Gypframe Metal Profiles

Technical & Safety Datasheet



TECHNICAL DATASHEET



INTRODUCTION

This data sheet is designed to provide a range of technical & HSE data, including our manufacturing processes and standards, how to use Gypframe, complete product list with dimensional properties and health & safety precautions. For any further information please contact us on 800 GYPROC (497762) or at www.gyproc.ae

Characteristics

Gypframe profiles are designed for use in Gyproc drylining systems and are cold roll formed from DX51D + Z140 utilising the patented $UItraSteel^{TM}$ process.

Protective Coating

All Gypframe metal components are available with standard Zinc coating of Z140.*

*Also available in Z275 upon request.

Cold Rolling and UltraSteel™

UltraSteelTM is a manufacturing process that alters the characteristics of plain steel, providing higher strength capacity at a lighter gauge. The process effectively hardens the steel by working it in strips with two mating rolls, which produce a dimpled surface and ribbing effect across the surface of the metal. During the process, the effective thickness of the material is increased to that of the original thickness plus that of the ribbing.

EXAMPLE

Base gauge = 0.5mm : after UltraSteelTM process = 1.0mm



Once the UltraSteel™ process has been applied, the base material is then passed through a series of contoured rollers which progressively form the steel into the required profile. The number of rollers in the process will vary, depending on the complexity of the profile being rolled. Service entries or tabs are pierced, either at the beginning or end of this process. The formed profiles are then cut to exact length, packed and then bundled ready for delivery. UltraSteel™ is unique to Gyproc and the Gypframe product range. Along with an aesthetic difference, UltraSteel™ provides the following additional benefits over plain steel sections:

- + Improved yield strength
- + Improved load carrying capacity
- + Improved screw retention and strip out strength
- + Improved resistance to screw pull-out

Standards

Gypframe metal products are produced to the following manufacturing standards:

EN 14195:2005 EN 10162:2003 ASTM C645

All Gyproc system solutions listed in the Middle East WHITE BOOK are covered by the SpecSure system warranty designed to protect the integrity of Gyproc specifications and deliver reliable performance, unrivalled technical support and peace of mind for everyone involved in the construction team.

General

For full information on the manual handling of Gyproc systems and Gypframe profiles please refere to the WHITE BOOK. For health and safety guidance, handling, storage information for our Gypframe profiles, please refer to the Health & Safety section of this data sheet. All literature is available to download from www.gyproc.ae

Recycled Content

Gypframe metal components are produced using steel manufactured by major world producers who use minimum 30% recycled ferrous scrap in producing the steel. Out of this 30% ferrous scrap:

- 80% is post-consumer recycled content
- 20% is pre-consumer recycled content

100% of Gypframe components are recyclable.

Fixing

Gyproc Drywall Screws should be used for fixing Gyproc plasterboard to Gypframe metal, with the exception of Gyproc Habito plasterboard which should be fixed using Gyproc Habito Screws. Screw length should be based on board thickness and reaching a minimum of 10mm penetration into the metal framing.

EXAMPLE					
Gyproc Plasterboard	Gyproc DryWall Screws Size in mm				
1 x 12.5mm	25	35	42		75
1 x 15mm	25	35	42		75
2 x 12.5mm	25	35	42		75
2 x 15mm	25	35	42		75
3 x 12.5mm	25	35	42	55	75
3 x 15mm	25	35	42	55	75
4 x 12.5mm	25	35	42		75
4 x 15mm	25	35	42		75

It is important to select the right type of screw for the gauge (thickness) of Gypframe metal you are using.

For fixing Gyproc plasterboard to Gypframe metal					
Gyproc Drywall Screws Gyproc Jack-Point Screws					
Gypframe metal up to 0.8mm	Gypframe metal above 0.8mm and all 'I' Studs				

For fixing Gypframe metal to metal					
Gyproc Wafer Head Screws	Gyproc Wafer Head Jack-Point Screws				
Gypframe metal up to 0.8mm	Gypframe metal above 0.8mm and all 'I' Studs				

Refer to Gyproc Screws data sheet for additional information

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Understanding Gypframe

The naming of Gypframe profiles follows a relatively simple nomenclature where the first 2 or 3 digits of a code refer to the component width, the letters refer to the component type and the last 2 digits indicate the gauge or metal thickness in mm. Several examples are listed in the table below. Other components also follow a simple 2 or 3 letter code with a further 1 or 2 digits to further identify the product. Examples would be RB1 – Resilient Bar 1, GA3 – Gypframe Angle 3, GFS1 – Gypframe Fixing Strap 1 and so on. Further information including descriptions, weights and dimensions are on the following pages.

Gypfra	Gypframe component		Description
Width	Туре	Gauge	
70	S	50	70mm - 'C' Stud - in 0.5mm gauge
92	AS	50	92mm - AcouStud - in 0.5mm gauge
150	I	90	150mm - 'I' Stud - in 0.9mm gauge
100	SC	80	Starter Channel - in 0.8mm gauge (for 100mm ShaftWall system)
103	FC	90	103mm - Fixing Channel - in 0.9mm gauge
52	С	50	52mm - Channel - in 0.5mm gauge
72	DC	60	72mm - Deep Channel - in 0.6mm gauge
102	EDC	80	102mm - Extra Deep Channel - in 0.8mm gauge

Gypframe Studs

Used as the vertical support in wall framing, these products are available in a range of widths, lengths and gauge depending on requirements for strength, height, impact resistance and sound insulation. Profile drawings are on page 6 and 7.

Gypframe 'C' Studs

The Gypframe 'C' Stud design includes sight lines down the legs of the stud to ease board alignment and increase profile strength. Structural apertures are also spaced along the spine of the Gypframe 'C' Stud, providing easy routing of services through the partition.



Product code	Width mm	Gauge thickness mm#	Available lengths mm*	Linear metre weight kg
50 S 50	50	0.5	3000	0.460
63 S 50	63	0.5	3000	0.500
70 S 50	70	0.5	3000	0.550
73 S 50	73	0.5	3000	0.550
92 S 50	92	0.5	3000	0.640
100 S 50	100	0.5	3000	0.670
150 S 50	150	0.5	3000	0.820

[#] Also available in increased gauge upto 0.9mm with increments of 0.1mm

Gypframe 'I' Studs

These studs are the strongest available in the Gypframe range. They allow for increased partition height, without increasing partition width, and provide improved impact resistance. Commonly used in ShaftWall, GypLyner IWL, GypWall QUIET IWL and other GypWall systems where board fixing strength is paramount. Structural apertures are also spaced along the spine of the Gypframe 'I' Stud, providing easy routing of services through the partition.

Product code	Width mm	Gauge thickness mm#	Available lengths mm*	Linear metre weight kg
70 70	70	0.7	3000	1.080
100 80	100	0.8	3000	1.420
150 I 90	150	0.9	3000	1.640

[#] Also available in 0.9 mm gauge thickness

Gypframe AcouStuds

These unique shaped studs are used for increased acoustic performance. The innovative patented profile reduces sound energy as it passes through the partition. Gypframe AcouStuds are available in both 70mm and 92mm sizes and can upgrade the acoustic performance of your partition without using insulation. The Gypframe AcouStud design includes sight lines for both board alignment and added profile strength. Gypframe AcouStuds also have wider flange widths than Gypframe 'C' Studs, providing increased board fixing area.

Product code	Width mm	Gauge thickness mm	Available lengths mm*	Linear metre weight kg
70 AS 50	70	0.5	3000	0.760
92 AS 50	92	0.5	3000	0.850

^{*} Bespoke lengths available on request

^{# 92}mm C stud is also available 1.0 mm gauge thickness

^{*} Bespoke lengths available on request

^{*} Bespoke lengths available on request

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Gypframe Standard, Deep and Extra Deep Channel

These products are used for retaining wall studs at floor and ceiling junctions. Although Standard (C) channels are the most commonly used, Deep Flange (DC) and Extra Deep Flange (EDC) versions are available for partitions over 4200mm high and 8000mm high respectively, or in situations where easier fixing of skirting is required, for deflection head details and improved impact resistance. Profile drawings are on page 6 and 7.

Product code	Width mm	Gauge thickness mm#	Available lengths mm*	Linear metre weight kg
52 C 50	52	0.5	3000	0.365
65 C 50	65	0.5	3000	0.413
72 C 50	72	0.5	3000	0.460
75 C 50	75	0.5	3000	0.480
94 C 50	94	0.5	3000	0.540
102 C 50	102	0.5	3000	0.560
152 C 50	152	0.5	3000	0.734

[#] Also available in increased gauge upto 0.9mm with increments of 0.1mm

Gypframe Deep Channels

Deep (DC) Channels are used for partition heights between 4200mm and 8000mm or in situations where easier fixing of skirting is required, for deflection head details and improved impact resistance. Profile drawings are on page 6 and 7.



Product code	Width mm	Gauge thickness mm#	Available lengths mm*	Linear metre weight kg
52 DC 60	52	0.6	3000	0.701
65 DC 60	65	0.6	3000	0.751
72 DC 60	72	0.6	3000	0.791
75 DC 60	75	0.6	3000	0.831
94 DC 60	94	0.6	3000	0.930
102 DC 60	102	0.6	3000	0.940
152 DC 60	152	0.6	3000	1.177

[#] Also available in increased gauge upto 0.9mm with increments of 0.1mm

Gypframe Extra Deep Channels

Extra Deep (EDC) Channels are used for partition heights over 8000mm or in situations where easier fixing of skirting is required, for deflection head details and improved impact resistance. Profile drawings are on page 6 and 7.



Product description	Width mm	Gauge thickness mm#	Available lengths mm*	Linear metre weight kg
52 EDC 80	52	0.8	3000	1.188
65 EDC 80	65	0.8	3000	1.313
72 EDC 80	72	0.8	3000	1.357
75 EDC 80	75	0.8	3000	1.376
94 EDC 80	94	0.8	3000	1.490
102 EDC 80	102	0.8	3000	1.545
152 EDC 80	152	0.8	3000	1.860

[#] Also available in 0.9mm gauge thickness

Gypframe MF Ceiling Channels and Accessories

These channels and associated accessories are designed for providing seamless suspended ceilings that can be either flat or curved. Profile drawings are on page 6, 7 and 8.



Product description	Width mm	Gauge thickness mm	Available lengths mm*	Linear metre weight kg
MF5 (Furring section)	35	0.5#	3000	0.367
MF7 (Main Channel)	38	0.5#	3000	0.230
GA1 Angle	25 x 25	0.5#	3000	0.190
Soffit Cleat with Nut & Bolt	25	1.6	n/a	n/a
Main Channel Clip	41.56	2.5	n/a	0.007

^{**} Also available in increased gauge upto 0.9mm with increments of 0.1mm, MF7 and GA1 also available in 1.5mm gauge thickness

Gypframe Clip-in Channels and Accessories.

These channels and associated accessories are designed for suspended Gyproc Clip-in Metal Ceiling System. Profile drawings are on page 6.



Product description	Width mm	Gauge thickness mm	Available lengths mm	Linear metre weight/pc kg
Spring T	35	0.45	4000	0.401
Main Channel Clip	41.56	2.5	-	0.007

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^{*} Bespoke lengths available on request

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GypLyner Studs and Accessories

This range of studs and accessories is designed for the ease of installing plasterboard linings on masonry walls, concrete soffits, and the encasement of steel columns and beams. Profile drawings on page 6 and 7.

	Product description	Width mm	Gauge thickness mm#	Available lengths mm*	Linear metre weight kg
	GL1 Stud	38	O.5 [#]	3000	0.263
	GA1 Angle	25 x 25	O.5 [#]	3000	0.190
	GLB85 Fixing Bracket	30	0.8	n/a	n/a
	GLB135 Fixing Bracket	30	0.8	n/a	n/a

[#] Also available in increased gauge upto 0.9mm with increments of 0.1mm

ShaftWall Channels and Accessories

This range of channels and compatible accessories is designed especially for the high performance ShaftWall system. 70mm 'I' Stud ShaftWall system uses 70 SC 70 Starter Channel & RC70 Retaining Channel. 100mm 'I' Stud ShaftWall system uses 100 SC 80 Starter Channel and RC100 Retaining Channel. 150mm 'I' Stud ShaftWall system uses 150 SC 90 Starter Channel and RC150 Retaining Channel. Profile drawings are on page 6 and 7.

Product description	Width mm	Gauge thickness mm	Available lengths mm*	Linear metre weight kg
70 SC 70	70	0.7#	3000	0.687
100 SC 80	100	0.8#	3000	0.980
150 SC 90	150	0.9	3000	1.450
RC70	45	0.4	3000	0.280
RC100	73	0.5	3000	0.392
RC150	35	0.4	3000	0.283
GA3 Angle	32 X 19	0.6#	3000	0.300

[#] Also available in increased gauge upto 0.9mm with increments of 0.1mm

Performance Accessories for Gyproc Acoustic Systems

These specially engineered products are used to optimise acoustic performance in partition wall systems.

Product description	Width mm	Gauge thickness mm	Available lengths mm*	Linear metre weight kg
Gypframe RB1 Resilient Bar	16	0.45	3000	0.390
GAB3 Gypframe Acoustic Brace	-	-	459 (per box)	8 (per box)

^{*} Bespoke lengths available on request

Gypframe Steel Angles

Widely used in framed construction to provide support, fixing and additional strength to wall, ceiling and encasement framing. Profile drawings are on page 6 and 7.

Product description	Dimensions mm	Gauge thickness mm	Available lengths mm*	Linear metre weight kg
GA1 Angle	25 x 25	0.5#	3000	0.190
GA3 Angle	32 x 19	0.6#	3000	0.270
GA4 Angle	50 x 25	0.7#	3000	0.440
GA6 Splayed Angle	86.5 × 86.5	0.5	3000	0.670

[#] Also available in increased gauge upto 0.9mm with increments of 0.1mm

Gypframe Fixing Strap and Channels

Used to maintain board fixings along horizontal joints in multi-layer boarded systems and to give added support for fixtures and fittings.



Product description	Width mm	Gauge thickness mm	Available lengths mm*	Linear metre weight kg
GFS1 Fixing Strap	70	0.40	2400 3000	0.260
103 FC 50 Fixing Channel	103	0.50	2400	0.390
103 FC 90 Fixing Channel	103	0.90	2400	0.680

All products listed above are supplied in plain steel

Plasterboard Metal Accessories

A range of beads for use with plasterboard to provide corner and edge reinforcement and protection.



Product description	Dimensions mm	Gauge thickness mm#	Available lengths mm*	Linear metre weight kg
Corner Bead 25 x 25mm	25 x 25	0.4	3000	0.109
Corner Bead 31 x 31mm	31 x 31	0.4	3000	0.140
Edge Bead 12.5mm	10 x 12.5 x 25	0.4	3000	0.150
Edge Bead 15mm	10 x 15 x 25	0.4	3000	0.160

[#] Also available in increased gauge upto 0.9mm with increments of 0.1mm

^{*} Bespoke lengths available on request

TECHNICAL DATASHEET



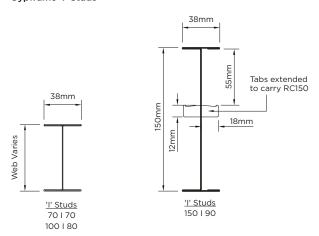
GYPFRAME PROFILES

Studs

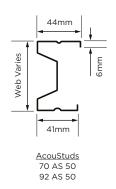
Gypframe 'C' Studs



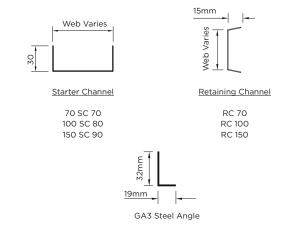
Gypframe 'I' Studs



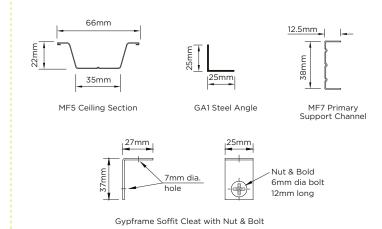
Gypframe AcouStuds



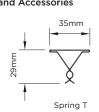
ShaftWall Channels and Accessories

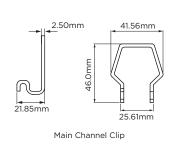


Gypframe MF Ceiling sections



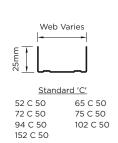


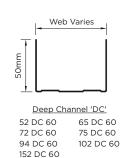


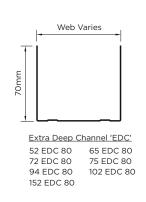


Channels

Gypframe Standard, Deep and Extra Deep Channels



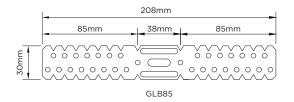




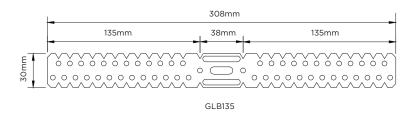
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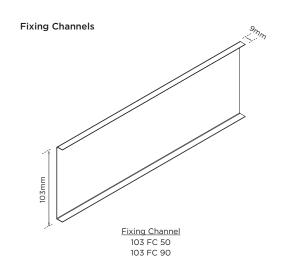
GypLyner sections

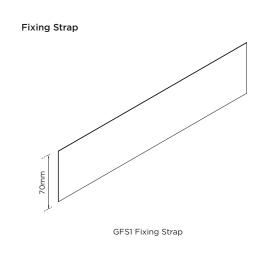


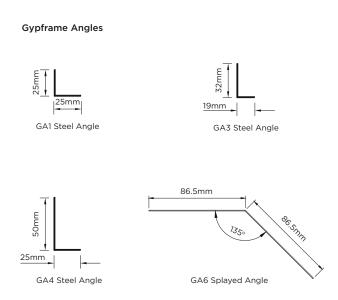


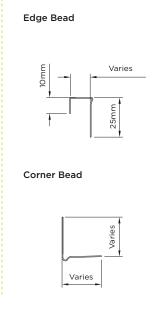


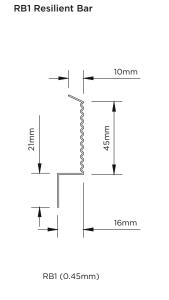












MATERIAL SAFETY DATASHEET



HEALTH & SAFETY

1. Identification of the substances/ preparation and company Gypframe metal sections

Supplier Saint-Gobain Gyproc Emirates Industries L.L.C

ICAD 1, Mussafah Abu Dhabi

United Arab Emirates P.O. Box 38983

Free Phone: 800 GYPROC (497762)
E-Mail: gyproc-me@saint-gobain.com

Recommended uses: In conjunction with Gyproc plasterboards to form internal walls and ceiling systems, linings and encasements.

2. Composition / Information on ingredients

General composition: Mild steel sections coated by zinc electrolytic process or hot dip galvanised process. The sections may have a protective film of a roll forming hydrocarbon lubricant or a residue of cutting fluid.

3. Hazards identification

THE MOST IMPORTANT HAZARDS ARE:

These products are not classified as dangerous according to CLP. CLP 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 metal sections and in use where they have been fitted to floors or walls and are exposed, prior to fixing plasterboard.

There is also a risk when cutting the banding due to the release of tension and the potential movement of material. Repeated contact with sheet metal coatings may cause skin irritation. During power cutting, grinding or drilling, irritant fumes or dust may be produced which can cause metal fume fever.

4. First aid measures

Eye contactSeek medical attention and treatment.Skin contactWash thoroughly with soap and water.IngestionSeek medical attention and treatment.InhalationIf irritation persists, remove person to fresh air.GeneralGet medical attention if any symptoms persist.

5. Fire fighting measures

The products do not pose a fire hazard. However, the protective coating/lubricant, packaging banding or sponge rubber elements may be combustible and emit hazardous fumes.

Suitable extinguishing media - 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

Mechanical handling - The dimensions of the pallet vary depending upon the product size. To avoid potentially overloading a lift truck, it is important that any effect on load centres is considered. The nominal weight of each palletised load is given on the delivery note.



Manual handling - Metal sections are supplied in a variety of lengths and widths and the weight of different sections varies. Do not use the banding or straps for lifting. Carefully consider the manual handling risks before lifting sections of metal. Appropriate cut-resistant PPE should be used when handling metal sections.

Storage - Store on pallets supplied and in dry conditions. To maintain stability, place pallets on firm level ground and ensure that stacks are both level and vertical. Stack height should not exceed twice the width of the pack. Banding should only be removed at ground level.

Use - Caution: as with all cut metal products, there is risk from sharp corners or edges. Appropriate cut-resistant PPE should be used when handling metal sections. Avoid prolonged and repeated contact with skin and wear protective clothing when handling metal sections (see Section 8).

When the banding is cut it may spring back as tension is released and the pack of material may become unstable. Appropriate PPE (including eye protection to BS EN 166) should be worn.

Metal sections which have been fixed to the floor or side wall, ready for plasterboard fixing, may have exposed sharp edges and care should be taken to protect persons from unintentional contact. Exposure to potentially sharp edges should be minimised.

Metal sections are not designed to support body weight; fixers must work from an independent support system.

8. Exposure control/ personal protection

Respiratory Use in a well ventilated area. Wear approved

respiratory equipment when power cutting or

grinding.

Skin Wear cut resistant gloves, suitable overalls and

footwear when handling sections.

Eye If there is a risk of material entering the eye, wear

eye protection to BS EN 166.

9. Physical and chemical properties

Appearance Metal sections in various lengths, thicknesses and

formation.

Odour Paraffin/oil (protective coating).

10. Stability and reactivity

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

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11. Toxicology information

Inhalation Dry grinding or machining may produce dust of the

same composition as the coating and base metal. Flame cutting may produce fumes containing oxides of zinc and iron, and also breakdown products of protective coating. Potential effects health include metal fume fever, a condition similar to influenza.

Skin contact Prolonged and repeated contact may cause

irritation

Eye contact None in normal use.

Ingestion Not applicable.

12. Ecological information

Stable product with no known adverse environmental effects.

13. Recycling

Gypframe Metal components contain recycled content and can contribute to LEED NC v2.2 Credit MRc4: Recycled Content.

14. Disposal consideration

Dispose at an authorised metal recycling facility in accordance with local waste management licensing regulations.

15. Transport information

Not classified as hazardous for transportation.

16. Regulatory information

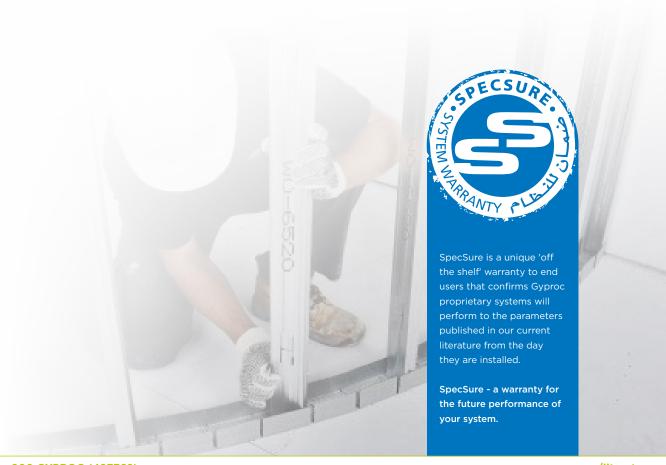
Not classified under the CHIP regulations.

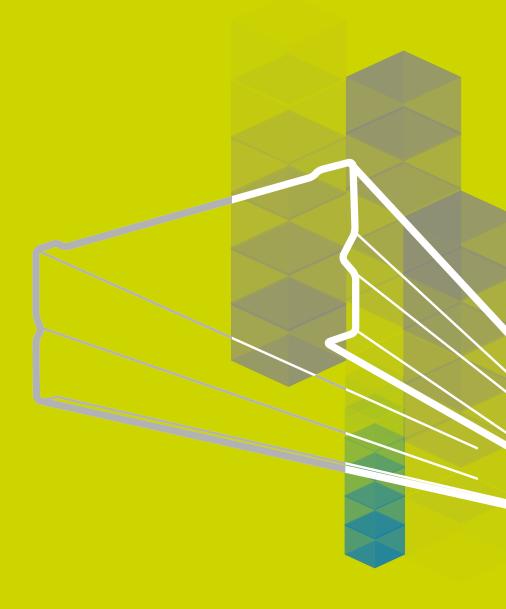
17. Other information

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 Gyproc Middle East WHITE BOOK, or contact Gyproc technical department.







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