

technical specification

Gyproc GypWall Plasterboards

GypWall Standard: 1/2 hour Fire Rating

SYSTEM: GYPWALL STANDARD

30 MIN Rw 42dB for 63.5mm UltraSTEEL™ Studs

Or 39 MIN Rw dB for 51mm UltraSTEEL™ Studs

Consisting of 63,5mm or 51mm UltraSTEEL™ Drywall steel studs inserted at 600mm centres into 63,5mm Drywall steel track at top and bottom and clad both sides with 12,5mm RhinoBoard fixed with 25mm Drywall Streaker screws spaced at 220mm centres. Stagger joints between boards. All joints to be taped and jointed as per manufacturer's instructions. 51mm studs and tracks may be used

For use in office walling, hotels, hospitals, schools or wherever a 1/2 hour Fire rating is required.

ULTRASTEEL STUD DRYWALL - non-load bearing 12,5mm RhinoBoard - one layer each side.

RODENT PROOF CLASS B1

WALL PROPERTIES

1/2 hour fire rating

Sound Reduction Index

	Stud	
	51 mm	63,5mm
Sound Reduction Index	39dB	42dB
Wall thickness	76 mm	89mm

Approximate mass 23 kg/m².

MATERIALS USED

1. 51 mm or 63,5mm Drywall UltraSTEEL™ stud.
2. 51 mm or 63,5mm Drywall UltraSTEEL™ track.
3. 12,5 mm Taper-edge RhinoBoard.
4. 25 mm Drywall Streaker screws.
5. Rhino Drywall jointing system.
6. Floor and ceiling finishes (i.e. skirtings and cornice/trim). To be specified separately.



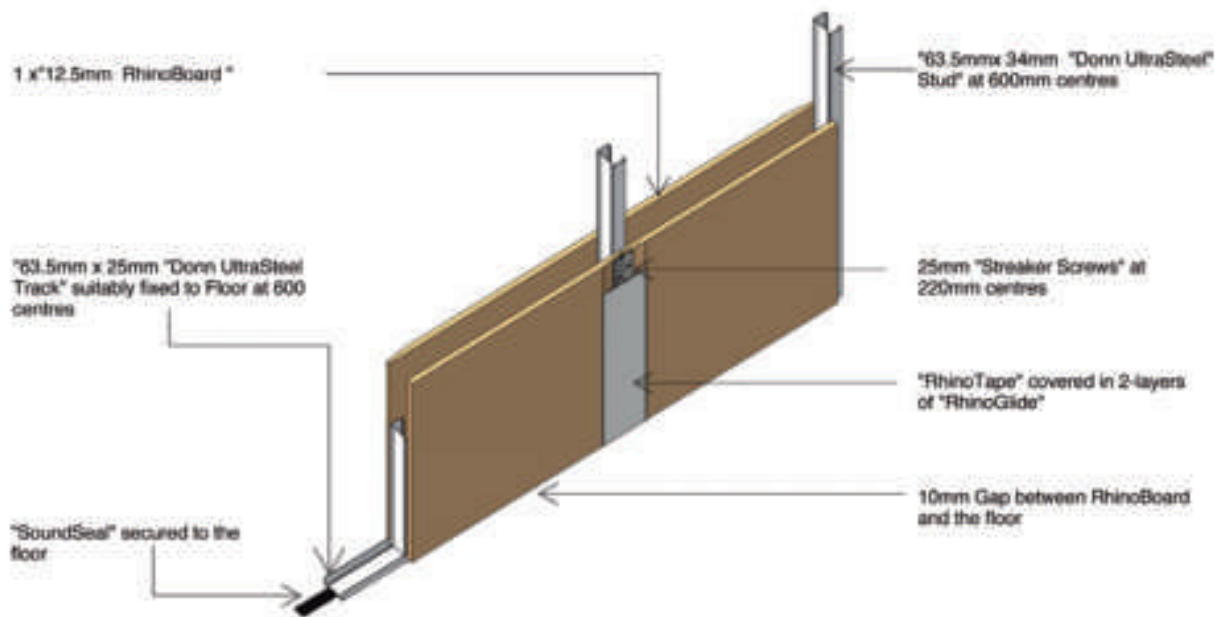
DIN EN 9001:2000
CERTIFICATE NO. 01 100 8280061
ISO CERTIFICATION FOR DURBAN ONLY

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APPLICATION DETAILS

1. Set UltraSTEEL™ studs spaced at 600mm c/c into equivalent UltraSTEEL™ track at floor and ceiling.
2. Fix a single layer of 12,5mm RhinoBoard to each side using 25mm Drywall Streaker screws spaced at 220mm c/c. Stagger joints.
3. Tape and joint according to manufacturers specifications.
4. Refer to data sheet Standard Clauses for Specifiers: Drywall Systems.
5. Acoustic performance requires sealing between UltraSTEEL™ track, floor, ceiling and any other abutment joints.



GypWall Silent: 1 hour Fire Rating

SYSTEM: GYPWALL SILENT 60 MIN Rw 48dB

Consisting of 63,5mm UltraSTEEL™ Drywall steel studs inserted at 600mm centres into 63,5mm Drywall steel track at top and bottom and clad one side with 12,5mm Firestop RhinoBoard fixed with 25mm Drywall Streaker screws spaced at 220mm centres. Insert RhinoFlam/Insulmat mineral fibre blanket in cavity. Clad the other side with a single layer of 12,5mm Taper-edge Rhino Firestop Board. Stagger joints between boards. All joints are to be taped and jointed in accordance with manufacturer's specifications.

For use in office walling, hotels, hospitals, schools or wherever a 2 hour Fire Rating is required.

ULTRASTEEL STUD DRYWALL - non-load bearing
12,5mm Rhino-Firestop board - two layers each side with RhinoFlam wire mesh surfaced mineral fibre blanket.

RODENT PROOF CLASS B1

WALL PROPERTIES

1 hour fire rating.

Sound Reduction Index with RhinoFlam/Insulmatt wire mesh surfaced fibre blanket of 80 kg/m³ - 48 dB.

Wall thickness 89 mm.

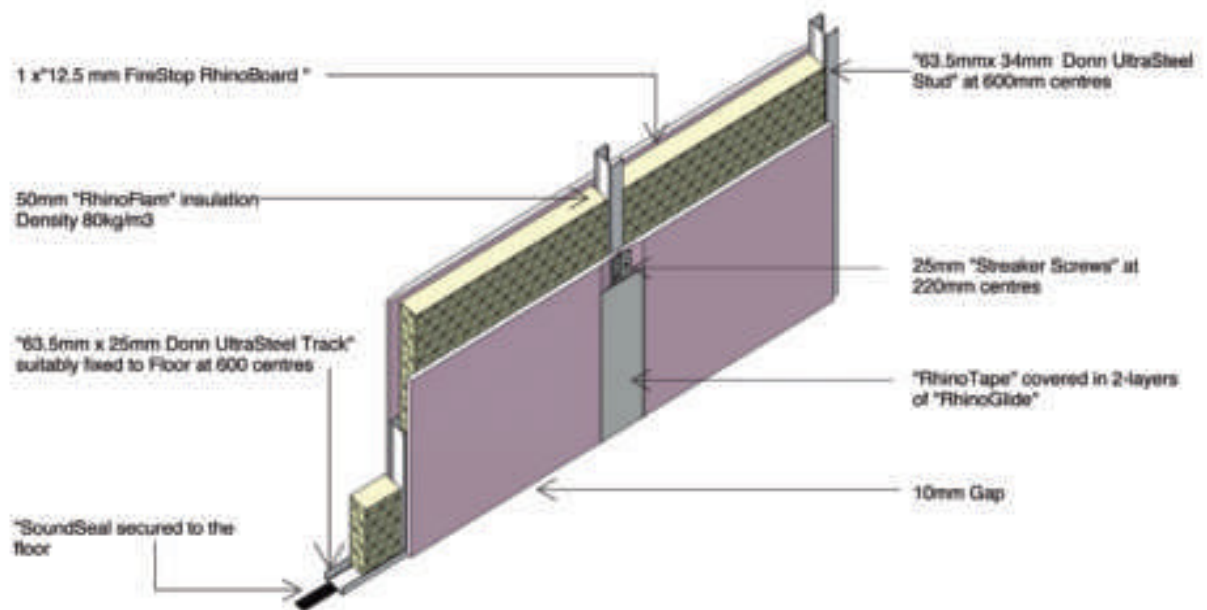
Approximate mass 30 kg/m².

MATERIALS USED

1. 63,5 mm UltraSTEEL™ stud.
2. 63,5 mm UltraSTEEL™ track.
3. 12,5 mm Firestop Taper-edge RhinoBoard.
4. 25 mm Drywall Streaker screws.
5. RhinoBoard Drywall jointing system.
6. Floor and ceiling finishes (i.e. skirting and cornice/trim). To be specified separately.
7. RhinoFlam/Insulmatt wire mesh surfaced fibre blanket of 80 kg/m³.

APPLICATION DETAILS

1. Set 63,5 mm UltraSTEEL™ studs spaced at 600mm c/c into UltraSTEEL™ track at floor and ceiling.
2. Apply a single layer of FireStop RhinoBoard vertically to one side using 25mm Drywall Streaker screws at 220mm c/c.
3. Insert the 80kg/m³ RhinoFlam/Insulmat wire mesh surfaced fibre blankets between studs.
4. Install a single layer of FireStop RhinoBoard vertically to the other side using 25mm Drywall screws at 220mm c/c. Stagger joints.
5. Tape and joint according to manufacturers specifications.
6. Refer to data sheet for Standard Clauses for Specifiers: Drywall Systems.
7. Acoustic performance requires sealing between UltraSTEEL™ track, floor, ceiling and any other abutment joints.



GypWall: 1 hour Fire Rating

SYSTEM: GYPWALL TOUGH 60 MIN Rw 46dB

Consisting of 63,5mm UltraSTEEL™ Drywall steel studs inserted at 600mm centres into 63,5mm Drywall steel track at top and bottom and clad both sides with two layers of 12,5mm RhinoBoard with base layer fixed with 25mm Drywall Streaker screws spaced at 220mm centres and face layer fixed using 41mm Drywall Streaker screws at 220mm centres. Stagger joints between all boards.

Face layer joints to be taped and jointed in accordance with manufacturer's specifications.

For use in office walling, hotels, hospitals, schools or wherever a 1 hour Fire Rating is required.

ULTRASTEEL STUD DRYWALL - non-load bearing 12,5mm RhinoBoard - double layer each side.

RODENT PROOF CLASS B1

WALL PROPERTIES

1 hour fire rating.

Sound Reduction Index 46 dB.

Thickness 114mm.

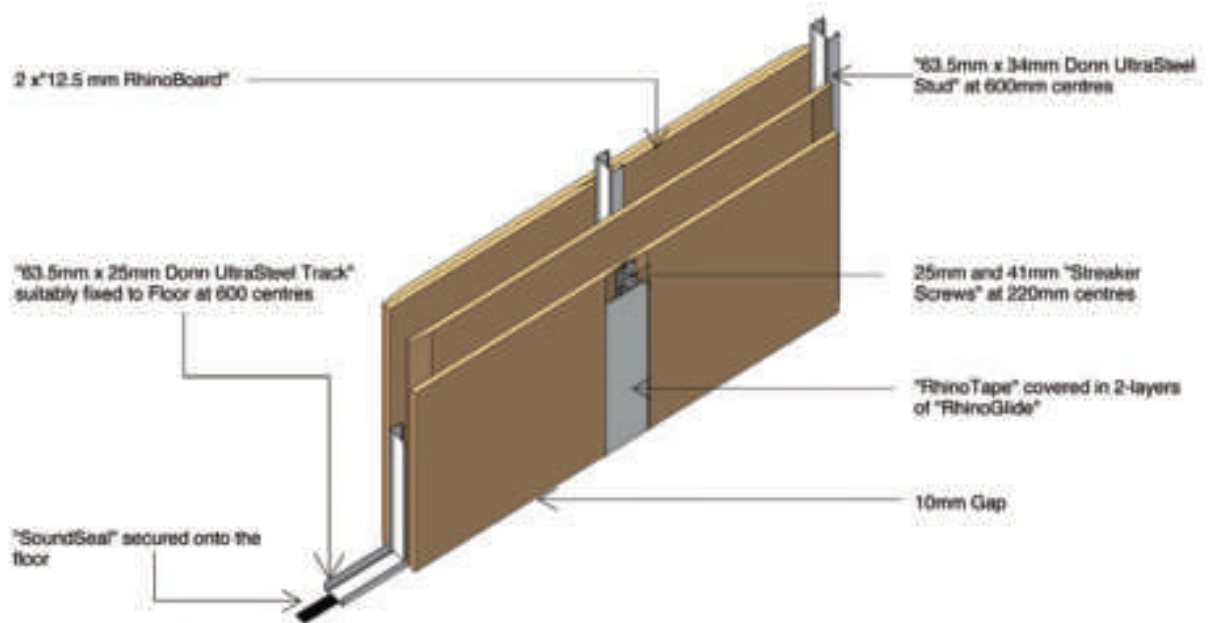
Mass 45kg/m².

MATERIALS USED

1. 63,5mm UltraSTEEL™ stud.
2. 63,5mm UltraSTEEL™ track.
3. 12,5mm Taper-edge RhinoBoard.
4. 25mm and 41mm Drywall Streaker screws.
5. Rhino Drywall jointing system.
6. Floor and ceiling finishes (i.e. skirting and cove/trim). To be specified separately.

APPLICATION DETAILS

1. Set 63,5 mm UltraSTEEL™ studs spaced at 600mm c/c into UltraSTEEL™ track at floor and ceiling.
2. Fix a base layer of 12,5mm board, to both sides to each side using 25mm Drywall Streaker screws at 220mm c/c.
3. Fix a face layer of 12,5mm RhinoBoard. Using 41mm drywall Streaker screws spaced at 220mm c/c Stagger all joints.
4. Tape and joint face layer only in accordance with data sheet for Hand Jointing Application.
5. Refer to data sheet for Standard Clauses for Specifiers: Drywall Systems.
6. Acoustic performance requires sealing between UltraSTEEL™ track, floor, ceiling and any other abutment joints.



GypWall Silent 52: 2 hour Fire Rating

SYSTEM: GYPWALL SILENT 52 120 MIN R_w 51dB

Consisting of 63,5mm UltraSTEEL™ Drywall steel studs inserted at 600mm centres into 63,5mm Drywall steel track at top and bottom and clad with a double layer of 12,5mm Firestop RhinoBoard on both sides fixed with 25mm Drywall Streaker screws spaced at 220mm centres and a face layer 12,5mm Firestop RhinoBoard fixed with 41mm Drywall Streaker screws at 220mm centres. Insert RhinoFlam/Insulmat mineral fibre blanket in cavity. Stagger all joints. Facelayer joints to be taped and jointed in accordance with manufacturer's specifications

For use in office walling, hotels, hospitals, schools or wherever a 2 hour Fire Rating is required.

ULTRASTEEL STUD DRYWALL - non-load bearing 12,5mm Rhino-Firestop board - two layers each side with RhinoFlam wire mesh surfaced mineral fibre blanket.

2 HOUR FIRE RATED WALL RODENT PROOF CLASS B1

WALL PROPERTIES

2 hour fire rating with 50mm 80kg/m³

RhinoFlam/Insulmatt

Sound Reduction Index 51 dB.

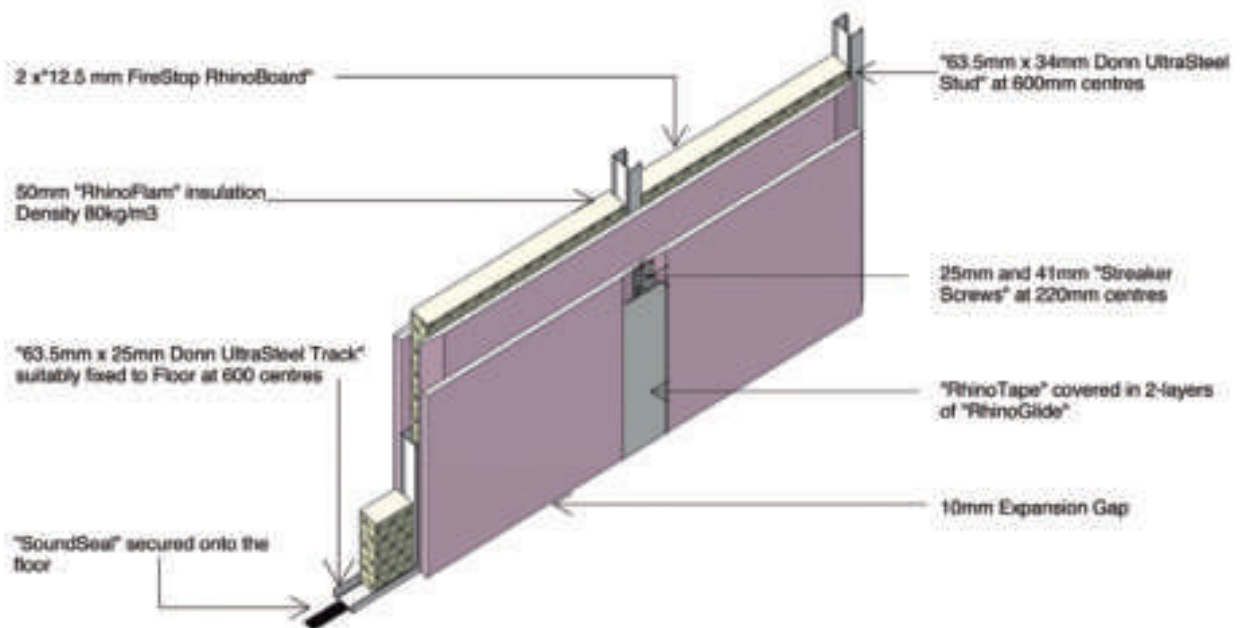
Wall thickness 114mm. Approximate mass 50kg/m².

MATERIALS USED

1. 63,5mm UltraSTEEL™ stud.
2. 63,5mm UltraSTEEL™ track.
3. 12,5mm Taper-edge FireStop RhinoBoard.
4. 25mm and 41mm Drywall Streaker Screws.
5. Rhino-Drywall jointing system.
6. Floor and ceiling finishes (i.e. skirting and cove/trim). To be specified separately.
7. RhinoFlam/Insulmatt wire mesh surfaced mineral fibre blanket of 80kg/m³.

APPLICATION DETAILS

1. Set 63,5 mm UltraSTEEL™ studs spaced at 600 mm c/c into UltraSTEEL™ track at floor and ceiling.
2. Fix a single layer of Firestop RhinoBoard vertically to one side using 25 mm Drywall Streaker screws spaced at 220 mm c/c.
3. Insert the 80 kg/m³ RhinoFlam/Insulmatt wire mesh surfaced fibre blanket between UltraSTEEL™ studs.
4. Fix a base layer of Rhino-Firestop board vertically to the other side using 25 mm Drywall screws at 220 mm c/c.
5. Fix a face layer of 12,5 mm Firestop RhinoBoard to both sides. Stagger all joints on each side using 41mm Drywall Streaker screws spaced at 220 mm c/c.
6. Tape and joint face layer in accordance with data sheet for Hand Jointing Application.
7. Refer to data sheet for Standard Clauses for Specifiers: Drywall Systems.
8. Acoustic performance requires sealing between UltraSTEEL™ track, floor, ceiling and any other abutment joints.



GypWall Secure: 2 hour Fire Rating

SYSTEM: GYPWALL SECURE

120 MIN Rw 51dB

Consisting of 63,5mm UltraSTEEL™ Drywall steel studs inserted at 600mm centres into 63,5mm steel Drywall track at top and bottom, clad on both sides with a 12,5mm Firestop RhinoBoard. Base layer fixed with 25mm Drywall Streaker screws at 220mm centres, 0,5mm galvanized steel sheet and a 12,5mm face layer Firestop RhinoBoard fixed using 41mm Drywall Streaker screws at 220mm centres. Stagger joints between boards. Face layer joints to be taped and jointed in accordance with manufacturer's specifications.

For use in office partitioning, internal residential walling, hotels, hospitals, schools or wherever a 2 hour Fire Rating is required.

ULTRASTEEL STUD DRYWALL - non-load bearing 12,5mm Firestop RhinoBoard plus 0,5mm steel plus 12,5mm Firestop RhinoBoard on each side.

2 HOUR FIRE RATED WALL RODENT PROOF CLASS B1

WALL PROPERTIES

2 hours fire rating.

Sound Reduction Index Rw 51 dB.

Wall thickness 115mm.

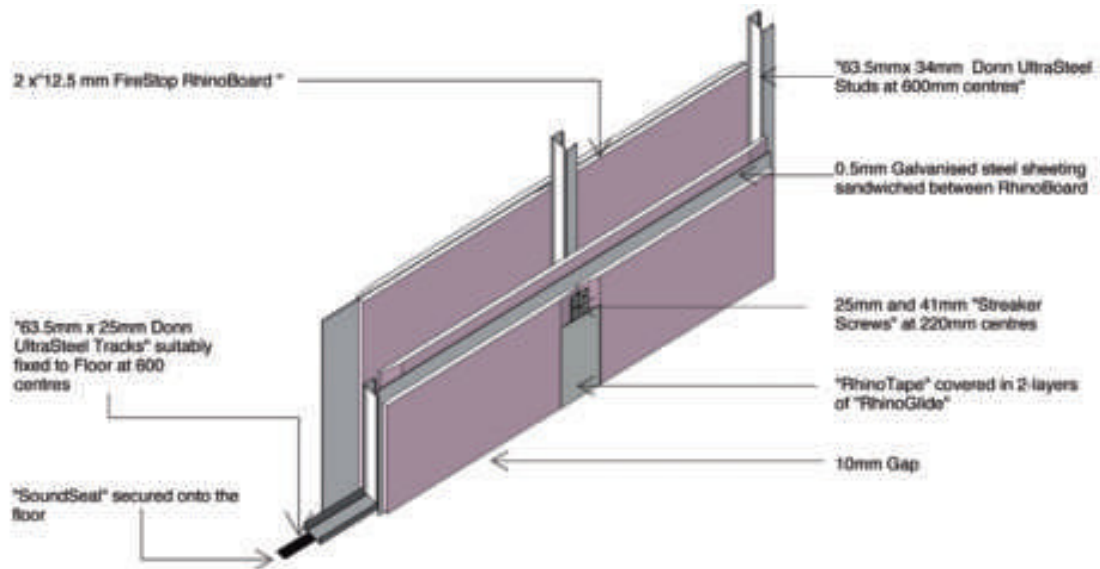
Approximate mass 50kg/m².

MATERIALS USED

1. 63,5mm UltraSTEEL™ stud.
2. 63,5mm UltraSTEEL™ track.
3. 12,5mm Taper-edge Firestop RhinoBoard.
4. 0,5mm galvanized steel sheet.
5. 25mm and 41mm Drywall Streaker screws.
6. RhinoBoard Drywall jointing system.
7. Floor and ceiling finishes (i.e. skirting and cove/trim). To be specified separately.

APPLICATION DETAILS

1. Set 63,5mm UltraSTEEL™ studs spaced 600mm c/c into 63,5mm UltraSTEEL™ track at floor and ceiling.
2. Fix a base layer of 12,5mm Firestop RhinoBoard vertically to each side using 25mm Drywall Streaker screws spaced at 220mm c/c.
3. Apply a sheet of 0,5mm galvanized steel to each side.
4. Apply a face layer of 12,5mm Taper-edge Firestop RhinoBoard to both sides. Staggering all joints using 41mm Drywall Streaker screws spaced at 220mm c/c.
5. Tape and joint according to data sheet for Hand Jointing Application.
6. Refer to data sheet for Standard Clauses for Specifiers: Drywall Systems.
7. Acoustic performance requires sealing between UltraSTEEL™ track, floor, ceiling and any other abutment joints.



GypWall FireBreak: 2 hour Fire Rating

SYSTEM: GYPWALL FIREBREAK 120 MIN Rw 50dB

Consisting of 63.5mm UltraSTEEL™ studs inserted at 600mm centres into 63.5mm UltraSTEEL™ track at top and bottom, clad with 12.5mm Taper-edge Firestop RhinoBoard on both sides fixed with 25mm Drywall Streaker screws at 220mm centres, and face layer 15mm Taper-edge Firestop RhinoBoard on both sides and fixed with 41mm Drywall Streaker screws at 220mm centres. Stagger joints between boards. Face layer joints to be taped and jointed in accordance with manufacturer's specifications.

For use in office walling, hotels, hospitals, schools or wherever a 2 hour Fire Rating is required.

ULTRASTEEL STUD DRYWALL - non-load bearing 12,5mm Rhino-Firestop plus 15mm Firestop RhinoBoard on each side.

2 HOUR FIRE RATED WALL RODENT PROOF CLASS B1

WALL PROPERTIES

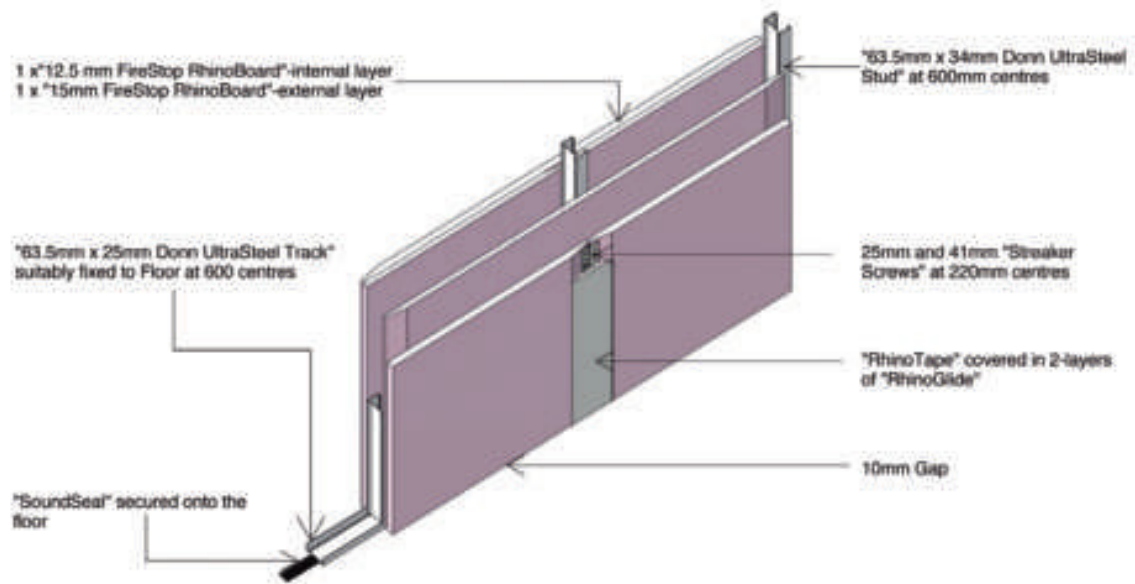
2 hours fire rating.
Sound Reduction Index Rw 50 dB.
Wall thickness 118mm.
Approximate mass 50kg/m²

MATERIALS USED

1. 63,5mm UltraSTEEL™ stud.
2. 63,5mm UltraSTEEL™ track.
3. 12,5mm Taper-edge Firestop RhinoBoard.
4. 15mm Taper-edge Firestop RhinoBoard.
5. 25mm and 41mm Drywall Streaker screws.
6. RhinoBoard Drywall jointing system.
7. Floor and ceiling finishes (i.e. skirting and cove/trim). To be specified separately.

APPLICATION DETAILS

1. Set 63,5mm UltraSTEEL™ studs spaced 600mm c/c into 63,5mm UltraSTEEL™ track at floor and ceiling.
2. Apply a base layer of 12,5mm Taper-edge Firestop RhinoBoard vertically to each side using 25mm Drywall Streaker screws spaced at 220mm c/c.
3. Apply a face layer of 15mm Taper-edge Firestop RhinoBoard to both sides. Staggering all joints using 41mm Drywall Streaker screws spaced at 220mm c/c.
4. Tape and joint according to data sheet for Hand Jointing Application.
5. Refer to data sheet for Standard Clauses for Specifiers: Drywall Systems.
6. Acoustic performance requires sealing between UltraSTEEL™ track, floor, ceiling and any other abutment joints.



GypWall Drylining

SYSTEM: GYPWALL DRYLINING

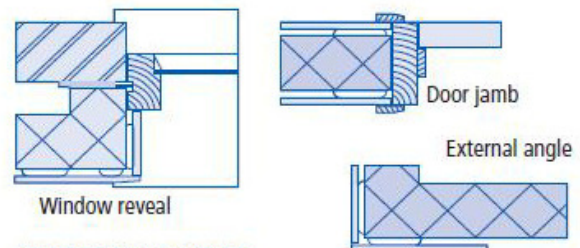
Drylining consisting of 12.5mm RhinoBoard fixed with RhinoLite gypsum plaster to brick, block or masonry walls. RhinoLite to be applied in vertical dabs of 75 x 250 at 300mm centres. Dabs to be spaced at 600mm centres and continuous runs along top and bottom of wall. RhinoBoard to be supported off the floor with a 12.5mm RhinoBoard strip spacer. The RhinoBoard lining is to be firmly bedded onto the RhinoLite dabs, and then straightened with a straight edge in both vertical and horizontal planes. Only full length boards to be used. All vertical joints to be lined up, joints between adjacent boards to be 1 - 2mm. Joints to be reinforced with RhinoTape, filled with RhinoGlide filler and finished off as per Gyproc's jointing instruction.

For use in offices, internal residential, walling, hotels, hospitals and schools.

DESCRIPTION

A basic drylining system primarily for the housing market and refurbishment sector. A plasterboard system that replaces a wet sand cement plaster with a dry lining that is smooth, straight and adds insulation to masonry walls.

- Rhinoboard is directly bonded to wall using RhinoLite.
- Suitable for all solid backgrounds of brick, block or concrete.



MATERIALS USED

1. 9.5, 12.5, 15mm T/E Rhinoboard.
2. RhinoLite.
3. Silicone Sealant.
4. Rhinoboard jointing system (i.e. RhinoTape and Rhinoglide).
5. Floor and ceiling finishes (i.e. skirting and cornice trim). To be specified separately.

Levels of GypWall Drywall Finish

1. SCOPE

This is a recommended specification that describes various levels of finish for drywall systems prior to the application of the final decoration. Each level is intended to supply the required surface finish for the application of the drywall and should be used to provide the most cost-effective alternative.

2. TERMINOLOGY

The following definitions are used in this document. **Accessories:** Metal or plastic corner beads, trim or mouldings used to protect or conceal corners, edges or abutments.

Critical Lighting: Strong side lighting from windows, surface mounted lights or downlighters.

Oil Based Plaster Primer: A paint formulated to stabilize and equalize the suction difference between RhinoBoard surface paper and the RhinoGlide compound used to finish joints angles, screw heads and accessories. To be used on drywall prior to decoration.

Skim coat: A thin coat of plaster over the entire wall surface to fill any imperfections in the joint work, smooth the paper texture, and provide a completely uniform finishing surface. A skim coat of RhinoLite can be used as an alternative to jointing.

Spotting: To cover screw heads with jointing compound.

3. LEVEL OF FINISH

The following levels of finish are proposed as a guide for specific final decoration. Each level will be illustrated with an example.

LEVEL 1

No jointing or finishing at all. This level of finish may be useful in temporary constructions.

LEVEL 2

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

LEVEL 3

All joints, angles and accessories shall have one coat of RhinoGlide jointing compound applied. All screw heads to be spotted. Surface shall be free of excess jointing compound but tool marks and ridges are acceptable. This finish is suitable where moisture resistant board is used as a substrate for tiling and may be used in garages or warehouse storage where surface appearance is not of primary importance.

LEVEL 4

All joints, angles and accessories shall have two separate coats of RhinoGlide jointing compound applied. All screw heads to be spotted. All jointing compound shall be smooth and free of tool marks and ridges. All areas receive a coat of oil based Plaster Primer before finishing. This level is suitable for areas which are to receive heavy or medium textured paint finishes, or where heavy grade wallcoverings are to be applied. Where lightweight vinyls are to be used all joints etc should be carefully sanded to provide a smoother surface.

LEVEL 5

A 3mm skim coat of RhinoLite plaster/Cretestone plaster shall be applied to the entire surface of the drywall. 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 oil based plaster primer before final decoration. This level should be used where gloss, semi-gloss or Matt non-textured paints are specified. Any drywall that is subjected to critical lighting must be finished to this level.

4. COMMENTS

Wall and ceiling areas abutting window mullions or skylights, long hallways, or atriums with large surface areas flooded with artificial or natural light are a few examples of critical lighting. Critical lighting (especially side-lighting) may reveal even minor surface imperfections. Light striking the surface obliquely, at a very slight angle, greatly exaggerates surface irregularities. If critical lighting can not be avoided, the effects can be minimized by skim coating the entire wall or by decorating the surface with medium or heavy textures (paint or vinyls). The use of drapes and/or blinds can also be used to soften shadows. It is also important to remember that during the construction phase of a building the lighting is often not fully functional and the appearance of the drywall could vary considerably once this is switched on.

In general smooth non-textured finishes highlight surface defects and textures help to hide minor imperfections.

NOTE: All Drywall partition systems should be 100% finished by the Drywall installer. It should not be left up to contractor applying the final decoration to rectify and surface blemishes or marks. All joints should be completely finished.

Moisture Resistant RhinoBoard

DESCRIPTION

12,5mm Moisture Resistant (MR) RhinoBoards are lined on both sides with a distinctive green paper to ease identification. The core of the board is treated with a silicone additive.

Size

MR RhinoBoard is available in the following sizes:- 12,5mm x 1200mm wide x 2400, 2700, 3000 long.

Weight

12,5mm MR RhinoBoard weighs 10-11kg/m².

Applications

MR RhinoBoard is a silicone impregnated gypsum board that is suitable for use in showers, bathrooms, kitchens and protected external applications.

MR RhinoBoard is used in areas where ceramic wall tiling is required.

MR RhinoBoard is not suitable for protection against continuous dampness or as a base for cementitious rendering.

MR RhinoBoards comply with the SABS 266: 1982 Specifications for plasterboard.

PERFORMANCE

Effects of temperature

The boards are not suitable for use in temperatures above 49°C, but can be subjected to freezing temperatures without risk of damage.

When tests in accordance with SABS 266 : 1982, the MR RhinoBoard absorbed less than 5% of water by weight in the total immersion test.

Thermal properties

$K = 0.25 \text{ W/m } ^\circ\text{C}$

$R = 0.05\text{m}^2 \text{ K/W}$

MR RhinoBoard will give similar performance to a standard board when tested for fire rating or sound insulation.