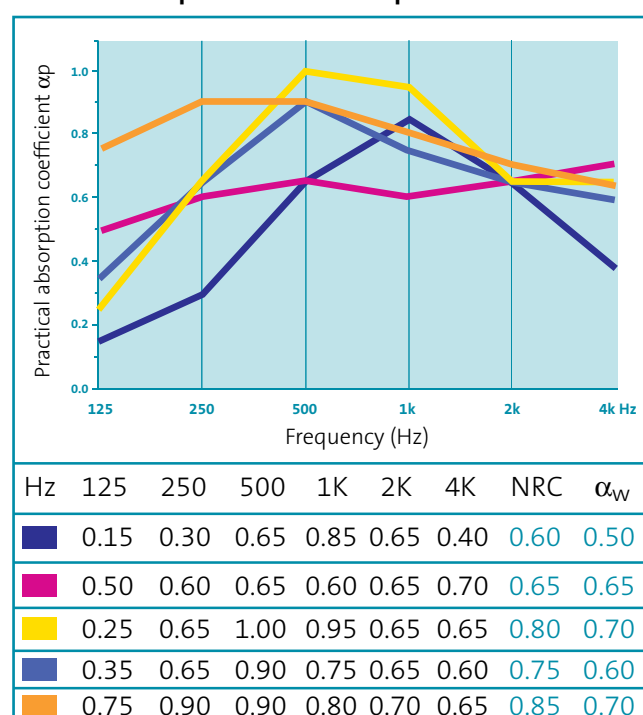
LINE 4 & LINE 8

Practical absorption coefficient α_p



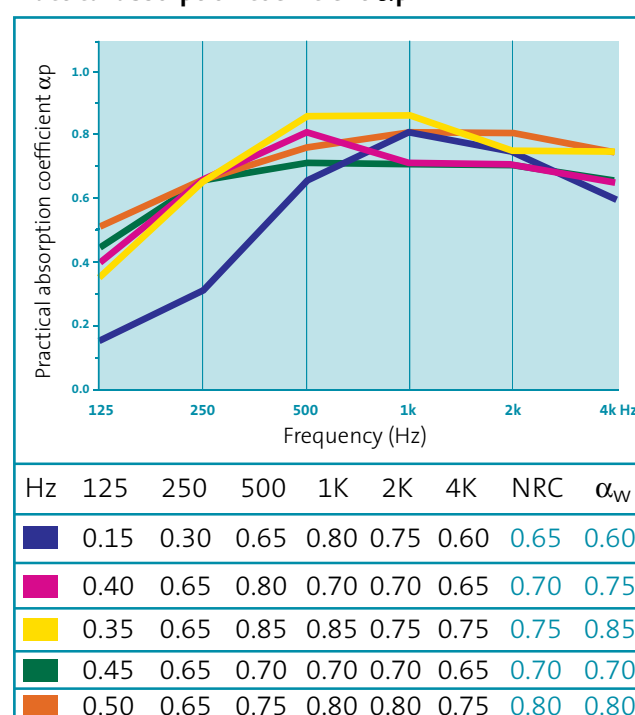
QUATTRO 20, QUATTRO 50, QUATTRO 55

Practical absorption coefficient α_p



SIXTO 60

Practical absorption coefficient α_p



- Plenum Depth 45mm
- Plenum Depth 187mm
- Plenum Depth 45mm with 50mm Isover
- Plenum Depth 287mm
- Plenum Depth 287mm with 75mm Isover
- Plenum Depth 400mm

- Plenum Depth 400mm with 100mm Isover
- Plenum Depth 387mm
- Plenum Depth 387mm with 100mm Isover
- Plenum Depth 137mm
- Plenum Depth 137mm with 100mm Isover

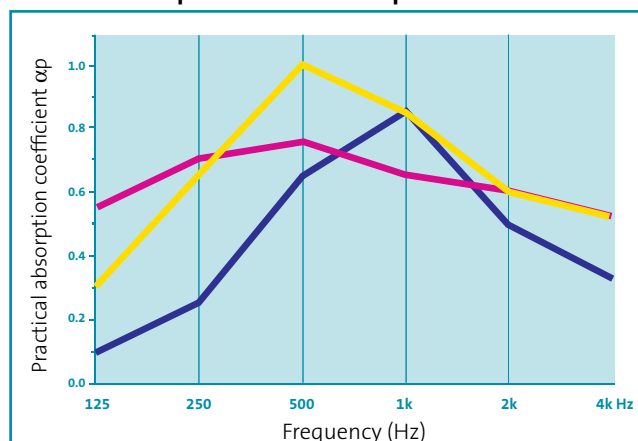
Gyptone boards, tiles & planks

Product data sheet



POINT 11 & POINT 15

Practical absorption coefficient α_p

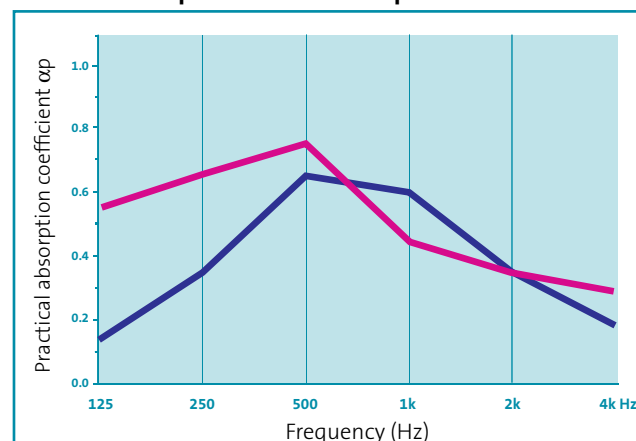


Hz	125	250	500	1K	2K	4K	NRC	α_w
Blue	0.10	0.25	0.65	0.85	0.50	0.35	0.55	0.40
Pink	0.55	0.70	0.75	0.65	0.60	0.55	0.65	0.65
Yellow	0.30	0.65	1.00	0.85	0.60	0.55	0.75	0.60

- Blue: Plenum Depth 45mm
- Pink: Plenum Depth 187mm
- Yellow: Plenum Depth 45mm with 50mm Isover
- Green: Plenum Depth 287mm
- Orange: Plenum Depth 287mm with 75mm Isover
- Light Blue: Plenum Depth 400mm

POINT 12

Practical absorption coefficient α_p



Hz	125	250	500	1K	2K	4K	NRC	α_w
Red	0.15	0.35	0.65	0.60	0.35	0.20	0.50	0.30
Green	0.55	0.65	0.75	0.45	0.35	0.30	0.55	0.40
Blue	0.15	0.35	0.65	0.60	0.35	0.20	0.50	0.30

- Red: Plenum Depth 400mm with 100mm Isover
- Green: Plenum Depth 387mm
- Dark Green: Plenum Depth 387mm with 100mm Isover
- Blue: Plenum Depth 137mm
- Orange: Plenum Depth 137mm with 100mm Isover

Installation

General

It is important to observe appropriate health and safety legislation when working on site i.e. personal protective clothing and equipment, etc. The following notes are intended as general guidance only. In practice, consideration must be given to design criteria requiring specific project solutions.

Handling

Manual off-loading of this product should be carried out with care to avoid unnecessary strain. For further information please refer to the Manual Handling section of the Middle East WHITE BOOK.

Cutting

This product may be cut using a plasterboard saw or by scoring with a sharp knife and snapping the board over a straight edge. Holes for switch or socket boxes should be cut out before the boards are fixed using a utility saw or sharp knife. When cutting boards, power and hand tools should be used with care and in accordance with the manufacturers' recommendations. Power tools should only be used by people who have been instructed and trained to use them safely. Appropriate personal protective equipment should be used.

Fixing

Gyptone boards are fixed using the Gyproc MF, Gyplyner or Gyproc MF CURVE systems. A range of access panels are available that allow access to the ceiling void. Gyptone Edge D1 tiles are installed into Gyptone special T-24 Edge D1 grids, and Gyptone planks are installed into Gyptone T-15 special main & edge profile grid systems. Gyptone A and E15 edge tiles are installed into the Gyproc 15mm or 24mm T-grid. All ceiling tiles and planks are fully demountable, allowing access to the ceiling void. For installation details, please refer to the Middle East WHITE BOOK.

Fixtures up to a maximum weight of 3kg can be supported by each tile.

Maintenance

Gyptone products can be cleaned using a damp cloth. Most standard mild detergents can be used. Gyptone can be re-decorated, as required, using a short haired roller and a suitable emulsion paint. The perforated tiles should not be spray painted as this may impair the sound absorption performance.

Gyptone boards, tiles & planks

Product data sheet



Health & Safety

1. Identification of the substances / preparation and company

Perforated acoustic gypsum products

Acoustic tissue lamination to the back

Supplier Saint-Gobain Gyproc Emirates Industries L.L.C
ICAD1, Mussafah
Abu Dhabi
United Arab Emirates
P.O. Box 38983
Free Phone: 800 GYPROC (497762)

Recommended uses: Recommended uses: Gyptone boards, tiles & planks are ideal for sound contract in classrooms, corridors, hospitals & large open plan areas.

2. Composition / information on ingredients

Plasterboard - Aerated gypsum core (calcium sulphate dihydrate) encased in and firmly bonded to strong paper liners. Constituents may include minor amounts of starch, boric acid, foaming agent, sugar and dispersing agent.

Acoustic tissue.

3. Hazards identification

THE MOST IMPORTANT HAZARDS ARE:

These products are not classified as dangerous according to CHIP. CHIP is the law that applies to suppliers of dangerous chemicals. Its purpose is to protect people and the environment from the effects of those chemicals by requiring suppliers to provide information about the dangers and to package them safely.

There is a risk of cuts and abrasions from sharp edges and ends when handling access panels. After installation open access panels with care.

4. First aid measures

Eye contact Wash eyes with clean water.

Skin contact Wash thoroughly with soap and water.

Ingestion Not applicable.

Inhalation If irritation persists, remove person to fresh air.

General Get medical attention if any symptoms persist.

5. Fire fighting measures

The products do not pose a fire hazard. However, some packaging materials or facings may burn.

Suitable extinguishing media – water, foam, carbon dioxide, dry powder.

6. Accidental release measures

Product discarded in an unaltered form is classified as a non-hazardous waste.

7. Handling and storage

Manual handling - Gyptone products can be unwieldy over a certain size, use an appropriate lifting technique.

The weight of each product can vary.

Storage

Store Gyptone products as supplied in dry conditions. To maintain stability, place the product on firm level ground, and ensure any stacked product is both level and vertical.

8. Exposure control / personal protection

Substance	Total inhalable	Respirable
Plaster	10mg/m ³ (8hr TWA)	4mg/m ³ 8hr TWA
Quartz (silica)	0.3mg/m ³ (8hr TWA)	–
Man Made Mineral Fibres (MMMMF)	15mg/m ³ (8hr TWA)	5mg/m ³ (8hr TWA)

NB: HSE guidance – control exposure to <0.1mg/m³ (8hr TWA)

Personal protection

Respiratory Use in a well ventilated area. Where practicable use engineering methods to control dust levels. If the exposure standards could be exceeded use a disposable face mask complying with EN 149 FFP2.

Skin Wear appropriate clothing to protect against repeated or prolonged skin contact.

Eye If there is a risk of material entering the eye, wear eye protection to BS EN 166.

9. Physical & chemical properties

Flat sheet pieces of board in varying dimensions, within an anodised aluminium sectionalised frame.

10. Stability and reactivity

Stable under normal conditions but when subjected to high temperatures fumes are produced.

11. Toxicology information

No known toxicological effects.

12. Ecological information

Stable product with no known adverse environmental effects.

13. Disposal consideration

Wastes from gypsum products are normally classified as 'non-hazardous' but should not be co-disposed with municipal waste. Dispose at an authorised landfill site in accordance with the local waste management regulation.

14. Transport information

Not classified as hazardous for transportation.

15. Regulatory information

Not classified under the CHIP regulations.

16. Other information

Regulation no. 1004 Soild Hazardous materials 1st Edition January 2010 Abu Dhabi Environment, Health and Safety Manegment System Regulations Framework (ADEHSMS).
The Gyproc website: www.gyproc.ae
The Middle East WHITE BOOK

Note to User:

This Product Data Sheet does not constitute a workplace risk assessment for COSHH.

There are a number of situations where the approach to manual handling of Gyproc products should be considered. For further guidance, please refer to the Manual Handling section of the Middle East WHITE BOOK which can be downloaded from www.gyproc.ae.

GYPTONE. THE ULTIMATE IN SOUND PERFORMANCE.



Register for an information pack at www.gyproc.ae/register or call free on 800 GYPROC (497762).



With acoustic absorption up to 0.85 NRC (Noise Reduction Co-efficient), Gyptone revolutionises the design of acoustic ceilings and walls. The special acoustic fleece backing provides sound absorption across the full range of frequencies - ideal for sound control in classrooms, corridors and large open plan areas. Four visually stunning perforation designs are available: line, square, point and hexagonal and in a range of boards and ceiling tiles. Made with natural materials and easily maintained, Gyptone is as functional as it is stunning.

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www.gyproc.ae

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Abu Dhabi, UAE



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