

COMMERCIAL



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Select on the "item"
you wish to view.



**Quality.
Guaranteed.**

SpecSure[®]



Guaranteeing the future of drywall and ceilings

SpecSure[®] is a unique warranty that guarantees that Saint-Gobain Gyproc proprietary systems, as listed here www.gyproc.co.za, will perform to the parameters published in our current literature for a 10-year period, from date of purchase, and provided that the system in question is installed as advised, using the recommended Saint-Gobain Gyproc products.

SpecSure[®] is your guarantee that the systems you have chosen:

- ▶ Comprise of the highest quality components, designed to work together to deliver the specified level of performance.
- ▶ Are supported, if required, by South Africa's leading drywall and ceiling specialists, at every stage of the project, offering technical expertise and support both on and off site.
- ▶ Have been tested in accordance with the current standards in accredited laboratories, and site tested to demonstrate installation integrity and simplicity.
- ▶ Will perform to published parameters as indicated in Gyproc technical specifications.



“Supported by South Africa’s leading drywall and ceiling specialists, at every stage of the project, offering technical expertise and support both on and off site.”



SpecSure[®]
GYPROC SYSTEMS
WARRANTY

To qualify for SpecSure[®]

- ▶ The customer must specify and install Saint-Gobain Gyproc systems in line with the recommendations in the current literature.
- ▶ The systems must be exclusively comprised of genuine branded Saint-Gobain Gyproc components, tried and tested over many decades in some of South Africa’s most prestigious buildings.
- ▶ Saint-Gobain Gyproc cannot guarantee that the use of other manufacturers’ components will meet our rigorous performance and quality standards when installed in our tested systems, and consequently the SpecSure[®] warranty will not apply if any other components are specified and installed in the relevant system.
- ▶ The following Gyproc products are not covered by the SpecSure[®] systems warranty: Gyproframe[®], Essential Range, Gypline[®] Range, and Gyprex[®] L (6.4 mm).
- ▶ Please make sure to refer to our online SpecSure[®] document for updated information, available at the following link: www.gyproc.co.za/legal-notices

Saint-Gobain Gyproc is:

- ▶ Primarily a local manufacturer with selected imported products.
- ▶ MERSETA and CETA accredited and offers training at the Saint-Gobain YouthBuild Academy.
- ▶ Ecospecifier, Greentag and LCA/EPD certified.
- ▶ A founding member of the Green Building Council of South Africa.
- ▶ In the top 100 most innovative companies in the world (Thomas Reuters 2020).

BENEFITS



DEVELOPER

- Supported by a well established global company that has been in existence for more than 355 years.
- Specifier support, system performance testing, comprehensive technical literature and leading SA experts reduce contract risks.

- Main and sub-contractor training and site support
- Successful execution of works
- Improved contractor performance through site support
- Quantity and costing support through manufacturer and suggested sub-contractors
- Local manufacturing improves product availability
- Reduction in project risk
- Offering peace of mind
- Global sustainable and innovative solutions
- Providing future flexibility
- Site support
- Installation of latest technologies & innovations



SPECIFIER

- Comprehensive project documentation support
- Comprehensive latest drawing library saves time
- Allows specifier to concentrate on design
- Tried and tested world class solutions
- Performance warranty reduces project risk
- Site assistance is offered
- Systems that meet NBR/SABISA requirements
- Offering peace of mind



CONTRACTOR

- Site support improves contractors performance
- Continued site training reduces errors
- Reduced income loss due to poor performance
- Technical documentation to support decision making
- Reduction in project risk
- Systems evaluated for buildability
- Local manufacturing improves product availability
- Tested components that work together
- Installation of latest technologies & innovations



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SpecSure[®]
**GYPROC SYSTEMS
WARRANTY**



Wall Type 01 -

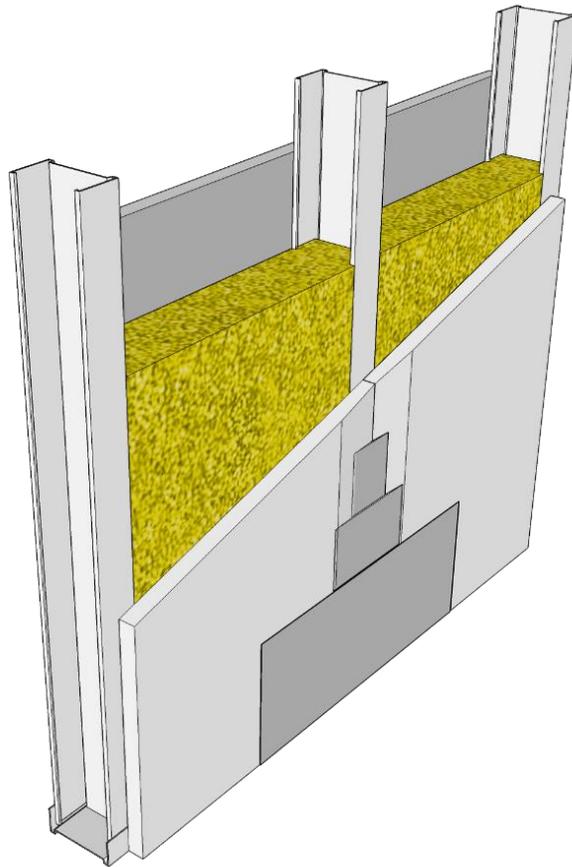
GYPROC BESPOKE FIRE RESISTANT WALL SYSTEM 63ST

1x 12.5 mm RHINOBOARD® FIRESTOP®

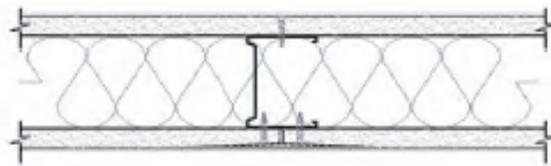
1x 12.5 mm RHINOBOARD® FIRESTOP®

SAINT-GOBAIN DRYWALL SYSTEMS

SINGLE FRAME SINGLE LAYER WITH INSULATION



TYPICAL PLAN LAYOUT



KEY BENEFITS



FIRE RESISTANT



VERSATILE



AESTHETIC & DESIGN
POSSIBILITIES



OPTIMISED PROJECT
COSTS



THINNER WALLS



GYPROC BESPOKE WALL SYSTEM

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Gyproc Bespoke Fire Resistant Wall System 63ST

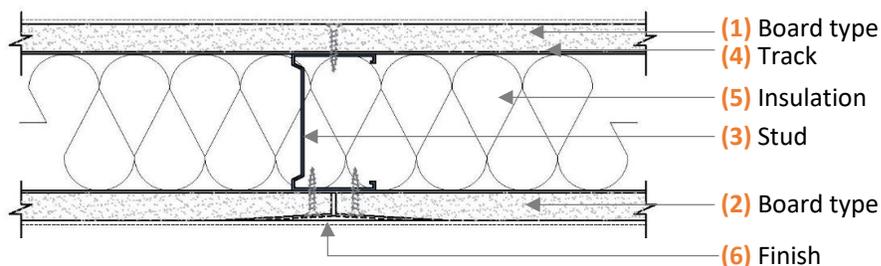
			Stud Spacing (centres)	Max Height (L/250 @ 200Pa)	System Nominal Thickness	Framework Height	Cladding Height	Duty Rating	Deflection allowance
Determination 30 min	Determination Rw 45 dB	22 kg/m ²	300 mm	3700 mm	89 mm	To underside of structural soffit	Full height	Medium	None
			400 mm	3500 mm					
			600 mm	3100 mm					

Note: Acoustic rating as per acoustic engineer

System Overview

Side 1 consisting of outer layer RhinoBoard® FireStop® 12.5 mm (1), Side 2 consisting of outer layer RhinoBoard® FireStop® 12.5 mm (2) (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Ecospecifier, Greentag level B listing, non-combustible to SANS 10177-5) fixed to both sides of the frameworks using Gyproc Sharp-point Screws 25 mm (face layer) at maximum 220 mm centres. 63.5 mm Gyproframe® UltraSTEEL® Studs (3) (locally manufactured, recycled content, ISO 9001 & 14001 certification) friction fitted into top and bottom 63.5 mm Gyproframe® UltraSTEEL® Tracks (4) at 600 mm centres. Floor and head track fixed with one line of proprietary fixing spaced at maximum 600 mm centres. Gyproframe® UltraSTEEL® Deep track is not required. Apply Gyproc RhinoTape® to all joints and internal corners. Install 63 mm Isover Cavitybatt™/Cavitylite® into frameworks with joints tightly butted, leaving no gaps (5). Install Gyproframe® Corner Bead to all external corners. Cover Gyproc RhinoTape® with 1 layer of Gyproc RhinoLite® CreteStone® (6) (locally manufactured). Apply sealant (supplied by others) between the building structure and the drywall framework. Bulk fill the gaps at the base of the drywall and any gaps exceeding 5 mm using Gyproc RhinoLite® or Gyproc RhinoGlide®. No skimmed finish and jointed finish required when tiling. Reduce stud spacing's to 400 mm centres when tiling.

System Details



For system heights exceeding 4200 mm, use Gyproframe® UltraSteel® Deep Track for both floor and head tracks. For systems with expected deflection of >10 mm and <4200 mm height, use Gyproframe® UltraSteel® Deep Track for head tracks only. Details shown are subject to accuracy of information provided to Saint-Gobain at the time the drawings were originally requested. No duty of care is owed to the recipient or any other third party and Saint-Gobain does not accept any liability in respect of details shown. This Saint-Gobain system detail must not be used without a complete evaluation by owner's design professional to verify the suitability of it's use with your specific application. **The detail should be read in conjunction with Saint-Gobain current literature. Refer to literature and clauses at <https://www.gyproc.co.za/>.**





Wall Type 02 -

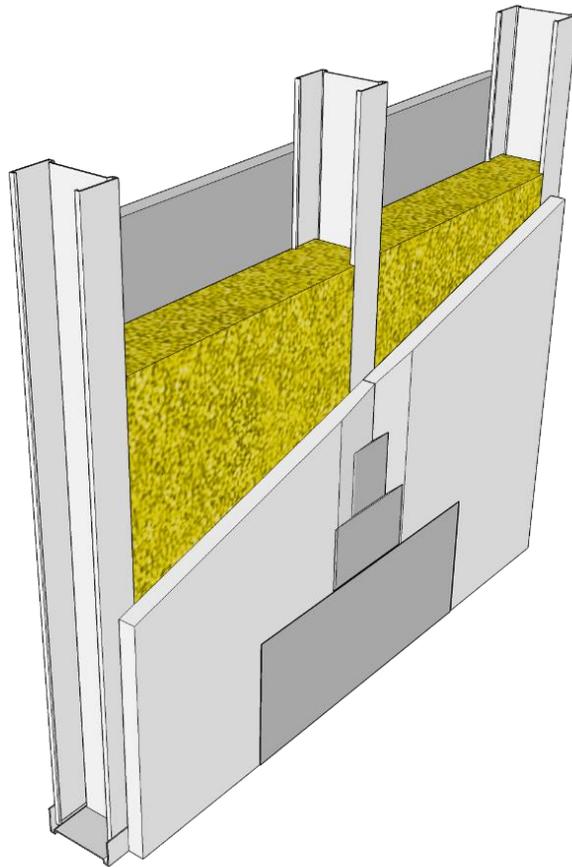
GYPROC FIRE RESISTANT WALL SYSTEM 63F60S49

1x 15 mm RHINOBOARD® FIRESTOP® dB

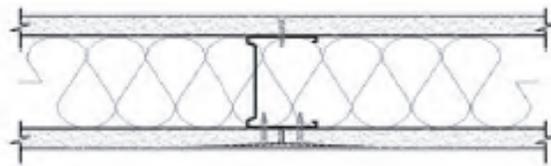
1x 15 mm RHINOBOARD® FIRESTOP® dB

SAINT-GOBAIN DRYWALL SYSTEMS

SINGLE FRAME SINGLE LAYER WITH INSULATION



TYPICAL PLAN LAYOUT



KEY BENEFITS



FIRE RESISTANT



VERSATILE



AESTHETIC & DESIGN
POSSIBILITIES



OPTIMISED PROJECT
COSTS



THINNER WALLS

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Gyproc Fire Resistant Wall System 63F60S49

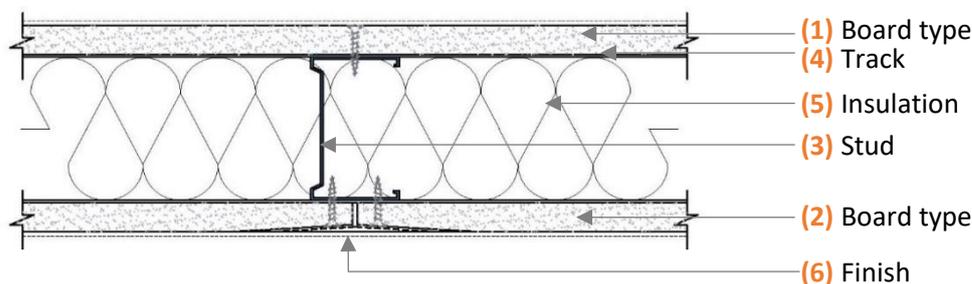
			Stud Spacing (centres)	Max Height (L/250 @ 200Pa)	System Nominal Thickness	Framework Height	Cladding Height	Duty Rating	Deflection allowance
60 min	Rw 49 dB	29 kg/m ²	300 mm	3900 mm	94 mm	To underside of structural soffit	Full height	Medium	None
			400 mm	3700 mm					
			600 mm	3400 mm					

System Overview

Side 1 consisting of outer layer RhinoBoard® FireStop® dB 15 mm (1), Side 2 consisting of outer layer RhinoBoard® FireStop® dB 15 mm (2) (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Ecospecifier, Greentag level B listing, non-combustible to SANS 10177-5) fixed to both sides of the frameworks using Gyproc Sharp-point Screws 25 mm (face layer) at maximum 220 mm centres. 63.5 mm Gypframe® UltraSTEEL® Studs (3) (locally manufactured, recycled content, ISO 9001 & 14001 certification) friction fitted into top and bottom 63.5 mm Gypframe® UltraSTEEL® Tracks (4) at 600 mm centres. Floor and head track fixed with one line of proprietary fixing spaced at maximum 600 mm centres. Gypframe® UltraSTEEL® Deep track is not required. Apply Gyproc RhinoTape® to all joints and internal corners. Install Gypframe® Corner Bead to all external corners. Install 63 mm Isover Cavitybatt™/Cavitylite® into frameworks with joints tightly butted, leaving no gaps (5). Cover Gyproc RhinoTape® with 1 layer of Gyproc RhinoLite® CreteStone® (6) (locally manufactured). Apply sealant (supplied by others) between the building structure and the drywall framework. Bulk fill the gaps at the base of the drywall and any gaps exceeding 5 mm using Gyproc RhinoLite® or Gyproc RhinoGlide®. No skimmed finish and jointed finish required when tiling. Reduce stud spacing's to 400 mm centres when tiling.

System Details

Downloadable BIM files can be found at Saint-Gobain BIM Library: <https://bimlibrary.saint-gobain.com>



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Wall Type 03 -

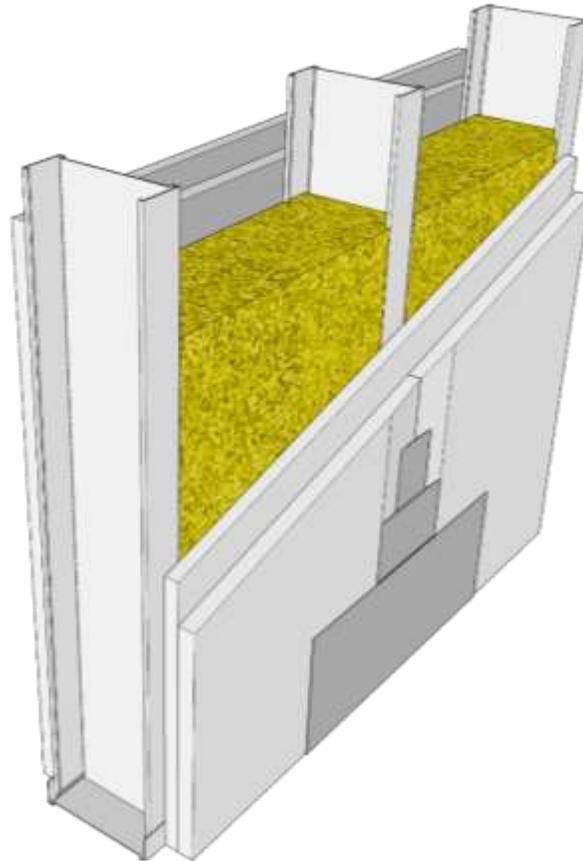
GYPROC BESPOKE FIRE RESISTANT WALL SYSTEM 63ST

1x 12.5 mm RHINOBOARD® FIRESTOP® + 1x 15 mm
RHINOBOARD® FIRESTOP®

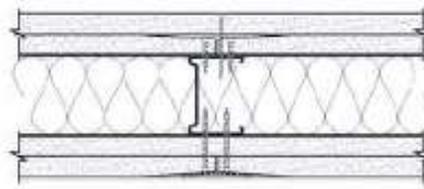
1x 12.5 mm RHINOBOARD® FIRESTOP® + 1x 15 mm
RHINOBOARD® FIRESTOP®

SAINT-GOBAIN DRYWALL SYSTEMS

SINGLE FRAME DOUBLE LAYER WITH INSULATION



TYPICAL PLAN LAYOUT



KEY BENEFITS



FIRE RESISTANT



VERSATILE



AESTHETIC & DESIGN
POSSIBILITIES



OPTIMISED PROJECT
COSTS



THINNER WALLS

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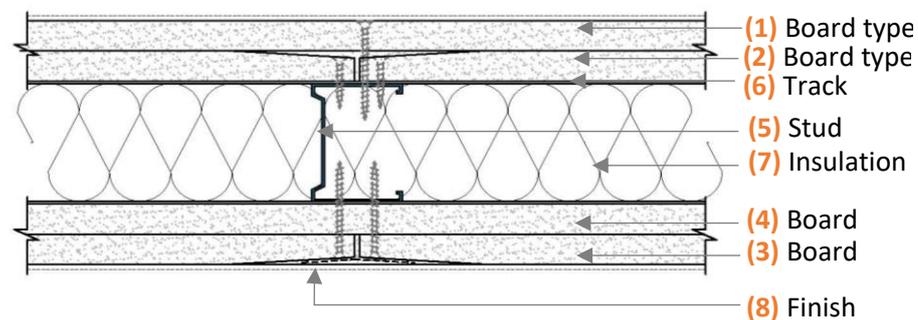
Gyproc Bespoke Fire Resistant Wall System 63ST

			Stud Spacing (centres)	Max Height (L/250 @ 200Pa)	System Nominal Thickness	Framework Height	Cladding Height	Duty Rating	Deflection allowance
Determination 120 min	Determination Rw 50 dB	42 kg/m ²	300 mm	4400 mm	119 mm	To underside of structural soffit	Full height	Severe	None
			400 mm	4200 mm					
			600 mm	4100 mm					

System Overview

Side 1 consisting of outer layer RhinoBoard® FireStop® 15 mm (1), inner layer RhinoBoard® FireStop® 12.5 mm (2). Side 2 consisting of outer layer RhinoBoard® FireStop® 15 mm (3), inner layer RhinoBoard® FireStop® 12.5 mm (4) (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Ecospecifier, Greentag level B listing, non-combustible to SANS 10177-5) fixed to both sides of the frameworks using Gyproc Sharp-point Screws 25 mm (base layer) and Gyproc Sharp-point Screws 42 mm (face layer) at maximum 220 mm centres. 63.5 mm Gypframe® UltraSTEEL® Studs (5) (locally manufactured, recycled content, ISO 9001 & 14001 certification) friction fitted into top and bottom 63.5 mm Gypframe® UltraSTEEL® Tracks (6) at 600 mm centres. Floor and head track fixed with one line of proprietary fixing spaced at maximum 600 mm centres. Gypframe® UltraSTEEL® Deep track shall be used for both floor and head track. Apply Gyproc RhinoTape® to all joints and internal corners. Install Gypframe® Corner Bead to all external corners. Install 63 mm Isover Cavitybatt™/Cavitylite® into frameworks with joints tightly butted, leaving no gaps (7). Cover RhinoBoard® RhinoTape® with 1 layer of Gyproc RhinoLite® CreteStone® (8) (locally manufactured). Apply sealant (supplied by others) between the building structure and the drywall framework. Bulk fill the gaps at the base of the drywall and any gaps exceeding 5 mm using Gyproc RhinoLite® or Gyproc RhinoGlide®. No skimmed finish and jointed finish required when tiling. Reduce stud spacing's to 400 mm centres when tiling.

System Details



For system heights exceeding 4200mm, use Gypframe® UltraSteel® Deep Track for both floor and head tracks. For syste

Details shown are subject to accuracy of information provided to Saint-Gobain at the time the drawings were originally requested. No duty of care is owed to the recipient or any other third party and Saint-Gobain does not accept any liability in respect of details shown. This Saint-Gobain system detail must not be used without a complete evaluation by owner's design professional to verify the suitability of it's use with your specific application. **The detail should be read in conjunction with Saint-Gobain current literature. Refer to literature and clauses at <https://www.gyproc.co.za/>.**



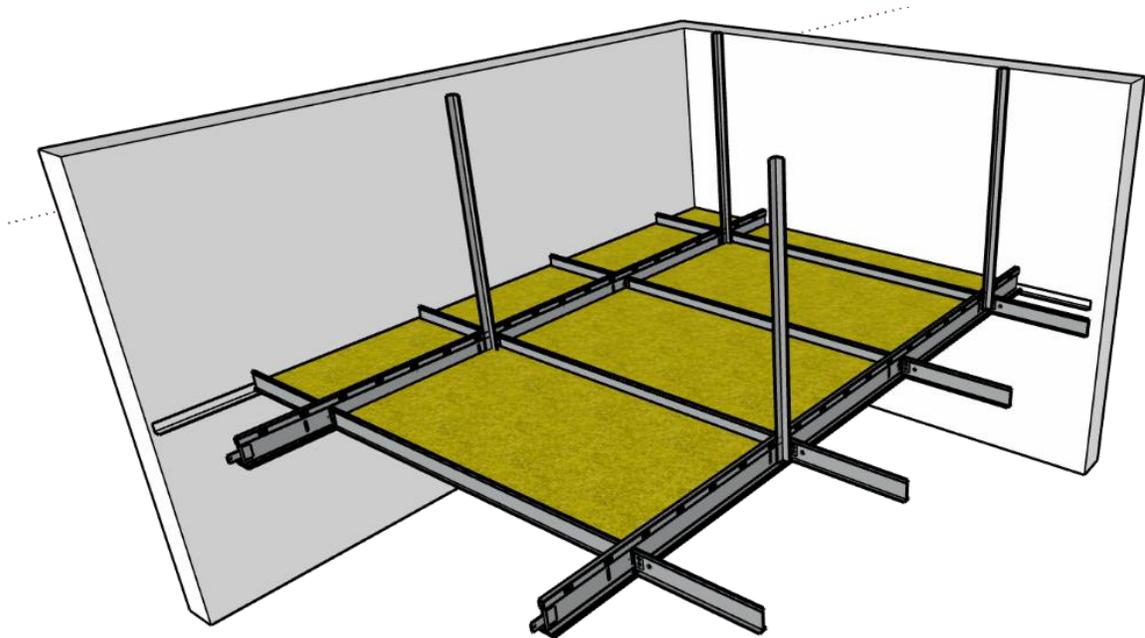
CT06 -

EXPOSED GRID MODULAR ACOUSTIC

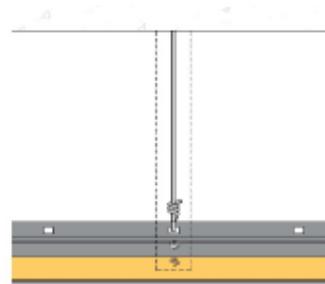
12 mm MINERVAL™ A 1200 x 600 mm; GYPFRAME®
D38FR

SAINT-GOBAIN CEILING SYSTEMS

EXPOSED GRID ACOUSTIC TILES – ISOVER MINERVAL™ A_GYPFRAME® D38FR



TYPICAL SECTION LAYOUT



KEY BENEFITS



DURABLE CEILING LINING



EXCEPTIONAL ACOUSTIC PROPERTIES



GOOD THERMAL RESISTANT VALUES



LIGHTWEIGHT AND EASY TO HANDLE



OFFERS IMPROVED LIGHT REFLECTION



SUITABLE FOR USE IN AREAS OF HIGH HUMIDITY (UP TO 95% RH)

ISOVER reserves the right to alter or amend product specification without notice. The information given in this publication is correct to the best of our knowledge at the time of publication. Whilst Isover will endeavour to ensure publications are up to date, it is the users' responsibility to check with us that it is correct prior to use.

MINERVAL™ A 12 mm

Thickness x Length (mm)	Width (mm)	K-Value (W/m.K)	NRC Value
12 mm x 1200 mm	600 mm	0.035	0.90

Application Specification

Lay Minerval™ A tiles (Size: 1200 mm x 600 mm. Thickness: 12 mm) into the framework. Install Gypframe® D38FR Main Tees (locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 mm centres. Suspend Main Tee using Gyproc Hanger Strap/ Gyproc Suspension Wire fixed to Main Tee web using 2 steel pop-rivets or one Gyproc Wafer-Head Tek screw. Hangers to be at maximum 400 mm from perimeter wall. Install Gypframe® D38FR Cross Tee (1200 mm long) (locally manufactured, recycled content, ISO 9001 & 14001 certification) at 600 mm c/c to create a 1200 mm x 600 mm ceiling grid. Install Gyproc Hold down clips per tile in areas susceptible to draught (2x per 1200 Cross Tee). Perimeter - Fix Gyproc SM25 Wall Angle (locally manufactured) to the wall using fixings at 300 mm centres. Fix Main Tee's to the wall using Gyproc Angle Cleats to ensure straight grid and stability.

Performance Criteria

K-value:

0.035 W/m.K

Fire Properties:

No Health risk.

EN 13501-1: A1.

REI120 according to EN 1365-2.

Environmental Sustainability:

Eurocoustic products are manufactured according to ISO 14001. Mineral wool is recyclable, and the vast majority of production waste is recycled. The recycled content of the mineral wool of our Minerval® A 12 panels is 45%.

Applications:

Ceiling tiles for: Residential buildings, Retrofit in existing homes, and Non-residential buildings.



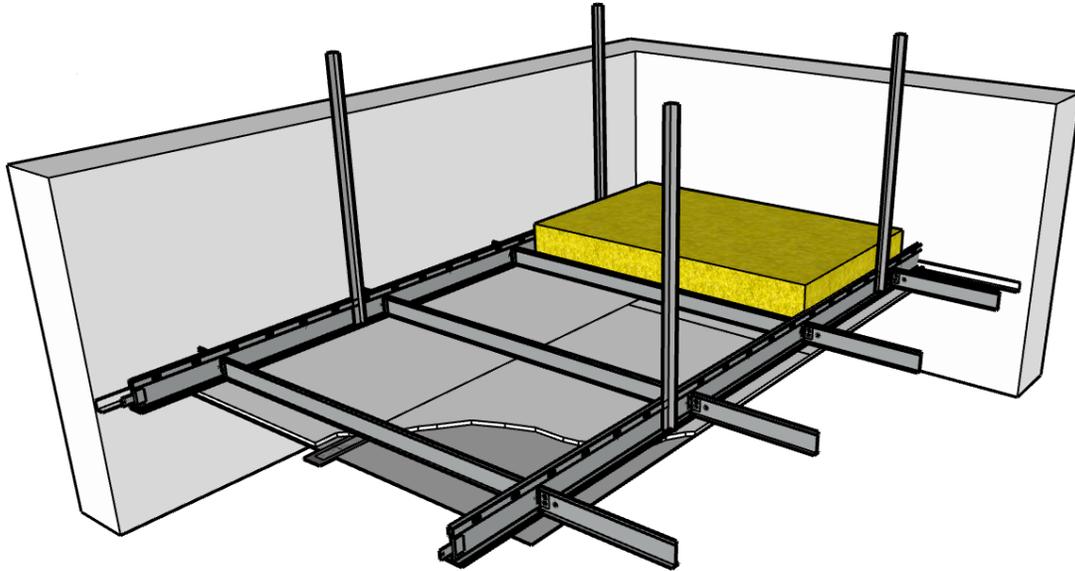
CT 01 & CT 03 -

CONCEALED GRID SKIMMED

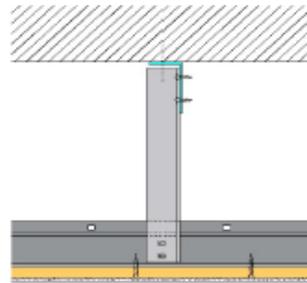
9 mm RHINOBOARD® 1200 x 2400-3600 mm;
GYPFRAME® D37/32K

SAINT-GOBAIN CEILING SYSTEMS

CONCEALED GRID – SKIMMED: GYPFRAME® D37K



TYPICAL SECTION LAYOUT



KEY BENEFITS



MONOLITHIC APPEARANCE



EASY TO CREATE BULKHEADS AND LEVEL CHANGE



SUSPENSION FROM CONCRETE SOFFITS OR TIMBER TRUSSES



GUARANTEED STRAIGHTNESS OF LONG SECTIONS



CAN BE INSULATED TO MEET SANS 10400-XA AND SANS 204 REQUIREMENTS



DURABLE CEILING LINING



SERVICES ACCOMMODATED IN THE PLENUM



GYPROC SKIMMED CEILING SYSTEM - CS1904



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Gyproc Skimmed Ceiling System 9 mm - Gypframe® D37/32K

		NRC	Board/ Tile size (mm)	Soffit Type	Finish
Not Applicable	Unclassified	Not Applicable	1200 x 2400-3600	Concrete Flat slab- Post tensioned slab	Skimmed Finish

System Overview

1x RhinoBoard® 9 mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Greentag Level B) fixed to Gypframe® D32K Cross Tee (Locally manufactured, recycled content, ISO 9001 & 14001 certification) using Gyproc Sharp-point Screws 25 mm at maximum 150 mm centres. Gypframe® D37K Main Tee installed at 1200 mm centres and suspended using Gyproc Galvanised Angle 25 mm x 25 mm hangers at 1200 mm centres. Gypframe® D32K Cross Tee at 400 mm centres. Hanger to be maximum 400 mm from perimeter wall. Apply Gyproc RhinoTape® to all joints. Cover Gyproc RhinoTape® with 1 layer of Gyproc RhinoLite® Multipurpose/ RhinoLite® Natural Plus®/ RhinoLite® CreteStone® (locally manufactured, Greentag Level B). Install Gypframe® Corner Bead to all external corners. Gyproc Plaster Trim 9.5 mm (locally manufactured) to the wall using fixings at 300 mm centres. Install 135 mm thick flexible, non-combustible, lightweight Aerolite® insulation material between the roof trusses and over bracing/purlins in a completed roof and ceiling system. Install in accordance with the manufacturers detail and specification.

System Information

Energy Zone	1	2	3	4	5	5H	6	7
Isover Aerolite® thickness (mm)	135	135	135	135	135	100	135	135
R-value of Aerolite®	3.38	3.38	3.38	3.38	3.38	2.5	3.38	3.38
Min. required total R-value	3.7	3.7	3.7	3.7	3.7	2.7	3.7	3.7

Where required, for improved thermal and/or acoustic performance, lay Isover insulation (locally manufactured, non-combustible to SANS 10177-5, SABS Mark) onto the ceiling.
Thickness: 100 mm/ 135 mm (according to energy zone, see table above)

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CT 02 & CT 04 -

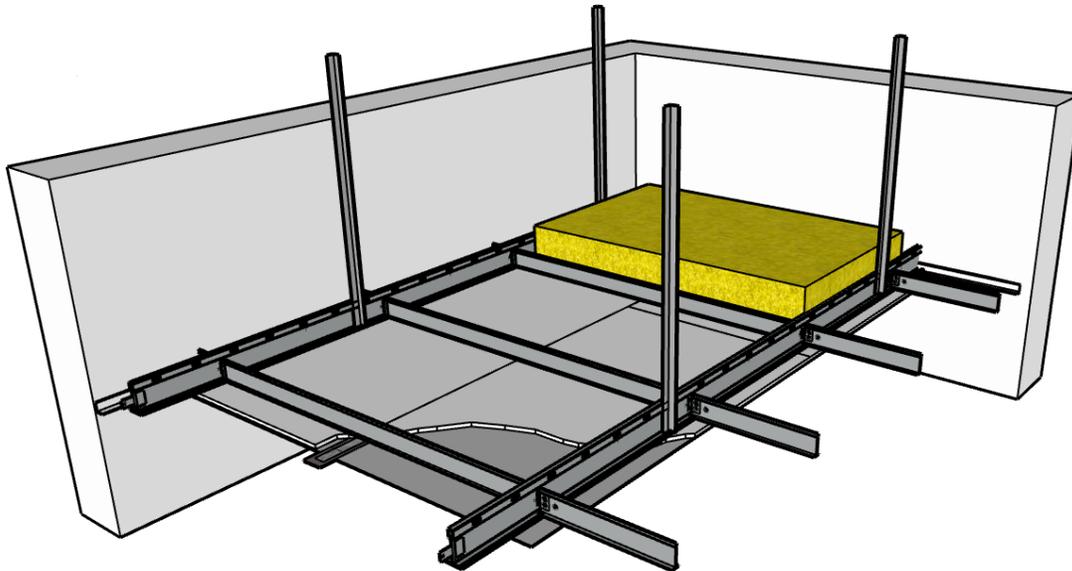
BESPOKE CONCEALED GRID
SKIMMED

12.5 mm RHINOBOARD® MOISTURERESISTANT 1200 x
2400-3600 mm; GYPFRAME® D37/32K

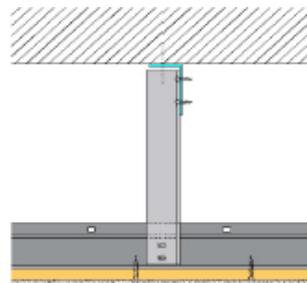


SAINT-GOBAIN CEILING SYSTEMS

CONCEALED GRID – SKIMMED: GYPFRAME® D37K



TYPICAL SECTION LAYOUT



KEY BENEFITS



MONOLITHIC APPEARANCE



EASY TO CREATE BULKHEADS AND LEVEL CHANGE



SUSPENSION FROM CONCRETE SOFFITS OR TIMBER TRUSSES



GUARANTEED STRAIGHTNESS OF LONG SECTIONS



CAN BE INSULATED TO MEET SANS 10400-XA AND SANS 204 REQUIREMENTS



DURABLE CEILING LINING



SERVICES ACCOMODATED IN THE PLENUM

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Gyproc Skimmed Ceiling System Moisture Resistant 12.5 mm - Gypframe® D37/32K with Gyproc Galvanised Angle

		NRC	Board/ Tile size (mm)	Soffit Type	Finish
Not Applicable	Unclassified	Not Applicable	1200 x 2400-3600	Concrete Flat slab- Post tensioned slab	Skimmed Finish

System Overview

1x RhinoBoard® MoistureResistant 12.5 mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Greentag Level B) fixed to Gypframe® D32K Cross Tee (Locally manufactured, recycled content, ISO 9001 & 14001 certification, less than 5% water absorption as per SANS 266) using Gyproc Sharp-point Screws 25 mm at maximum 150 mm centres. Gypframe® D37K Main Tee installed at 1200 mm centres and suspended using Gyproc Galvanised Angle 25 mm x 25 mm hangers at 1200 mm centres. Gypframe® D32K Cross Tee at 600 mm centres. Hangers to be maximum 400 mm from perimeter wall. Apply Gyproc RhinoTape® to all joints and internal corners. Install Gypframe® Corner Bead to all external corners. Cover Gyproc RhinoTape® with 1 layer of Gyproc RhinoLite® CreteStone® (locally manufactured). Wall Angle – Fix Gyproc Plaster Trim 12.5 mm (locally manufactured) to the wall using fixings at 300 mm centres. Install 135 mm thick flexible, non-combustible, lightweight Aerolite® insulation material between the roof trusses and over branding/purlins in a completed roof and ceiling system. Install in accordance with the manufacturers detail and specification.

System Information

Climatic zone	1	2	3	4	5	5H	6	7
Isover Aerolite® thickness (mm)	135	135	135	135	135	100	135	135
Energy Zone <small>rolite®</small>	3.38	3.38	3.38	3.38	3.38	2.5	3.38	3.38
Min. required total R-value	3.7	3.7	3.7	3.7	3.7	2.7	3.7	3.7

Where required, for improved thermal and/or acoustic performance, lay Isover insulation (locally manufactured, non-combustible to SANS 10177-5, SABS Mark) onto the ceiling.
Thickness: 100 mm/ 135 mm (according to energy zone, see table above)

WALL INSULATION



63 mm CAVITYBATT™ / CAVITYLITE®

ISOVER reserves the right to alter or amend product specification without notice. The information given in this publication is correct to the best of our knowledge at the time of publication. Whilst Isover will endeavour to ensure publications are up to date, it is the users' responsibility to check with us that it is correct prior to use.

CAVITYBATT™ 63 mm

Thickness (mm)	Length (mm)	Width (mm)	K- Value (W/.mK)
63 mm	1200 mm	600 mm	0.038

Application Specification:

Install non-combustible Cavitybatt™ insulation (progressively as boarding proceeds) between the studs with the glasswool tissue facing the installer. Fit securely with closely butted joints, leaving no gaps.

Performance Criteria

K-value:

0.038 W/mK for 63mm (ASTM C518).

R-value:

1.66 m².K/W for 63 mm.

Fire Properties:

No Health risk.

Non-combustible – tested to SANS 10177-5.

SANS 428 fire classification – A/A1/1.

EN 13501 fire classification – A1.

Quality Management System:

ISOVER products are manufactured according to ISO 9001:2008.

Environmental Sustainability:

ISOVER products are manufactured according to ISO 14001:2004. Zero ozone depleting potential (ODP) and Zero global warming potential (GWP).

Applications:

Designed for used in cavity walls but may be used on top of ceilings, along the roofline, within masonry wall cavities, Steel frame buildings, Timber frame structures and Drywall systems.

No duty of care is owed to the recipient or any other third party and Saint-Gobain does not accept any liability in respect of specification shown. This Saint- Gobain system specification must not be used without a complete evaluation by owner's design professional to verify the suitability of it's use with your specific application. **The specifications should be read in conjunction with Isover current literature available on www.isover.co.za**

TILING ONTO DRYWALLS



This is a general specification for wall tiling and is issued for information purposes only. Weber has experienced personnel available to provide technical support. Technical helpline: 08600 Weber (93237) for project specific solutions. Please consult with us for further product options. www.weber-tylon.co.za

WEBER TYLON® QUICKSET 6

GENERAL SPECIFICATION FOR FIXING SMALL TO LARGE GLAZED CERAMIC & PORCELAIN TILES TO GYPROC RHINOBOARD DRYWALL SYSTEMS: 6hr Quick setting

Initial Setting time	Final setting time	Open time	Pot life	Grouting time	
3 hours	6 hours	20 minutes	1 hour	6 hours	5L per 20kg bag

Weber Products required for Installation

1. **Weber Tylon® Key-It & Weber Tylon® Plaskey** (used to prep the RhinoBoard® prior to tiling)
3. **Weber Tylon® QuickSet 6**
4. **Weber Tylon® Bond-It** (additive to grout used in wet areas i.e. showers and kitchen areas)
5. **Weber Tylon® Tile Grout** (Cementitious grout) colour to match tiles

Applying Adhesive

Apply **Weber Tylon® QuickSet 6** to the prepared substrate using a notched wall trowel. Spread adhesive to a minimum bedded thickness of 6 mm. Press tiles firmly into wet adhesive with a twisting action. Use a rubber mallet to bed large or heavy tiles. Back buttering is compulsory for large format tiles to ensure adhesion and complete adhesive coverage of tile. Occasionally lift a tile to check that full contact is being made between the tile and the adhesive. Ensure that heavy and/or large format wall tiles are well supported by means of a batten or some type of mechanical device until such time that the adhesive has set sufficiently, in this instance it will be 6 hours. Apply tile adhesive (thin bed) for skirting to both the wall and back of tile. Do not butt joint tiles. Clean excess adhesive off the surface once tiles are firmly set using a damp sponge. Allow the adhesive to dry for 6 hours (**Weber Tylon® QuickSet 6 has a 6 hour set**) before grouting.

Adhesive Coverage

Weber Tylon® QuickSet 6 - Depending on the nature and evenness of the surface and method of application, approximately 6 m² per 20 kg bag when applied using a 6 mm notched trowel (wall tiling) and 4 m² per 20 kg bag when applied using a 10 mm notched trowel (floor tiling).

Weber Tylon® Key-It & Weber Tylon® Plaskey - Use Mohair Brush for increased coverage.

Applying Grout

Grouting must NOT be carried out until sufficient bond has developed between the bedding mix and the tiles to avoid disturbance of the tiles during the grouting application.

- Ensure that the joints are free from tile adhesive and any other foreign matter.
- **Weber Tylon® Tile Grout** has a minimum joint width of 2 mm for walls. We recommend to consult with the tile manufacturer for recommended joint widths.
- Particular care must be taken to clean the grout off the tile face before it hardens completely. This is especially important when using additives like **Weber Tylon® Bond-It** liquid instead of water in grout mix.
- It is advisable to moisten joints before application to assist the flow of grout into the joints.
- Note that the grout will dry a shade darker.
- Do not add too much water (or **Weber Tylon® Bond-It** where applicable) in an attempt to extend the working time as this will cause the adhesive to be weak with a tendency to crumble. It may also cause surface discolouration and variation, especially with darker colours.

Note:

- Do not tile over structural, expansion or cold joints in the background. These joints must be extended through the various layers to the surface.
- Initial setting time duration is required to delay the process of hydration or hardening.
- Final setting time is the time when the paste completely loses its plasticity.

TILING ONTO FLOORS



This is a general specification for floor tiling and is issued for information purposes only. Weber has experienced personnel available to provide technical support. Technical helpline: 08600 Weber (93237) for project specific solutions. Please consult with us for further product options. www.weber-tylon.co.za

WEBER TYLON® QUICKSET 6

GENERAL SPECIFICATION FOR FIXING SMALL TO LARGE CERAMIC AND PORCELAIN FLOOR TILES TO CONCRETE SURFACE BED/SLAB: 6hr Quick setting

Initial Setting time	Final setting time	Open time	Pot life	Grouting time	
3 hours	6 hours	20 minutes	1 hour	6 hours	5L per 20kg bag

Weber Products required for Installation

1. **Weber Tylon® Key-It & Weber Tylon® Plaskey** (Used to prep the floor)
2. **Weber Tylon® Bond-It** (Additive to grout only)
4. **Weber Tylon® Tile Grout** (Cementitious grout) colour to match tiles
5. **Weber Tylon® QuickSet 6** (Interior floors and external balconies and patio floors)

Applying Adhesive

Apply **Weber Tylon® QuickSet 6** to the prepared substrate using a notched floor trowel. Spread adhesive to a minimum bedded thickness of 6 mm. Press tiles firmly into wet adhesive with a twisting action. Use a rubber mallet to bed large or heavy tiles. At no time spread more adhesive that can be tiled onto in 10 to 15 minutes. Depending on atmospheric conditions, this is normally around 1 square meter. This prevents the adhesive from drying before the tiles are applied. Do not tile over structural, expansion or cold joints in the background. These joints must be extended through the various layers to the surface. Occasionally lift a tile to check that full contact is being made between the tile and the adhesive. Do not butt joint tiles. Clean excess adhesive off the surface once tiles are firmly set using a damp sponge. Once the adhesive has hardened, only mechanical removal is possible. Allow the adhesive to dry for 6 hours (**Weber Tylon® QuickSet 6 has a 6 hour set**) before grouting.

Adhesive Coverage

Weber Tylon® QuickSet 6 - Depending on the nature and evenness of the surface and method of application, approximately 6 m² per 20 kg bag when applied using a 6mm notched trowel (wall tiling) and 4 m² per 20 kg bag when applied using a 10 mm notched trowel (floor tiling).

Applying Grout

Grouting must NOT be carried out until sufficient bond has developed between the bedding mix and the tiles to avoid disturbance of the tiles during the grouting application.

- Ensure that the joints are free from tile adhesive and any other foreign matter.
- Replace the water with **Weber Tylon® Bond-It** in the mix
- **Weber Tylon® Tile Grout** has a minimum joint width of 3 mm for floors. We recommend to consult with the tile manufacturer for recommended joint widths.
- Particular care must be taken to clean the grout off the tile face before it hardens completely. This is especially important when using additives like **Weber Tylon® Bond-It** liquid instead of water in grout mix.
- It is advisable to moisten joints before application to assist the flow of grout into the joints.
- Note that the grout will dry a shade darker.
- Do not add too much water (or **Weber Tylon® Bond-It** where applicable) in an attempt to extend the working time as this will cause the adhesive to be weak with a tendency to crumble. It may also cause surface discolouration and variation, especially with darker colours.

Note:

- It is important that newly installed tiles are protected from traffic (other trades etc.) for a minimum of 6 hours, while the adhesive sets. This is especially important in fast-track installations.
- Initial setting time duration is required to delay the process of hydration or hardening.
- Final setting time is the time when the paste completely loses its plasticity.

WATERPROOFING

PLASKEY & KEY-IT



Weber Tylon® Plaskey

Cement based primer

Weber Tylon® Plaskey is a cement-based primer and surface preparation material that is suitable for interior and exterior use. This product is designed for wall and floor applications. **Weber Tylon® Plaskey** is specially formulated to provide an excellent water-resistant, all-purpose preparation for tiling. Must be used in conjunction with **Weber Tylon® Key-It**

Performance

BETTER QUALITY BETTER
 ECONOMIC VALUE



Easy to apply



Primer



Easy To Mix





USES

Weber Tylon® Plaskey

- It is suitable for interior and exterior use.
- Suitable for wall and floor applications.
- **Weber Tylon® Plaskey** is specially formulated to provide excellent water resistance and all purpose surface preparation for tiling.
- It can be applied onto friable, timber, smooth, previously painted and gypsum plastered surfaces.
- **Weber Tylon® Plaskey** must be mixed with **Weber Tylon® Key-It**.

SAFETY INSTRUCTIONS

Contains cement, which is alkaline when wet and can cause skin irritation. Use eye protection and gloves and avoid prolonged skin contact. Avoid inhalation of dust. Wash skin contamination away with warm soapy water. Remove splashes to the eyes by prolonged irrigation and consult a doctor. Do not ingest.

GENERAL

- **Weber Tylon® Plaskey** should not be applied externally when there is a risk of rain or frost within six hours after application.
- Equipment should be cleaned with water immediately after the application has been completed.

MIXING AND APPLICATION

1. Gradually mix 20 kg of **Weber Tylon® Plaskey** to not more than 10 litres of **Weber Tylon®Key-It**.
2. Mix thoroughly to a paintable consistency
3. For increased plasticity allow mix to gel for 5 minutes
4. Remix before use
5. Apply with a builders block brush or a large paint brush to ±2mm thickness ensuring that full coverage is achieved
6. Allow to dry for at least 24 hours before tiling commences

PACKAGING

Weber Tylon® Plaskey is supplied in 20 kg bags

STORAGE AND SHELF LIFE

When stored, unopened in a dry place at temperatures above 5°C, shelf life is 12 months from date of manufacture.

SAFETY INSTRUCTIONS

Contains cement, which is alkaline when wet and can cause skin irritation. Use eye protection and gloves and avoid prolonged skin contact. Avoid inhalation of dust. Wash skin contamination away with warm soapy water. Remove splashes to the eyes by prolonged irrigation and consult a doctor. Do not ingest.

GUARANTEE

We agree that **Weber** products meet the product specifications and will be free from any defect. Any guarantee with regard to the performance of **Weber** products will be subject to its professional and practical application of **Weber** products in accordance with our instructions and specifications. However, we have no influence over specific site conditions and therefore, if in doubt, the user should first carry out sufficient tests to ensure that the product is suitable. In special cases, obtain advice. Should our product prove defective, we undertake to replace any defective material. This guarantee will fall away in the event of **Weber** products being contaminated by the addition of sand, cement or substance other than recommended by us.

TECHNICAL SERVICES

Weber has a team of experienced advisors available to provide technical support. Technical helpline: 08600 WEBER (93237) or visit www.za.weber.

Weber Tylon® Plaskey

Weber Tylon® Key-It

Latex primer and keying agent.

Weber Tylon® Key-It is a latex-based liquid primer and keying agent specifically formulated for use with cement-based tile adhesives, tile grouts and slurries. Also used as a surface preparation in conjunction with **Weber Tylon® Plaskey** and as a bonding coat for gypsum and cement surfaces.

Performance



Easy to apply



Easy to Mix



Ready to Use





USES

Use **Weber Tylon® Key-It** to :

- Stabilise friable and chalking surfaces before tiling
- Replace the water in the slurry mix when re-plastering a pool with **Weber Marbelite®**
- Strengthen and waterproof mortar and concrete
Use **Weber Tylon® Key-It** in conjunction with **Weber Tylon® Plaskey**
- To prime wood, flexible surfaces and permanently wet areas
- To prime previously painted plaster and gypsum surfaces
- As a base coat when applying ceramic tiles
- As a bonding aid for plastering and screeding

SUITABLE SURFACES

Weber Tylon® Key-It is suitable for use on surfaces like :

- Cement-based plaster
- Cement screeds
- Concrete surfaces

SURFACE PREPARATION

Ensure that all surfaces are clean, dry, sound and free from dust, grease or any contamination that could impair bonding. Make good any unsound areas and remove flaky or peeling layers. Organic growth must be removed and the spores killed. PVA paint and gypsum plaster must be chipped to expose 80% of the substrate. Enamel paint and bitumen should be scraped and chipped to expose 80% of the substrate.

Do not use a solvent or heat to remove bitumen from the surface. Existing ceramic tiles must be thoroughly cleaned. Rinse well with cold water.

MIXING

1. Gradually mix 20 kg of **Weber Tylon® Plaskey** to not more than 10 litres of **Weber Tylon® Key-It**
2. Mix thoroughly to a paintable consistency
3. For increased plasticity allow mix to gel for 5 minutes
4. Remix before use
5. Apply with a builders block brush or a large paint brush to ± 2 mm thickness ensuring that full coverage is achieved
6. Allow to dry for at least 24 hours before tiling commences

APPLICATION

- Bonding aid for rendering and screeding : add 9 litres of **Weber Tylon® Key-It** for every 50 kg of cement.
- Ceramic tiling and screeding mixture : mix 10 litres of **Weber Tylon® Key-It** to 20 kg of **Plaskey**.
- Mortar and concrete strengthening and waterproofing : add 9 litres of **Weber Tylon® Key-It** for every 50 kg of cement.
- High strength or hydrostatic pressure mix : add 18 litres of **Weber Tylon® Key-It** for every 50 kg of cement.
- Priming of painted plaster-and-gypsum surfaces : mix 10 litres of **Weber Tylon® Key-It** to 20 kg of **Weber Tylon® Plaskey**.
- Stabilising of friable surfaces: apply undiluted **Key- It** using a block-brush. Allow to dry before tiling or coating.
- Priming wood, flexible surfaces and permanently wet areas : mix 2.5 parts **Weber Tylon® Key-It** to 1 part **Weber Tylon® Plaskey**.

COVERAGE

Coverage is subject to the mixing requirements of the material **Weber Tylon® Key-It** is mixed with. 1 litre of **Weber Tylon® Key-It** will cover approximately 5 m² when used as a priming/sealing coat.

PACKAGING

Weber Tylon® Key-It is supplied in 1, 5 and 20 litre plastic bottles.

Weber Tylon® Key-It

STORAGE AND SHELF LIFE

When stored, unopened in a dry place at temperatures above 5 °C, shelf life is 12 months from date of manufacture.

SAFETY INSTRUCTIONS

Use eye protection and gloves and avoid prolonged skin contact. Wash skin contamination away with warm soapy water. Remove splashes to the eyes by prolonged irrigation and consult a doctor. Do not ingest.

GUARANTEE

We agree that **Weber** products meet the product specifications and will be free from any defect. Any guarantee with regard to the performance of **Weber** products will be subject to its professional and practical

application of **Weber** products in accordance with our instructions and specifications.

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TECHNICAL SERVICES

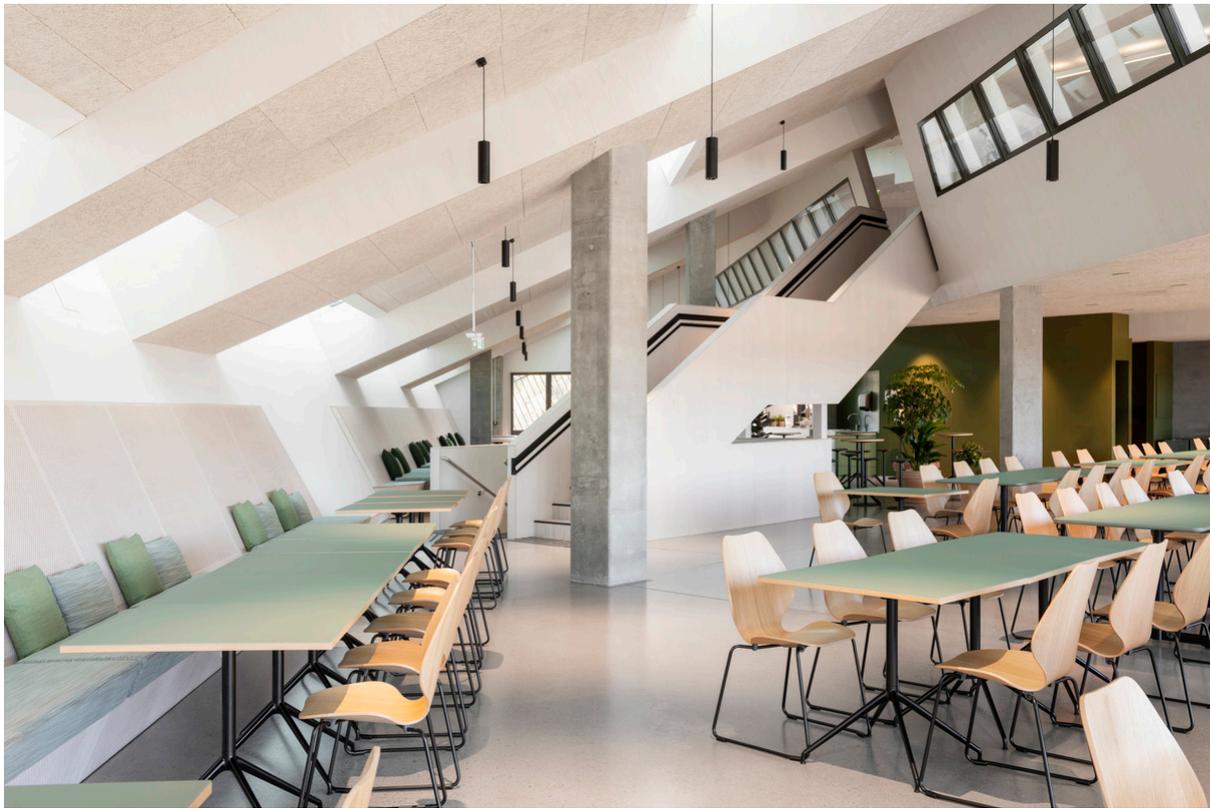
Weber has a team of experienced advisors available to provide technical support. Technical helpline: 08600 **WEBER** (93237) or visit **www.za.weber**.

SAGA™ B



Ecophon Saga™ B

Ecophon Saga™ B is bonded edge-to-edge and directly fixed using screws. The bevelled edge creates a narrow groove between the tiles. For applications where the minimum possible overall depth of system is required.



SYSTEM RANGE



Size, mm	600x600	1200x600
Direct	•	•
Direct to grid, mechanically	•	•
Suspended	•	•
Wall	•	•
Thickness (THK)	25	25
Inst. Diagr.	M575, M576, M578	M575, M576, M578



Saga B panel



Saga B System



Saga B Section

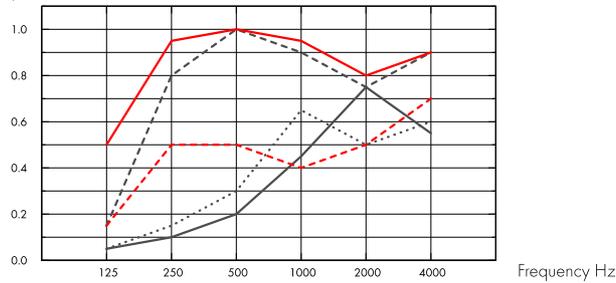
Acoustic



Sound Absorption:

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.

α_p , Practical sound absorption coefficient



- Saga B, 25 mm o.d.s.
 - Saga B, 50 mm o.d.s.
 - Saga B + Saga Acoustic, 70 mm o.d.s.
 - .-.- Saga B, 200 mm o.d.s.
 - Saga B + Saga Acoustic, 200 mm o.d.s.
- o.d.s = overall depth of system

	THK mm	o.d.s. mm	α_p , Practical sound absorption coefficient						α_w	Sound absorption class
			125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
-	25	25	0.05	0.10	0.20	0.45	0.75	0.55	0.30	D
-	25	50	0.05	0.15	0.30	0.65	0.50	0.60	0.35	D
+ Saga Acoustic	65	70	0.15	0.80	1.00	0.90	0.75	0.90	0.85	B
-	25	200	0.15	0.50	0.50	0.40	0.50	0.70	0.50	D
+ Saga Acoustic	65	200	0.50	0.95	1.00	0.95	0.80	0.90	0.90	A

	THK mm	o.d.s. mm	NRC	SAA
-	25	25	0.40	0.37
-	25	50	0.40	0.41
+ Saga Acoustic	65	70	0.85	0.89
-	25	200	0.50	0.48
+ Saga Acoustic	65	200	0.95	0.92

Indoor Air Quality



Certificate / Label	
Euofins Indoor Air Comfort®	IAC Gold
French VOC	A+
Finnish M1	•





Carbon footprint

	kg CO ₂ equiv/m ²	Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804
Saga (white cement)	6,41	
Saga (grey cement)	4,80	



Circularity



Products are made with FSC certified wood.



Fire safety

Country	Fire standard	Class
Europe	EN 13501-1	B-s1,d0



Humidity Resistance

Class C, relative humidity 95% and 30°C, according to EN 13964:2014



Thermal Properties

Thermal conductivity $\lambda = 0,1$ W/m-K according to EN 12664.



Visual appearance

Super fine fibres 1.0 mm. Light reflectance and nearest NCS colour sample for all the different colours: See Ecophon Colours and surfaces.



Mould and Bacterial Resistance

Standard/Method	
ISO 846 A	0
ISO 846 C	0



Accessibility

The tiles are not demountable.



System weight

The weight of the system (including suspension grid) should be approximately 17,5 kg/m² (20,0 kg/m² with additional Saga Acoustic acoustic absorber).



Mechanical properties

See table regarding the min- and max- load bearing capacities and functional demands. Additional live load has to be fixed to the soffit.



Impact Resistance

Thickness	M-sketch	Classification
25	M575	1A

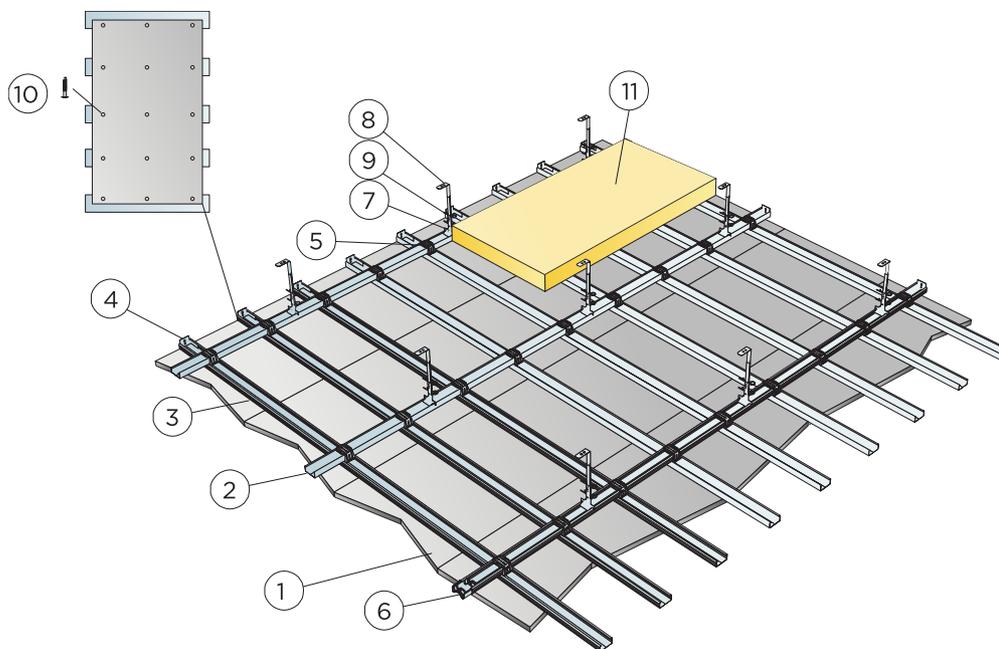
Tested and classified according to EN 13964 annex D.



CE

Ecophon Saga products are CE-marked according to the European harmonized standard EN 13964:2014 (suspended ceilings). CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

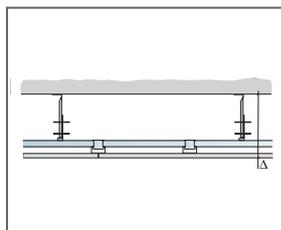
INSTALLATION DIAGRAM (M575) FOR ECOPHON SAGA B, IMPACT RESISTANT SYSTEM WITH GRIDS.



©Saint Gobain Ecophon AB

QUANTITY SPECIFICATION (EXCL. WASTAGE)

	Size, mm	
	600x600	1200x600
1 Saga B	2,8/m ²	1,4/m ²
2 Connect C-profile Plus, L=3100 mm, installed 900 mm centres	1,2m/m ²	1,2m/m ²
3 Connect C-profile Plus, L=3100 mm, installed 300 mm centres	3,4m/m ²	3,4m/m ²
4 Connect Wall bracket Plus	as required	as required
5 Connect X-connector Plus	7,4/m ²	7,4/m ²
6 Connect Splice connector Plus	1,2/m ²	1,2/m ²
7 Connect Nonius hanger lower, installed at 900 mm centres	1,2/m ²	1,2/m ²
8 Connect Nonius hanger upper, installed at 900 mm centres	1,2/m ²	1,2/m ²
9 Connect Split pin (2/hanger)	2,3/m ²	2,3/m ²
10 Connect Saga Fixation	9pcs/panel	15pcs/panel
11 Saga Acoustic (if required)	as required	as required
Δ Min. overall depth of system: 310 mm	-	-
δ Min. demounting depth: The system is not demountable	-	-

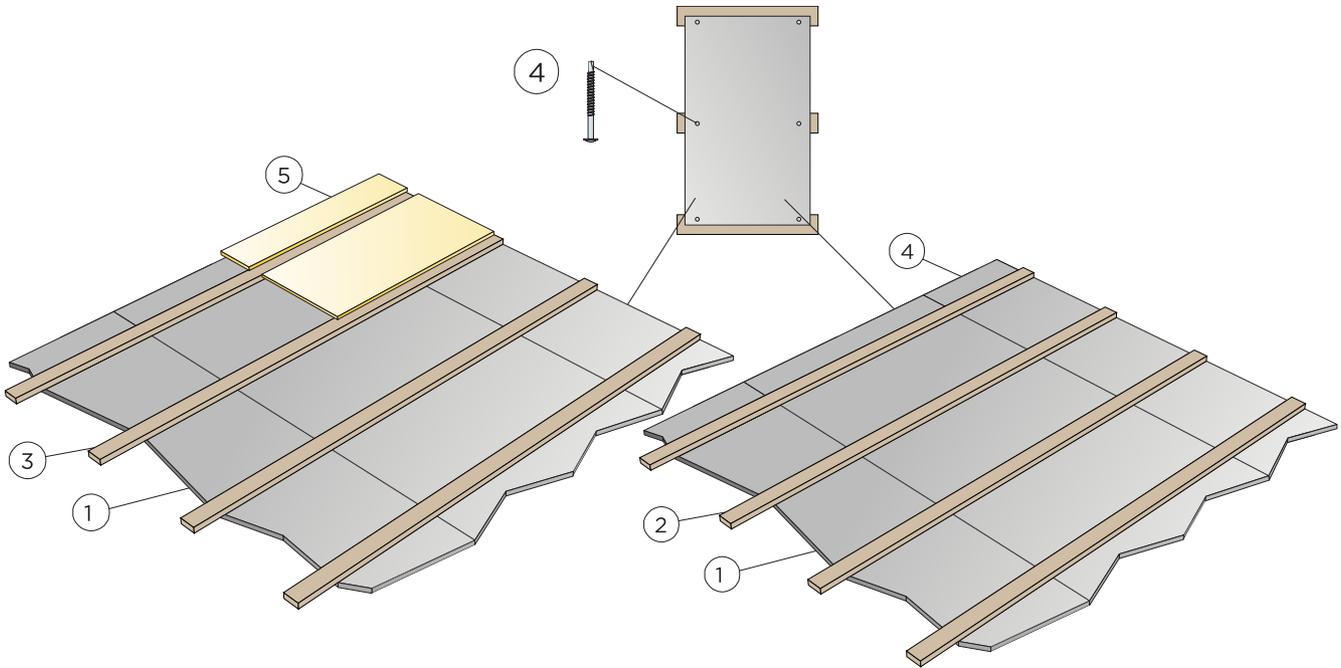


See Quantity Specification

Size, mm	Max live load [N]	Min load bearing capacity [N]
600x600x25	0	160
1200x600x25	0	160

Live load/load bearing capacity

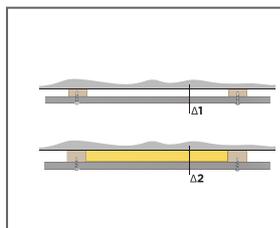
INSTALLATION DIAGRAM (M576) FOR ECOPHON SAGA B, DIRECT FIXING SYSTEM (CEILING).



© Saint-Gobain Ecophon AB

QUANTITY SPECIFICATION (EXCL. WASTAGE)

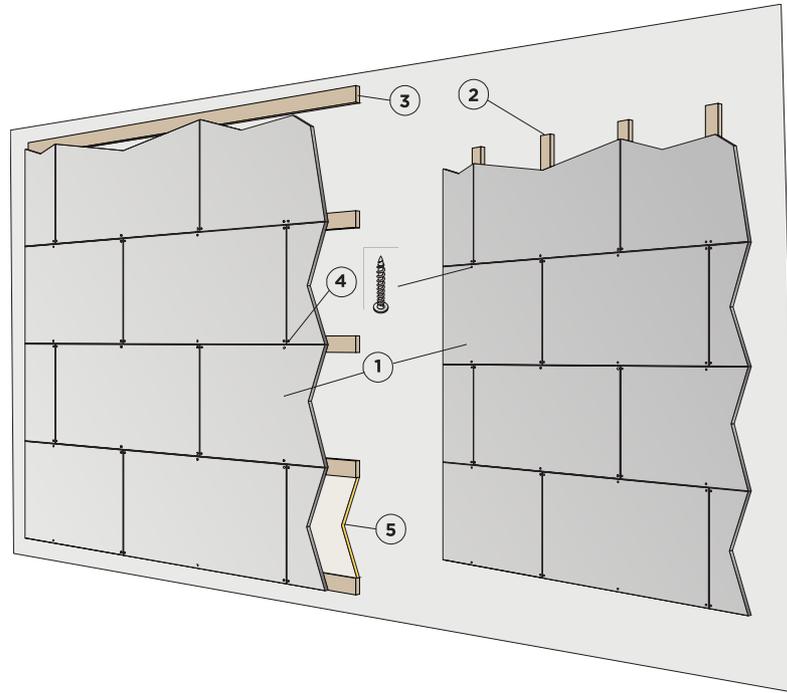
	Size, mm	
	600x600	1200x600
1 Saga B	2,8/m ²	1,4/m ²
2 Mounting wood laths 28x70, installed 600 mm centres	1,7/m ²	1,7/m ²
3 Alt Mounting wood laths 45x70, installed 600 mm centres for Saga Acoustic	1,7/m ²	1,7/m ²
4 Connect Saga Fixation	4pcs/panel	6pcs/panel
5 Saga Acoustic (if required)	as required	as required
Δ Min. overall depth of system: Δ1 50 mm / Δ2 70 mm The system is not demountable	-	-
	-	-



Size, mm	Max live load [N]	Min load bearing capacity [N]
600x600x25	-	-
1200x600x25	-	-

Live load/load bearing capacity

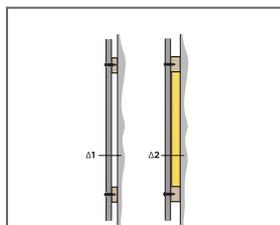
INSTALLATION DIAGRAM (M578) FOR ECOPHON SAGA B, LATHING WALL SYSTEM.



© Saint-Gobain Ecophon AB

QUANTITY SPECIFICATION (EXCL. WASTAGE)

	Size, mm	
	600x600	1200x600
1 Saga B	2,8/m ²	1,4/m ²
2 Mounting wood laths 28x70, installed 600 mm centres	1,7/m ²	1,7/m ²
3 Alt Mounting wood laths 45x70, installed 600 mm centres for Saga Acoustic	1,7/m ²	1,7/m ²
4 Connect Saga Fixation	4pcs/panel	6pcs/panel
5 Saga Acoustic (if required)	as required	as required
Δ Min. overall depth of system: Δ1 50 mm / Δ2 70 mm The system is not demountable	-	-
	-	-



Size, mm	Max live load [N]	Min load bearing capacity [N]
600x600x25	-	-
1200x600x25	-	-

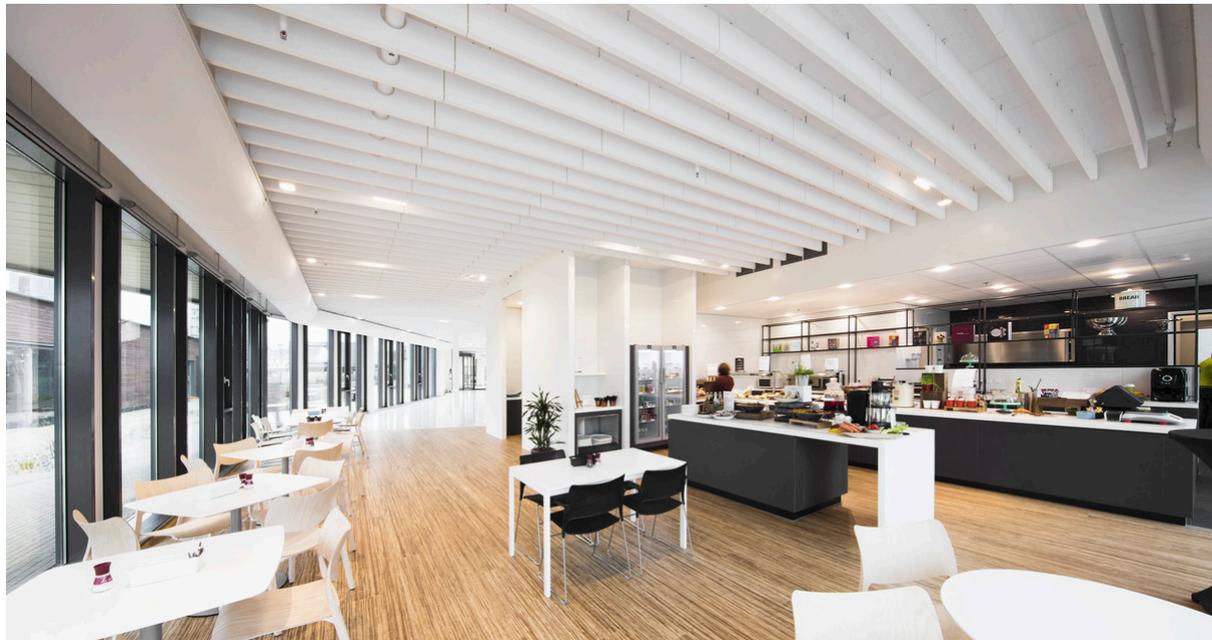
Live load/load bearing capacity

SOLO™ BAFFLE



Ecophon Solo™ Baffle

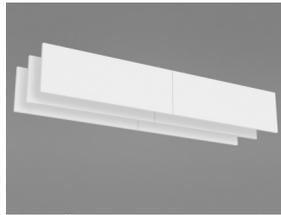
Solo Baffle is vertically installed unframed baffles. Solo Baffle can be used to form distinct lines and is available in different sizes and a wide range of colours. Baffles are used primarily when natural light is brought into the room via skylight.



Plantorics, Hoofddorp, Netherlands

SYSTEM RANGE

Size, mm	1200x200	1200x300	1200x600	1800x200	1800x300	1800x600
Special Fixing	•	•	•	•	•	•
Thickness (THK)	40	40	40	40	40	40
Inst. Diagr.	M414, M491, M563, M580					



Solo Baffle



Solo Baffle/anchor



Solo Baffle/anchor installation



Solo Baffle/hook

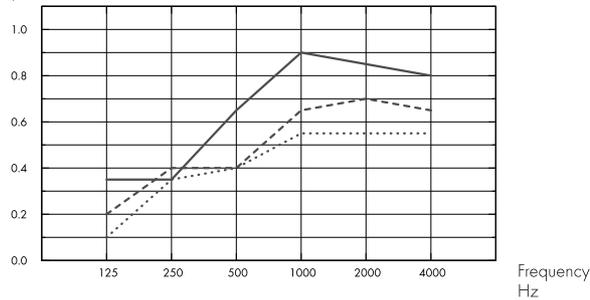
Acoustic



Sound Absorption:

Test results according to EN ISO 354:2003 NOTE: Results shown are not comparable with results according to older versions of this standard due to discrepancies in test method. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.

α_p , Practical sound absorption coefficient



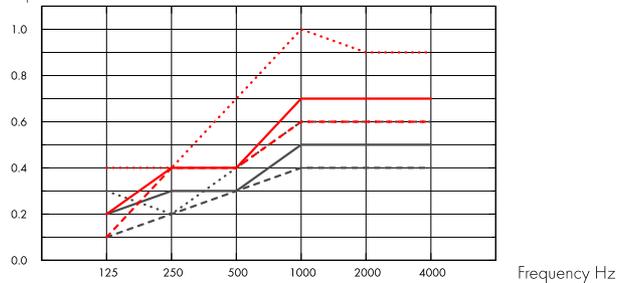
.... Solo Baffle 1200/1800x200, spacing 600mm, direct mounting

--- Solo Baffle 1200/1800x300, spacing 600mm, direct mounting

- Solo Baffle 1200/1800x600, spacing 600mm, direct mounting

o.d.s = overall depth of system

A_{eq} , Equivalent absorption area per unit (m^2 sabin)



--- Solo Baffle 1200x200

- Solo Baffle 1200x300

.... Solo Baffle 1200x600

--- Solo Baffle 1800x200

- Solo Baffle 1800x300

.... Solo Baffle 1800x600

o.d.s = overall depth of system

	THK mm	o.d.s. mm	α_p , Practical sound absorption coefficient						α_w
			125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	
c600	40	200	0.10	0.35	0.40	0.55	0.55	0.55	0.50
c600	40	300	0.20	0.40	0.40	0.65	0.70	0.65	0.50
c600	40	600	0.35	0.35	0.65	0.90	0.85	0.80	0.65

	THK mm	o.d.s. mm	A_{eq} , Equivalent absorption area per unit (m^2 sabin)					
			125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
1200x200 c600	40	200	0.1	0.2	0.3	0.4	0.4	0.4
1200x300 c600	40	300	0.2	0.3	0.3	0.5	0.5	0.5
1200x600 c600	40	600	0.3	0.2	0.4	0.6	0.6	0.6
1800x200 c600	40	200	0.1	0.4	0.4	0.6	0.6	0.6
1800x300 c600	40	300	0.2	0.4	0.4	0.7	0.7	0.7
1800x600 c600	40	600	0.4	0.4	0.7	1.0	0.9	0.9

	THK mm	o.d.s. mm	NRC	SAA
c200	40	200	0.65	0.65
c400	40	200	0.50	0.51
c600	40	200	0.45	0.43
c800	40	200	0.40	0.37
c200	40	300	0.70	0.71
c400	40	300	0.60	0.61
c600	40	300	0.55	0.53
c800	40	300	0.45	0.46
c200	40	600	0.80	0.82
c400	40	600	0.75	0.74
c600	40	600	0.70	0.67
c800	40	600	0.60	0.60



Indoor Air Quality

Certificate / Label	
Eurofins Indoor Air Comfort®	IAC Gold
French VOC	A+



Cradle to Cradle Certified®



This product is Cradle to Cradle Certified® at Bronze level (version 4.0).



Material Health

This product has received a C2C Certified Material Health Certificate™ at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate™ is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.



Carbon footprint

	kg CO ₂ equiv/m ²	Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804
Solo Baffle	10,11	



Circularity

Minimum post-consumer recycled content	57%
Recyclability	Fully recyclable



Fire safety

Country	Fire standard	Class
Europe	EN 13501-1	A2-s1,d0

The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182.



Humidity Resistance

Class C, relative humidity 95% and 30°C, according to EN 13964:2014



Visual appearance

White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.



Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



Accessibility

The tiles are demountable.



Installation

Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification.



System weight

	kg/m ²	Weight information is indicative and subject to variation.
Solo Baffle	4,6	



Mechanical properties

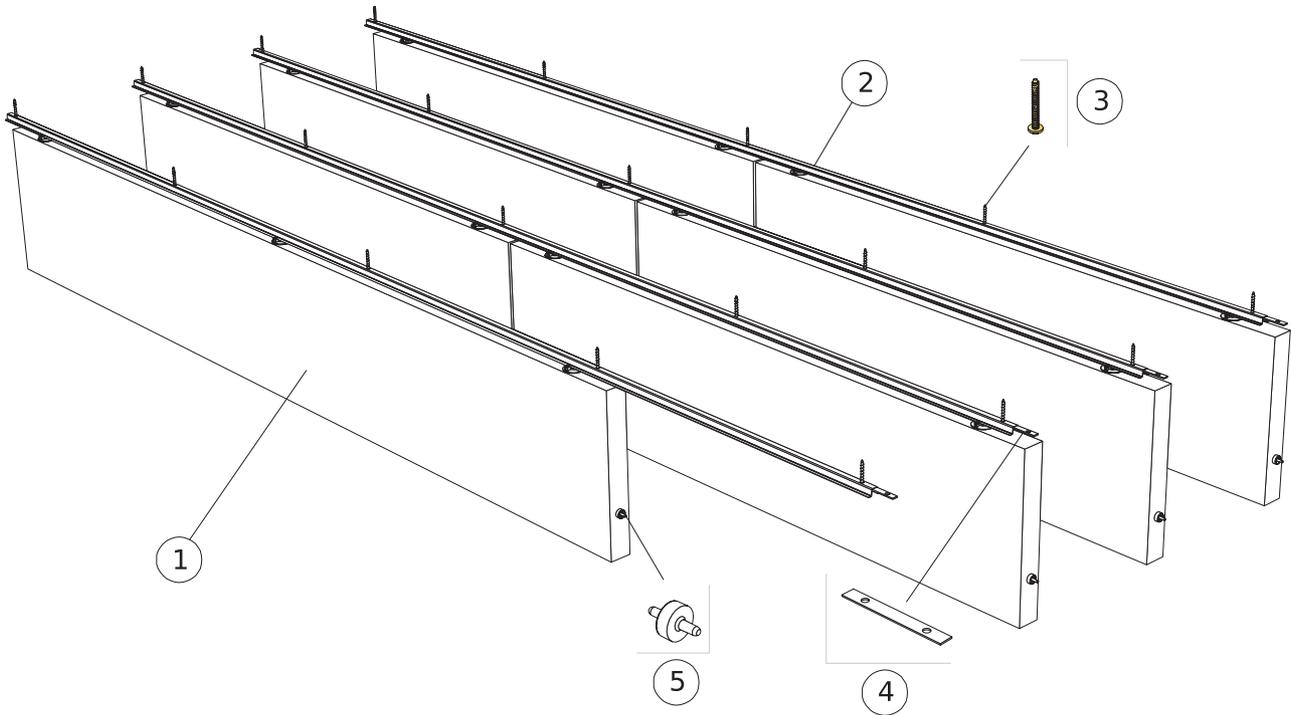
Additional live load has to be fixed to the soffit.



CE

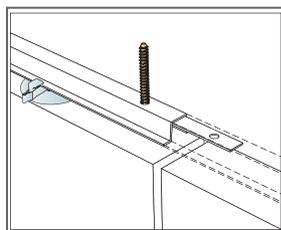
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

INSTALLATION DIAGRAM (M414) FOR ECOPHON SOLO BAFFLE/ANCHOR

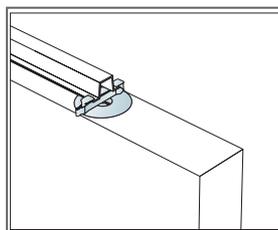


QUANTITY SPECIFICATION (EXCL. WASTAGE)

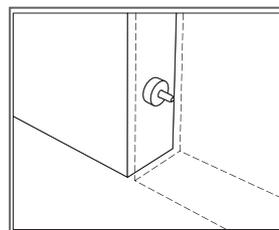
	Size, mm					
	1200x200	1200x300	1200x600	1800x200	1800x300	1800x600
1 Solo Baffle/anchor, installed at 300 mm centres	2,8/m ²	2,8/m ²	2,8/m ²	1,9/m ²	1,9/m ²	1,9/m ²
2 Connect Baffle profile, installed at 300 mm centres	3,3m/m ²					
3 Connect Anchor screw, fixed at 1200 mm centres	2,8/m ²					
4 Connect Profile connector, installed at 2400 mm centres	1,4/m ²					
5 Connect Guiding pin, installed at 1200/1800 mm centres	2,8/m ²	2,8/m ²	2,8/m ²	1,9/m ²	1,9/m ²	1,9/m ²



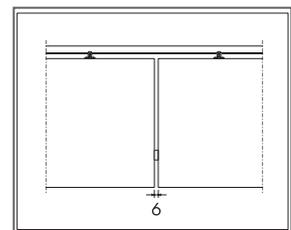
Fixing of Connect Profile connector



The baffles are secured with clips

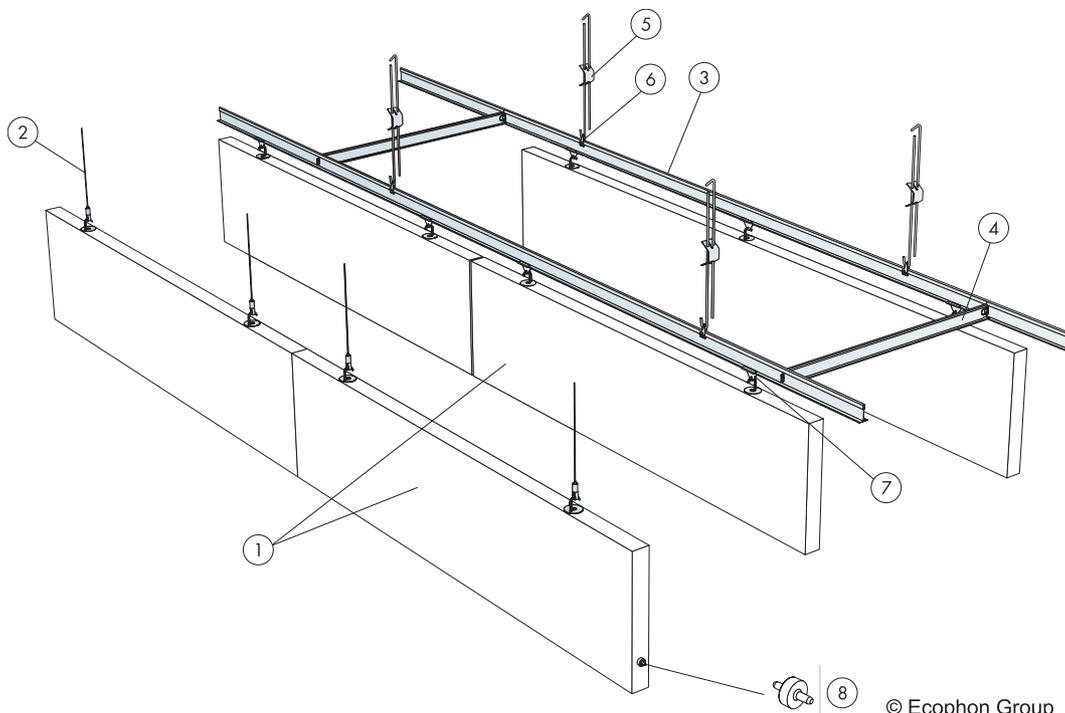


Connect Guiding pin, used to fix distance and level between panels



Distinct gap of 6 mm between baffles with Connect Guiding pin

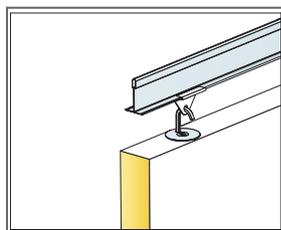
INSTALLATION DIAGRAM (M491) FOR ECOPHON SOLO BAFFLE/HOOK



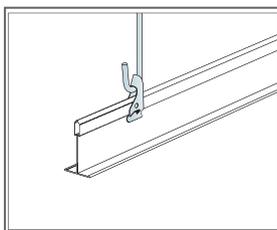
© Ecophon Group

QUANTITY SPECIFICATION (EXCL. WASTAGE)

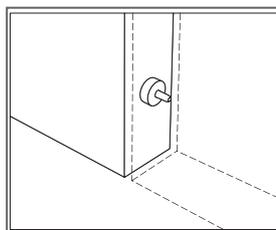
	Size, mm					
	1200x200	1200x300	1200x600	1800x200	1800x300	1800x600
1 Solo Baffle/hook, installed at 600 mm centres	1,4/m ²	1,4/m ²	1,4/m ²	0,9/m ²	0,9/m ²	0,9/m ²
2 Connect Adjustable wire hanger (Alt 1)	2/panel	2/panel	2/panel	3/panel	3/panel	3/panel
3 Connect T24 Main runner, installed at 600 mm centres (Alt 2)	1,7m/m ²					
4 Connect T24 Cross tee, L=600 mm, installed at 1800 mm centres (Alt 2)	0,6m/m ²					
5 Connect Adjustable hanger (Alt 2) c1200	1,4/m ²					
6 Connect Hanger clip (Alt 2)	1,4/m ²					
7 Connect Baffle clip (Alt 2)	2,8/m ²					
8 Connect Guiding Pin, installed at 1200/1800 mm centres	2,8/m ²	2,8/m ²	2,8/m ²	0,9/m ²	0,9/m ²	0,9/m ²



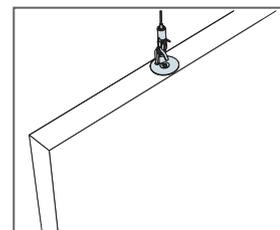
Detail of suspension



Suspension with adjustable hanger and clip

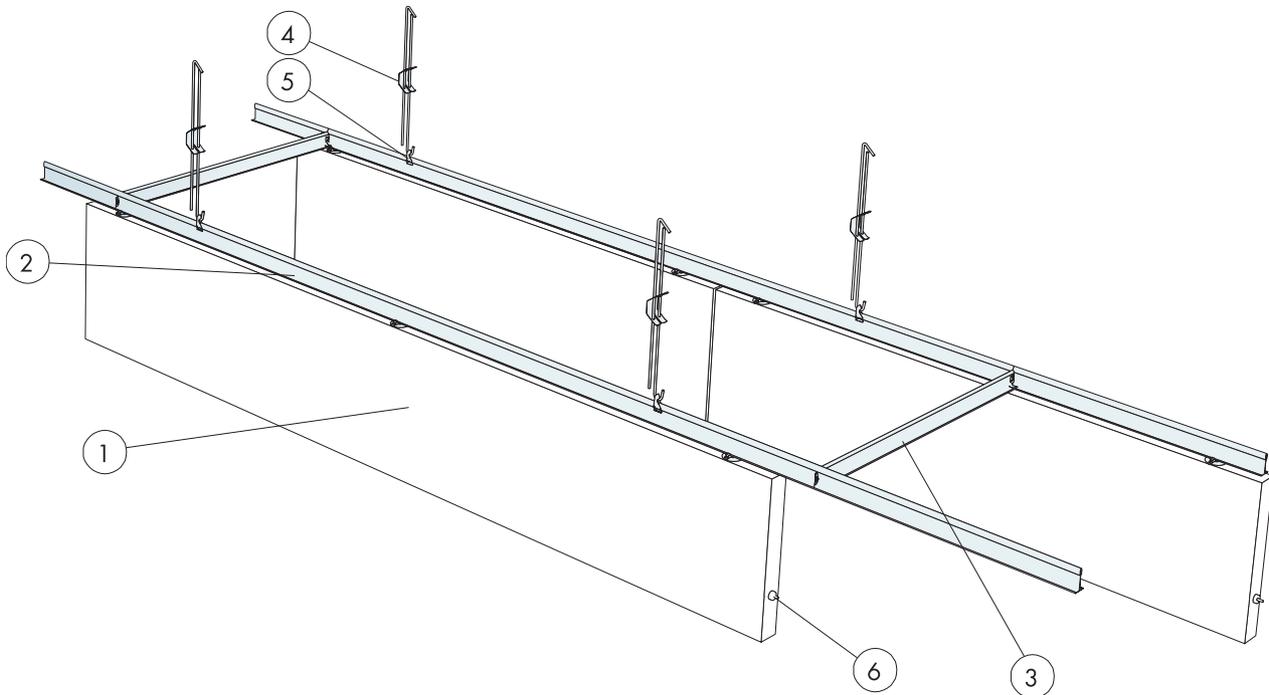


Connect Guiding pin, used to fix distance and level between panels



Suspension with Connect Adjustable wire hanger

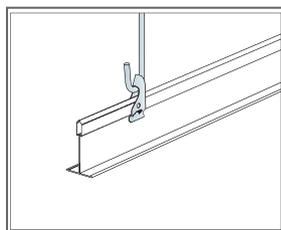
INSTALLATION DIAGRAM (M563) FOR ECOPHON SOLO BAFFLE/ANCHOR



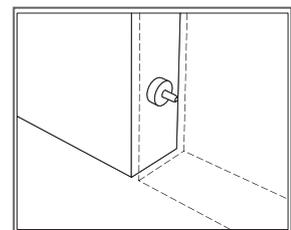
© Ecophon Group

QUANTITY SPECIFICATION (EXCL. WASTAGE)

	Size, mm					
	1200x200	1200x300	1200x600	1800x200	1800x300	1800x600
1 Solo Baffle/anchor, installed at 600 mm centres	1,4/m ²	1,4/m ²	1,4/m ²	0,9/m ²	0,9/m ²	0,9/m ²
2 Connect T24 Main runner, installed at 600 mm centres (Alt 2)	1,7m/m ²					
3 Connect T24 Cross tee, L=600 mm, installed at 1800 mm centres (Alt 2)	0,6m/m ²					
4 Connect Adjustable hanger (Alt 2) c1200	1,4/m ²					
5 Connect Hanger Clip (Alt 1), not to be used in swimming hall environments	-	-	0,7/m ²	-	-	-
6 Connect Guiding Pin, installed at 1200/1800 mm centres	2,8/m ²	2,8/m ²	2,8/m ²	0,9/m ²	0,9/m ²	0,9/m ²

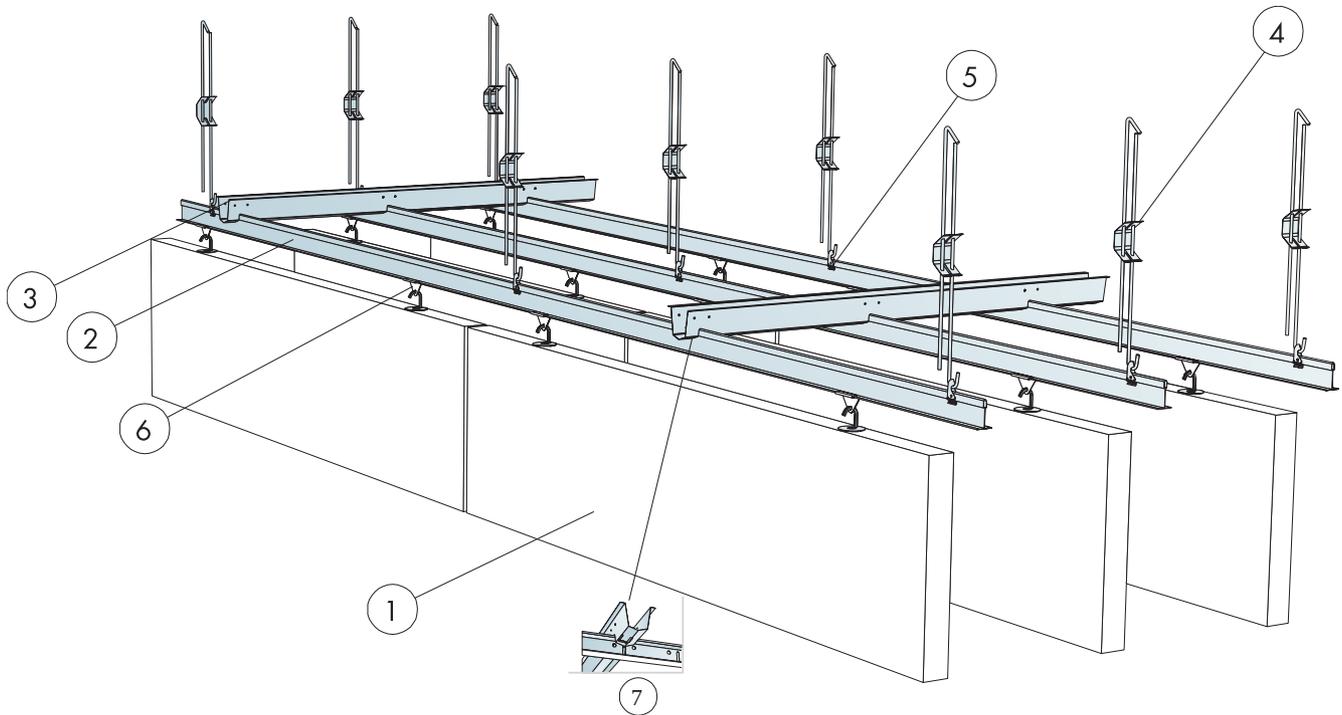


Suspension with adjustable hanger and clip



Connect Guiding pin, used to fix distance and level between panels

INSTALLATION DIAGRAM (M563) FOR ECOPHON SOLO BAFFLE/HOOK



QUANTITY SPECIFICATION (EXCL. WASTAGE)

	Size, mm					
	1200x200	1200x300	1200x600	1800x200	1800x300	1800x600
1 Solo Baffle/hook, installed at 600 mm centres	1,4/m ²	1,4/m ²	1,4/m ²	1,9/m ²	1,9/m ²	1,9/m ²
2 Connect T24 Main runner HD (Black, Grey) / PL(White Only), installed at 600 mm centres	-	-	-	-	-	1,7m/m ²
3 Connect Space bar	-	-	as required	-	-	as required
4 Connect Adjustable hanger (Alt 2) c1200	1,4/m ²					
5 Connect Hanger Clip (Alt 1), not to be used in swimming hall environments	-	-	0,7/m ²	-	-	-
6 Connect Baffle clip (Alt 2)	2,8/m ²					
7 Connect Space bar winch, installed one per joint Main runner/Space bar	-	-	1,1/m ²	-	-	1,1/m ²
	-	-	-	-	-	-

EXAMPLE DETAILS

ONE LAYER LINING AND SINGLE FRAME

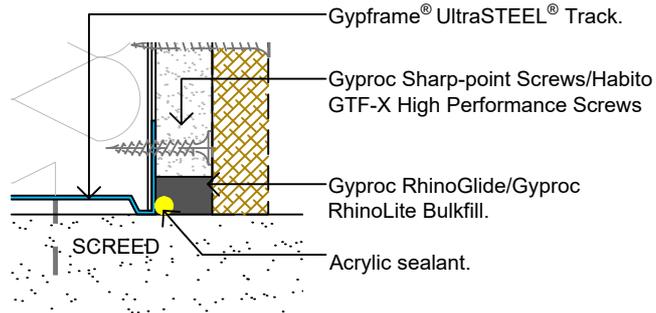


BASE DETAIL WITH TIMBER SKIRTING

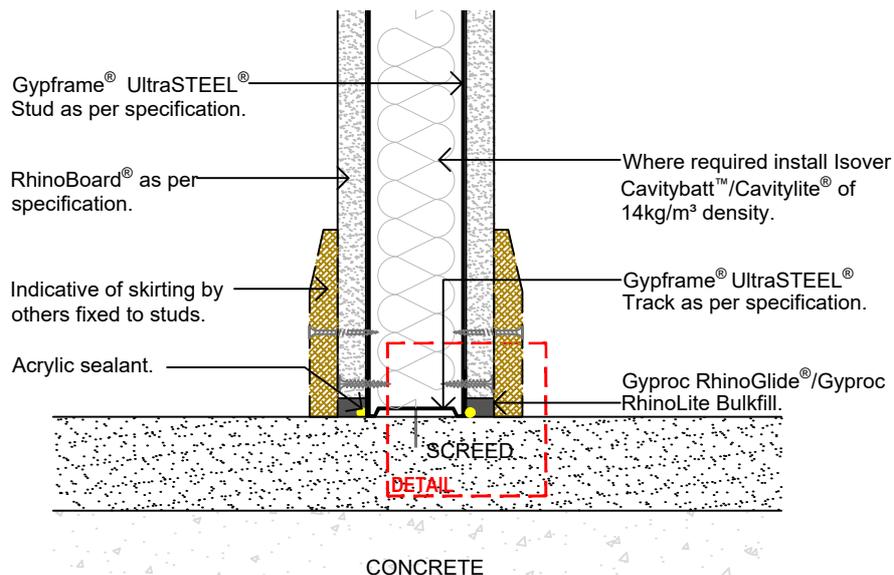
Details to be approved by a professional before use to ensure that they meet with the project requirements. **DRAWINGS NOT TO BE MODIFIED OR SCALED** to suite without approval.
For Fire and Sound Rating where applicable, refer to Saint-Gobain current literature available on www.gyproc.co.za.

DRAWING NOTES:

- Gypframe® UltraSTEEL® Track & Channel less than or equal to 70 mm shall be fixed to the floor using one line of fixings (by others) spaced at maximum 600 mm centres and located at maximum 150 mm from the ends of the track and door openings.
- Gypframe® UltraSTEEL® Track & Channel more than 70 mm shall be fixed to the floor using two lines of fixings (by others) staggered @ 300 mm centres and located not more than 25 mm from the flanges. The fixings in each line shall be spaced at maximum 600 mm centres and located at maximum 150 mm from the ends of the track and door openings.
- Bulk fill to maintain Fire and Acoustic performances.
- To maintain fire resistance performance fix RhinoBoard® to bottom Gypframe® UltraSTEEL® Track using fixings spaced at maximum 220 c/c.
- Timber skirting by others fixed to Gypframe® UltraSTEEL® Stud using skirting screws or a good quality silicone adhesive by others.



DETAIL



DATE	REVISION	UPDATE
11.07.2019	Revised naming	S.M.

TECHNICAL DIVISION
TEL: 0860 272 829
E-mail:
saint-gobain.technical@saint-gobain.com

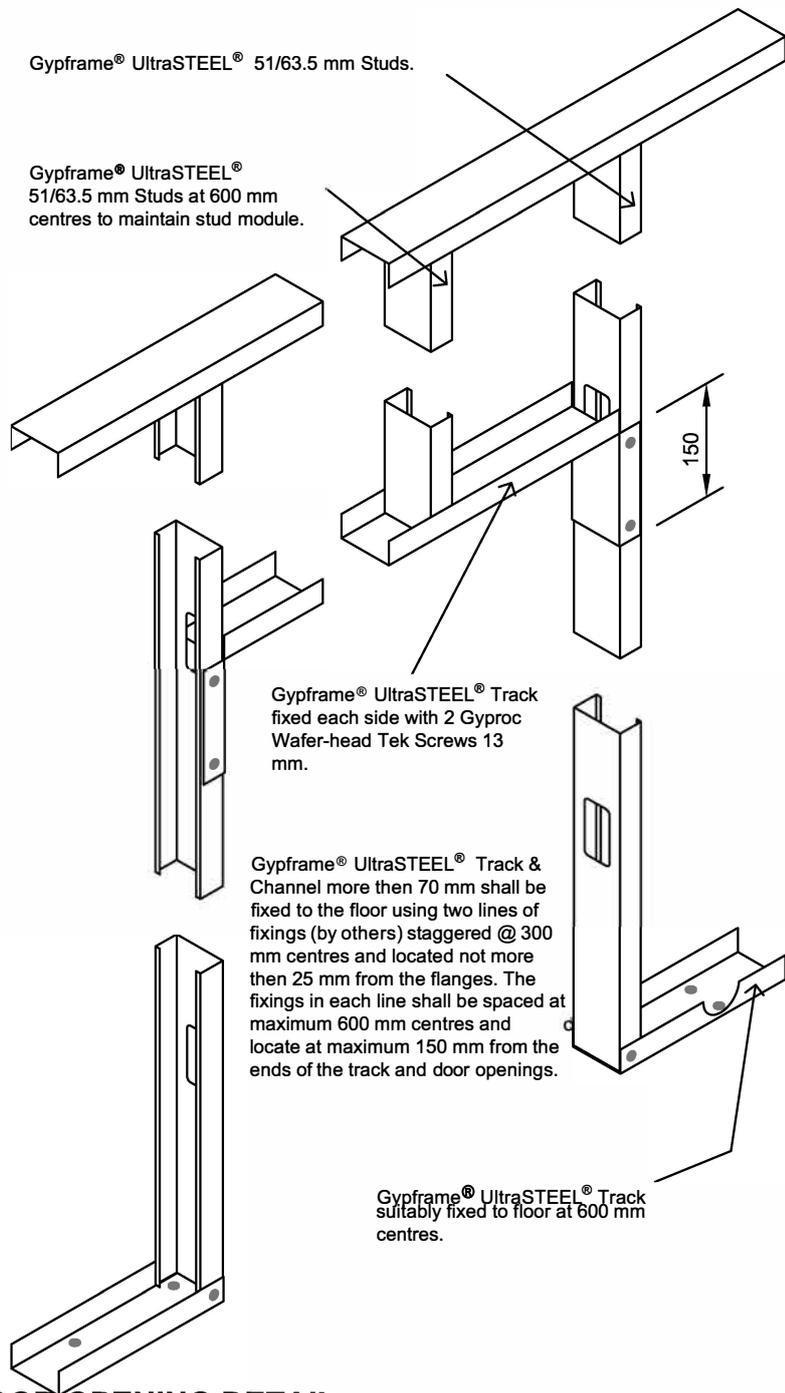
TITLE	BASE DETAIL WITH TIMBER SKIRTING		
SYSTEM	SINGLE FRAME DRYWALL SYSTEM		
DWG. NO.	SF-B002		
SCALE	DATE	DRAWN	REV. NO.
1:4	JULY 2019	S.M.	01
TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS			

EXAMPLE DETAILS NON-SYSTEM SPECIFIC:

Details shown are subject to accuracy of information provided to Saint-Gobain at the time the drawings was originally requested. No duty of care is owed to the recipient or any other third party and Saint-Gobain does not accept any liability in respect of details shown. This Saint-Gobain System Detail must not be used without a complete evaluation by owner's design professional to verify the suitability of its use with your specific application. The detail should be read in conjunction with Saint-Gobain current literature available on www.gyproc.co.za.

DOOR OPENING MEDIUM DUTY

Details to be approved by a professional before use to ensure that they meet with the project requirements. **DRAWINGS NOT TO BE MODIFIED OR SCALED** to suite without approval.
For Fire and Sound Rating where applicable, refer to Saint-Gobain current literature available on www.gyproc.co.za.

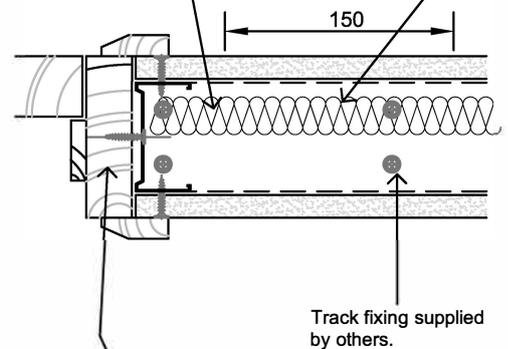


Advice should be sought from the door manufacturer or installer prior to construction of this detail.

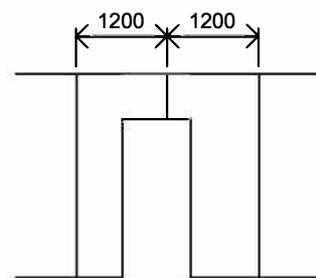
Maximum 1200 mm opening width for partition with deflection head. Contact Saint-Gobain for further guidance on wider openings.

Gyproc Plasterboard® fixed with Screws at 220 mm centres.

Where required install Isover Cavitybatt™/Cavitylite® 14 kg/m³.



Indicative timber door frame & architrave.



Partition Elevation

Gyproframe® UltraSTEEL® Stud Partition Typical Details

DOOR OPENING DETAIL

MAXIMUM DOOR WEIGHT 35KG - MEDIUM DUTY
(BASED ON SOUND ENGINEERING PRINCIPLES)

FOR TIMBER DOOR FRAMES, STEEL DOOR FRAMES, AND ALUMINIUM SHOPFRONTS

DATE	REVISION	UPDATE
14.06.2017	Drawing and notes revised	N.H.
14.12.2017	Hatch and notes revised	S.M.
11.09.2019	Revised naming convention and template	S.M.

TECHNICAL DIVISION
TEL: 0860 272 829
E-mail:
saint-gobain.technical@saint-gobain.com

TITLE	MEDIUM DUTY_DOOR OPENING		
SYSTEM	TYPICAL DETAILS_SYSTEM SPECIFIC		
DWG. NO.	DRD-006		
SCALE	DATE	DRAWN	REV. NO.
1:5	SEPTEMBER 2019	S.M.	03

TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS

TYPICAL DETAILS - SYSTEM SPECIFIC:

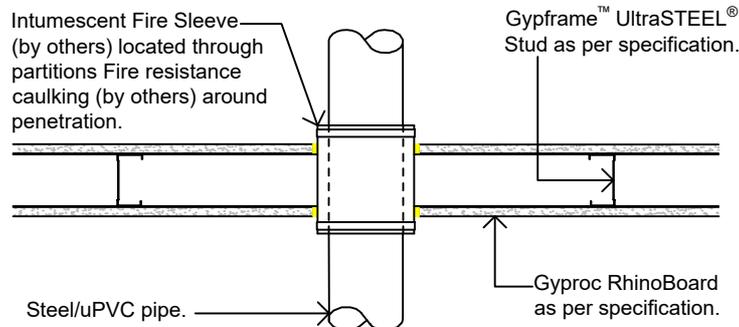
Details shown are subject to accuracy of information provided to Saint-Gobain at the time the drawings was originally requested. No duty of care is owed to the recipient or any other third party and Saint-Gobain does not accept any liability in respect of details shown. This Saint-Gobain System Detail must not be used without a complete evaluation by owner's design professional to verify the suitability of its use with your specific application. The detail should be read in conjunction with Saint-Gobain current literature available on www.gyproc.co.za.

PVC PIPE PENETRATION USING FIRE COLLARS, FIRE RESISTANCE SEALANT & FIRE SLEEVE

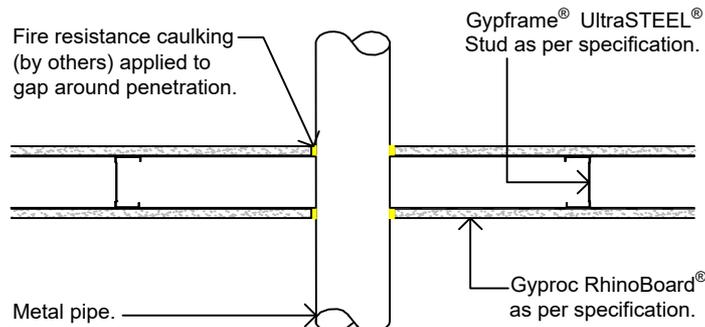
Details to be approved by a professional before use to ensure that they meet with the project requirements. **DRAWINGS NOT TO BE MODIFIED OR SCALED** to suite without approval.
For Fire and Sound Rating where applicable, refer to Saint-Gobain current literature available on www.gyproc.co.za.

DRAWING NOTES:

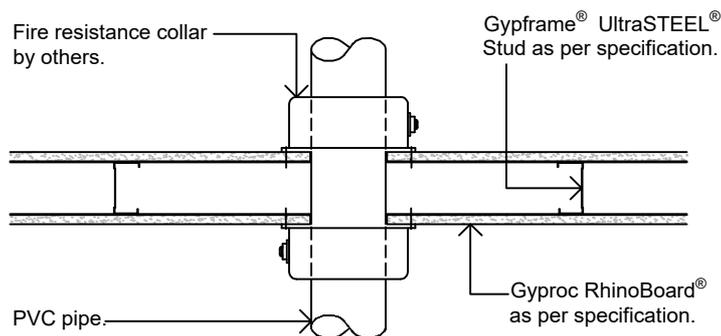
- Guidance shall be obtained from a specialist regarding the appropriate fire stopping materials and the required opening tolerances.



STEEL/PLASTIC PIPE PENETRATION USING SLEEVE



METAL PIPE PENETRATION USING FIRE RESISTANT SEALANT



PVC PIPE PENETRATION USING FIRE COLLARS

DATE	REVISION	UPDATE
09.02.2016	Revision	N.H.
20.06.2017	Detail notes revised	S.M.
14.12.2017	Detail and notes revised	S.M.
09.12.2019	Revised naming convention and template	S.M.

TECHNICAL DIVISION
TEL: 0860 272 829
E-mail:
saint-gobain.technical@saint-gobain.com

TITLE	PVC PIPE PENETRATION USING FIRE COLLARS, FIRE RESISTANCE SEALANT & FIRE SLEEVE		
SYSTEM	PENETRATION DETAILS		
DWG. NO.	PD-003		
SCALE	DATE	DRAWN	REV. NO.
1:4	DECEMBER 2019	S.M.	03
TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS			

EXAMPLE DETAILS NON-SYSTEM SPECIFIC:

Details shown are subject to accuracy of information provided to Saint-Gobain at the time the drawings was originally requested. No duty of care is owed to the recipient or any other third party and Saint-Gobain does not accept any liability in respect of details shown. This Saint-Gobain System Detail must not be used without a complete evaluation by owner's design professional to verify the suitability of its use with your specific application. The detail should be read in conjunction with Saint-Gobain current literature available on www.gyproc.co.za.

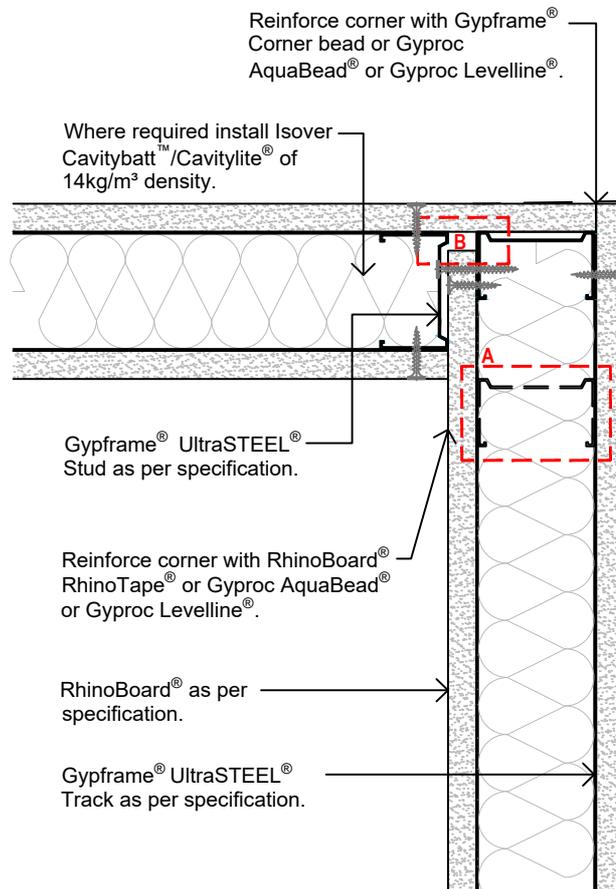
CORNER DETAIL



Details to be approved by a professional before use to ensure that they meet with the project requirements. **DRAWINGS NOT TO BE MODIFIED OR SCALED** to suite without approval.
For Fire and Sound Rating where applicable, refer to Saint-Gobain current literature available on www.gyproc.co.za.

DRAWING NOTES:

- **B** - Detail for optimum acoustic performance, the outer layer lining and the inner layer lining shall be kept separate. See gap (10mm) between inner layer lining and outer layer lining.
- Gyproframe® UltraSTEEL® Track & Channel less than or equal to 70 mm shall be fixed to the floor/soffit using one line of fixings (by others) spaced at maximum 600 mm centres and located at maximum 150 mm from the ends of the track and door openings.
- Gyproframe® UltraSTEEL® Track & Channel more than 70 mm shall be fixed to the floor/soffit using two lines of fixings (by others) staggered @ 300 mm centres and located not more than 25 mm from the flanges. The fixings in each line shall be spaced at maximum 600 mm centres and located at maximum 150 mm from the ends of the track and door openings.
- **A** - In areas where timber skirting is fixed, provide additional support as shown.
- Internal Corners: Reinforce internal corners with RhinoBoard® RhinoTape® or Gyproc AquaBead® or Gyproc Levelline®.
- External Corners: Reinforce external corners with Gyproframe® Corner Bead or Gyproc AquaBead® or Gyproc Levelline®.



DATE	REVISION	UPDATE
09.02.2016	Revision	N.H.
13.06.2017	Drawing notes revised	S.M.
18.12.2017	Drawing and notes revised	S.M.
11.07.2019	Revised Naming	S.M.
16.07.2020	Revised Gyproframe trademark	S.M.

TECHNICAL DIVISION
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E-mail:
saint-gobain.technical@saint-gobain.com

TITLE	CORNER DETAIL		
SYSTEM	SINGLE FRAME DRYWALL SYSTEM		
DWG. NO.	SF-C001		
SCALE	DATE	DRAWN	REV. NO.
1:4	JULY 2020	S.M.	04
TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS			

EXAMPLE DETAILS NON-SYSTEM SPECIFIC:

Details shown are subject to accuracy of information provided to Saint-Gobain at the time the drawings was originally requested. No duty of care is owed to the recipient or any other third party and Saint-Gobain does not accept any liability in respect of details shown. This Saint-Gobain System Detail must not be used without a complete evaluation by owner's design professional to verify the suitability of its use with your specific application. The detail should be read in conjunction with Saint-Gobain current literature available on www.gyproc.co.za.

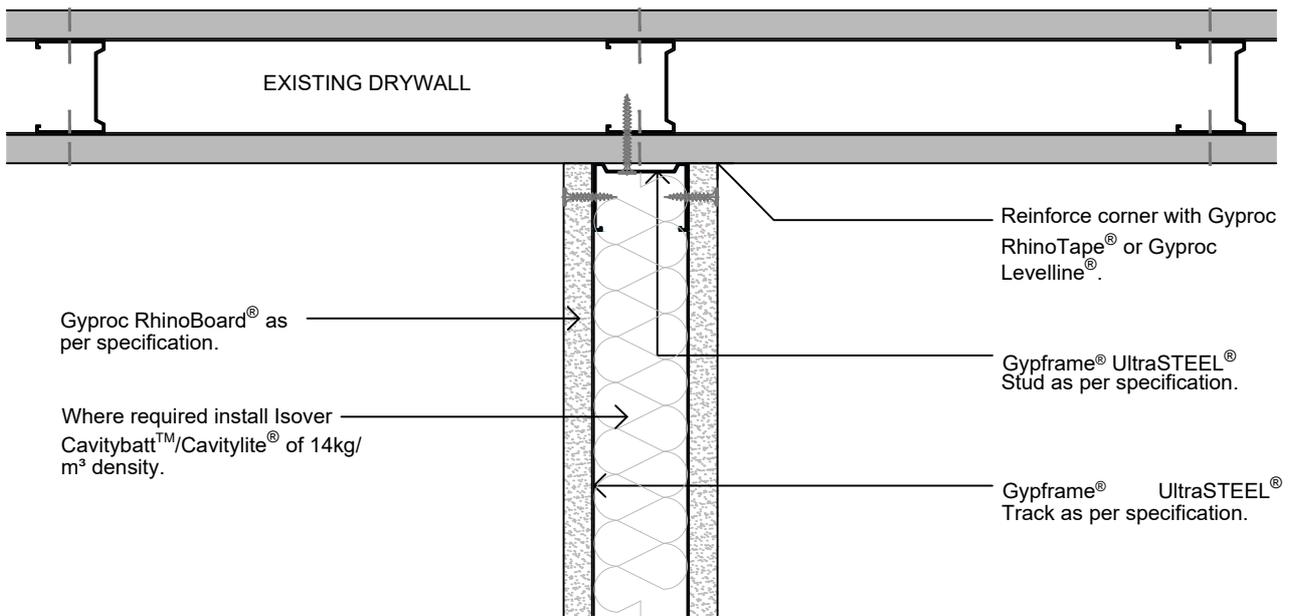
ABUTMENT DETAIL - BETWEEN A SINGLE FRAME DRYWALL AND AN EXISTING DRYWALL



Details to be approved by a project professional before use to ensure that they meet with the specific project requirements. **DRAWINGS NOT TO BE MODIFIED OR SCALED** to suite without approval.
For Fire and Sound Rating where applicable, refer to Saint-Gobain current literature available on www.gyproc.co.za.

DRAWING NOTES:

- Gypframe® UltraSTEEL® Track & Channel less than or equal to 70 mm shall be fixed to the floor/soffit using one line of fixings (by others) spaced at maximum 600 mm centres and located at maximum 150 mm from the ends of the track and door openings.
- Gypframe® UltraSTEEL® Track & Channel more than 70 mm shall be fixed to the floor/soffit using two lines of fixings (by others) staggered @ 300 mm centres and located not more than 25 mm from the flanges. The fixings in each line shall be spaced at maximum 600 mm centres and located at maximum 150 mm from the ends of the track and door openings.
- Internal Corners: Reinforce internal corners with Gyproc RhinoTape® or Gyproc Levelline®.
- External Corners: Reinforce external corners with Gypframe™ Corner Bead or Gyproc AquaBead® or Gyproc Levelline®.



DATE	REVISION	UPDATE
09.02.2016	Revision	N.H.
10.07.2017	Drawing detail notes revised	S.M.
18.12.2017	Detail and notes revised	S.M.
31.01.2020	Revised layout and new naming	E.M.

TECHNICAL DIVISION
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TITLE	ABUTMENT DETAIL - BETWEEN A SINGLE FRAME DRYWALL AND AN EXISTING DRYWALL		
SYSTEM	SINGLE FRAME DRYWALL SYSTEM		
DWG. NO.	SF-A006		
SCALE	DATE	DRAWN	REV. NO.
1:4	SEPTEMBER 2017	E.M.	04
TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS			

EXAMPLE DETAILS NON-SYSTEM SPECIFIC:

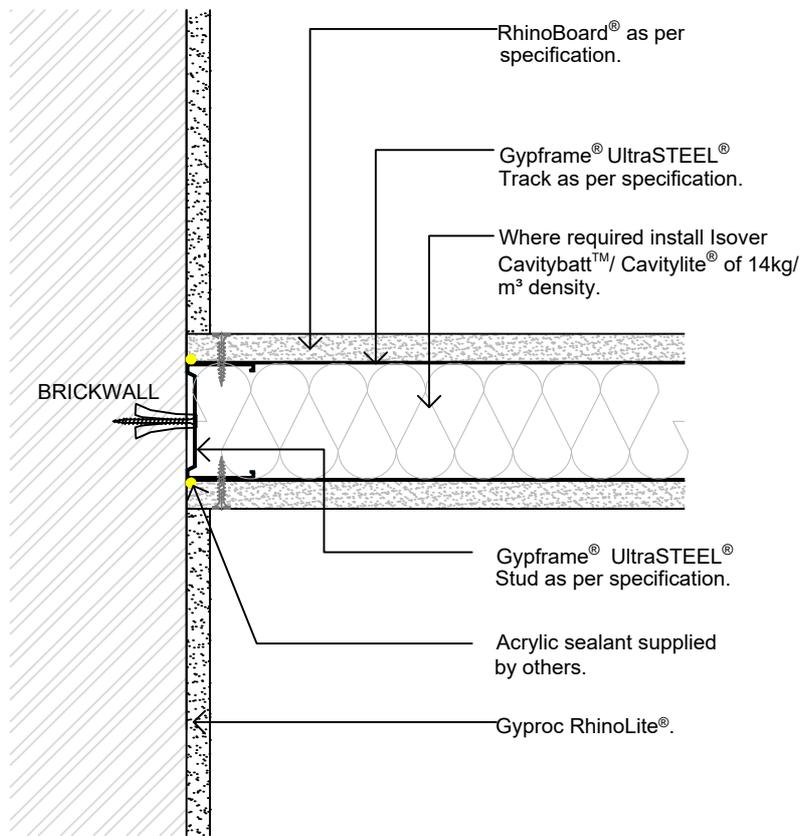
Details shown are subject to accuracy of information provided to Saint-Gobain at the time the drawings was originally requested. No duty of care is owed to the recipient or any other third party and Saint-Gobain does not accept any liability in respect of details shown. This Saint-Gobain System Detail must not be used without a complete evaluation by owner's design professional to verify the suitability of its use with your specific application. The detail should be read in conjunction with Saint-Gobain current literature available on www.gyproc.co.za.

ABUTMENT DETAIL - BETWEEN A DRYWALL AND MASONRY WALL WITH PLASTER FINISH

Details to be approved by a professional before use to ensure that they meet with the project requirements. **DRAWINGS NOT TO BE MODIFIED OR SCALED** to suite without approval.
For Fire and Sound Rating where applicable, refer to Saint-Gobain current literature available on www.gyproc.co.za.

DRAWING NOTES:

- Gypframe® UltraSTEEL® Track/Stud & Channel less then or equal to 70 mm shall be fixed to the floor/masonry using one line of fixings (by others) spaced at maximum 600 mm centres and located at maximum 150 mm from the ends of the track and door openings.
- Gypframe® UltraSTEEL® Track/Stud & Channel more then 70 mm shall be fixed to the floor/masonry using two lines of fixings (by others) staggered @ 300 mm centres and located not more then 25 mm from the flanges. The fixings in each line shall be spaced at maximum 600 mm centres and located at maximum 150 mm from the ends of the track and door openings.



DATE	REVISION	UPDATE
09.02.2016	Revision	N.H.
13.06.2017	Drawing notes revised	S.M.
13.11.2017	Detail revised	S.M.
11.07.2019	Revised naming	S.M.
16.07.2020	Revised Gypframe trademark	S.M.

TECHNICAL DIVISION
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TITLE	ABUTMENT DETAIL - BETWEEN A DRYWALL AND MASONRY WITH PLASTER FINISH		
SYSTEM	SINGLE FRAME DRYWALL SYSTEM		
DWG. NO.	SF-A001		
SCALE	DATE	DRAWN	REV. NO.
1:4	JULY 2020	S.M.	04

TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS



T-JUNCTION WITH HIGH PERFORMANCE WALL CORNER FORM T-JUNCTION WITH LOW PERFORMANCE WALL

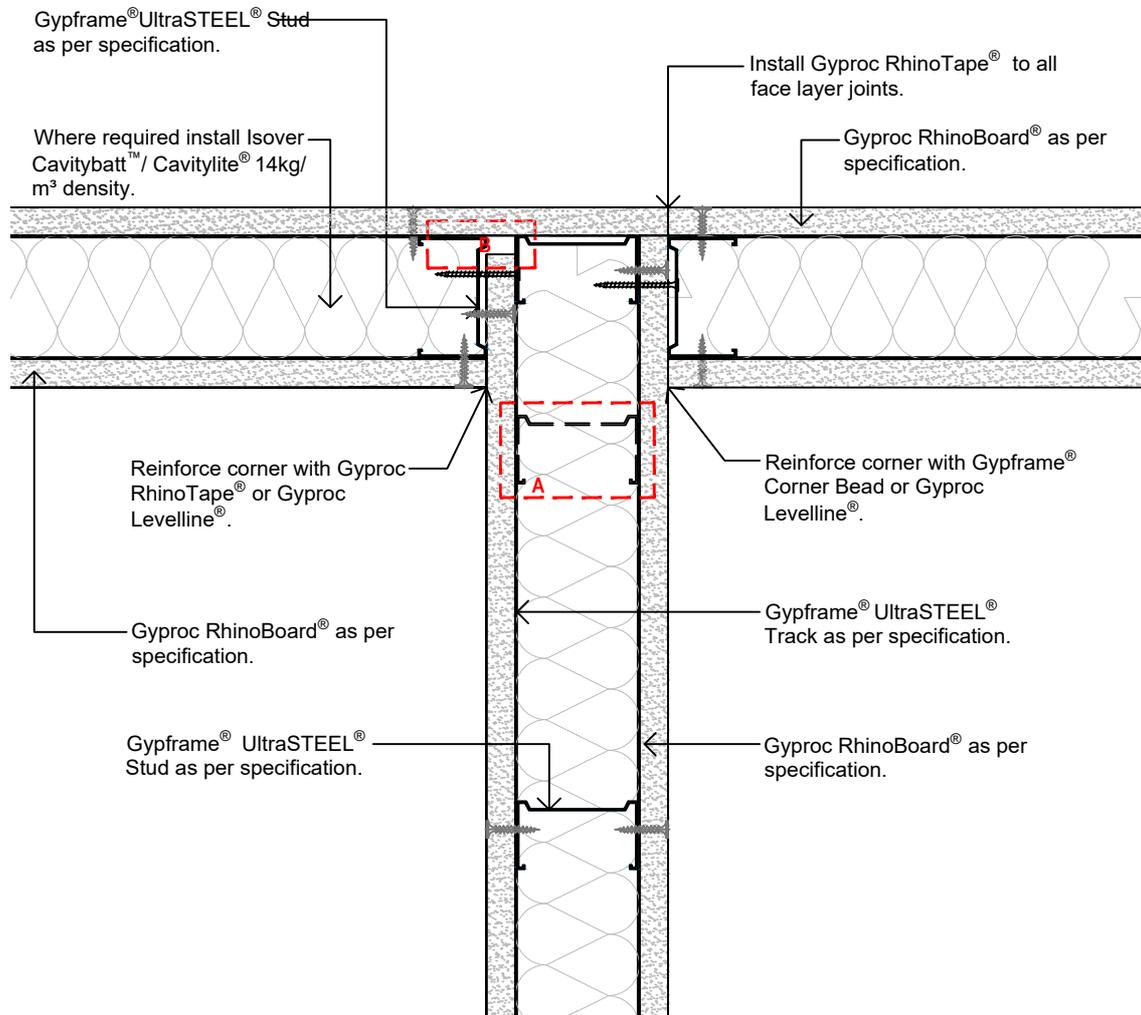
Details to be approved by a project professional before use to ensure that they meet with the specific project requirements. **DRAWINGS NOT TO BE MODIFIED OR SCALED** to suite without approval.
For Fire and Sound Rating where applicable, refer to Saint-Gobain current literature available on www.gyproc.co.za.

DRAWING NOTES:

- Gypframe® UltraSTEEL® Track & Channel less than or equal to 70 mm shall be fixed to the floor/soffit using one line of fixings (by others) spaced at maximum 600 mm centres and located at maximum 150 mm from the ends of the track and door openings.
- Gypframe® UltraSTEEL® Track & Channel more than 70 mm shall be fixed to the floor/soffit using two lines of fixings (by others) staggered @ 300 mm centres and located not more than 25 mm from the flanges. The fixings in each line shall be spaced at maximum 600 mm centres and located at maximum 150 mm from the ends of the track and door openings.
- Gypframe® Corner Bead embedded in Gyproc RhinoGlide®/RhinoLite® for reinforcing the corner.
- A** - In areas where timber skirting is fixed, provide additional support as shown.
- B** - Detail for optimum acoustic performance, the outer layer lining and the inner layer lining shall be kept separate. See gap (10mm) between inner layer lining and outer layer lining.
- Separation of inner leaf and outer leaf of lining should be maintained.

Internal Corners: Reinforce internal corners with Gyproc RhinoTape® or Gyproc Levelline®.

External Corners: Reinforce external corners with Gypframe® Corner Bead or Gyproc AquaBead® or Gyproc Levelline®.



DATE	REVISION	UPDATE	TITLE	T-JUNCTION WITH HIGH PERFORMANCE WALL CORNER FORM T-JUNCTION WITH LOW PERFORMANCE WALL		
14.02.2020	Revised layout and new naming	E.M.	SYSTEM	SINGLE FRAME DRYWALL SYSTEM		
			DWG. NO.	SF-T003		
			SCALE	DATE	DRAWN	REV. NO.
			1:4	FEBRUARY 2020	E.M.	01
TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS						

GYPROC: SAINT-GOBAIN
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EXAMPLE DETAILS NON-SYSTEM SPECIFIC:
Details shown are subject to accuracy of information provided to Saint-Gobain at the time the drawings was originally requested. No duty of care is owed to the recipient or any other third party and Saint-Gobain does not accept any liability in respect of details shown. This Saint-Gobain System Detail must not be used without a complete evaluation by owner's design professional to verify the suitability of its use with your specific application. The detail should be read in conjunction with Saint-Gobain current literature available on www.gyproc.co.za.

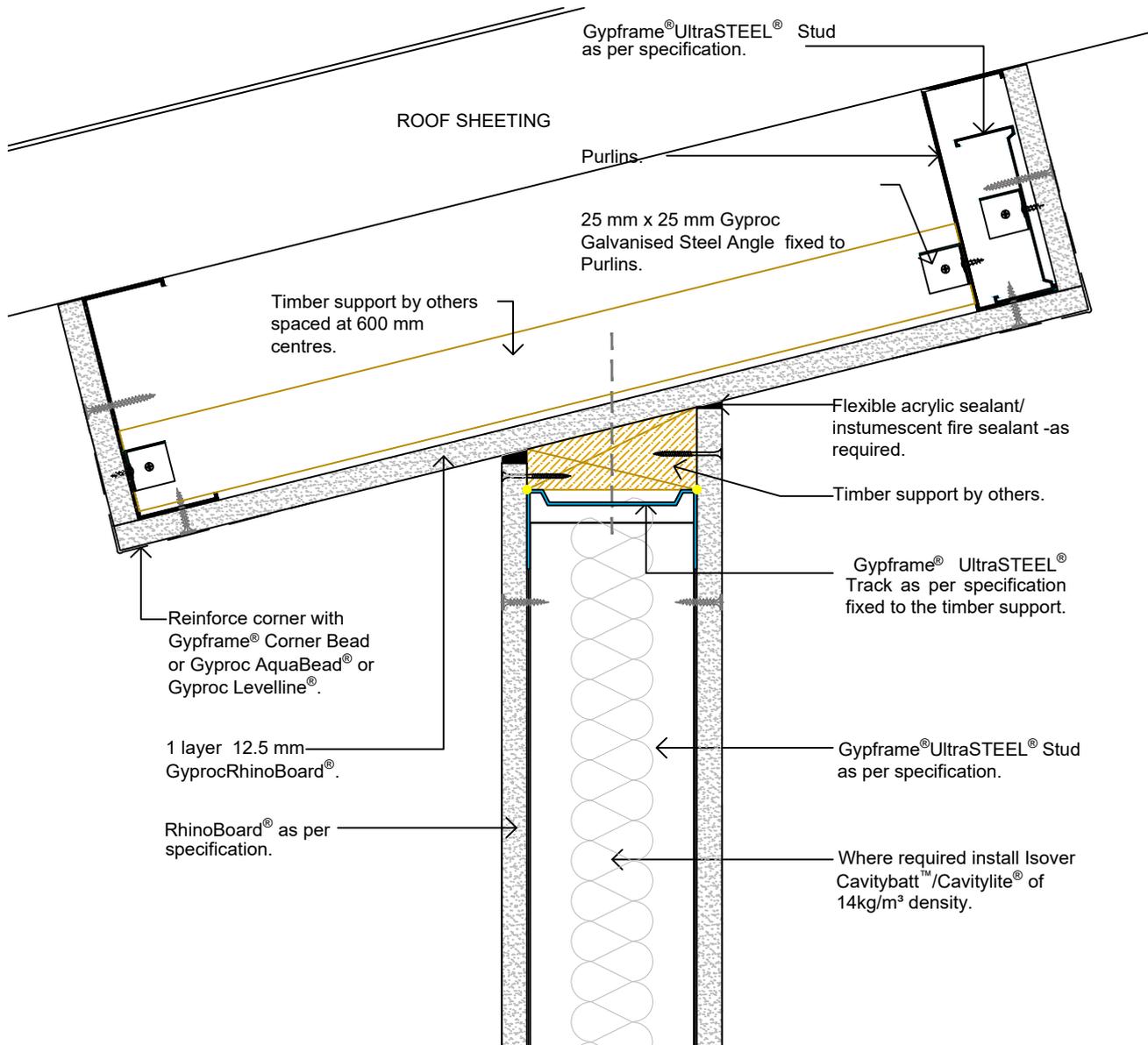
HEAD DETAIL - UP TO 30mins FIRE RATING WALL PARALLEL TO PURLINS



Details to be approved by a project professional before use to ensure that they meet with the specific project requirements. **DRAWINGS NOT TO BE MODIFIED OR SCALED** to suite without approval.
For Fire and Sound Rating where applicable, refer to Saint-Gobain current literature available on www.gyproc.co.za.

DRAWING NOTES:

- Gypframe® UltraSTEEL® Track & Channel less than or equal to 70 mm shall be fixed to the soffit using one line of fixings (by others) spaced at maximum 600 mm centres and located at maximum 150 mm from the ends of the track and door openings.
- Gypframe® UltraSTEEL® Track & Channel more than 70 mm shall be fixed to the soffit using two lines of fixings (by others) staggered @ 300 mm centres and located not more than 25 mm from the flanges. The fixings in each line shall be spaced at maximum 600 mm centres and located at maximum 150 mm from the ends of the track and door openings.



TO BE APPROVED BY FIRE ENGINEER

DATE	REVISION	UPDATE
14.02.2020	Revised layout and new naming	E.M.

TECHNICAL DIVISION
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saint-gobain.technical@saint-gobain.com

TITLE	HEAD DETAIL - UP TO 30mins FIRE RATING WALL PARALLEL TO PURLINS		
SYSTEM	SINGLE FRAME DRYWALL SYSTEM		
DWG. NO.	SF-H016		
SCALE	DATE	DRAWN	REV. NO.
1:4	FEBRUARY 2020	E.M.	01

TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS

EXAMPLE DETAILS NON-SYSTEM SPECIFIC:

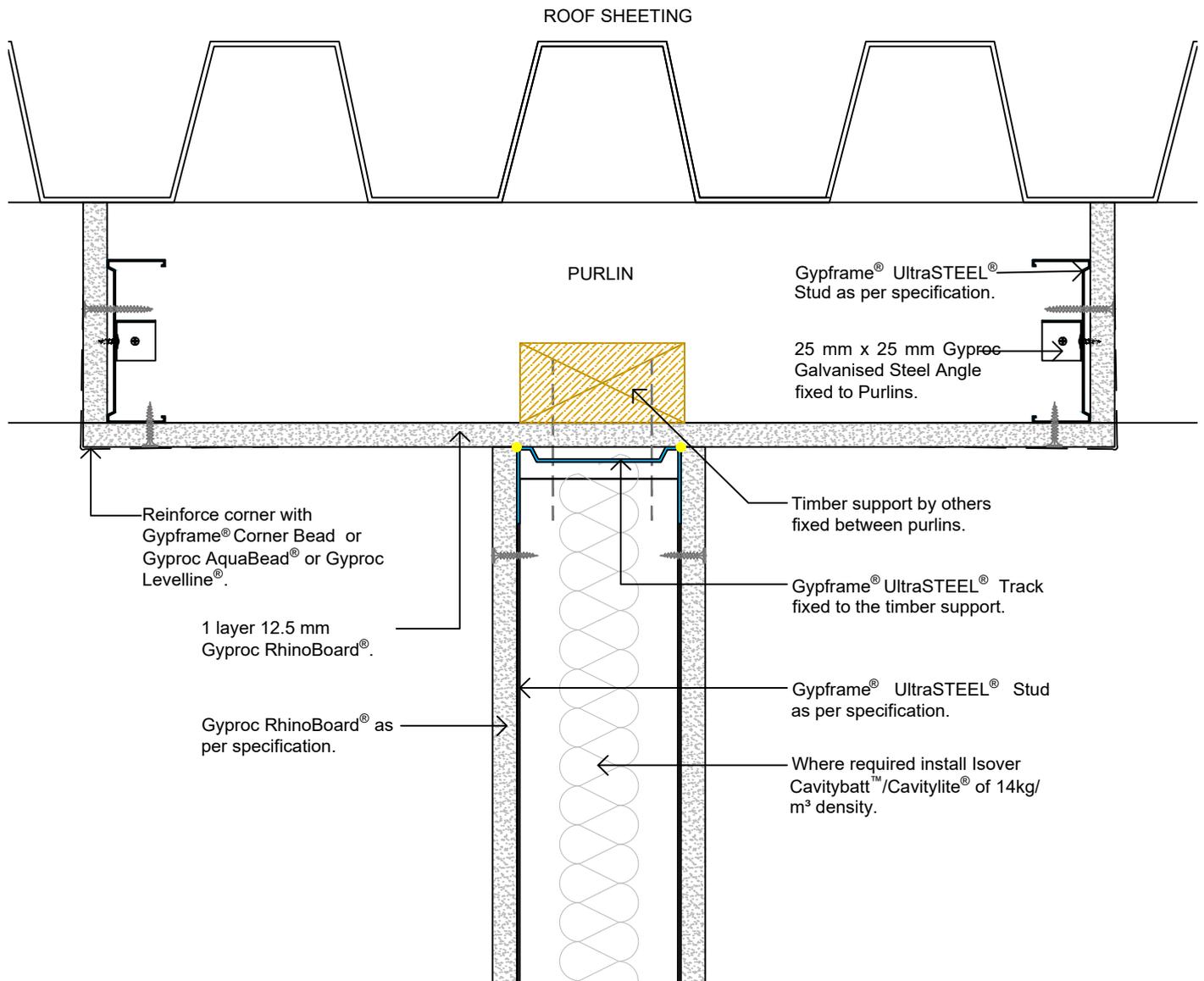
Details shown are subject to accuracy of information provided to Saint-Gobain at the time the drawings was originally requested. No duty of care is owed to the recipient or any other third party and Saint-Gobain does not accept any liability in respect of details shown. This Saint-Gobain System Detail must not be used without a complete evaluation by owner's design professional to verify the suitability of its use with your specific application. The detail should be read in conjunction with Saint-Gobain current literature available on www.gyproc.co.za.

HEAD DETAIL - UP TO 30min FIRE RATING WALL PERPENDICULAR TO PURLINS

Details to be approved by a project professional before use to ensure that they meet with the specific project requirements. **DRAWINGS NOT TO BE MODIFIED OR SCALED** to suite without approval.
For Fire and Sound Rating where applicable, refer to Saint-Gobain current literature available on www.gyproc.co.za.

DRAWING NOTES:

- Gypframe® UltraSTEEL® Track & Channel less than or equal to 70 mm shall be fixed to the soffit using one line of fixings (by others) spaced at maximum 600 mm centres and located at maximum 150 mm from the ends of the track and door openings.
- Gypframe® UltraSTEEL® Track & Channel more than 70 mm shall be fixed to the soffit using two lines of fixings (by others) staggered @ 300 mm centres and located not more than 25 mm from the flanges. The fixings in each line shall be spaced at maximum 600mm centres and located at maximum 150 mm from the ends of the track and door openings.



TO BE APPROVED BY FIRE ENGINEER

DATE	REVISION	UPDATE
14.02.2020	Revised layout and new naming	E.M.

TECHNICAL DIVISION
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E-mail:
saint-gobain.technical@saint-gobain.com

TITLE	HEAD DETAIL - UP TO 30min FIRE RATING WALL PERPENDICULAR TO PURLINS		
SYSTEM	SINGLE FRAME DRYWALL SYSTEM		
DWG. NO.	SF-H017		
SCALE	DATE	DRAWN	REV. NO.
1:4	FEBRUARY 2020	E.M.	01
TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS			

EXAMPLE DETAILS NON-SYSTEM SPECIFIC:

Details shown are subject to accuracy of information provided to Saint-Gobain at the time the drawings was originally requested. No duty of care is owed to the recipient or any other third party and Saint-Gobain does not accept any liability in respect of details shown. This Saint-Gobain System Detail must not be used without a complete evaluation by owner's design professional to verify the suitability of its use with your specific application. The detail should be read in conjunction with Saint-Gobain current literature available on www.gyproc.co.za.

EXAMPLE DETAILS

TWO LAYER LINING AND SINGLE FRAME

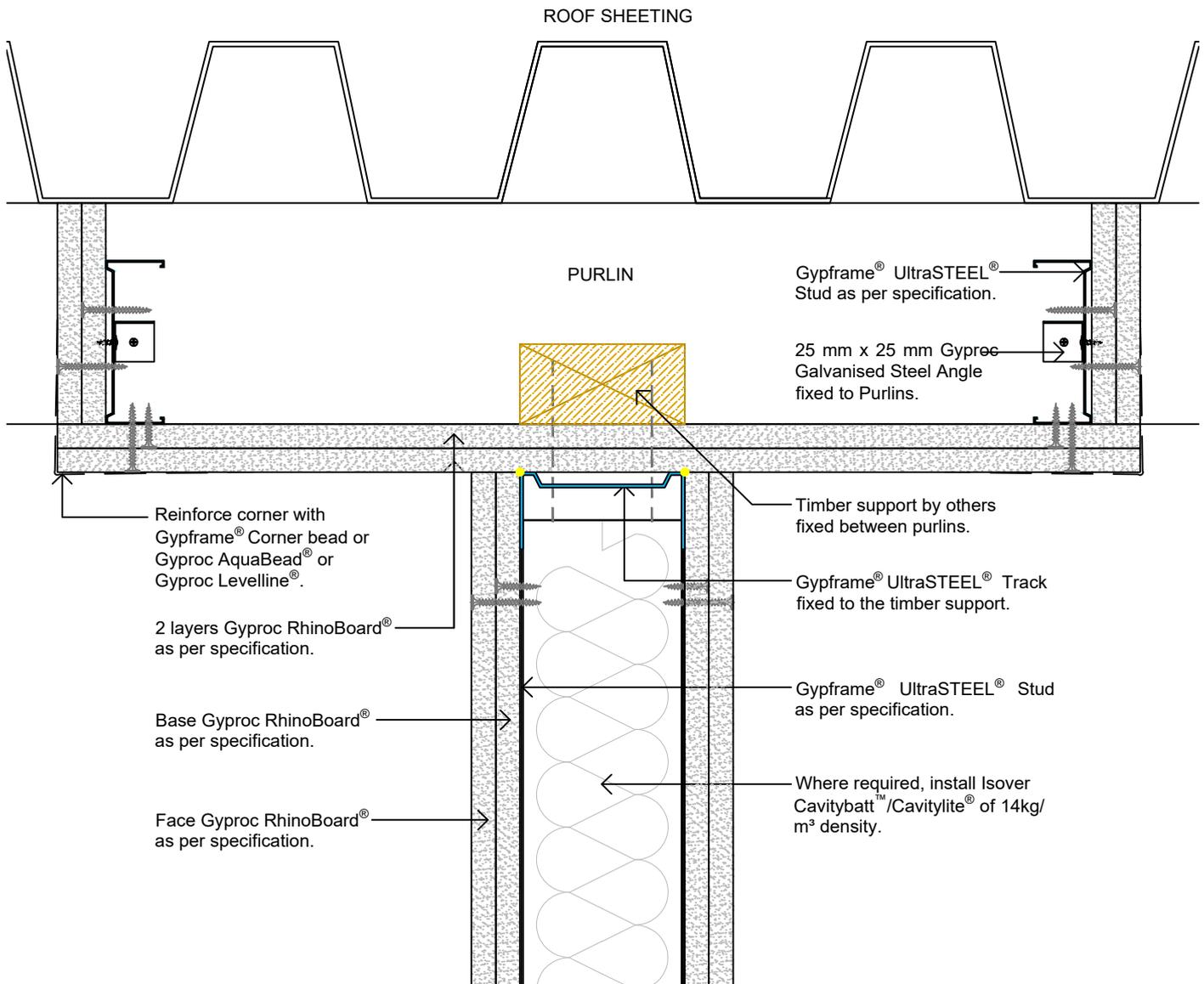


HEAD DETAIL - UP TO 60min FIRE RATING WALL PERPENDICULAR TO PURLINS

Details to be approved by a project professional before use to ensure that they meet with the specific project requirements. **DRAWINGS NOT TO BE MODIFIED OR SCALED** to suite without approval.
For Fire and Sound Rating where applicable, refer to Saint-Gobain current literature available on www.gyproc.co.za.

DRAWING NOTES:

- Gypframe® UltraSTEEL® Track & Channel less than or equal to 70 mm shall be fixed to the soffit using one line of fixings (by others) spaced at maximum 600 mm centres and located at maximum 150 mm from the ends of the track and door openings.
- Gypframe® UltraSTEEL® Track & Channel more than 70 mm shall be fixed to the soffit using two lines of fixings (by others) staggered @ 300 mm centres and located not more than 25 mm from the flanges. The fixings in each line shall be spaced at maximum 600 mm centres and located at maximum 150 mm from the ends of the track and door openings.



TO BE APPROVED BY FIRE ENGINEER

DATE	REVISION	UPDATE
19.02.2020	Revised layout and new naming.	E.M.

TECHNICAL DIVISION
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E-mail:
saint-gobain.technical@saint-gobain.com

TITLE	HEAD DETAIL - UP TO 60min FIRE RATING WALL PERPENDICULAR TO PURLINS		
SYSTEM	SINGLE FRAME DRYWALL SYSTEM		
DWG. NO.	SF-H119		
SCALE	DATE	DRAWN	REV. NO.
1:4	FEBRUARY 2020	E.M.	01
TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS			

EXAMPLE DETAILS NON-SYSTEM SPECIFIC:

Details shown are subject to accuracy of information provided to Saint-Gobain at the time the drawings was originally requested. No duty of care is owed to the recipient or any other third party and Saint-Gobain does not accept any liability in respect of details shown. This Saint-Gobain System Detail must not be used without a complete evaluation by owner's design professional to verify the suitability of its use with your specific application. The detail should be read in conjunction with Saint-Gobain current literature available on www.gyproc.co.za.

DEFLECTION HEAD - UP TO 60min FIRE RATING FOR UP TO 50mm DEFLECTION WALL PARALLEL TO PURLINS



Details to be approved by a project professional before use to ensure that they meet with the specific project requirements. **DRAWINGS NOT TO BE MODIFIED OR SCALED** to suite without approval.
For Fire and Sound Rating where applicable, refer to Saint-Gobain current literature available on www.gyproc.co.za.

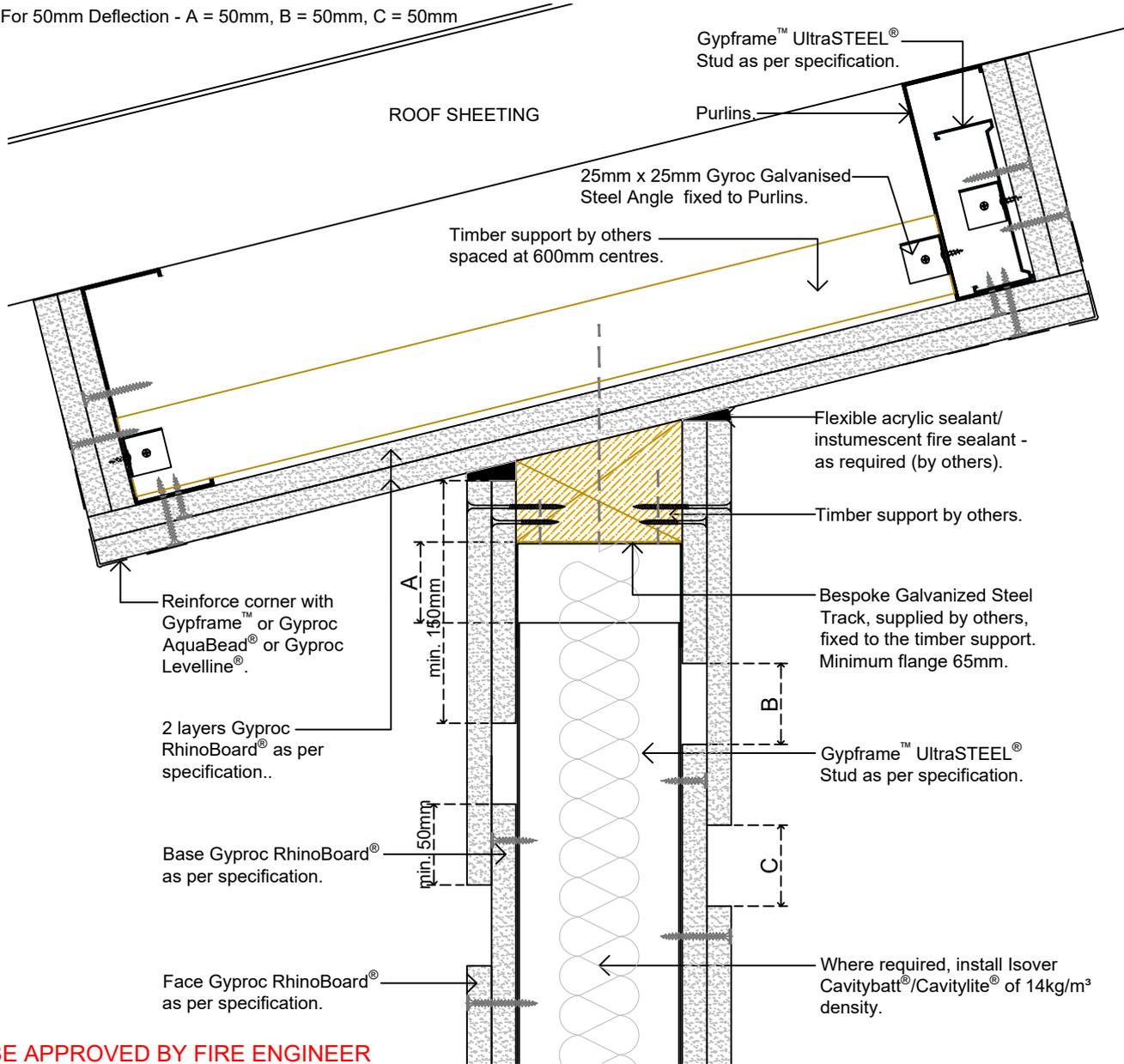
DRAWING NOTES:

- Gypframe™ UltraSTEEL® Track & Channel less than or equal to 70mm shall be fixed to the soffit using one line of fixings (by others) spaced at maximum 600mm centres and located at maximum 150mm from the ends of the track and door openings.
- Gypframe™ UltraSTEEL® Track & Channel more than 70mm shall be fixed to the soffit using two lines of fixings (by others) staggered @ 300mm centres and located not more than 25mm from the flanges. The fixings in each line shall be spaced at maximum 600mm centres and located at maximum 150mm from the ends of the track and door openings.

DEFLECTION NOTES:

- A - Gap between soffit and drywall line
- B - Distance between topmost part of Stud and the top of the Bespoke Track.
- C - Distance from the Bespoke Track Flange to the top most screw.

For 50mm Deflection - A = 50mm, B = 50mm, C = 50mm



TO BE APPROVED BY FIRE ENGINEER

DATE	REVISION	UPDATE
19.02.2020	Revised layout and new naming.	E.M.

TECHNICAL DIVISION
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saint-gobain.technical@saint-gobain.com

TITLE	DEFLECTION HEAD - UP TO 60min FIRE RATING FOR UP TO 50mm DEFLECTION WALL PARALLEL TO PURLINS		
SYSTEM	SINGLE FRAME DRYWALL SYSTEM		
DWG. NO.	SF-B-H102		
SCALE	DATE	DRAWN	REV. NO.
1:4	FEBRUARY 2020	E.M.	01
TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS			

EXAMPLE DETAILS. NON-SYSTEM SPECIFIC:
Details shown are subject to accuracy of information provided to Saint-Gobain at the time the drawings was originally requested. No duty of care is owed to the recipient or any other third party and Saint-Gobain does not accept any liability in respect of details shown. This Saint-Gobain System Detail must not be used without a complete evaluation by owner's design professional to verify the suitability of its use with your specific application. The detail should be read in conjunction with Saint-Gobain current literature available on www.gyproc.co.za.

T-JUNCTION WITH HIGH PERFORMANCE WALL CORNER FORM T-JUNCTION WITH LOW PERFORMANCE WALL



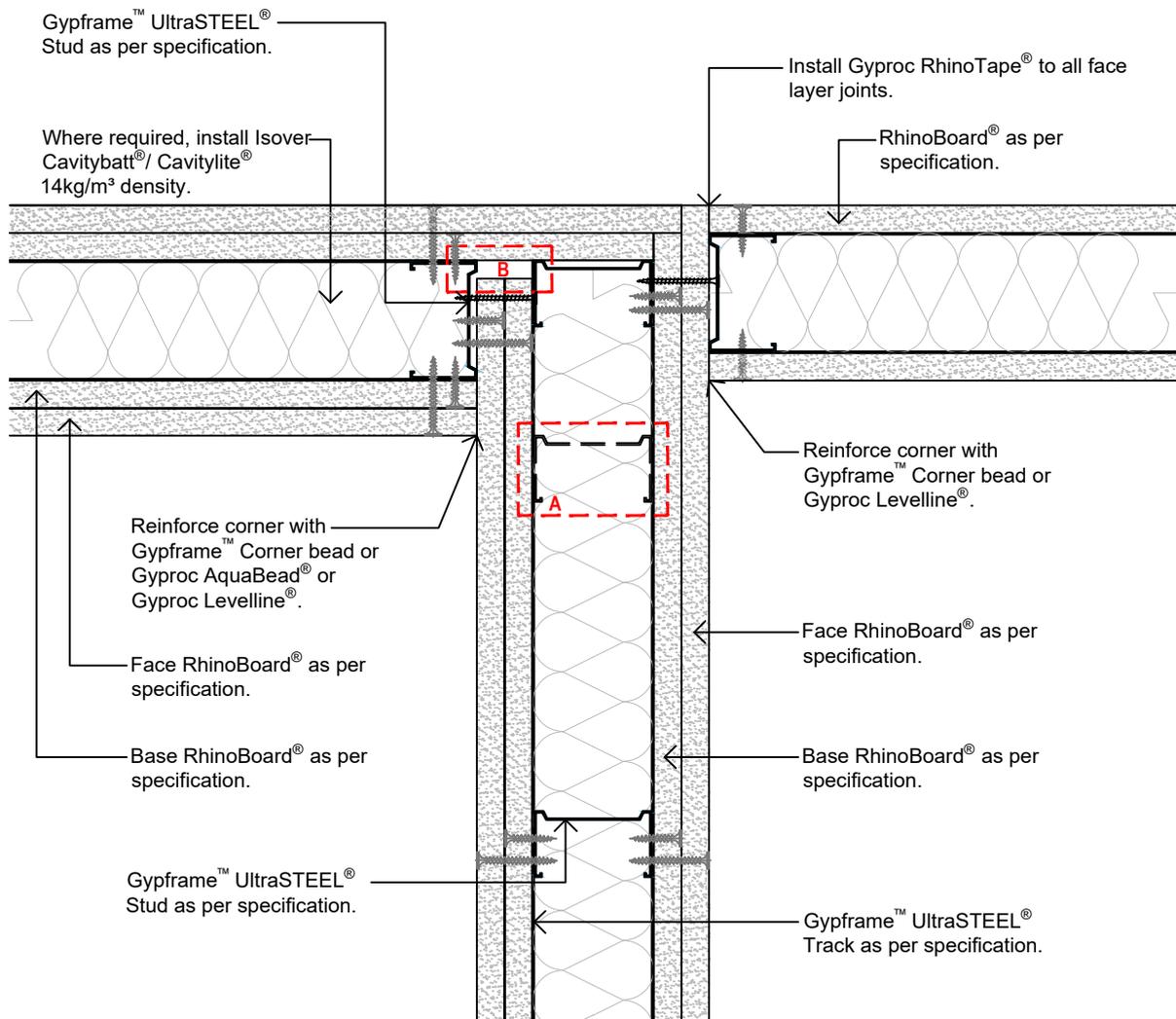
Details to be approved by a project professional before use to ensure that they meet with the specific project requirements. **DRAWINGS NOT TO BE MODIFIED OR SCALED** to suite without approval.
For Fire and Sound Rating where applicable, refer to Saint-Gobain current literature available on www.gyproc.co.za.

DRAWING NOTES:

- Gypframe™ UltraSTEEL® Track & Channel less than or equal to 70mm shall be fixed to the floor/soffit using one line of fixings (by others) spaced at maximum 600mm centres and located at maximum 150mm from the ends of the track and door openings.
- Gypframe™ UltraSTEEL® Track & Channel more than 70mm shall be fixed to the floor/soffit using two lines of fixings (by others) staggered @ 300mm centres and located not more than 25mm from the flanges. The fixings in each line shall be spaced at maximum 600mm centres and located at maximum 150mm from the ends of the track and door openings.
- Gypframe™ Corner bead embedded in Gyproc RhinoGlide®/RhinoLite® for reinforcing the corner.
- A** - In areas where timber skirting is fixed, provide additional support as shown.
- B** - Detail for optimum acoustic performance, the outer layer lining and the inner layer lining shall be kept separate. See gap (10mm) between inner layer lining and outer layer lining.
- Separation of inner leaf and outer leaf of lining should be maintained.

Internal Corners: Reinforce internal corners with Gyproc RhinoTape® or Gyproc Levelline®.

External Corners: Reinforce external corners with Gypframe™ Corner bead or Gyproc AquaBead® or Gyproc Levelline®.



DATE	REVISION	UPDATE
19.02.2020	Revised layout and new naming.	E.M.

TECHNICAL DIVISION
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TITLE			
T-JUNCTION WITH HIGH PERFORMANCE WALL CORNER FORM T-JUNCTION WITH LOW PERFORMANCE WALL			
SYSTEM			
SINGLE FRAME DRYWALL SYSTEM			
DWG. NO.			
SF-T106			
SCALE	DATE	DRAWN	REV. NO.
1:4	FEBRUARY 2020	E.M.	01
TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS			

EXAMPLE DETAILS NON-SYSTEM SPECIFIC:

Details shown are subject to accuracy of information provided to Saint-Gobain at the time the drawings was originally requested. No duty of care is owed to the recipient or any other third party and Saint-Gobain does not accept any liability in respect of details shown. This Saint-Gobain System Detail must not be used without a complete evaluation by owner's design professional to verify the suitability of its use with your specific application. The detail should be read in conjunction with Saint-Gobain current literature available on www.gyproc.co.za.

CORNER DETAIL



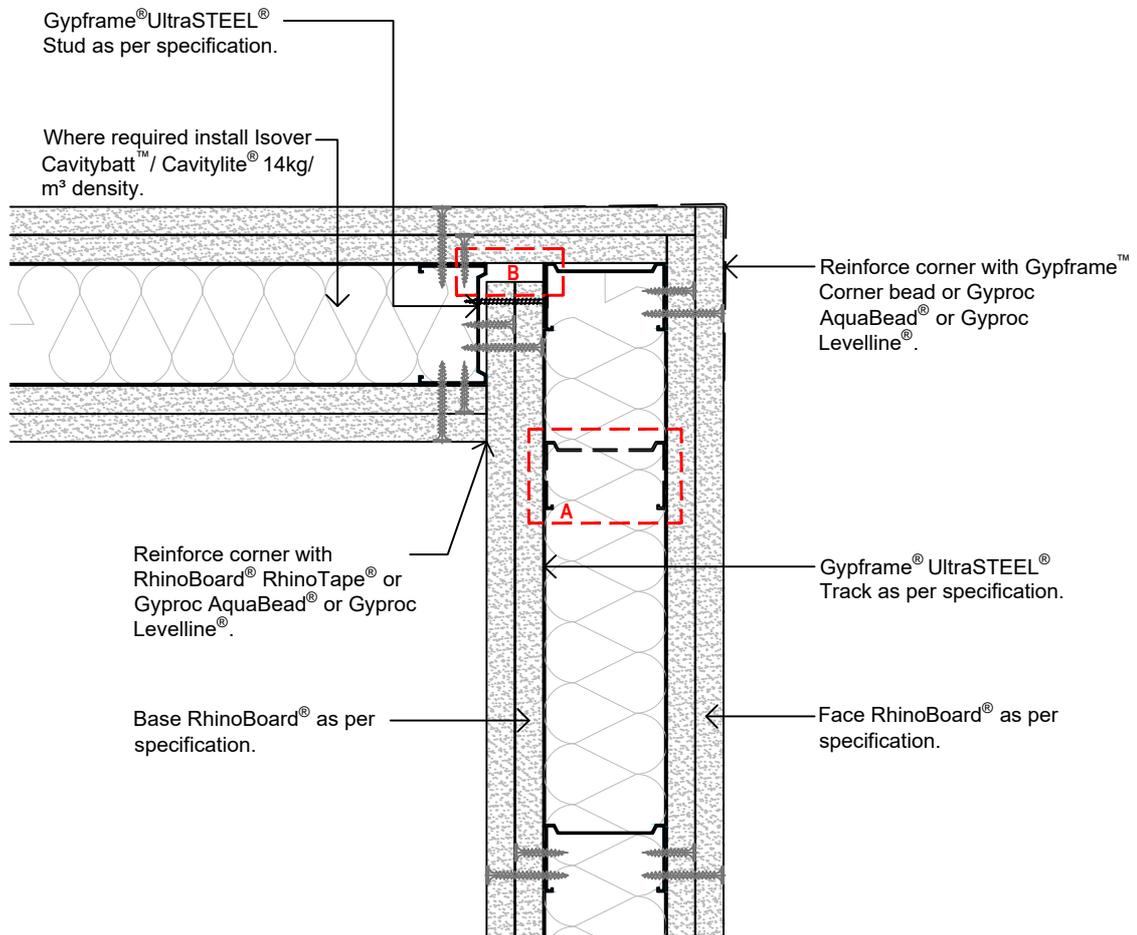
Details to be approved by a professional before use to ensure that they meet with the project requirements. **DRAWINGS NOT TO BE MODIFIED OR SCALED** to suite without approval.
For Fire and Sound Rating where applicable, refer to Saint-Gobain current literature available on www.gyproc.co.za.

DRAWING NOTES:

- Gyproframe® UltraSTEEL® Track & Channel less than or equal to 70 mm shall be fixed to the floor/soffit using one line of fixings (by others) spaced at maximum 600 mm centres and located at maximum 150 mm from the ends of the track and door openings.
- Gyproframe® UltraSTEEL® Track & Channel more than 70 mm shall be fixed to the floor/soffit using two lines of fixings (by others) staggered @ 300 mm centres and located not more than 25 mm from the flanges. The fixings in each line shall be spaced at maximum 600 mm centres and located at maximum 150 mm from the ends of the track and door openings.
- Gyproframe® Corner Bead embedded in Gyproc RhinoGlide®/RhinoLite® for reinforcing the corner.
- **A** - In areas where timber skirting is fixed, provide additional support as shown.
- **B** - Detail for optimum acoustic performance, the outer layer lining and the inner layer lining shall be kept separate. See gap (10 mm) between inner layer lining and outer layer lining.
- Separation of inner leaf and outer leaf of lining should be maintained.

Internal Corners: Reinforce internal corners with RhinoBoard® RhinoTape® or Gyproc AquaBead® or Gyproc Levelline®.

External Corners: Reinforce external corners with Gyproframe® Corner Bead or Gyproc AquaBead® or Gyproc Levelline®.



DATE	REVISION	UPDATE
09.02.2016	Revision	N.H.
15.06.2017	Detail notes revised	S.M.
20.12.2017	Detail and notes revised	S.M.
09.06.2019	Revised naming	S.M.

TECHNICAL DIVISION
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saint-gobain.technical@saint-gobain.com

TITLE	CORNER DETAIL		
SYSTEM	SINGLE FRAME DRYWALL SYSTEM		
DWG. NO.	SF-C101		
SCALE	DATE	DRAWN	REV. NO.
1:4	JUNE 2019	S.M.	03
TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS			

EXAMPLE DETAILS NON-SYSTEM SPECIFIC:

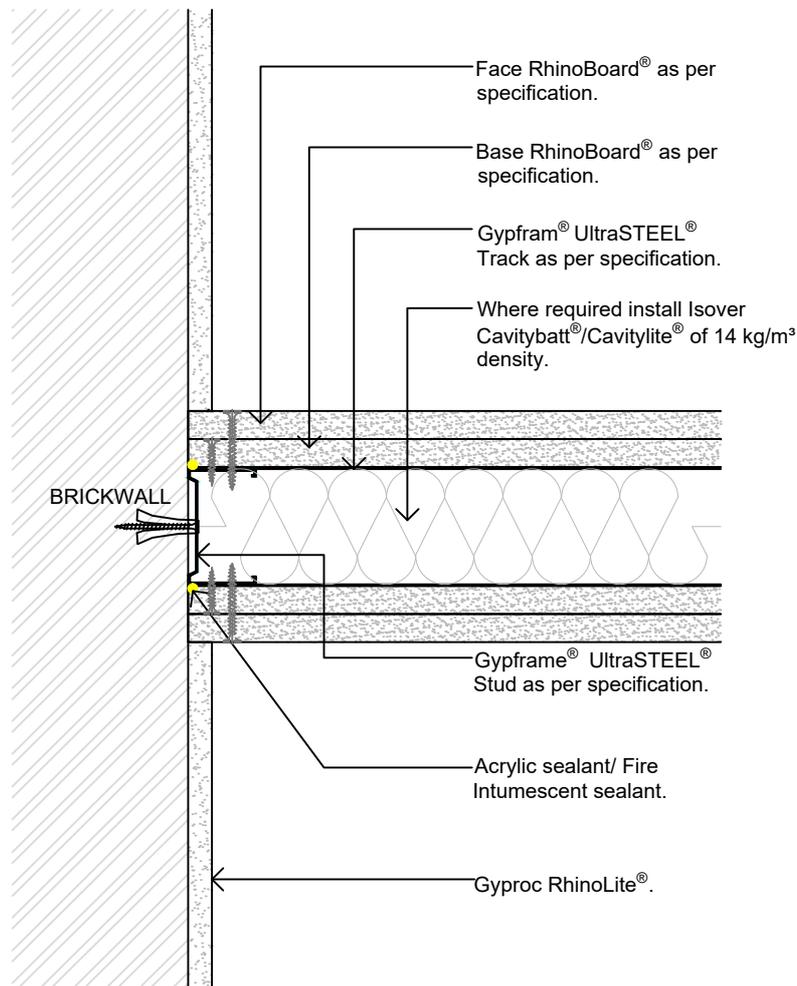
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ABUTMENT DETAIL - BETWEEN A DRYWALL AND MASONRY WALL WITH PLASTER FINISH

Details to be approved by a professional before use to ensure that they meet with the project requirements. **DRAWINGS NOT TO BE MODIFIED OR SCALED** to suite without approval.
For Fire and Sound Rating where applicable, refer to Saint-Gobain current literature available on www.gyproc.co.za.

DRAWING NOTES:

- Gypframe® UltraSTEEL® Track & Channel less than or equal to 70 mm shall be fixed to the floor using one line of fixings (by others) spaced at maximum 600 mm centres and located at maximum 150 mm from the ends of the track and door openings.
- Gypframe® UltraSTEEL® Track & Channel more than 70 mm shall be fixed to the floor using two lines of fixings (by others) staggered @ 300 mm centres and located not more than 25 mm from the flanges. The fixings in each line shall be spaced at maximum 600 mm centres and located at maximum 150 mm from the ends of the track and door openings.



DATE	REVISION	UPDATE
09.02.2016	Revision	N.H.
13.06.2017	Drawing notes revised	S.M.
20.12.2017	Detail drawing, notes, and drawing number	S.M.
09.06.2019	Revised naming	S.M.

TECHNICAL DIVISION
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E-mail:
saint-gobain.technical@saint-gobain.com

TITLE	ABUTMENT DETAIL - BETWEEN A DRYWALL AND MASONRY WALL WITH PLASTER FINISH		
SYSTEM	SINGLE FRAME DRYWALL SYSTEM		
DWG. NO.	SF-A101		
SCALE	DATE	DRAWN	REV. NO.
1:4	JUNE 2019	S.M.	03
TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS			

EXAMPLE DETAILS NON-SYSTEM SPECIFIC:

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EXAMPLE DETAILS

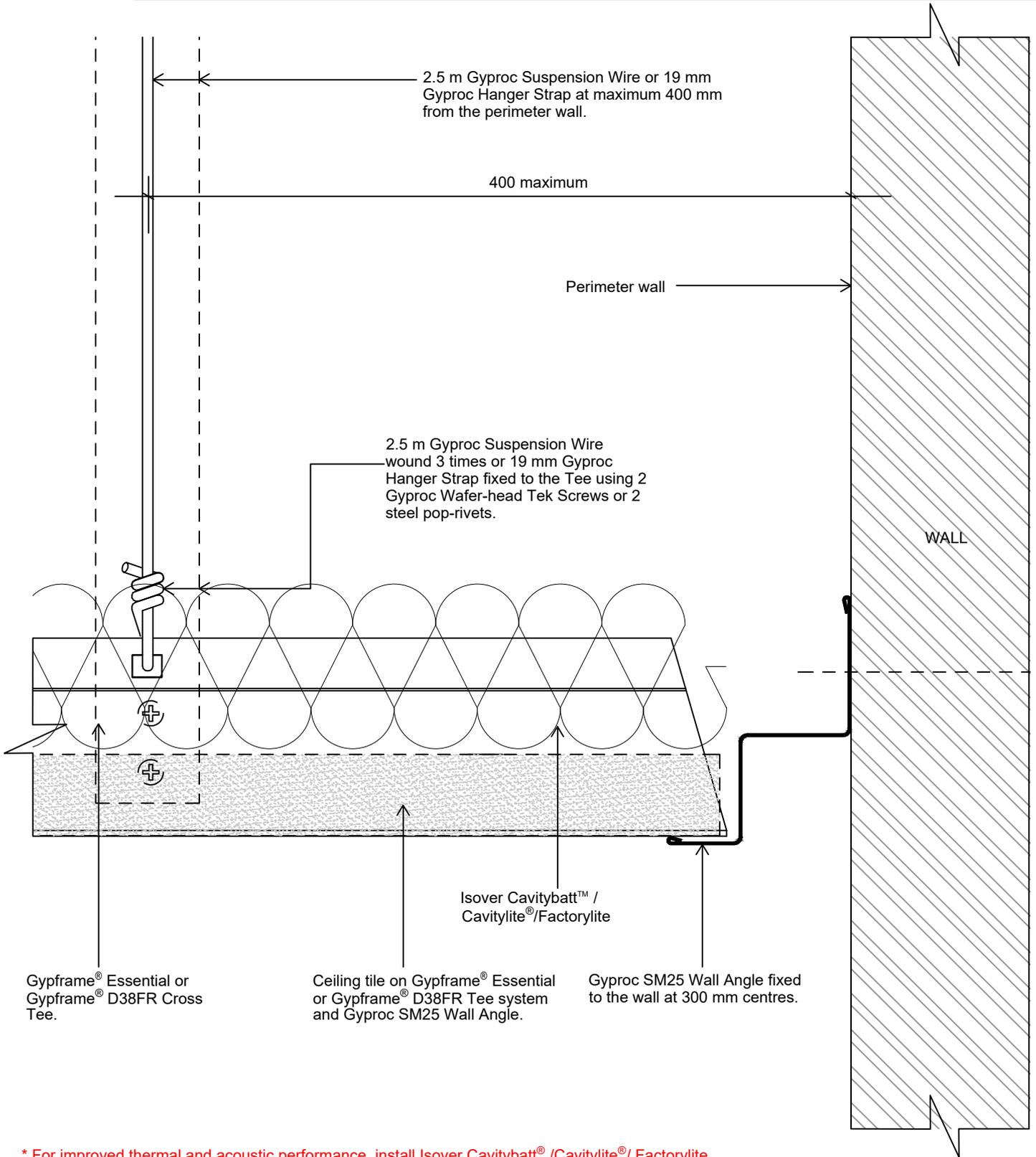
EXPOSED GRID CEILING SYSTEMS



SAINT-GOBAIN EXPOSED CEILING SYSTEM : GYPROC SM25 WALL ANGLE PERIMETER DETAIL

Details to be approved by a professional before use to ensure that they meet with the project requirements. **DRAWINGS NOT TO BE MODIFIED OR SCALED** to suite without approval.

For Fire and Sound Rating where applicable, refer to Saint-Gobain current literature available on www.gyproc.co.za.



* For improved thermal and acoustic performance, install Isover Cavitybatt® /Cavitylite® / Factorylite.

DATE	REVISION	UPDATE
---	Revised layout	N.N.
03.10.2019	Revised naming	S.S.
12.11.2019	Revised naming	S.M.
10.06.2020	Changes as per new Gypframe trademark	E.M.

TECHNICAL DIVISION
 TEL: 0860 272 829
 E-mail:
saint-gobain.technical@saint-gobain.com

TITLE	SM25 WALL ANGLE PERIMETER DETAIL		
SYSTEM	GYPROC EXPOSED CEILING SYSTEM		
DWG. NO.	GECS-005		
SCALE	DATE	DRAWN	REV. NO.
N.T.S	JUNE 2020	E.M.	04
TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS			

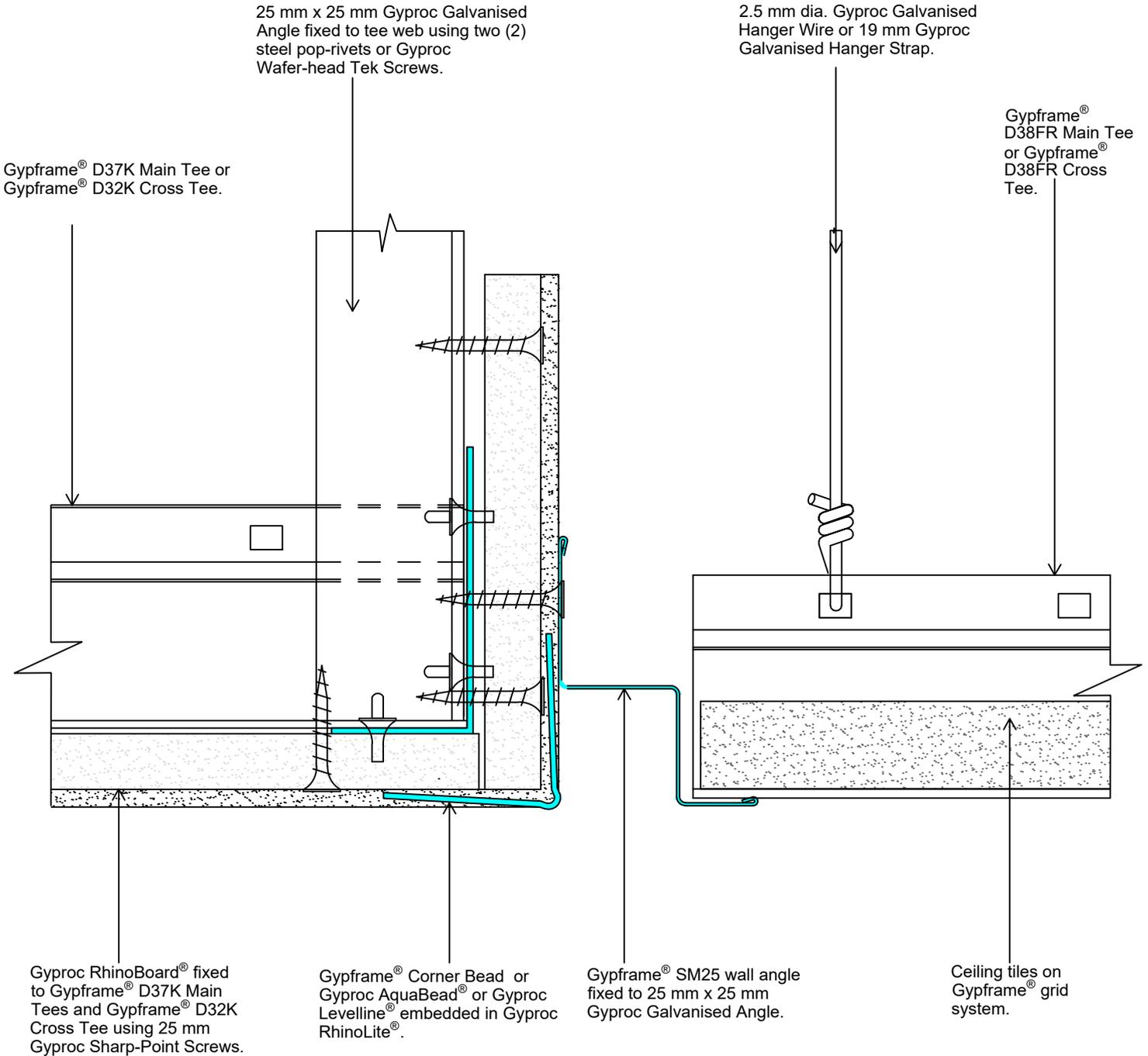
EXAMPLE DETAILS NON-SYSTEM SPECIFIC:

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GYPROC SKIMMED AND EXPOSED CEILING SYSTEM : INTERFACE

Details to be approved by a professional before use to ensure that they meet with the project requirements. **DRAWINGS NOT TO BE MODIFIED OR SCALED** to suite without approval.

For Fire and Sound Rating where applicable, refer to Saint-Gobain current literature available on www.gyproc.co.za.



DATE	REVISION	UPDATE
18.12.2017	Revised layout	N.N.
09.04.2020	Revised layout and new naming	E.M.
18.11.2021	Revised new naming	M.M.M.

GYPROC: SAINT-GOBAIN
TECHNICAL DIVISION
TEL: 0860 272 829
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saint-gobain.technical@saint-gobain.com

TITLE	INTERFACE		
SYSTEM	GYPROC SKIMMED AND EXPOSED CEILING SYSTEM		
DWG. NO.	GSECS-001		
SCALE	DATE	DRAWN	REV. NO.
N.T.S	NOVEMBER 2021	M.M.M.	03
TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS			

EXAMPLE DETAILS NON-SYSTEM SPECIFIC:

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SAINT-GOBAIN EXPOSED CEILING SYSTEM : GRID LAYOUT 1200X600

Details to be approved by a professional before use to ensure that they meet with the project requirements. **DRAWINGS NOT TO BE MODIFIED OR SCALED** to suite without approval.

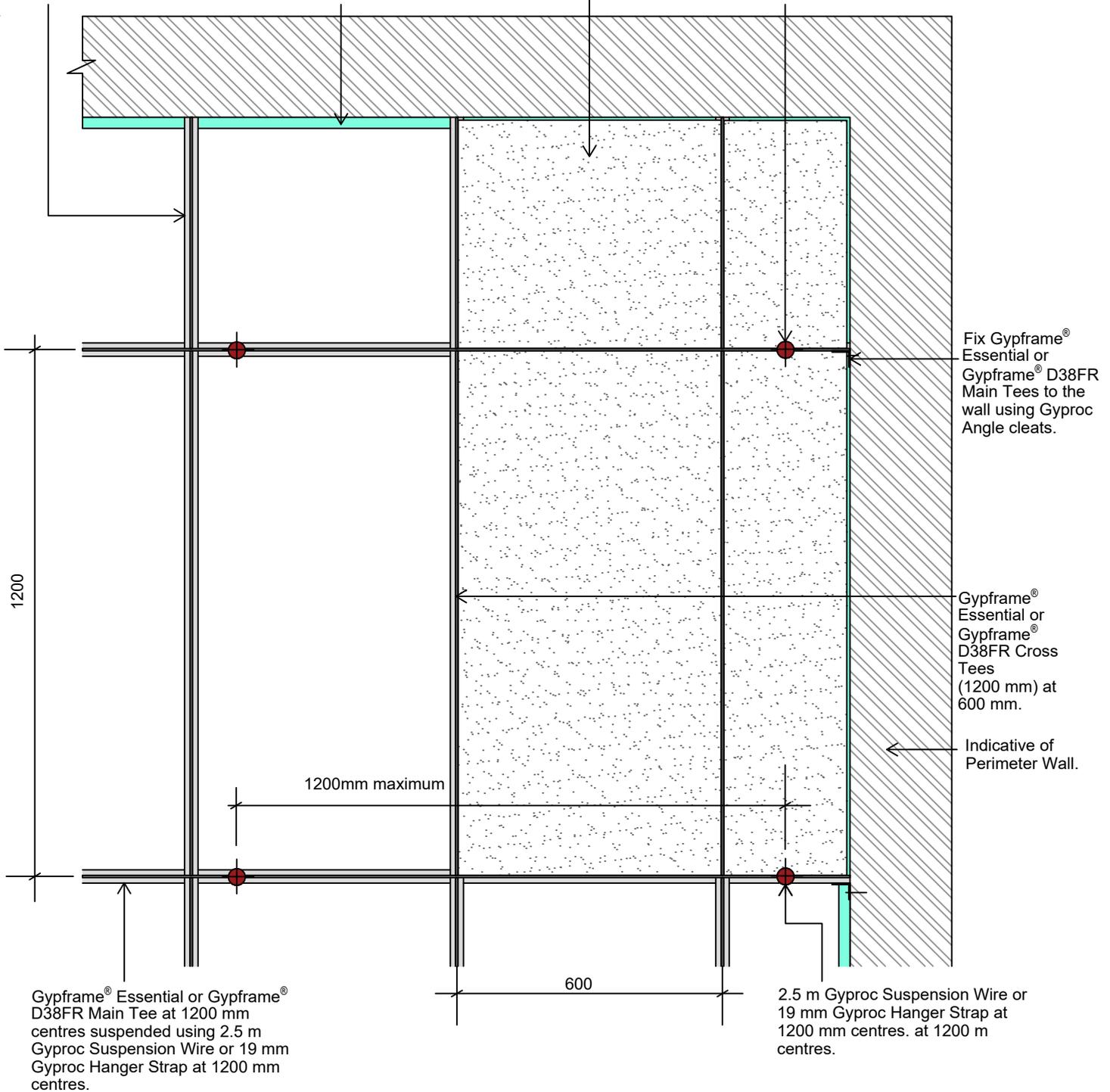
For Fire and Sound Rating where applicable, refer to Saint-Gobain current literature available on www.gyproc.co.za.

Gypframe® Essential or Gypframe® D38FR Cross Tees more than 600 mm should be suspended at 400 mm from the wall.

Gyproc SM 25 Wall Angle or Gyproc M6 Wall Angle fixed to the wall at 300 mm centres.

Ceiling tiles on Gypframe® Essential or Gypframe® D38FR Tee system.

Gypframe® Essential or Gypframe® D38FR Main Tees suspension should not be more than 400 mm from the wall and at 1200 mm centres thereafter.



* For improved thermal and acoustic performance, install Isover Cavitybatt® /Cavitylite®/ Factorylite.

DATE	REVISION	UPDATE
18.12.2017	Revised layout	N.N.
03.10.2019	Revised naming	S.S.
12.11.2019	Revised naming	S.M.
10.06.2020	Changes as per new Gypframe trademark	E.M.

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TITLE	GRID LAYOUT 1200X600		
SYSTEM	GYPROC EXPOSED CEILING SYSTEM		
DWG. NO.	GECS-002		
SCALE	DATE	DRAWN	REV. NO.
1:2	JUNE 2020	E.M.	04

TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS

EXAMPLE DETAILS NON-SYSTEM SPECIFIC:
Details shown are subject to accuracy of information provided to Saint-Gobain at the time the drawings was originally requested. No duty of care is owed to the recipient or any other third party and Saint-Gobain does not accept any liability in respect of details shown. This Saint-Gobain System Detail must not be used without a complete evaluation by owner's design professional to verify the suitability of its use with your specific application. The detail should be read in conjunction with Saint-Gobain current literature available on www.gyproc.co.za.

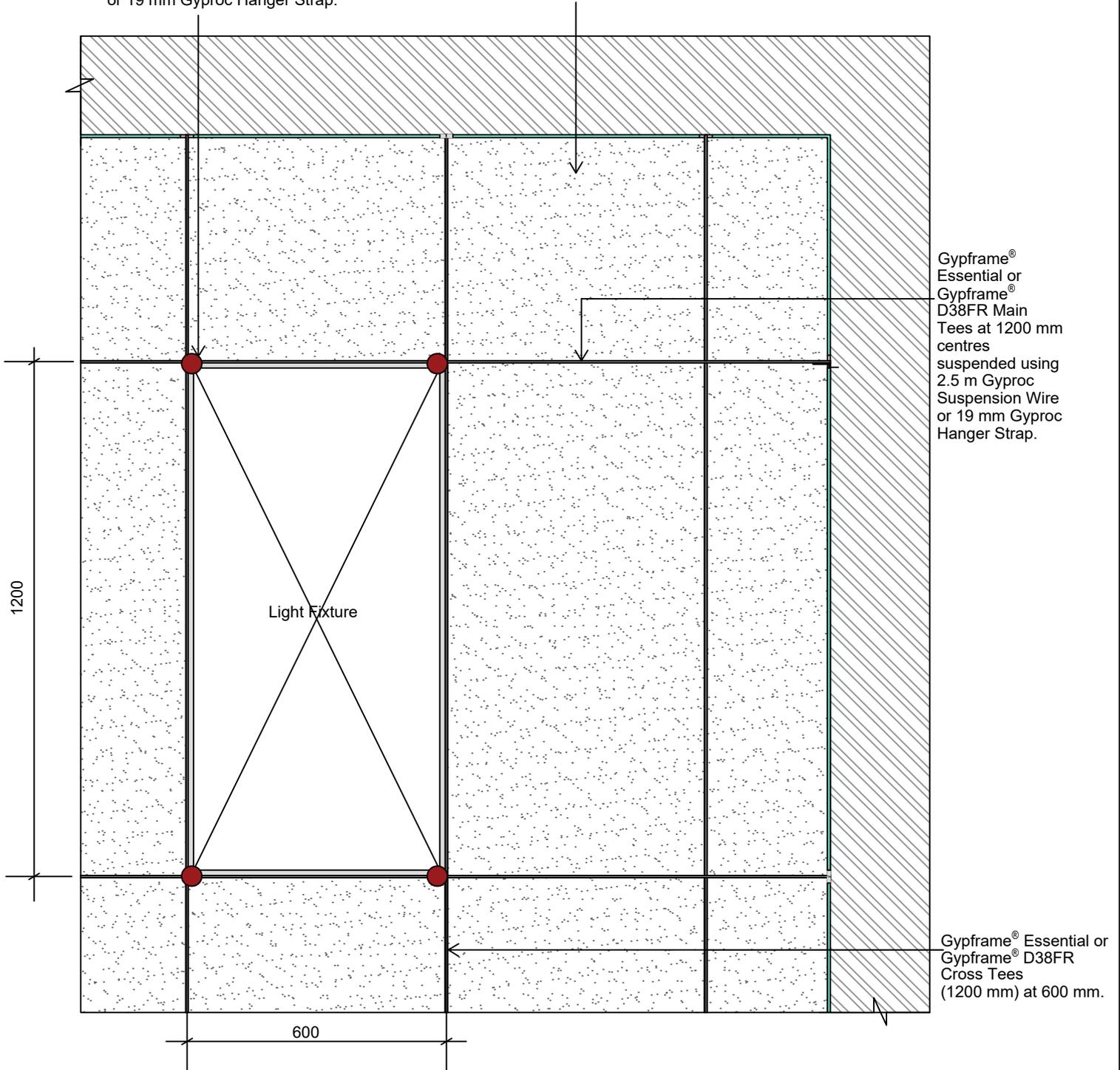
SAINT-GOBAIN EXPOSED CEILING SYSTEM : LIGHT FIXTURE SUSPENSION 1200X600

Details to be approved by a professional before use to ensure that they meet with the project requirements. **DRAWINGS NOT TO BE MODIFIED OR SCALED** to suite without approval.

For Fire and Sound Rating where applicable, refer to Saint-Gobain current literature available on www.gyproc.co.za.

Suspend light fixture on all four corners using 2.5 m Gyproc Suspension Wire or 19 mm Gyproc Hanger Strap.

Ceiling tile on Gypframe® Essential or Gypframe® D38FR Tee system.



Gypframe® Essential or Gypframe® D38FR Main Tees at 1200 mm centres suspended using 2.5 m Gyproc Suspension Wire or 19 mm Gyproc Hanger Strap.

Gypframe® Essential or Gypframe® D38FR Cross Tees (1200 mm) at 600 mm.

* For improved thermal and acoustic performance, install Isover Cavitybatt™ /Cavitylite®/ Factorylite.

DATE	REVISION	UPDATE
18.12.2017	Revised layout	N.N.
03.10.2019	Revised naming	S.S.
12.11.2019	Revised naming	S.M.
10.08.2020	Changes as per new Gypframe trademark	E.M.

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TITLE	LIGHT FIXTURE SUSPENSION 1200X600		
SYSTEM	GYPROC EXPOSED CEILING SYSTEM		
DWG. NO.	GECS-004		
SCALE	DATE	DRAWN	REV. NO.
N.T.S	JUNE 2020	E.M.	04

TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS

EXAMPLE DETAILS NON-SYSTEM SPECIFIC:

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EXAMPLE DETAILS

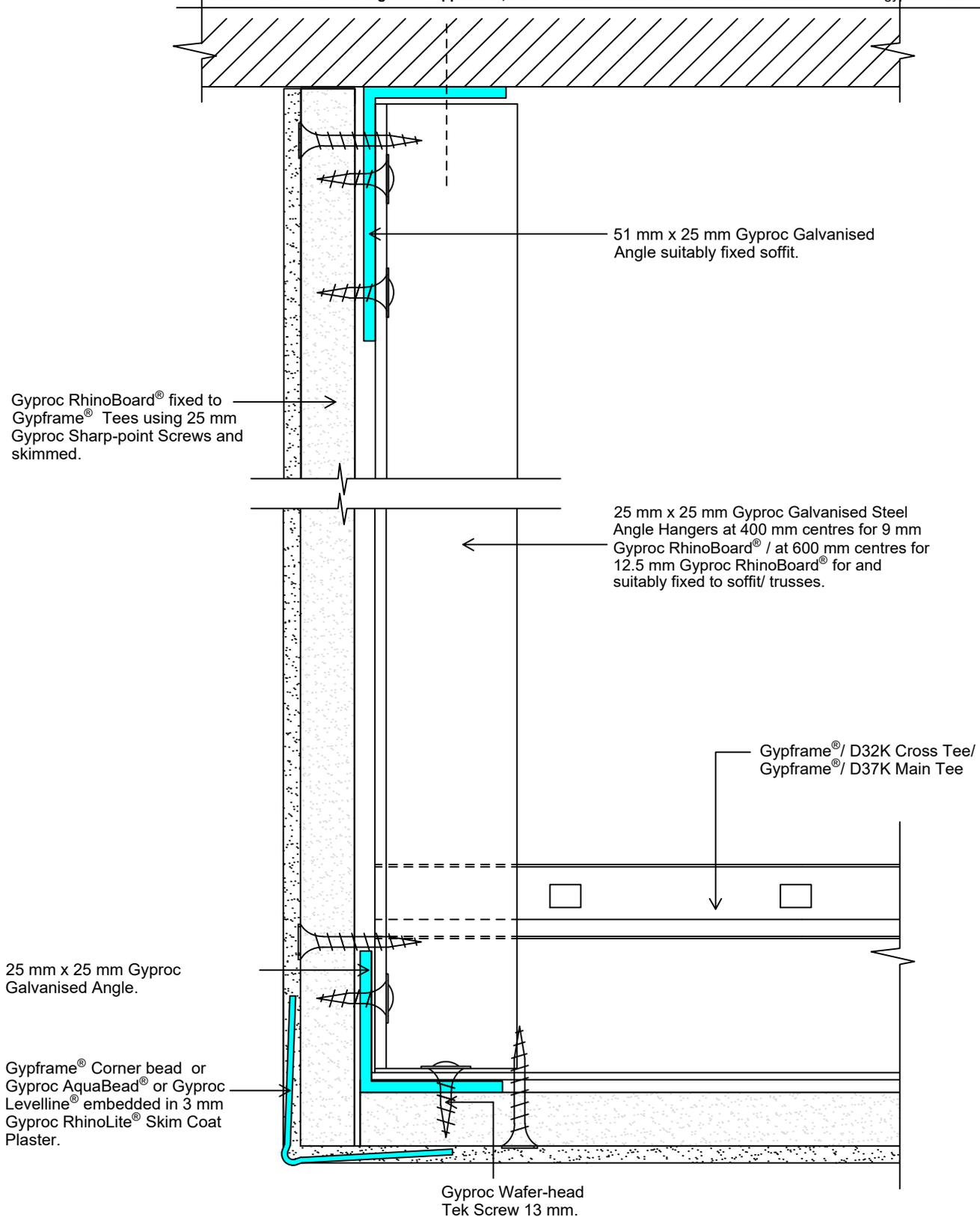
CONCEALED GRID CEILING SYSTEMS



GYPROC CONCEALED GRID CEILING SYSTEM : BULKHEAD DETAIL

Details to be approved by a professional before use to ensure that they meet with the project requirements. **DRAWINGS NOT TO BE MODIFIED OR SCALED** to suite without approval.

For Fire and Sound Rating where applicable, refer to Saint-Gobain current literature available on www.gyproc.co.za.



DATE	REVISION	UPDATE
20.12.2017	Revised layout	N.N.
10.06.2019	Revised naming	S.M.
12.11.2019	Revised naming	S.M.
19.06.2020	Changes as per new Gypframe trademark	E.M.
29.11.2021	Changes as per new gypframe naming	M.M.M.

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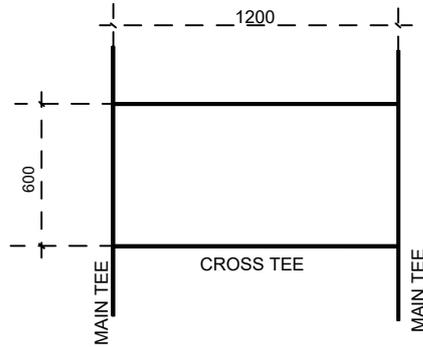
TITLE	BULKHEAD DETAIL		
SYSTEM	GYPROC SKIMMED CEILING SYSTEM		
DWG. NO.	GCGCS-004		
SCALE	DATE	DRAWN	REV. NO.
N.T.S	NOVEMBER 2021	M.M.M.	05
TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS			

GYPROC SKIMMED CEILING SYSTEM : TRAP DOOR DETAIL

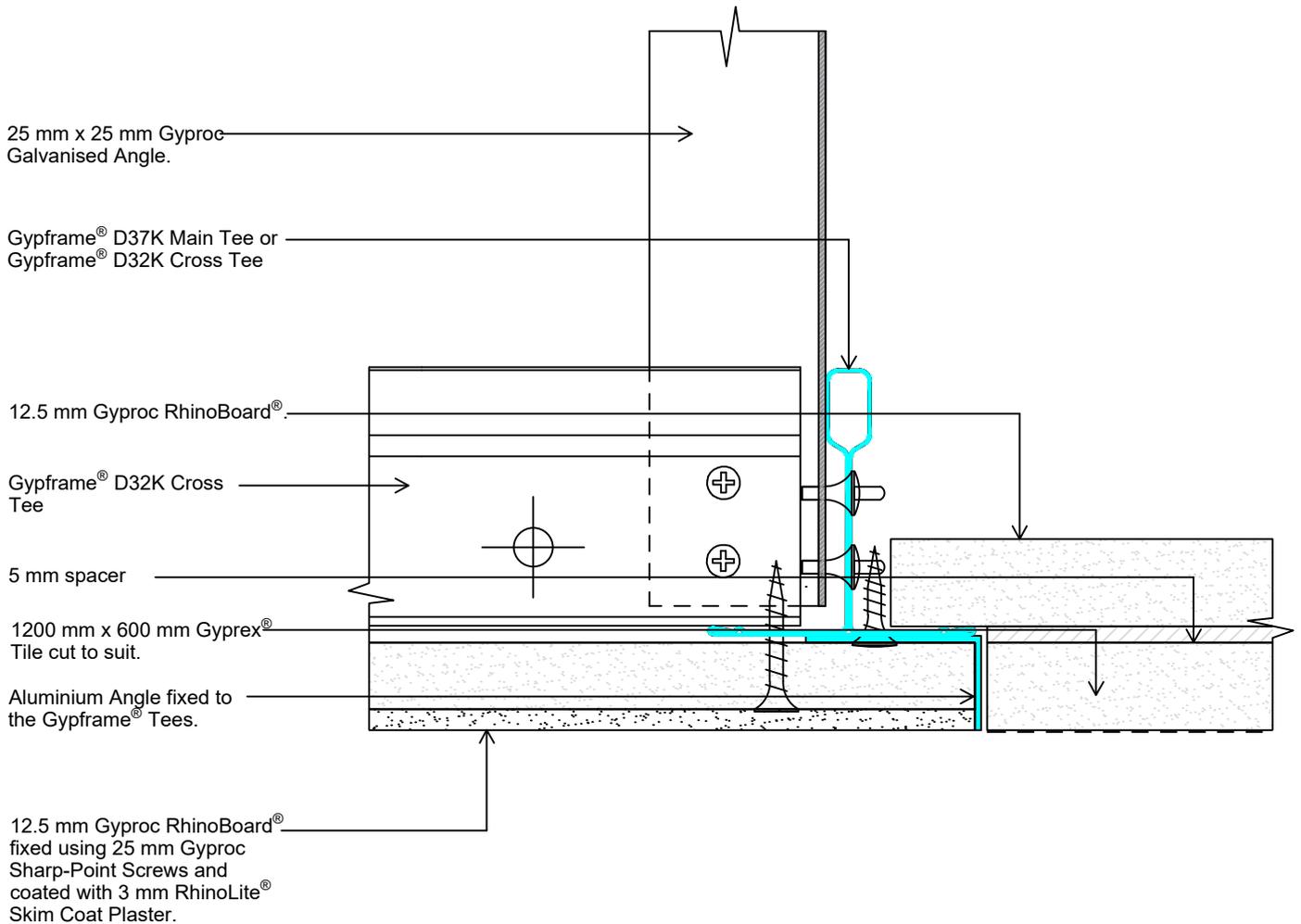


Details to be approved by a professional before use to ensure that they meet with the project requirements. **DRAWINGS NOT TO BE MODIFIED OR SCALED** to suite without approval.

For Fire and Sound Rating where applicable, refer to Saint-Gobain current literature available on www.gyproc.co.za.



TRIMMING-OUT TRAP DOOR



DATE	REVISION	UPDATE
20.12.2017	Revised layout	N.N.
09.04.2020	Revised layout and new naming	E.M.
29.11.2021	Changes as per new gyproframe naming	M.M.M

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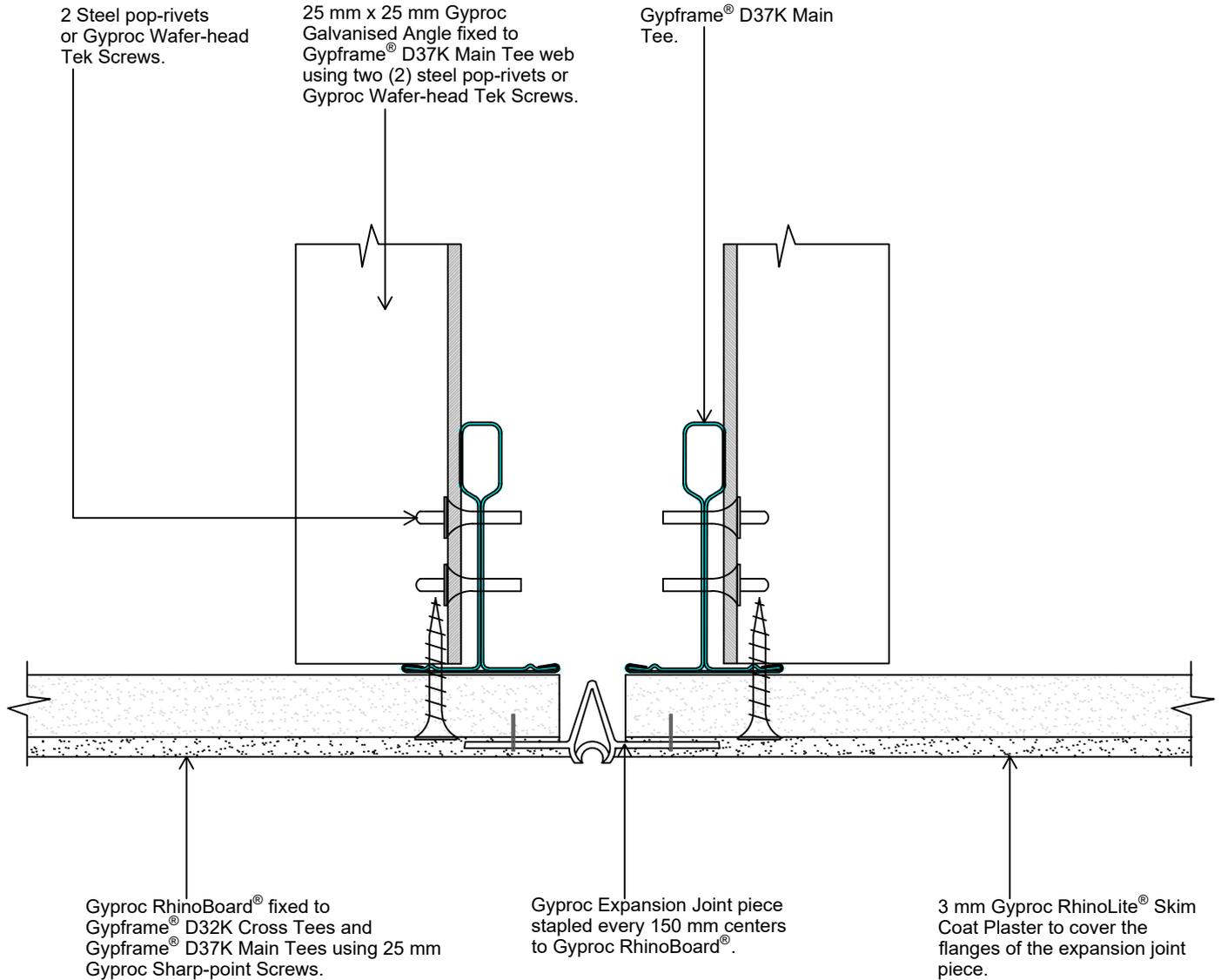
TITLE		TRAP DOOR DETAIL	
SYSTEM		GYPROC SKIMMED CEILING SYSTEM	
DWG. NO.		GCGCS-011	
SCALE	DATE	DRAWN	REV. NO.
N.T.S	NOVEMBER 2021	M.M.M.	03
TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS			

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GYPROC SKIMMED CEILING SYSTEM : EXPANSION JOINT DETAIL- PARALLEL TO MAIN TEES

Details to be approved by a professional before use to ensure that they meet with the project requirements. **DRAWINGS NOT TO BE MODIFIED OR SCALED** to suite without approval.

For Fire and Sound Rating where applicable, refer to Saint-Gobain current literature available on www.gyproc.co.za.



DATE	REVISION	UPDATE
20.12.2017	Revised layout	N.N.
25.01.2019	Included note for spacing of fixings for the expansion joint piece	S.M.
04.04.2019	Revised naming conventions and title sheet	S.S.
19.06.2020	Changes as per new Gypframe trademark	E.M.
29.11.2021	Changes as per new gypframe naming	M.M.M.

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TITLE	EXPANSION JOINT DETAIL-PARALLEL TO MAIN TEES		
SYSTEM	GYPROC SKIMMED CEILING SYSTEM		
DWG. NO.	GCGCS-005		
SCALE	DATE	DRAWN	REV. NO.
N.T.S	NOVEMBER 2021	M.M.M.	05

TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS

SAINT-GOBAIN CONCEALED CEILING SYSTEM : GRID LAYOUT

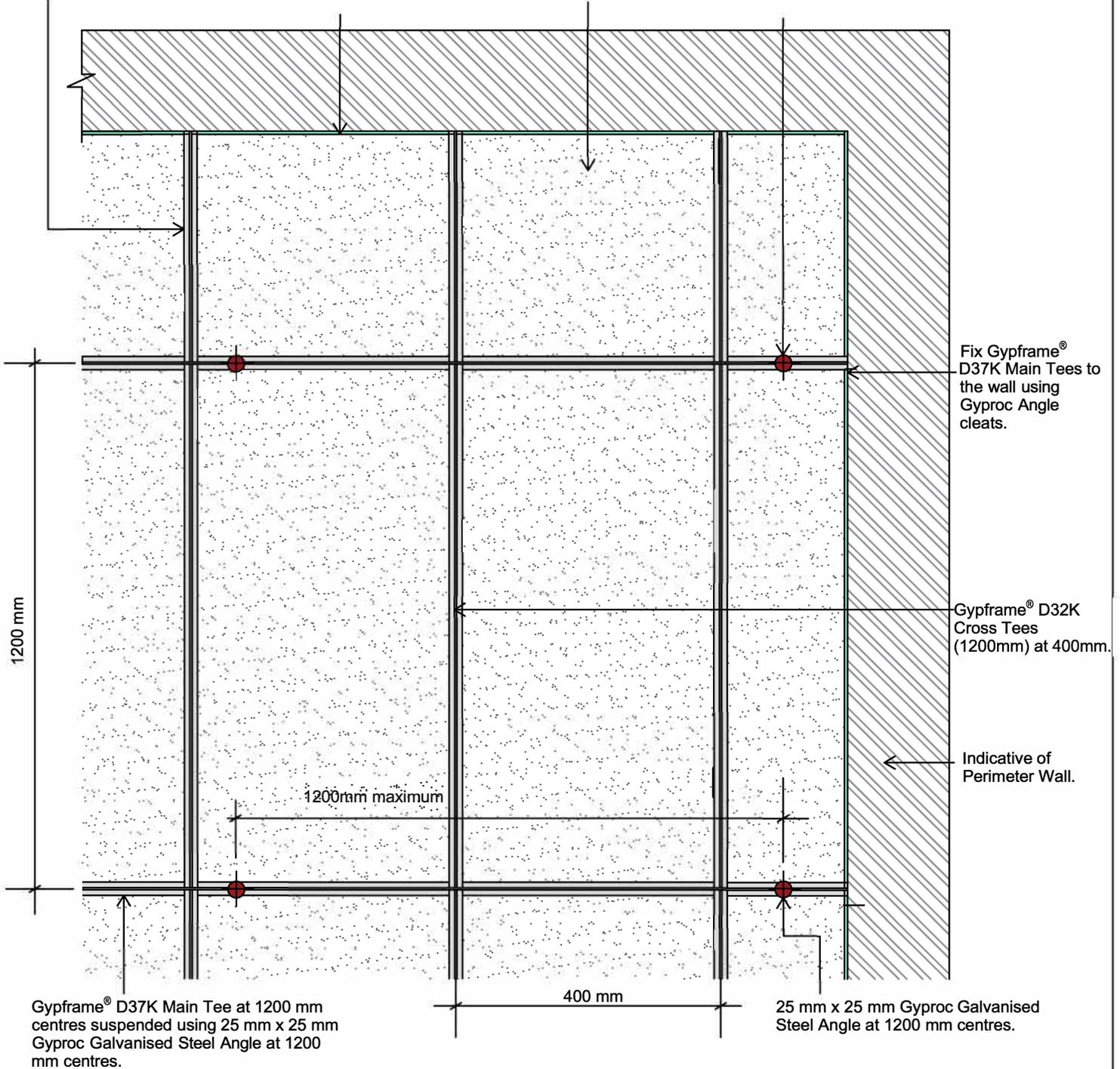
Details to be approved by a professional before use to ensure that they meet with the project requirements. **DRAWINGS NOT TO BE MODIFIED OR SCALED** to suite without approval.
For Fire and Sound Rating where applicable, refer to Saint-Gobain current literature available on www.gyproc.co.za.

Gypframe® D32K Cross Tees spaced at 600 mm c/c, suspended at 400 mm from the wall.

Gyproc Plaster Trim 9.5 mm Wall Angle fixed to the wall at 300 mm centres.

Ceiling board fixed to Gypframe® D37K Main Tee system.

Gypframe® D37K Main Tees suspension should not be more than 400 mm from the wall and at 1200 mm centres thereafter.



* For improved thermal and acoustic performance, install Isover Aerolite.

DATE	REVISION	UPDATE
	Revision	

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TITLE			
GRID LAYOUT			
SYSTEM			
GYPROC SKIMMED CEILING SYSTEM			
DWG. NO.			
GSCS-017			
SCALE	DATE	DRAWN	REV. NO.
1:2	SEPTEMBER 2020	T.C.	01

TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS

EXAMPLE DETAILS NON-SYSTEM SPECIFIC:

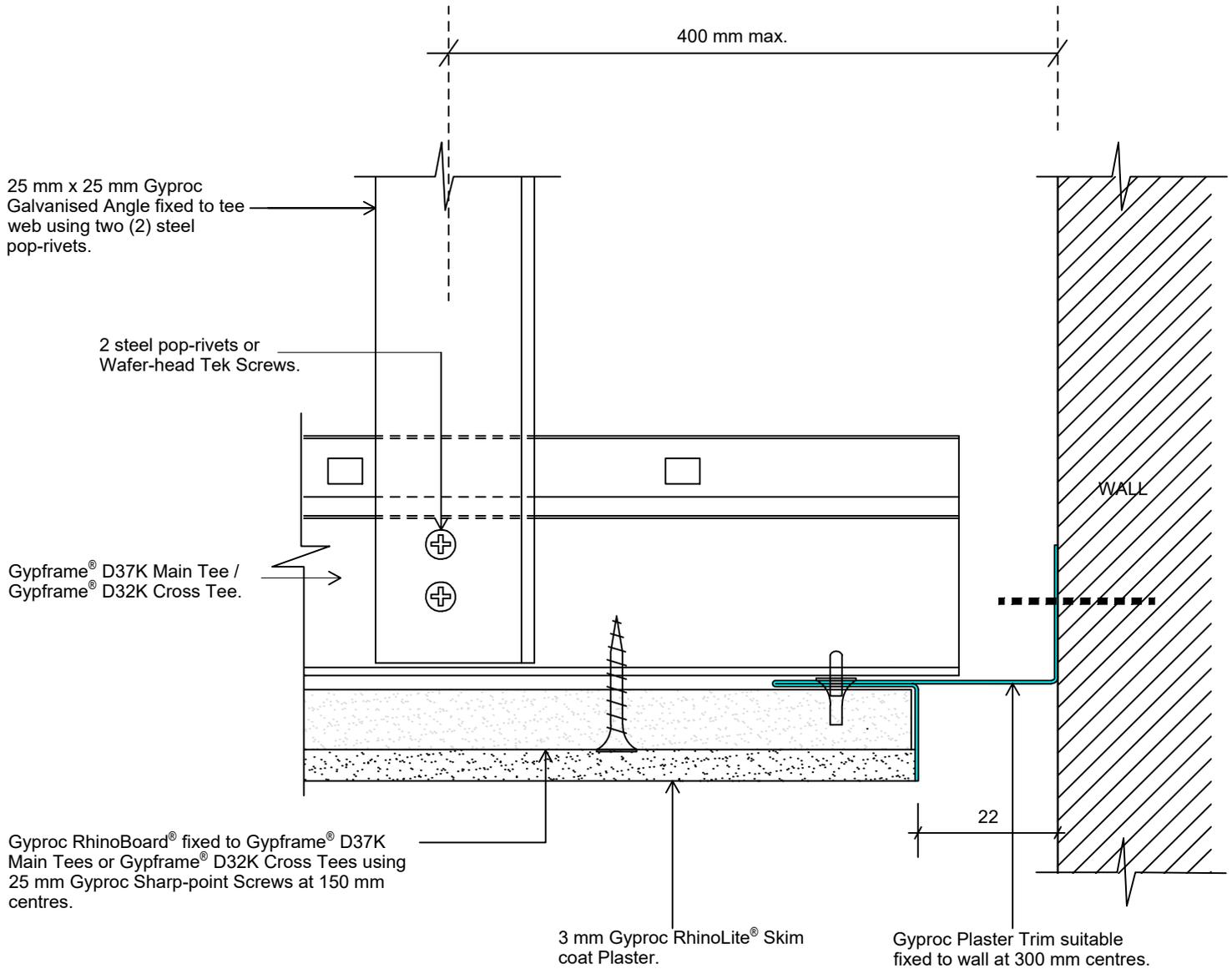
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GYPROC SKIMMED CEILING SYSTEM : SHADOW LINE PERIMETER DETAIL



Details to be approved by a professional before use to ensure that they meet with the project requirements. **DRAWINGS NOT TO BE MODIFIED OR SCALED** to suite without approval.

For Fire and Sound Rating where applicable, refer to Saint-Gobain current literature available on www.gyproc.co.za.



DATE	REVISION	UPDATE
20.12.2017	Revised layout	N.N.
10.06.2019	Revised naming	S.M.
12.11.2019	Revised naming	S.M.
19.06.2020	Changes as per new Gyframe trademark	E.M.
18.11.2021	Revised new naming	M.M.M.

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TITLE	SHADOW LINE PERIMETER DETAIL		
SYSTEM	GYPROC SKIMMED CEILING SYSTEM		
DWG. NO.	GSCS-008		
SCALE	DATE	DRAWN	REV. NO.
N.T.S	NOVEMBER 2021	M.M.M.	05
TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS			

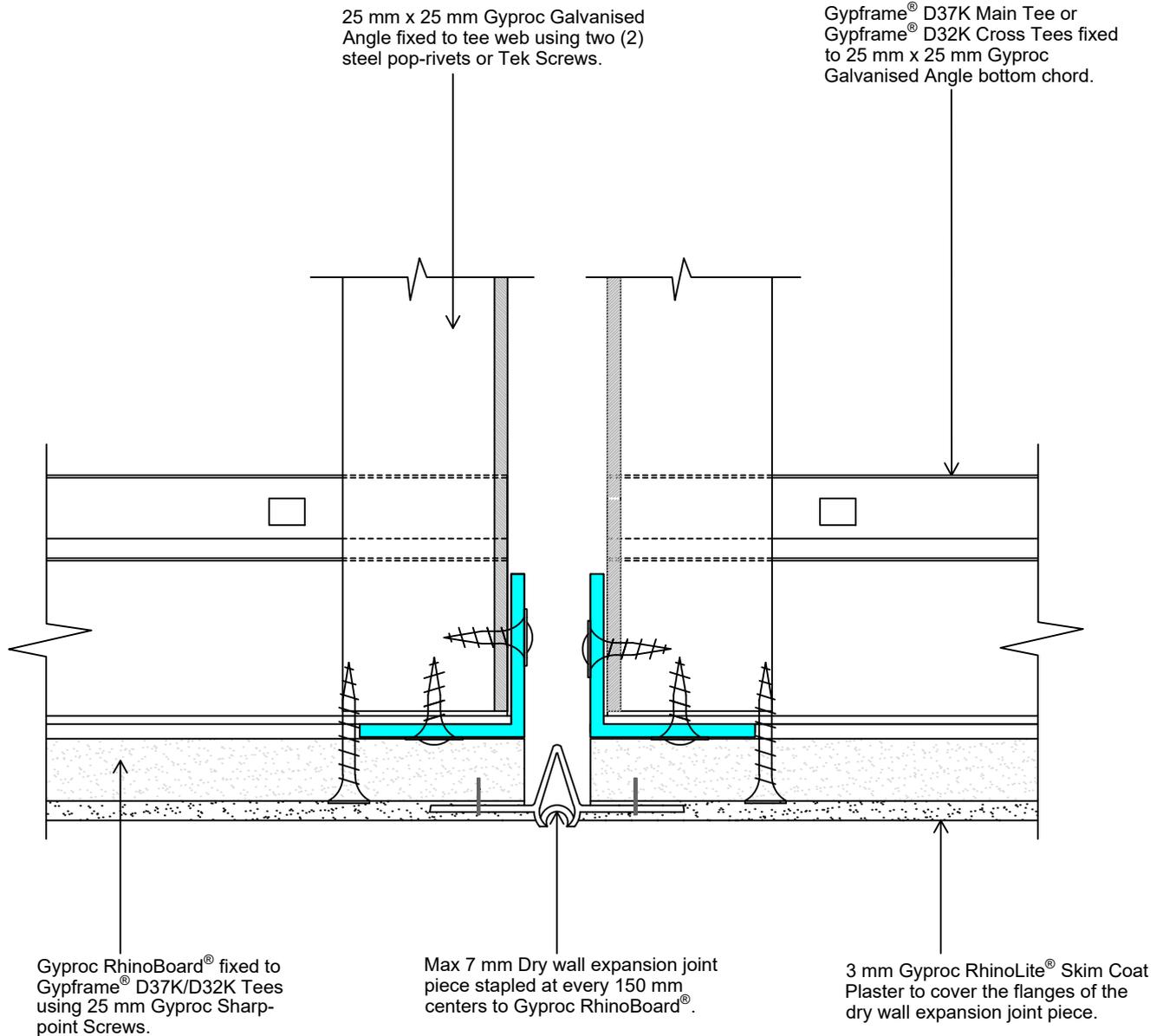
Details shown are subject to accuracy of information provided to Saint-Gobain at the time the drawings was originally requested. No duty of care is owed to the recipient or any other third party and Saint-Gobain does not accept any liability in respect of details shown. This Saint-Gobain System Detail must not be used without a complete evaluation by owner's design professional to verify the suitability of its use with your specific application. The detail should be read in conjunction with Saint-Gobain current literature available on www.gyproc.co.za.



GYPROC SKIMMED CEILING SYSTEM : EXPANSION JOINT DETAIL- ACROSS MAIN TEES

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For Fire and Sound Rating where applicable, refer to Saint-Gobain current literature available on www.gyproc.co.za.



DATE	REVISION	UPDATE
20.12.2017	Revised layout	N.N.
25.01.2019	Included note for spacing for the expansion joint piece	S.M.
10.06.2019	Revised naming	S.M.
19.06.2020	Changes as per new Gypframe trademark	E.M.
29.11.2021	Changes as per new gypframe naming	M.M.M.

GYPROC: SAINT-GOBAIN
TECHNICAL DIVISION
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TITLE	EXPANSION JOINT DETAIL- ACROSS MAIN TEES		
SYSTEM	GYPROC SKIMMED CEILING SYSTEM		
DWG. NO.	GSCS-006		
SCALE	DATE	DRAWN	REV. NO.
N.T.S	NOVEMBER 2021	M.M.M.	05

TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS

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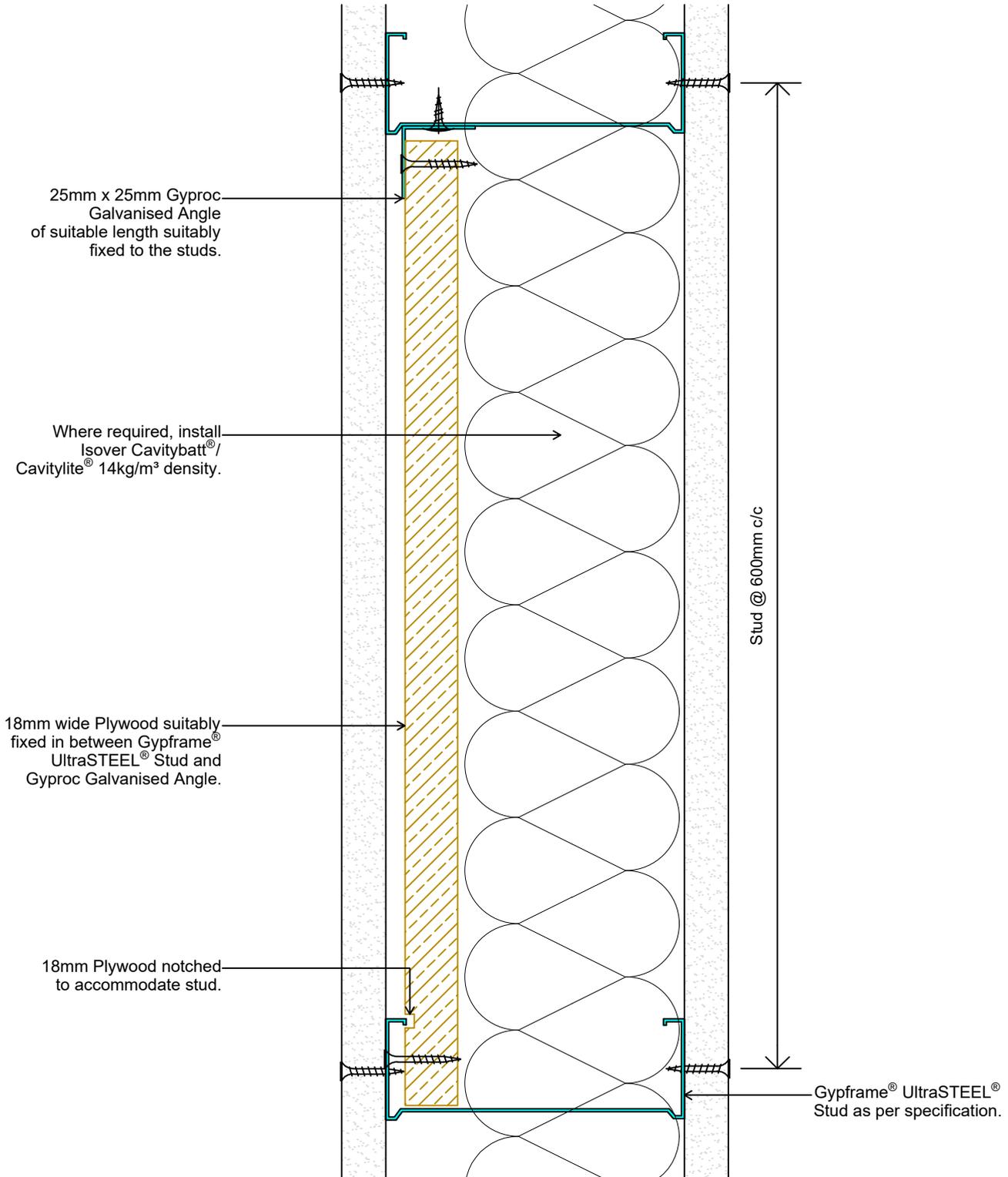
FIXTURES AND FITTINGS



NOGGIN FIXING



Details to be approved by a professional before use to ensure that they meet with the project requirements. **DRAWINGS NOT TO BE MODIFIED OR SCALED** to suite without approval.
 For Fire and Sound Rating where applicable, refer to Saint-Gobain current literature available on www.gyproc.co.za.



DATE	REVISION	UPDATE
20.06.2019	Revised naming	S.M.
30.03.2020	Revised layout and new naming	E.M.

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TITLE	NOGGIN FIXING		
SYSTEM	FIXTURES AND FITTINGS		
DWG. NO.	FF-003_NOGGIN FIXING		
SCALE	DATE	DRAWN	REV. NO.
N.T.S	MARCH 2020	E.M	02

TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS

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GUIDELINES



DRYWALL AND DRYLINING SYSTEM GUIDELINES

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1. QUALITY CONTROL

The installer should have experience and knowledge of the installation of ceiling systems or be a SABISA approved installer. Gypframe® UltraSTEEL® metal framing and products should be inspected by a recognized site authority. Gyproc RhinoBoard® should be inspected after each installation and before finishing. All ducts services ducts and conduits should be installed before boarding. Manufacturer's specification should be properly interpreted and adhered to. It is the drywall contractor's responsibility to ensure that the specifications are properly adhered to.

2. DELIVERY, STORAGE, AND HANDLING

Store materials indoors, under cover and keep them dry and protected against damage from weather, direct sunlight, surface contamination, corrosion, and construction traffic.

Store Gyproc RhinoBoard®, Gyproc RhinoLite® on raised platforms.

Store flat to prevent damage.

Gyproc RhinoBoard® should be carried on edge. When the board is stacked, the long edge should be placed down before it's turned horizontally. When the board is installed, the long edge should be placed down before it's turned and placed into position.

Boards should not be slid over each other as this can scuff the surface.

3. SITE PREPARATION

Verify that site conditions are suitable for the commencement of work and that all labelled materials are as indicated in the Saint-Gobain Gyproc & Isover specification document or as instructed by the manufacturer. The building should be weatherproof before the installation of the Gyproc Drywall System.

4. SERVICE INSTALLATIONS

Services can be incorporated in all Saint-Gobain Gyproc Drywall Systems. Gypframe® UltraSTEEL® Studs are specified with service holes to accommodate routing of electrical services. Grommets or isolating strip must be installed in the service holes to prevent abrasion of the cables and plumbing pipes. Where heating pipes, particularly micro-bore systems, are to be located within the Gyproc dry walling system, it is recommended that only one pipe is passed through each aperture in the metal framework. If this cannot be accommodated for whatever

reason, it may be necessary to incorporate proprietary pipe restraining clips, or other means of keeping the pipes apart, to prevent vibration noise.

5. SERVICE PENETRATIONS

Penetrations for services should be given careful consideration to ensure that the fire, thermal and sound performance of the wall is not compromised and also that services themselves do not act as pathways for the transmission of fire, thermal and sound. Fixing electrical socket boxes into Gyproc Drywall Systems can impair both fire and acoustic performance, but with careful detailing this can be minimized.

In particular, back-to-back services must be avoided. Gyproc plasterboards should always be neatly cut, and a proprietary sealant should be applied where optimum acoustic performance is required. A proprietary fire resistant sealant (supplied by others) should be used on walls requiring a fire rating.

By designing service zones through which all services pass, the number of individual service penetrations can be minimized. Access to services can be achieved by installing access panels. The access panels should be designed not to compromise the sound, thermal and fire rating of the drywall system.

6. HEAD TRACK SUPPORT

Provisions to be made for top track to be fixed accurately to a securely fixed framing structural member. Additional transverse support shall be provided at maximum 600 mm centres.

7. FIXTURES AND FITTINGS

Fittings can be fixed to the face of Gyproc Drywall Systems, using plywood/heavy-duty track noggins within the cavity of the drywall. A minimum stud spacing of 400 mm is recommended. An alternative to this would be to install a structural metal or timber support framework within the cavity of the drywall. Provide or ensure provision of accurately positioned and securely fixed noggins to support fixtures, fittings and services for systems consisting of Gyproc RhinoBoard® / FireStop® / FireStop® dB/ MoistureResistant™ / DuraLine / Activ'Air® / SoundBloc® or X-Ray Protection. All fixtures and fittings subject to dynamic loading shall be securely fixed to noggins or specially designed structural frameworks.

Noggins are not required for fixtures and fitting mounted onto Gyproc Habito® High Performance Systems. Noggins are required for Fixtures and fittings mounted in the cavity of Habito® systems. Use RhinoBoard Habito® 12.5 mm as noggins for selected fixtures and fittings.

8. INSULATION

Fit Isover Cavitybatt® / Cavitylite® / U Thermo Boards securely with closely butted joints, leaving no gaps. Unless the insulation is of a self-supporting batt type fitted between studs, fix at head of frame using 25 mm x 25 mm Gyproc Galvanised Steel Angle.

9. DOOR DETAILS

Where heavy semi-solid and solid core doors are fixed onto aluminum door frames, additional bracing and reinforcement of the frame will be required, otherwise the door opening will undergo too much deflection and damage if the door slams. To reinforce Gypframe® UltraSTEEL® Studs use timber inserts.

For heavy duty and severe duty walls, the vertical framework at the door opening shall be formed using studs and tracks. The tracks shall be extended 300 mm beyond the door opening on either side and the 300 mm over run bent up through 90° to cover the bottom of the jamb stud and fixed twice either side using Gyproc Wafer-head Tek screws 13 mm.

Door opening for fire rated doors shall be formed using steel square tubing framework fixed to the floor and soffit.

10. MAXIMUM HEIGHTS

Saint-Gobain Gyproc has adopted an internationally accepted methodology to determine maximum allowable wall heights, which is based on the level of lateral deflection under a given uniformly distributed load (UDL). The criterion is that the maximum lateral deflection of the drywall should not exceed L/250 (where L is the drywall height) when the drywall is uniformly loaded to 200Pa and L/125 at 200Pa where applicable.

11. SOCKET OUTLETS

Switch boxes and socket outlets can be supported on brackets formed from 102 mm Gypframe® UltraSTEEL® Track. Pipes or conduits should be fixed in position before lining work commences. Fixing electrical socket boxes into Gyproc Drywall Systems can impair both fire and acoustic

performance, but with careful detailing this can be minimized. In particular, back-to-back services must be avoided.

12. ACCESS PANELS

Access panels should be designed to offer practical, cost effective solutions. Care should be taken that the acoustic, thermal and fire performance of the wall is not compromised by the access panels.

13. FIRE PERFORMANCE

Closely follow Saint-Gobain Gyproc specifications as deviations may negate fire resistance performance.

Cut boards to a neat fit, avoiding any gaps. If small gaps do occur, they must be backed by a framing member and filled with appropriate jointing material, or be skim plastered. Tape and fill joints, or skim plaster plasterboard to achieve fire performance. Fire-stop joints, junctions, penetrations, etc. to maintain integrity. Keep penetrations to a minimum and avoid back-to-back sockets.

14. ACOUSTIC PERFORMANCE

Isover Glasswool, Gyproc Gyptone™ and Ecophon tiles are designed to provide sound absorption. Where sound insulation room-to-room is required, sound attenuation (CAC) can be improved by the installation of Isover glasswool insulation onto the ceiling.

Alternatively, other design considerations should be adopted such as extending adjoining partitions into the plenum void or installing a plenum barrier. Consider the layout and structure of buildings at the design stage in order to separate quiet and noisy areas.

Plan properly to avoid retro-fitting of services and/or noggins. Control sound paths around walls and floors to reduce flanking sound transmission. Seal the base and top of the wall using non-hardening silicone sealant. Tape and fill, or skim plaster plasterboard joints to increase air tightness. Keep penetrations to a minimum and as small as possible. Use an acoustic sealant for optimum sound insulation. Seal penetrations, joints, junctions, etc. to avoid transmission of sound through leakage. It is good practice to seal all service holes/penetrations. Air conditioning ducts should be fitted with the appropriate proprietary dampers.

Avoid back-to-back sockets. Gaps on either side of the socket box should be sealed with an appropriate fire or acoustic sealant. The gap between the socket box and opposite side lining should be filled.

Closely follow manufacturers' fixing details as deviations may negate any acoustic benefit. Where the demising drywall meets the external wall/Gyproc drywall lining, appropriate detailing should be adopted to reduce leakage of sound and vibration transfer.

15. VERTICAL JOINTS

Lightly butt boards together. Centre joints on studs. Ensure that joints on opposite sides of studs are staggered. For double layer boarding, stagger joints between layers.

16. HORIZONTAL JOINTS

Horizontal joints are not recommended in walls up to a height of 3600 mm. Horizontal joints may impinge on the aesthetics of a jointed wall. Consequently, the position of horizontal joints should be agreed upon with the Architect or Designer. For two-layer lining, stagger joints between layers by at least 600 mm. Provide horizontal framing to support the horizontal edges of the face layer lining.

17. FIXING OF BOARDS

Stagger the boards along Gyproc RhinoBoard® butt joints. Fix working from the centre of each board.

Position screws not less than 13 mm from cut edges and 10 mm from bound edges of boards. Set heads in a depression; do not break paper or gypsum core. For single layer Gyproc High Performance Wall Systems with Habito®, Habito UltraSTEEL® Studs and Habito® GTX-F High Performance Screws must be used.

For double layer lining use Habito® High GTX-F Performance Screws for securing the inner layer of Gyproc Habito® and Gyproc Sharp-point screws 42 mm to secure the outer layer of Gyproc RhinoBoard® or RhinoBoard® FireStop®/ FireStop® dB.

18. DEFLECTION HEADS

Deflection allowance shall be specified by the project structural engineer when necessary. Studs shall be cut shy of the floor to soffit height in order to accommodate the specified deflection.

Deflection heads, by definition, must be able to move and therefore achieving an airtight seal is very difficult without incorporating sophisticated components and techniques. Air leakage at the drywall heads will have a detrimental effect on the acoustic performance of any drywall.

19. LEVEL OF FINISHING

Level 1 - Temporary constructions. No jointing or finishing at all

Level 2 - Frequently used in plenum areas above ceilings and in areas that are generally concealed. All joints shall have the tape embedded in jointing compound. Surface shall be free of excess jointing compound but tool marks and ridges are acceptable

Level 3 - This finish is suitable where moisture resistant boards are used as a substrate for tiling and may be used in garages or warehouse storage where surface appearance is not of primary importance. All joints, angles and accessories shall have one coat of jointing compound applied. All screw heads to be spotted.

Surface shall be free of excess jointing compound but tool marks and ridges are acceptable.

Level 4 - This level is suitable for areas which are to receive heavy or medium textured paint finishes, or where heavy grade wall coverings are to be applied. Where lightweight vinyl is to be used all joints etc. should be carefully sanded to provide a smoother surface. All joints, angles and accessories shall have two separate coats of jointing compound applied. All screw heads to be spotted. All jointing compound shall be smooth and free of tool marks and ridges. It is recommended that all the areas of jointing compound receive a coat of suitable base plaster primer.

Level 5 - This level should be used where gloss, semi-gloss or matt non-textured paints are specified. Any drywall that is subjected to critical lighting shall be finished to this level. Apply Gyproc RhinoTape® to all joints. Cover Gyproc RhinoTape® with one layer of Gyproc RhinoLite® Multipurpose / RhinoLite CreteStone® / RhinoLite Natural Plus. Skim the surface using one layer of Gyproc RhinoLite® Multipurpose / RhinoLite CreteStone® / RhinoLite Natural Plus to a minimum thickness of 3mm. Finish the surface using rubber float and steel trowel or steel trowel only. The surface shall be completely smooth and free of any marks and surface blemishes. The entire surface of the drywall shall receive a coat of suitable plaster primer before final decoration.

20. CRITICAL LIGHT

Wall and ceiling areas abutting window mullions or skylights, long hallways, or atriums with large surface areas flooded with artificial and/or natural lighting are a few examples of critical lighting areas. Strong side lighting from windows or surface-mounted light fixtures may reveal even minor surface imperfections. Light striking the surface obliquely, at a very slight angle, greatly exaggerates surface irregularities. If critical lighting cannot be avoided, the effects can be minimized by creating a shadow-line joint or by decorating the surface with medium to heavy textures, or by the use of draperies and blinds which soften shadows.

In general: Paints with sheen levels other than flat, enamel and dark paint finishes highlight surface defects; textures hide minor imperfections.

21. CONTROL JOINTS

Control joints may be required in the partition to relieve stresses induced by expansion and contraction of the structure. Control joints are visible and may impinge on the aesthetics of the building. Consequently, the position of the control joints should be determined by the architect/designer. Control joints shall be specified where any of the conditions listed below exist.

Where excessive movement is likely to occur.

Where a drywall, or ceiling traverser's movement joint within the surrounding structure. The width of the drywall control joint shall be equal to that of structure.

Where a drywall is exposed to variable or extreme temperatures and the wall runs in an uninterrupted straight plane exceeding 12 m in length. NOTE: Full height door frames may be considered as a control joint.

Where the building/substrate structural system/material changes.

A control joint is desired or incorporated as a design accent or architectural feature.

[Control Expansion Joints Guidelines](#)

22. STUD SPACING

Reducing the centres of the metal studs within Gyproc & Isover Drywall Systems partition systems allows for greater heights to be achieved when considered within the framework of

Saint-Gobain accepted methodology. Please note however that this can have a detrimental effect on the sound insulation performance of the system.

We have estimated the performance reductions for Gyproc & Isover Drywall Systems.

When there is no insulation in the cavity and the studs spacing is reduced to 300 mm centres, this results in an estimated 3 dB loss in the R_w compared to studs at 600 mm centres without insulation.

When there is insulation in the cavity and the studs spacing is reduced to 300 mm centres, this results in an estimated 2 dB loss in the R_w compared to studs at 600 mm centres with insulation in the cavity.

When there is no insulation in the cavity and the studs spacing is reduced to 400 mm centres, this results in an estimated 2 dB loss in the R_w compared to studs at 600 mm centres without insulation.

When there is insulation in the cavity and the studs spacing is reduced to 400 mm centres, this results in an estimated 0 dB loss in the R_w compared to studs at 600 mm centres with insulation in the cavity.

23. APPLICATION OF TILES

General

All control joints in the drywall or plasterboard must extend through the adhesive bed and tiles, and filled with a suitable flexible filler or expansion joint profile.

All expansion and movement joints in the substrate must extend through the adhesive bed and tiles, and filled with a suitable flexible filler or expansion joint profile.

Wall tile movement joints must also be allowed for in vertical corners, surface obstructions, pipes, fixed fittings and over all building material variances (brick and concrete beams).

We recommend the mechanical support of tiles where tiling heights are in excess of 2.5 meters.

This specification must be used in accordance with SANS 10107: THE DESIGN AND INSTALLATION OF CERAMIC TILING. For all South African National Standards (SANS) documentation see www.sabs.co.za.

Surface preparation:

- Tiling onto existing drywall: Make good any unsound areas and remove flaky or peeling layers before tiling.
- Tiling onto existing painted drywall: Sand plasterboard to remove PVA paint (100 mm grit) and prime with a slurry coat using a mix of two volumes of weber.prim Plaskey and 1 volume of weber.ad Key-it. Apply to a thickness of approximately 2 mm using a block-brush. Leave to dry for 24 hours.
- Tiles must have full contact with adhesive – leave no voids.
- Tiles must be clean and free of dust and contaminants.
- Use only dry tiles - do not soak tiles.
- Gyproc Rhinoboard® board must be primed as above prior to tiling.

24. IMPACT STRENGTH

The impact performance of the wall systems is established by testing the wall systems in accordance with the full requirements of BS 5234. This rating relates the strength and robustness characteristics of the partition system against specific end-use applications. The table below gives details of the four duty categories. From the test conducted by Saint-Gobain Gyproc and British Gypsum it can be established that in all cases a double layer lining achieves Severe Duty.

Duty rating	Category	Examples
Medium	Adjacent space moderately used, primarily by persons with some incentive to exercise care. Some chance of accident occurring or of misuse.	Office accommodation
Heavy	Adjacent space frequently used by the public and others with little incentive to exercise care. Chances of accident occurring or of misuse.	Public circulation areas
Severe	Adjacent space intensively used by the public and others with little incentive to exercise care. Prone to vandalism and abnormal rough use.	Major circulation areas and industrial areas

25. WATER DAMAGE

Board exposed to moisture may need to be replaced depending on the source of moisture and the conditions of the boards. If the following conditions are observed or experienced, the boards should be replaced:

Gyproc RhinoBoard® is not structurally sound and there is evidence of rusting fasteners or physical damage that would diminish the physical properties of the ceiling system.

Gyproc RhinoBoard® cannot be dried thoroughly before mold growth begins (typically 24 to 48 hours depending on environmental conditions).

If Gyproc RhinoBoard® is exposed to contaminated water.

Ensure that the source of moisture is identified and eliminated.

IF EVER THERE IS ANY DOUBT WHETHER TO REPLACE THE BOARDS OR NOT - REPLACE THE BOARDS.

26. CURVED DRYWALL

Planning – key factors

The positioning of vertical board joints on exposed board layers at the apex of the curve should be avoided. The positioning of all studs, therefore, needs to be determined at the design stage. Where straight runs occur within curved partitions or linings, stud centres can be increased as determined by the specification, once 600mm off the curve.

Curved walls exert additional stresses onto the supporting studs and require that studs are spaced at a spacing of 300 mm centers.

Fire resistance

There is no specific standard against which to test curved walls and linings, but adhoc testing has been carried out which confirms that a similar performance can be achieved to that claimed for the straight partition.

Degree of curvature

In common with other sheet materials, board-ends have a tendency to remain straight. The minimum radius, therefore, will be influenced by the board characteristics, the length of curve, the support centres, and the occurrence of board joints.

Table 1 Minimum recommended board radiuses

Board type	Thicknesses (mm)	Stud Centers (mm)	Minimum Radius (mm)
FireStop®	12.5	300	4800
	15	300	5700
RhinoBoard®	12.5	300	3600
	9.0	300*	1800*
	6.4*	300*	1800*

*9.0mm and 6.4mm Rhinoboard® figures to be retested in RSA for compliance

Sound insulation

Reducing the centres of the metal studs within Gyproc & Isover Drywall Systems curve can have a detrimental effect on sound insulation. Include Isover Cavitybatt® / Cavitylite® insulation in the cavity for optimised acoustic performance.

27. RECOMMENDED QUALITY CONTROL ON SITE

Gypframe® Metal framing should be inspected by a recognized site authority.

All cavity services ducts and conduits should be installed before boarding. Plan the position of all service penetrations/fittings and provide the necessary framing.

Gyproc RhinoBoard® should be inspected after each installation and before finishing.

Manufacturers specification should be properly interpreted and adhered to. It is the drywall contractor's responsibility to ensure that the specifications are properly adhered to.

28. DAMPERS

Fire and smoke resisting dampers can be installed in Saint-Gobain Construction Products range of Gyproc Drywall Systems. As the performance of the complete assembly will depend on a number of elements, the actual details of the opening need to be determined in conjunction with the fire stopping and damper manufacturers.

Penetrations of dampers need careful consideration to ensure that the integrity of the element is not impaired, and also that the dampers do not act as the mechanism of fire spread. It is

important to use only those dampers and their installations which have been shown by fire test to be able to maintain the integrity of the construction.

Service zones can be sealed after installation of the services using a tested and substantiated fire stopping system. In most situations, the services will be installed by drywall contractors. It is important, therefore, that all relevant contractors should be advised as to where and how their service penetrations should be made and maintained.

The necessity to independently support of dampers will depend on their size and weight. Consult Saint-Gobain Construction Products Technical Solutions Centre further detailed information.

29. ACCESS TO SERVICES

Access Panels should be designed to offer practical, cost effective solutions. Care should be taken that the acoustic and fire performance of the wall is not compromised by the access panels.

30. HEALTH AND SAFETY

The advice and guidance referred to does not seek to replace the Health and Safety advice and systems of employers in relation to the use and installation of the Company's products but should be considered in addition. At all times all users of such products and installation techniques should ensure that they are familiar with, and adhere to, their employer's own Health and Safety procedures.

Saint-Gobain Construction Products systems have been developed for use in various sectors including Hospitality, Commercial, Retail, Healthcare, Affordable Housing, Education, Industrial, Recreational, and Residential. Guidance as to the correct installation and use of these products and systems is included in the installation sections. It is important to follow good site practice at all times and to ensure that appropriate safety precautions are taken (including the wearing of appropriate personal protection equipment and clothing) when working with Saint-Gobain Construction Products.

CONCEALED GRID CEILING SYSTEMS GUIDELINES

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1. CONSTRUCTION STANDARDS/ DESIGN CRITERIA

The ceiling should be constructed in accordance to Saint-Gobain Construction Products. The erection of the ceiling should comply with SABISA guidelines for suspended ceilings.

2. QUALITY ASSURANCE

All Saint-Gobain Construction Products are manufactured according to SABS standards. Gyproc RhinoBoard® is manufactured according to ISO 9001 Quality management System and ISO 14001 environmental management system. The installer should have experience and knowledge of the installation of ceiling systems.

3. BUILDING STRUCTURE

Concrete Soffit: Gypframe® D37K Main Tee and Gypframe® D32K Cross Tee or Gypframe® N Main Bar and Gypframe® N Cross Furring Channel framework should be used where soffit is concrete and hangers fixed using appropriate fixings. Steel or timber brandering are not to be used.

Timber Joist or Purlins: Steel or Timber brandering and Gypframe® D37K Main Tee or Gypframe® N Main Bar should be used. Building structure should be at 1200 mm centres. Gypframe® D37K Main Tee and Gypframe® N Main Bar can also be suspended from timber floors and purlins.

4. SUB-GRID

A sub-grid is not required when a continuous length of hanger is used.

A sub-grid is required when:

- The hangers are out of plumb by more than 25 mm for every 150 mm depth (9.5°) and the ceiling is suspended more than 2 m.
- The ceiling mass exceeds 20 kg/m².
- The main ceiling framework is required to run parallel to the suspending structural members. i.e. parallel to the trusses if main tees are suspended from the trusses or parallel to the purlins if the main tees are suspended from the purlins.

We suggest consulting a structural engineer to assist with the design of the sub-grid. Construct the sub-grid using Gyproc Burgess Channel. The sub-grid shall be installed with the primary grid perpendicular to the directions of the main tees and at 1200 mm centres. The Gyproc Burgess Channel shall be suspended using a continuous length of hanger at every 2400 mm centres.

Ceiling Drop

A sub-grid is not required when a continuous length of hanger is used.

5. RELATIVE HUMIDITY (RH)

Gyproc ceilings lined with RhinoBoard® or Gyptone™ ceilings are suitable for use under normal occupancy conditions. Buildings in which these linings are used should be dry, glazed and enclosed, with environmental conditions of not greater than 70% RH at 10°C to 21°C. For high humidity or high moisture conditions, MoistureResistant™ shall be used.

6. VAPOUR CONTROL

Other precautions, such as ceiling void ventilation, may be necessary to reduce the risk of interstitial condensation

Two coats of vapour resistant sealer applied to the face of the lining will provide water vapour control. Install vapour membrane between framework and ceiling lining.

7. CEILING FRAMEWORK

Gypframe® D37K Main Tees

The ceiling grid (concealed grid) consist of Gypframe® D37K Main Tee (3600 mm) framework spaced at 1200 mm centres. The grid is then suspended from the structure using the appropriate hanger. The suspension system shall support the ceiling assembly described with a maximum deflection of 1/360 of the span.

Gypframe® D32K Cross Tees

Install Gypframe® D32K Cross Tee (1200) clipped into Gypframe® D37K Main Tee at 600 mm, 400 mm, 300 mm centres with capping of galvanised **steel**.

Gypframe® UltraSTEEL® Brandering

Gypframe® UltraSTEEL® Brandering should be installed onto Gyproc Suspension Bracket. Gyproc Suspension Bracket are fixed to the timber joists/trusses using 32 mm Gyproc Grabber Screws.

Maximum joist/tie beam spacing shall be 1200 mm centres.

Timber Brandering

Timber brandering can be fixed directly onto the joists/trusses. The size of timber brandering used will depend on the joists/truss spacing.

Brander Sizes - Truss/Joist Spacing:

UP to 1000 mm = 38 mm x 38 mm Timber brandering

1000 mm to 1200 mm = 38 mm x 50 mm Timber brandering (with the 50 mm dimension vertical)

1200 mm to 1400 mm = 50 mm x 76 mm Timber brandering (with the 76 mm dimension vertical.)

Gypframe® N Main Bar

The ceiling grid (concealed grid) consist of Gypframe® N Main Bar (3660 mm) framework spaced at 1000 mm centres. The grid is then suspended from the structure using the appropriate hanger. The suspension system shall support the ceiling assembly described with a maximum deflection of 1/360 of the span.

Gypframe® N Cross Furring Channel

Install Gypframe® N Cross Furring Channel (3600) clipped into Gypframe® N Main Bar at 280 mm, 400 mm, 480 mm, 600 mm centres.

8. SUSPENSION - RIGITONE® BOARD LININGS

Gypframe® N Framework

Gypframe® N Main Bars are installed at maximum 1000 mm centres. The Gypframe® N Cross Furring Channel shall be suspended using 25 mm x 25 mm Gyproc Galvanised Angle at 1000 mm centres along the length of the Gypframe® N Main Bar. In addition to this, the Gypframe® N Cross Furring Channel should be installed 280 mm (9 notches) centres. Additional Gypframe® N Cross Furring Channel should be fixed to the Gypframe® N Main Bar at the transverse ends of the Rigitone® boards.

Rigitone® ceiling boards are best suited for installation onto our Gypframe® N ceiling framework. Due to the unique dimensions of Rigitone® boards when compared to typical board sizes, additional framing members are required on transverse board ends that may not coincide with the configuration of Gypframe® D38FR main tee and cross tee configuration. Gypframe® N framework of main bars and cross furring channels are best suited to address the nature of Rigitone® board dimensions of both width and length.

9. CEILING HANGERS

Hangers should be suitably fixed to the structure using suitable fixing devices. Gypframe® D37K Main Tee shall be suspended from the structure using 25 mm x 25 mm Gyproc Galvanised Angle hangers spaced at 1200 mm centres. In areas where this cannot be achieved where the fixing structure is more than 1200 mm centres, consideration should be given to install a Sub-grid.

Steel branderings shall be suspended from the structure using Gyproc Suspension Bracket (for steel Branderings). 25 mm x 25 mm Gyproc Galvanised Angles shall be used to suspend Gypframe® D37K Main Tee grid from purlins or timber joists/trusses. Building structure should be at 1200 mm centres.

Timber branderings can be fixed directly onto the joists/trusses. The size of timber branderings used will depend on the joists/truss spacing. Timber branderings should be spaced at max 600 mm centres.

Gypframe® N Square Angle can be fixed at 1000 mm intervals. The space between the wall and the first suspension point is not more than 400 mm. Measure 17 mm above the perimeter angle and mark the bottom level of the Gypframe® N Square Angle hangers. Using a fish line or laser-level, transfer the mark to the Gypframe® Square Angle hangers. Cut the Gypframe® N Square Angle hangers on the fish line or laser-level mark.

NB: In situations where only the Gypframe® is used as a perimeter angle, the bottom level of the hangers can be determined using the shorter side (17 mm) of the Gypframe® N Square Angle.

10. CEILING PERIMETER DETAIL

Where shadowline perimeter detail is required for skimmed ceilings, use 9.5 mm and 12.5 mm Gyproc Plaster Trim. Use 9.5 mm Gyproc Plaster Trim with a skimmed 9 mm Gyproc

RhinoBoard®, 12.5 mm Gyproc Plaster Trim with a skimmed 12.5 mm Gyproc RhinoBoard®. Gyproc Plaster Trim shall be fixed to the perimeter wall at 300 mm centres and are not to carry the ceiling framework load. Ceiling framework hangers to not exceed 150 mm from the perimeter wall.

Gyproc QuickCornice™ and Gyproc Rhino Cove Cornice™ should be fixed to the perimeter wall using Gyproc RhinoBed®, Cornice adhesive, Flexible adhesive respectively.

For Fire rated ceilings, we recommend using Gyproc Rhino Cove Cornice™ fixed to perimeter wall using Gyproc RhinoBed®.

11. CORNICE FIXING

Glue the cornice to the wall using RhinoBed® with support nails under the cornice and in front of the cornice in the ceiling, until a bond between the cornice and the wall has formed. Fill the gap at the ceiling with an acrylic silicone.

12. DYNAMIC LOADS ON CEILINGS

Care should be taken to ensure that the fixing used for suspension points (especially into concrete) should be able to support a safety factor of three times the design load of the ceiling.

13. CEILING LINING

Tightly butt boards together. The boards shall be installed with the longer side running perpendicular to the direction of branding or Gypframe® D32K Cross Tee. The boards shall be installed with the shorter side joints staggered by at least 300 mm and centered on ceiling framework where required install additional framing. For a two-layer lining, stagger joints between layers by at least 600 mm.

For single layer lining onto a steel framework: fix boards securely using 25 mm RhinoBoard® Gyproc Sharp-point Screws at maximum 150 mm centres.

For Double layer lining onto a steel framework: fix first layer using 25 mm RhinoBoard® Gyproc Sharp-point Screws at maximum 150 mm centres and fix second layer with 42 mm RhinoBoard® Gyproc Sharp-point Screws at maximum 150 mm centres.

For single layer lining onto a timber framework: Fix boards securely using 32 mm Gyproc Grabber Screws at maximum 150 mm centres. For plastered ceilings only 32 mm Gyproc Grabber Screws must be used. Do not use semi-clout nails.

Position fixings not less than 13 mm from cut edges and 10mm from bound edges of boards. Set heads in a depression; do not break paper or gypsum core.

14. THERMAL PERFORMANCE

Isover glasswool insulation can be laid over the ceiling to provide the required standard of thermal insulation. Contact Saint-Gobain Technical Solution Centre for further guidance. Insulation shall be laid securely with closely butted joints, leaving no gaps.

15. CLIMATIC ZONES

Refer to SANS 10400 XA and SANS 204.

16. ACOUSTIC PERFORMANCE

Isover Soundlite® / Cineplex® / Glasswool, Gyproc Gyptone™ and Ecophon tiles are designed to provide sound absorption

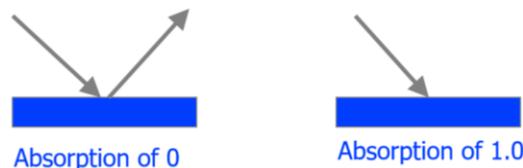
Where sound insulation room-to-room is required, sound attenuation (CAC) can be improved by the installation of Isover Glasswool insulation onto the ceiling. Alternatively, other design considerations should be adopted such as extending adjoining partitions into the plenum void or installing a plenum barrier.

Gyptone™ and Rigitone® boards are perforated and designed to provide sound absorption when used in conjunction with an air space behind the ceiling. Increased levels of sound absorption can be achieved by installing glasswool insulation onto the ceiling.

NRC (or Noise Reduction Coefficient) is the number which rates the effectiveness of a material at absorbing sound. NRC (Noise Reduction Coefficient) measures how well materials stop sound from reflecting (how much sound they can absorb). The NRC is the percentage of sound that a surface absorbs (in other words, hits a surface and doesn't reflect back again into the room).

Where sound insulation room-to-room is required, sound attenuation (Dncw) can be improved by the installation of Isover glasswool insulation onto the ceiling. Alternatively, other design considerations should be adopted such as extending adjoining partitions into the plenum void or installing a plenum barrier. CAC is a measure for rating the performance of a ceiling system as a barrier to airborne sound transmission through a common plenum between adjacent closed spaces such as offices. The higher the CAC rating, the better the performance.

Sound Absorption is the amount of sound energy absorbed by a material. It is frequency and density dependent. It is normally expressed as a co-efficient where 1.0 equals total absorption and 0 is total reflection.



A single value can be expressed as a Sound Absorption Class A – E. α_w is split into intervals.

classification	α_w -value
A	0,90 ; 0,95 ; 1,00
B	0,80 ; 0,85
C	0,60 ; 0,65 ; 0,70 ; 0,75
D	0,30 ; 0,35 ; 0,40 ; 0,45 ; 0,50 ; 0,55
E	0,15 ; 0,20 ; 0,25
not classified	0,00 ; 0,05 ; 0,10

EN ISO 11654
European Standard

17. CONTROL/ EXPANSION JOINT

Gyproc Control Joints may be required in certain ceilings to relieve stresses induced by expansion and contraction of the structure. Control joints are visible and may impinge on the aesthetics of the building. Consequently, the position of the control joints should be determined by the architect/designer. Control joints shall be specified where any of the conditions listed below exist;

- Control joints are required to relieve stress induced by expansion or contraction of drywall due to:
 - Where excessive movement is likely to occur.
 - RhinoBoard® internal stresses, this is mostly due to thermal and moisture changes.
 - Where the building/ substrate structural system/ material changes.
 - Drywall abuts with plywood, chipboard...etc. (or any other type of cladding)
- Guidance as recommended for preparation of expansion joints in RhinoBoard® ceilings
 - Interior ceilings with perimeter relief: Control joints shall be installed so that linear dimensions between control joints shall not exceed 15 m and total area between control joints does not exceed 225 m².
 - Interior ceilings without perimeter relief: Control joints shall be installed so that the linear dimensions between control joints shall not exceed 9m and total area between control joints does not exceed 81 m².
 - Exterior ceilings and soffit: Control joints shall be installed so that linear dimensions between control joints shall not exceed 9m and total area between control joints do not exceed 81 m².
 - A control joint is desired or incorporated as a design accent or architectural feature.

Gyptone™ Rigitone® Expansion Joints:

Gyptone™ Rigitone® boards should be cut 10 mm short of the perimeter walls and should not be fixed to the perimeter channel.

18. SERVICES INSTALLATION

The plenum can be used to route all service requirements including ducting, pipework, electrical cables and conduits. Where light fittings, access panels and similar components are incorporated as part of the design requirements, consideration must be given to maintaining the integrity of the ceiling to meet fire resistance and sound insulation requirements.

Ceiling systems are not designed to carry excess or additional structural loads. It is therefore recommended that catwalks are installed where access is required to other services above the ceiling, and that personnel walkways are installed above the installed ceiling. It is recommended that appropriate suspension is used to support these loads independently of the ceiling system. This applies also to bulkheads, signs and other appendages. Any load that is installed below the ceiling should be independently supported.

Where the ceiling framework is cut short to create an opening in the ceiling system, it is recommended that additional suspensions/ support be used.

19. FIRE PERFORMANCE

Fire rating shall be in accordance with SANS 10177-2. Concealed grid ceiling can achieve full fire rating (Stability, Integrity & Insulation).

Where fire / smoke baffles are required, these can be created using RhinoBoard® FireStop® fixed to a metal or timber frame. The framework should be fixed to the building structure to avoid undue loading of the ceiling suspension grid or, alternatively, additional hangers should be incorporated to support the ceiling alongside the fire/smoke baffle.

20. FIXTURES

Fixings to the system should always be made into the ceiling grid or to supplementary framing. Where heavy loads are anticipated, an independent suspension should be provided from the structure.

21. LEVEL OF FINISHING

Level 1 - Temporary constructions. No jointing or finishing at all

Level 2 - Frequently used in plenum areas above ceilings and in areas that are generally concealed. All joints shall have the tape embedded in jointing compound. Surface shall be free of excess jointing compound but tool marks and ridges are acceptable

Level 3 - This finish is suitable where moisture resistant boards are used as a substrate for tiling and may be used in garages or warehouse storage where surface appearance is not of primary importance. All

joints, angles and accessories shall have one coat of jointing compound applied. All screw heads to be spotted.

Surface shall be free of excess jointing compound but tool marks and ridges are acceptable.

Level 4 - This level is suitable for areas which are to receive heavy or medium textured paint finishes, or where heavy grade wall coverings are to be applied. Where lightweight vinyl is to be used all joints etc. should be carefully sanded to provide a smoother surface. All joints, angles and accessories shall have two separate coats of jointing compound applied. All screw heads to be spotted. All jointing compound shall be smooth and free of tool marks and ridges. It is recommended that all the areas of jointing compound receive a coat of suitable base plaster primer.

Level 5 - This level should be used where gloss, semi-gloss or matt non-textured paints are specified. Any drywall that is subjected to critical lighting shall be finished to this level. Apply Gyproc RhinoTape® to all joints. Cover Gyproc RhinoTape® with one layer of Gyproc RhinoLite® Multipurpose / RhinoLite CreteStone® / RhinoLite Natural Plus. Skim the surface using one layer of Gyproc RhinoLite® Multipurpose / RhinoLite CreteStone® / RhinoLite Natural Plus to a minimum thickness of 3mm. Finish the surface using rubber float and steel trowel or steel trowel only. The surface shall be completely smooth and free of any marks and surface blemishes. The entire surface of the drywall shall receive a coat of suitable plaster primer before final decoration.

22. CEILING SYSTEMS FINISHES AND SPACINGS

Rigitone® Finish

Additional care and attention should be taken when jointing Rigitone® boards so as not to fill the perforations and impair the acoustic performance of the finished ceiling.

Skimmed Finish

For a skimmed finish, apply Gyproc RhinoLite® to a minimum thickness of 3 mm. Gyproc Skimmed Ceiling System offers a durable ceiling lining.

Jointed Finish

For a jointed finish, Gyproc RhinoLite® shall be applied 300 mm wide on the tapered side of the board and 600 mm wide on the butt jointed sides.

M-Strip Finish

Install Gyproc M-strip Joints to the joint locally manufactured spot/cover all the screw heads Gyproc RhinoGlide®.

Branding

FINISH	BOARD TYPE	BRANDER SPACINGS	CEILING SYSTEM
M-STRIP	6.4	400	GYPROC M-STRIP CEILING SYSTEM_ STEEL BRANDING
M-STRIP	6.4	400	GYPROC M-STRIP CEILING SYSTEM_ TIMBER BRANDING
SKIMMED	6.4	300	GYPROC SKIMMED CEILING SYSTEM_6.4 mm
JOINTED	9	500	GYPROC JOINTED CEILING SYSTEM_ 9 mm
SKIMMED	9	400	GYPROC SKIMMED CEILING SYSTEM_ 9 mm
JOINTED	12.5	600	GYPROC JOINTED CEILING SYSTEM_12.5 mm
SKIMMED	12.5	600	GYPROC SKIMMED CEILING SYSTEM_12.5 mm

23. JOINTS

Gyproc RhinoBoard® boards to be lightly butt together with all joints staggered. Centre all ceiling joints on ceiling framework. Additional ceiling framework to be provided as necessary to ensure support to all vertical edges of boards.

For two-layer lining, stagger joints between layers by at least 600 mm.

For two layer boarding framing must support the outer layer.

24. PAINTING: PLASTER FINISH/ JOINTED FINISH

Saint-Gobain Construction products reference: Gyproc RhinoLite® MultiPurpose/ Gyproc RhinoLite® CreteStone®/ Gyproc RhinoLite® Natural Plus® / Gyproc RhinoGlide®. Primer: As per manufacturers recommendation. Paint to be applied as per project specification. Do not use epoxy paints.

25. CURVED CEILINGS

Planning – Key Factors

Board joints should be avoided on the apex of the curve for the exposed layer of board. The positioning of all framework, therefore, needs to be determined at the design stage.

Degree of Curvature

In common with other sheet materials, board-ends have a tendency to remain straight. The minimum radius, therefore, will be influenced by the board characteristics, the length of curve, the support centres, and the occurrence of board joints.

Board Finishing

Whilst a good quality finish can be achieved using normal jointing techniques, a plaster skim finish may be considered (with the exception of Gyptone™ and Rigitone® boards), particularly where there are a number of butt-end joints on the curve.

EXPOSED GRID CEILING SYSTEMS GUIDELINES

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CONSTRUCTION STANDARDS/ DESIGN CRITERIA

The ceiling should be constructed in accordance to Saint-Gobain Construction Products. The erection of the ceiling should comply with SABISA guidelines for suspended ceilings.

1. QUALITY CONTROL

The installer should have experience and knowledge of the installation of ceiling systems or be a SABISA approved installer. Gypframe® D metal framing should be inspected by a recognised site authority. Ceiling tiles should be inspected after each installation and before finishing. The installation of the suspended ceiling shall be strictly in accordance with the latest specification and coordinated ceiling layout drawings. Manufacturer's specification should be properly interpreted and adhered to. Ceilings should be set out from the centre to give balanced widths of tiles at the perimeter. A number of grid layouts are possible, depending on the grid selected and the choice of ceiling tile.

2. DELIVERY, STORAGE, AND HANDLING

Storage time on site should be as short as possible with environmental conditions as near as possible to those specified for occupancy. Any storage area should be clean, dry, secure and fully protected from the weather with cartons stored off the ground. Cartons of materials should never be rolled, dropped or slid and under no circumstances used as a work base or substituted for ladders, scaffolding etc.

3. SITE PREPARATION

Verify that site conditions are suitable for the commencement of work and that all labelled materials are as indicated in the Saint-Gobain Gyproc specification document or as instructed by the manufacturer. Ensure that there are no damaged materials. The building should be weatherproof before the installation of the Gyproc Ceiling lining. All wet trades shall be completed and adequately dry prior to the installation of ceiling products. This includes grinding of terrazzo floors, floor screed, brickwork and plastering of walls. All windows and exterior doors shall be in place and fully glazed and the roof and/or intermediate floor slabs shall be watertight prior to the start of the ceiling installation.

4. BUILDING STRUCTURE

Hangers should be suitably fixed to the structure using suitable fixing devices. Main tees shall be suspended from the structure using hangers spaced at 1200 mm centres. In areas where this

cannot be achieved where the fixing structure is more than 1200 mm centres, consideration should be given to install a Sub-grid.

5. SUB-GRID

A sub-grid is not required when a continuous length of hanger is used.

A sub-grid is required when:

- The hangers are out of plumb by more than 25 mm for every 150 mm depth (9.5°) and the ceiling is suspended more than 2 m.
- The ceiling mass exceeds 20 kg/sqm.
- The main tees are required to run parallel to the suspending structural members. i.e. parallel to the trusses if main tees are suspended from the trusses or parallel to the purlins if the main tees are suspended from the purlins.

We suggest consulting a structural engineer to assist with the design of the sub-grid. Construct the sub-grid using Gyproc Burgess Channel. The sub-grid shall be installed with the primary grid perpendicular to the directions of the Main Tees and at 1200 mm centres. The Gyproc Burgess Channel shall be suspended using a continuous length of hanger at every 2400 mm centres.

6. RELATIVE HUMIDITY (RH)

The grid is suitable for use in heated occupied buildings in conditions up to 95% relative humidity (RH95). Gyproc Gyprex tiles are suitable up to RH70 and Isover Glasswool tiles are suitable up to RH95.

7. WATER VAPOUR CONTROL

Whilst the vinyl surface can provide an effective vapour control layer, it may be necessary to complete the integrity where the boards abutt metal grid sections. This is achieved by sealing with continuous beads of water vapour resistant mastic, which should be applied to the back of the metal sections prior to laying the tiles. Care should be taken to ensure that the mastic sealant does not damage the vinyl surface of the tiles.

Other precautions, such as ceiling void ventilation, may be necessary to reduce the risk of interstitial condensation.

8. LIGHT REFLECTANCE

Light reflectance is the ability of a surface to reflect light back into a space. The light reflectance of a variety of ceiling tiles measured in South Africa indicated a reflectance range from 0.8 to 0.92, with the mean being 0.84 from a sample group of 30 tiles. A reflectance of 0.85 is considered to be high. The intensity and number of luminance can be optimised depending on the light reflection of the ceiling tiles. Consult a lighting specialist for further guidance.

9. CEILING FRAMEWORK

Fixing points for suspending the metal grid are required at 1200 mm centres. Suitable fixing devices should be used when fixing to the structure. Gypframe® D Tees are fixed to the wall with angle cleats which are attached to the tee web and are secured through the wall angle or perimeter trim to the wall. This is to stabilize and align the ceiling as well as to avoid displacement of the tees during erection. Tee's are fixed after the first row of cross tee's have been clipped into the main tee, this enables erection from a fixed reference point. For greater spans, contact the manufacturer for details.

Perimeter cross tees must be suspended ± 100 mm from the perimeter angle. When using a lightweight tile e.g. Mineral fibre, the above is not required.

The ceiling framework is designed such that when supported at recommended centres and loaded as recommended, the maximum deflection of the grid is not more than L/360 of the suspension span.

10. BRACING OF FRAMEWORK

Gyproc Angle Cleats are fixed to the wall to ensure straight grid and stability. Provide diagonal bracing as per project requirements.

11. CEILING HANGERS

Fixing points for suspending the metal grid are required at 1200 mm centres. Suitable fixing devices should be used when fixing to the structure. Consult a fixing specialist for further guidance.

The ceiling grid must be suspended from a concrete soffit using a continuous length of pre-stretched 2.5 mm Gyproc Suspension Wire or 19 mm Gyproc Hanger Strap. To provide a more robust suspension support, which restricts any flexing grid when pressure is applied from below, Gyproc Galvanised Steel Angle 25 mm x 25 mm shall be used.

Where ductwork is so extensive as to make it impossible to install hangers in an area, the mechanical trades shall provide proper framing of adequate strength to support the ceiling from their framing. Under no circumstances is the ceiling grid to be suspended from any of the service installations.

Care should be taken to ensure that the fixing used for suspension points (especially into concrete) should be able to support a safety factor of three times the design load of the ceiling.

12. CEILING TILE

Lay 1200 mm x 600 mm ceiling tile into the ceiling grid for 1200 mm x 600 mm grid. Lay 600 mm x 600 mm ceiling tile into the ceiling grid for 600 mm x 600 mm grid. The maximum allowable ceiling tile weight is 20 kg/m². In areas subject to draught Gyproc Hold-down Clips should be used. The use of Gyproc Hold-down Clips should be determined by the structural engineer.

13. HOLD DOWN CLIPS

In areas susceptible to draft, ceiling Gyproc Hold-down Clips shall be installed. 2x Gyproc Hold-down Clips per Cross Tee, 4x Gyproc Hold-down Clips per tile. Gyproc Hold-down Clips are used to assist with the acoustic performance of ceiling tiles, i.e. by holding the tiles in place. Gyproc Hold-down Clips assist by keeping the tiles in place where excess updraft is experienced in a building.

14. PERIMETER TRIMS

Perimeter angles, Gyproc SM25 and Gyproc M6 are fixed to the perimeter wall at 300 mm centres and are not to carry the ceiling framework load. Gypframe[®] Main Tee hangers to not exceed 400 mm from the perimeter wall.

15. CEILING LOADING

Care should be taken to ensure that the fixing used for suspension points (especially into concrete) should be able to support a safety factor of three times the design load of the ceiling.

16. THERMAL PERFORMANCE

Thermal performance of the ceiling is drastically reduced by thermal bridging as a result of the exposed framework. Isover glasswool insulation can be laid over the ceiling to provide the required standard of thermal insulation. Contact Saint-Gobain Technical Solution Centre for further guidance. Insulation shall be laid securely with closely butted joints, leaving no gaps.

17. CLIMATIC ZONES

Refer to SANS 10400 XA and SANS 204.

18. FIRE RATING

Ceiling tiles shall be tested in accordance with SANS 10177-2. Exposed grid ceilings may not achieve the full fire rating (Stability, Integrity & Insulation) due to the exposed framework. Exposed grid ceilings may achieve integrity and stability only unless otherwise stated in the specification.

19. ACOUSTIC PERFORMANCE

Isover Glasswool, Gyproc Rigitone[®] and Gyptone[™] and Ecophon tiles are designed to provide sound absorption.

Where sound insulation room-to-room is required, sound attenuation (CAC) can be improved by the installation of Isover glasswool insulation onto the ceiling. Alternatively, other design considerations should be adopted such as extending adjoining partitions into the plenum void or installing a plenum barrier.

When using acoustic ceiling tiles consideration should be given to the transmission of sound via the ceiling void. This is referred to as (CAC) - Ceiling Attenuation Class. CAC can be improved

by laying glasswool insulation on the ceiling tiles or installing a non-perforated ceiling tiles above the acoustic tiles.

The best CAC performance can be achieved by using Gyprex® tiles. CAC is a measure for rating the performance of a ceiling system as a barrier to airborne sound transmission through a common plenum between adjacent closed spaces such as offices. The higher the CAC rating, the better the performance.

NRC (or Noise Reduction Coefficient) is the number which rates the effectiveness of a material at absorbing sound. NRC (Noise Reduction Coefficient) measures how well materials stop sound from reflecting (how much sound they can absorb). The NRC is the percentage of sound that a surface absorbs (in other words, hits a surface and doesn't reflect back again into the room).

Sound Absorption is the amount of sound energy absorbed by a material. It is frequency and density dependent. It is normally expressed as a co-efficient where 1.0 equals total absorption and 0 is total reflection.



A single value can be expressed as a Sound Absorption Class A – E. α_w is split into intervals.

classification	α_w -value
A	0,90 ; 0,95 ; 1,00
B	0,80 ; 0,85
C	0,60 ; 0,65 ; 0,70 ; 0,75
D	0,30 ; 0,35 ; 0,40 ; 0,45 ; 0,50 ; 0,55
E	0,15 ; 0,20 ; 0,25
not classified	0,00 ; 0,05 ; 0,10

EN ISO 11654
European Standard

20. CONTROL JOINT

Control joints are predetermined separations that are designed to relieve internal stresses created by expansion and contraction of the building structure, commonly created from thermal or humidity movement.

Provision shall be made for control joints.

21. SERVICES INSTALLATION

Mechanical, electrical, air-conditioning, plumbing and other services (e.g. sprinklers) shall be installed prior to the start of any ceiling installation. and the respective trades shall make available to the ceiling contractor, prior to the start of the ceiling installation, adequate descriptive literature, samples and shop drawings of any item that is to be carried by or fixed to the ceiling. Ceiling systems are not designed to carry excess or additional structural loads. It is therefore recommended that catwalks are installed where access is required to other services above the ceiling, and that personnel walkways are installed above the installed ceiling. It is recommended that appropriate suspension is used to support these loads independently of the ceiling system. This applies also to bulkheads, signs and other appendages. Any load that is installed below the ceiling should be independently supported.

22. LIGHTING FIXTURES

Accurately plan the position of light fixtures with suitable suspension as necessary to adequately support the weight of the light fixture. Extra support is required in areas where light fixtures are installed. If the light fixture is more than 15 kg/m², independent supports should be provided for light fixtures.

23. MAINTENANCE

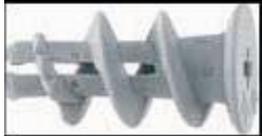
Ceiling tiles can be cleaned using a damp cloth or soft brush. Most standard mild detergents can only be used on vinyl faced tiles.

General Design Guidelines

- There is a wide variety of fixing devices suitable for securing fixtures and fittings to Saint-Gobain Construction Products systems. Generally, the choice of individual fixing devices will depend on the type of system and the loading requirements.
- This section gives recommendations on the selection of generic fixings.
- Consider the layout of fixtures and fittings at the design stage to allow necessary supports to be provided.
- Table below gives recommended fixing devices.
- The guidance given is primarily concerned with fixtures at the time of installation.
- Subsequent installation in hollow partitions is less easy, especially for heavier fixtures which will often require identification of the framework in hollow partitions.
- Light fixings can be fixed directly onto Gyproc RhinoBoard®. Medium to heavy fixtures should be fixed to the studs or timber noggins.

FIXTURES & FITTINGS GUIDELINES

Contact Fischer for more details

Fixing Detail	Fischer Fixing Code	Gyproc FireStop/ MoistureResista nt thickness	Maximum Allowable load (kg)
	GK	Into 1 x 12.5mm	8
		Into 2 x 12.5mm	11
		Into 1 x 15mm	10
		Into 2 x 15mm	14
	GKM	Into 1 x 12.5mm	8
		Into 2 x 12.5mm	11
		Into 1 x 15mm	10
		Into 2 x 15mm	14
	PD	Into 1 x 12.5mm	10
		Into 2 x 12.5mm	15
		Into 1 x 15mm	15
		Into 2 x 15mm	18
	UX6/UX8/UX10	Into 1 x 12.5mm	10
		Into 2 x 12.5mm	15
		Into 1 x 15mm	20
		Into 2 x 15mm	25
	HM5/HM10	Into 1 x 12.5mm	20
		Into 2 x 12.5mm	25
		Into 1 x 15mm	25
		Into 1 x 15mm	30
	KD3/KD 4	Into 12.5mm	14
		Into 2 x 12.5mm	20
		Into 1 x 15mm	20
		Into 2 x 15mm	25

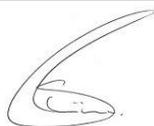
PULL OUT TEST REPORT

Date 08/05/2008
 Location Upat Head Office
 Engineer/Designer
 Test by CR Sillman
 Test Conditions Interior
 Time of Test 10:30
 Substrate 16mm ply noggin behind 15mm gypsum board
 Position
 Edge Distance
 Anchors Tested Spax 4x40 Chipboard Screw
 Spax 5x50 Chipboard Screw
 Hole n/a
 Tester Hydrjaw - JHB 001 10 kN gauge
 Persons Present Farayi Muhamba (BPB Gypsum)

Results	Load (kN)					
	Number	Description	Proof Load	Ultimate Load	Failure Method	Comment
	1	Spax 4x40	---	1.3	Pullout	130kg
	2	Spax 4x40	---	1.6	Pullout	160kg
	3	Spax 5x50	---	2.2	Pullout	220kg
	4	Spax 5x50	---	2.9	Pullout	290kg

Recommended Load Calculations (5% Fractile)			NOT APPLICABLE	
Number of anchors (n)	4		[Too few samples to perform accurate calculation]	
Coefficient for fractile value (k)	3.401			
Minimum value	1.3	kN		
Maximum value	2.9	kN		
Total sum (kN)	8	kN		
Mean value (Fu)	2.0	kN	N_u	
Standard deviation (s)	0.71			
Load bearing resistance (F5%=Fu-(k*s))	-0.40	kN	N_{Rk}	
Safety factor (3-5)	1			
RECOMMENDED LOAD	-0.40	kN	N_R	-0.6

Report By



08/05/2008

CR Sillman PrTechEng MSAICE MIPET

Control Joints Guidelines

While the advice and guidance given in the Specification Document meets relevant legislative and regulatory requirements and standards current at the date of publication, it is the responsibility of the user to ensure that these remain current prior to use.

The Saint-Gobain Gyproc products and systems included in the Specification Document have been developed for use in domestic, commercial and industrial buildings.

Guidance as to the correct application and installation of these products and systems is included in the installation sections.

It is important to follow good site practice at all times and to ensure that appropriate safety precautions are taken (including the wearing of appropriate personal protection equipment and clothing) when working with Saint-Gobain Gyproc products.

Gyproc Control Joints may be required in certain ceilings to relieve stresses induced by expansion and contraction of the structure. Control joints are visible and may impinge on the aesthetics of the building. Consequently, the position of the control joints should be determined by the architect/designer. Control joints shall be specified where any of the conditions listed below exist;

1. Drywall and ceiling control/ expansion Joints

Control Joints are required to relieve stress induced by expansion or contraction of drywall due to:

- Where excessive movement is likely to occur.
- RhinoBoard internal stresses, this is mostly due to thermal and moisture changes.
- Where the building/substrate structural system/material changes.
- Drywall abuts with plywood, chipboard...etc. (or any other type of cladding)

Guidance as recommended for preparation of expansion joints in RhinoBoard walls and ceilings

- Where a drywall is exposed to variable or extreme temperatures and the wall runs in an uninterrupted straight plane exceeding 12m in length.

- Interior ceilings with perimeter relief: Control joints shall be installed so that linear dimensions between control joints shall not exceed 15m and total area between control joints does not exceed 225m².
- Interior ceilings without perimeter relief: Control joints shall be installed so that the linear dimensions between control joints shall not exceed 9m and total area between control joints does not exceed 81m².
- Exterior ceilings and soffit: Control joints shall be installed so that linear dimensions between control joints shall not exceed 9m and total area between control joints not exceed 81m².
- A control joint is desired or incorporated as a design accent or architectural feature.

2. Building structure control/ expansion Joints

- Where the building/ substrate structural system/ material change.
- External excessive movements due to movement of building structure (as may be advised by a structural engineer.
- Building expansion joints in the building structure separated the building into different section. (As may be advised by a structural engineer)

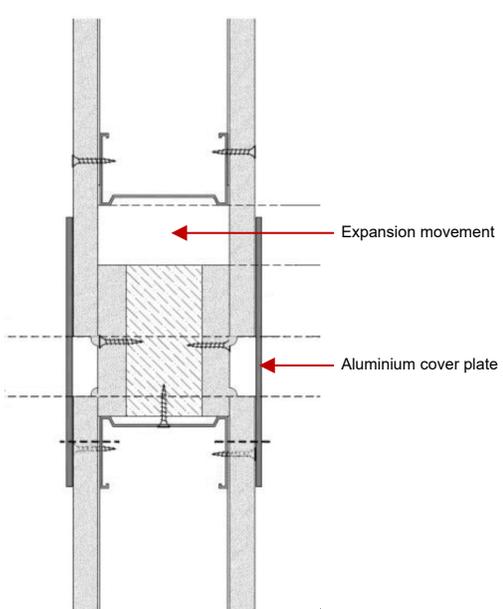
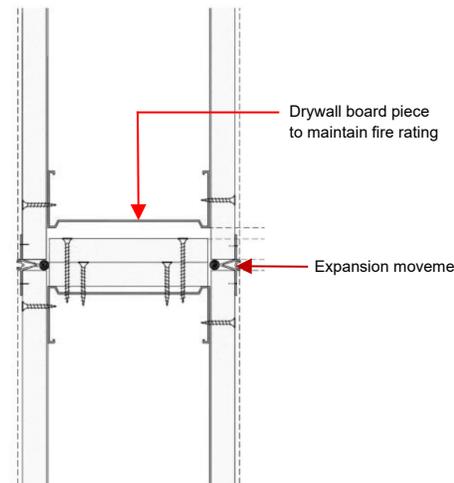
Guidance as recommended for preparation of expansion joints for building structure

- Where a drywall system is fixed along and/or across building expansion joint, relieve for expansion should also be provided and system equally separated with that of building expansion joint. (Dimensions for expansion joint should be advised by a structural engineer)
- Where a ceiling traverses movement joints within the surrounding structure. The width of the drywall control joint shall be equal to that of structure.

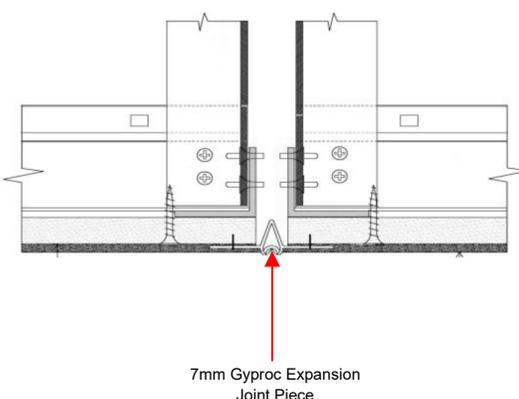
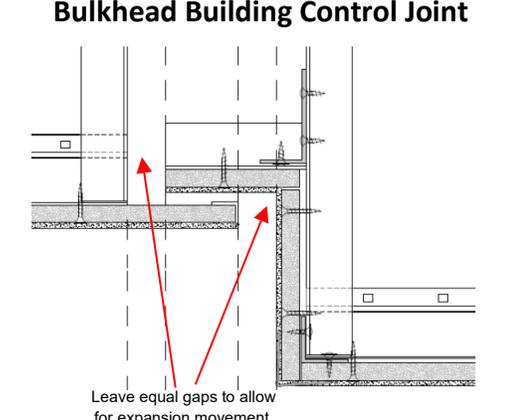
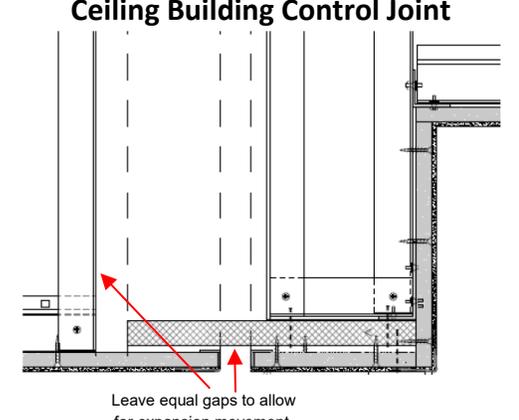
3. Gyptone Rigitone Expansion Joints:

- Gyptone Rigitone boards should be cut 10mm short of the perimeter walls and should not be fixed to the perimeter channel.

Typical Control Joint Details

Drywall Details	
<p style="text-align: center;">Building Control Joint</p> 	<p style="text-align: center;">Where/ When:</p> <ul style="list-style-type: none"> - Solution applicable where expected expansion of >7mm is required - Building control joint requirement <p>Solution</p> <ul style="list-style-type: none"> - Timber/ Steel frame internal; structure support for expansion movement - Metal/ Aluminium cover plate (supplied by others) fixed to one side to allow movement
<p style="text-align: center;">Drywall Control Joint</p> 	<p style="text-align: center;">Where/ When:</p> <ul style="list-style-type: none"> - Solution applicable where expected expansion of <7mm is required - Wall runs in an uninterrupted straight plane exceeding 12m in length - RhinoBoard internal stresses under normal situations <p>Solution</p> <ul style="list-style-type: none"> - 7mm Gyproc Expansion Joint piece

*To be read in conjunction with the Control Joint Guidelines

Ceiling Details	
<p>Ceiling Control Joint</p>  <p style="text-align: center;">7mm Gyproc Expansion Joint Piece</p>	<p>Where/ When:</p> <ul style="list-style-type: none"> - Solution applicable where expected expansion of <7mm is required - Installed so that linear dimensions between control joints do not exceed 9m and that the total area between control joints does not exceed 81m² <p>Solution</p> <ul style="list-style-type: none"> - 7mm Gyproc Expansion Joint piece
<p>Bulkhead Building Control Joint</p>  <p style="text-align: center;">Leave equal gaps to allow for expansion movement.</p>	<p>Where/ When:</p> <ul style="list-style-type: none"> - Solution applicable where expected expansion of >7mm is required - Building control joint requirement <p>Solution</p> <ul style="list-style-type: none"> - Framework split-up to allow for expansion movement - Edge Trim
<p>Ceiling Building Control Joint</p>  <p style="text-align: center;">Leave equal gaps to allow for expansion movement.</p>	<p>Where/ When:</p> <ul style="list-style-type: none"> - Solution applicable where expected expansion of >7mm is required - Building control joint requirement <p>Solution</p> <ul style="list-style-type: none"> - Framework split-up to allow for expansion movement - Edge Trim

*To be read in conjunction with the Control Joint Guidelines



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