

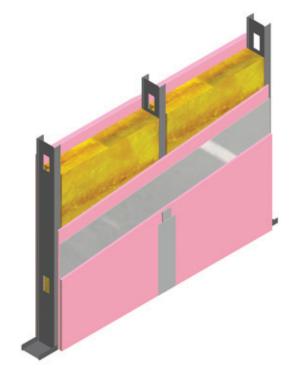


## **GypWall Secure Systems**

This is a lightweight, non load bearing security wall system, offering high resistance to determined attack.

### **Key facts**

- Minimal wall thickness
- Tested in accordance with SANS 10177:2
- Additional steel sheet can be installed for extra security
- Accommodates service within the drywall cavity
- Lightweight alternative to traditional constructions
- Donn UltraSTEEL™ framework will not twist or warp
- Less waste, cleaner site conditions
- Environmentally friendly products



### **Applications**

A range of applications, including cash desks, data storage and other high security areas.

### Sector

Commercial | Health Care | Educational | Retail | Sports & Leisure | Industrial | Residential

#### Performance



Fire rating 120 minutes.



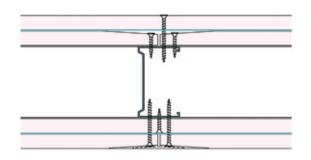
Sound insulation range from 51dB – 58dB

### **Performance**



#### GypWall Secure 63/F120S51

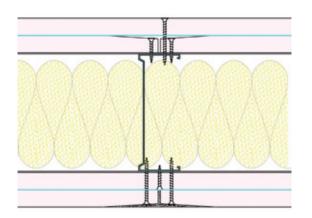
2 layers Gyproc FireStop 12.5mm fixed to both sides of the framework using Gyproc RhinoBoard Sharp Point Screws 3.5mm diameter x 25mm (for base layer) and Gyproc RhinoBoard Sharp Point Screws 3.5mm diameter x 42mm (for face layer) and at maximum 220mm centres. All joints shall be staggered. In wet areas replace face layer of Gyproc RhinoBoard 12.5mm with Gyproc MoistureResistant 12.5mm. Framework consisting of Donn UltraSTEEL Studs 63.5mm x 35mm friction fitted into top and bottom Donn UltraSTEEL Track 63.5mm x 25mm at 600mm. Apply Gyproc RhinoTape to all joints and internal corners. Install Donn Corner Bead to all external corners. 0.5mm thick Donn Galvanised Steel Sheet shall be sandwiched between 2 layers of Gyproc FireStop - on both sides of the framework.



## 2

#### GypWall Secure 102/F120S58

2 layers Gyproc FireStop 15mm fixed to both sides of the framework using Gyproc RhinoBoard Sharp Point Screws 3.5mm diameter x 25mm (for base layer) and Gyproc RhinoBoard Sharp Point Screws 3.5mm diameter x 42mm (for face layer) and at maximum 220mm centres. All joints shall be staggered. In wet areas replace face layer of Gyproc RhinoBoard 15mm with Gyproc MoistureResistant 15mm. Framework consisting of Donn UltraSTEEL Studs 102mm x 35mm friction fitted into top and bottom Donn UltraSTEEL Track 102mm x 25mm at 600mm centres. Install Isover Cavitybatt, 102mm thick, 14kg/m² density in the cavity. Apply Gyproc RhinoTape to all joints and internal corner. Install Donn Corner Bead to all external corners. 0.5mm thick Donn Galvanised Steel Sheet shall be sandwiched between 2 layers of Gyproc FireStop - on both sides of the framework.



Detail	System name	Stud size (mm)	Board type	Lining thickness* (mm)	Cavity insulation (mm)	Fire rating (min)	Sound rating R <sub>w</sub> dB	Nominal thickness (mm)	Maximum allowable height** stud spacing		
									600mm	400mm	300mm
1	GypWall Secure 63/F120S51	63.5	FireStop	2x12.5+0.5	-	120	51	115	4200	4400	4600
2	GypWall Secure 102/F120S58	102	FireStop	2×15+0.5	102***	120	58	163	6100	6300	6500

<sup>\*</sup>Lining thickness on both sides of the framework.

<sup>\*\*</sup>Based on limiting deflection of L/240 at 200Pa.

<sup>\*\*\*</sup>Isover Cavitybatt.

## **System Components**

### Metal products



Donn UltraSTEEL Stud 63.5mm



Donn UltraSTEEL Track 63.5mm



Donn UltraSTEEL Stud 102mm



Donn UltraSTEEL Track 102mm



Donn Corner Bead for all external corners on drywall

### **Board products**



Gyproc MoistureResistant 12.5mm/15mm



Gyproc FireStop 12.5mm/15mm



0.5mm Galvanised steel sheet

### Finishing products



Gyproc RhinoBoard Sharp Point Screws 25mm



Gyproc RhinoLite Multipurpose Plaster



Gyproc RhinoBoard Sharp Point Screws 42mm



Gyproc RhinoLite Projection Plaster



Gyproc RhinoTape



Gyproc RhinoGlide Jointing Plaster



SoundSeal

**Note:** These are the components found in the GypWall Secure systems. Please refer to the specific guidelines for each system's specific components.

### GypWall Secure | 63/F120S51

Nominal thickness (excluding finishes): 115mm

#### Performance criteria



SANS 10177: Part 2: 120 minutes



SANS ISO 140-3:1995: Rw 51dB

#### Framework

Studs: Donn UltraSTEEL™ Studs 63.5mm x 35mm at 600mm centres. In areas with tile finishes, reduce stud spacing to 400mm centres.

Floor track: Donn UltraSTEEL™ Track 63.5mm x 25mm fixed with one line of fixings spaced at 600mm centres.

Head track: Donn UltraSTEEL™ Track 63.5mm x 25mm fixed with one line of fixings spaced at 600mm centres. Adequate support shall be

provided for head track. Donn Deep Track 63.5mm x 40mm shall be used in areas subject to deflection.

Deflection allowance: Shall be determined by the project structural engineer.

Apply two continuous beads of SoundSeal between the building structure and the framework.

#### Lining

2 layers Gyproc FireStop 12.5mm, sheet width 1200mm; to both sides of framework. All joints shall be staggered.

In wet areas replace face layer of Gyproc FireStop 12.5mm with Gyproc MoistureResistant 12.5mm.

Screw first lining layer: Gyproc RhinoBoard Sharp Point Screws 3.5mm diameter x 25mm at maximum 220mm centres.

Screw second lining layer: Gyproc RhinoBoard Sharp Point Screws 3.5mm diameter x 42mm at maximum 220mm centres.

0.5mm thick Donn Galvanised Steel sheet shall be sandwiched by 2 layers Gyproc FireStop 12.5mm on both sides of the framework.

Steel sheet should be overlapping by 100mm (see Gyproc GypWall installation guide).

### Finishing

#### Jointed Finishing:

Apply Gyproc RhinoTape to all joints and internal corners.

Apply Donn Corner Bead embedded in Gyproc RhinoGlide plaster to all external corners.

Cover Gyproc RhinoTape with two layers of Gyproc RhinoGlide.

Paint using a good quality oil based plaster primer. Apply paint as required.

#### **Skimmed Finishing:**

Apply Gyproc RhinoTape to all joints and internal corners.

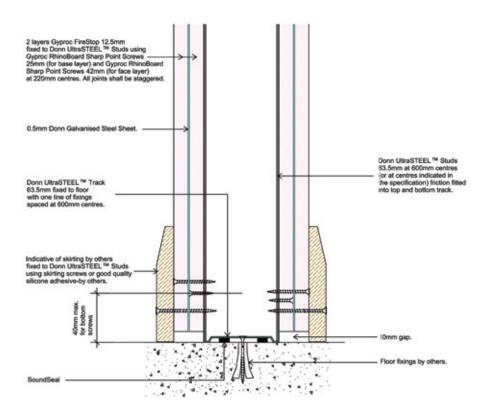
Apply Donn Corner Bead embedded in Gyproc RhinoLite plaster to all external corners.

Cover Gyproc RhinoTape with one layer of Gyproc RhinoLite. Skim the surface using one layer of Gyproc RhinoLite.

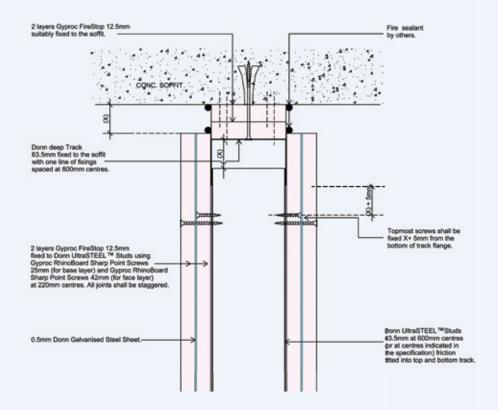
Paint using a good quality oil based plaster primer. Apply paint as required.

## **GypWall Secure 63/F120S51 Illustrations**

#### Base detail

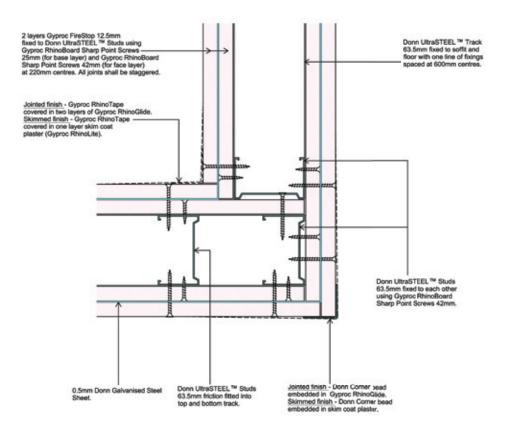


### **Head detail**

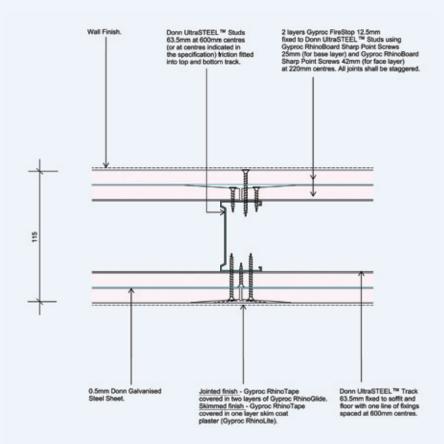


## **GypWall Secure 63/F120S51 Illustration**

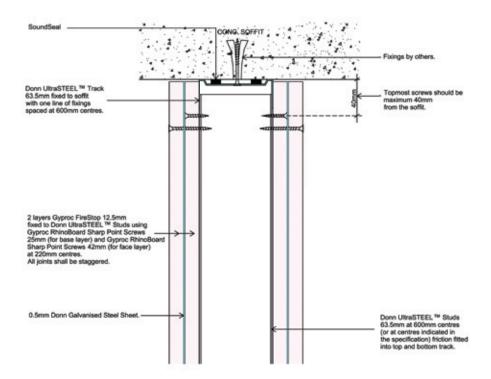
#### **Corner detail**



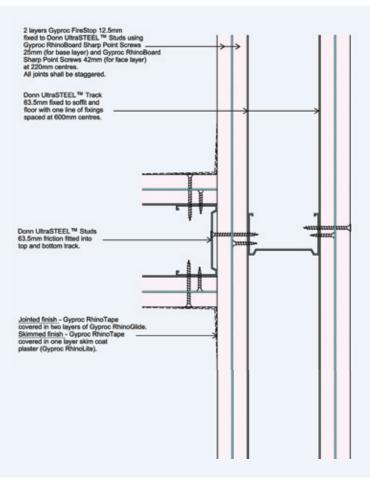
### Layout



#### **Head detail**

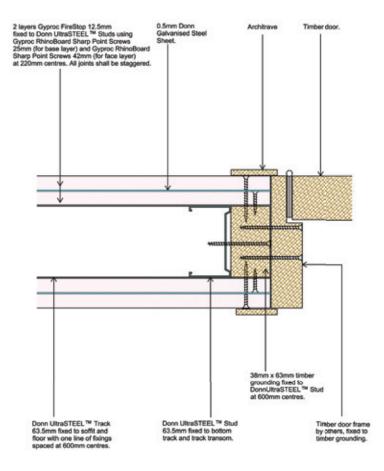


### T-junction



# **GypWall Secure 63/F120S51 Illustration**

### Timber door frame detail





### GypWall Secure | 102/F120S58

Nominal thickness (excluding finishes): 163mm

#### Performance criteria



SANS 10177: Part 2: 120 minutes



SANS ISO 140-3:1995: Rw 58dB

#### Framework

Studs: Donn UltraSTEEL™ Studs 102mm x 35mm at 600mm centres. In areas with tile finishes, reduce stud spacing to 400mm centres.

Floor track: Donn UltraSTEEL™ Track 102mm x 25mm fixed with two lines of staggered fixings 50mm from each other and spaced at

600mm centres.

Head track: Donn UltraSTEEL™ Track 102mm x 25mm fixed with two lines of staggered fixings 50mm from each other and spaced at

600mm centres. Adequate support shall be provided for the head track. Donn Deep Track 102mm x 50mm shall be used in

areas subject to deflection.

Deflection allowance: Shall be determined by the project structural engineer.

Apply two continuous beads of SoundSeal between the building structure and the framework.

#### Lining

 $2\ layers\ Gyproc\ FireStop\ 15mm, sheet\ width\ 1200mm; fixed\ to\ both\ sides\ of\ framing.\ All\ joints\ shall\ be\ staggered.$ 

0.5mm galvanised steel sheet sandwiched between the boards.

In wet areas replace face layer of Gyproc FireStop 15mm with Gyproc MoistureResistant 15mm.

Screw first lining layer: Gyproc RhinoBoard Sharp point Screws 3.5mm diameter x 25mm at maximum 220mm centres.

Screw second lining layer: Gyproc RhinoBoard Sharp point Screws 3.5mm diameter x 42mm at maximum 220mm centres.

0.5mm thick Donn Galvanised Steel sheet shall be sandwiched by 2 layers Gyproc FireStop 12.5mm on both sides of the framework.

Steel sheet should be overlapping by 100mm (see Gyproc GypWall installation guide).

### **Cavity Insulation**

Cavity insulation: Isover Cavitybatt 102mm thick, 14kg/m³ density. Fit securely with closely butted joints, leaving no gaps.

### Finishing

#### Jointed Finishing:

Apply Gyproc RhinoTape to all joints and internal corners.

Apply Donn Corner Bead embedded in Gyproc RhinoGlide plaster to all external corners.

Cover Gyproc RhinoTape with two layers of Gyproc RhinoGlide.

Paint using a good quality oil based plaster primer. Apply paint as required.

#### **Skimmed Finishing:**

Apply Gyproc RhinoTape to all joints and internal corners.

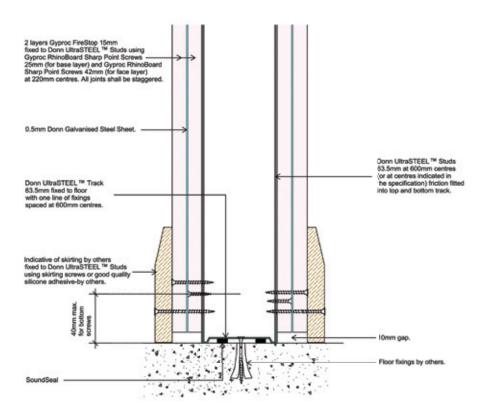
Apply Donn Corner Bead embedded in Gyproc RhinoLite plaster to all external corners.

 ${\it Cover Gyproc Rhino Tape with one layer of Gyproc Rhino Lite Skim the surface using one layer of Gyproc Rhino Lite.}$ 

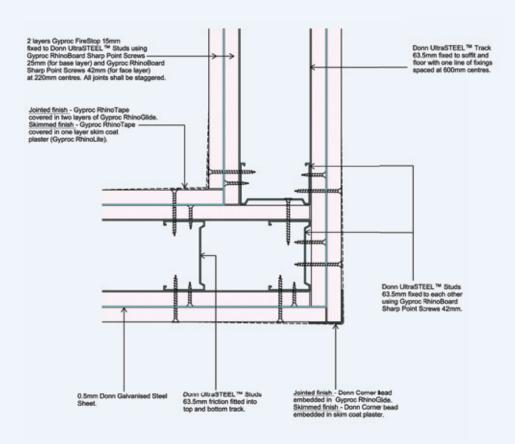
Paint using a good quality oil based plaster primer. Apply paint as required.

## **GypWall Secure 102/F120S58 Illustration**

#### Base detail

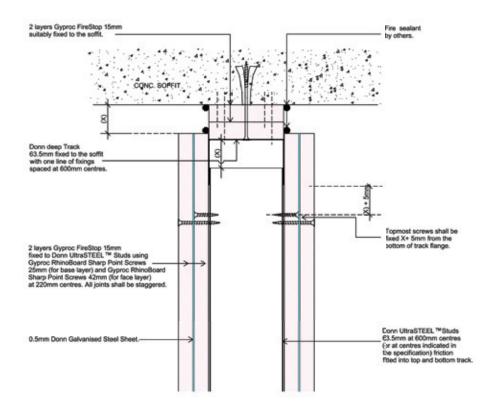


### **Corner detail**

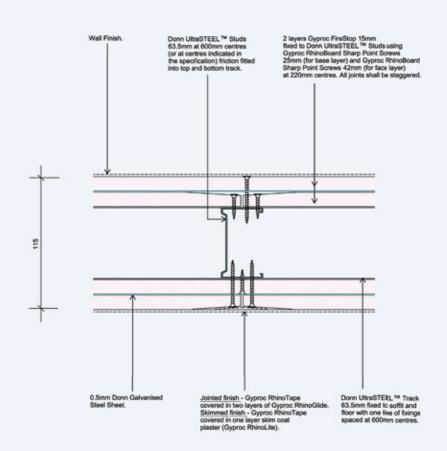


## **GypWall Secure 102/F120S58 Illustration**

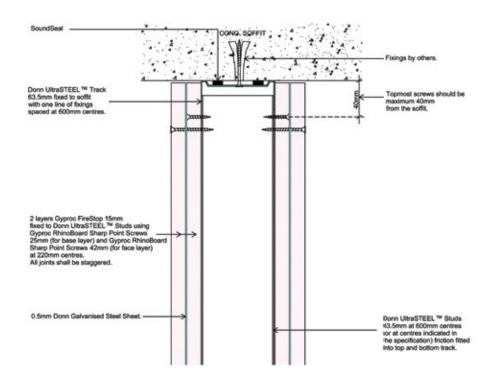
### Head detail



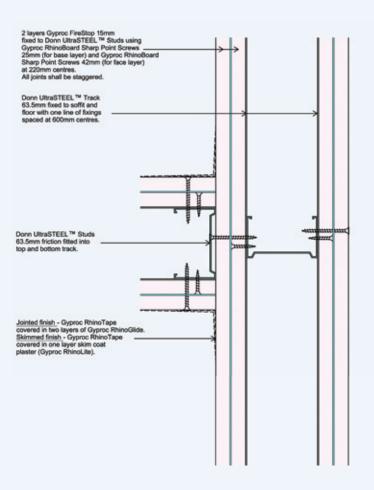
### Layout



#### **Head detail**

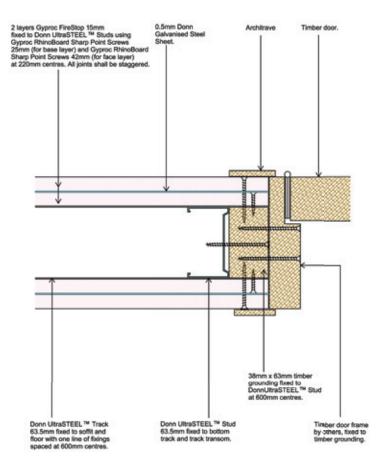


#### T-junction



# **GypWall Secure 102/F120558 Illustration**

### Timber door frame detail





## **Gywall Secure installation guide**



Apply SoundSeal as a continuous application to the perimeter of the framework.  $% \begin{center} \end{center} \begin{center} \begin{center}$ 



Determine and mark wall position and make allowance for openings. Fix Donn UltraSTEEL Track at 600mm centres using suitable fixings.



Measure the wall height and cut stud to size. Install the Donn UltraSTEEL Stud into Donn UltraSTEEL Track.



Twist UltraSTEEL Stud into place.



Ensure the stud is plumb and mark stud position.



Fix the UltraSTEEL stud to the abutting wall at 600mm centres using suitable fixings.



Insert top UltraSTEEL Track into position.



Fasten the top UltraSTEEL Track at 600mm centres.



Insert UltraSTEEL Studs at 600mm centres to a friction fit within the channel sections – this allows for adjustment during boarding. Position the studs so all face the same way.



Install Isover Cavitybatt 63mm between the studs progressively as boarding proceeds. After installation of the Cavitybatt, install Gyproc FireStop 12.5mm onto the framework using Gyproc RhinoBoard Sharp Point Screws 25mm.



After the first layer of FireStop 12.5mm is fixed, proceed to install 0.5mm galvanised steel sheets to the wall.



Fix second layer of FireStop 12.5mm.





After the boarding is complete, apply Gyproc RhinoTape to all joints.



Apply Gyproc Rhino Glide to the joints using a 150mm taping knife.  $% \label{eq:control}$ 



Fill all screw heads and apply a second coat of RhinoGlide using a 300mm steel trowel.



### Saint-Gobain's SpecSure system warranty

Unique to Saint-Gobain Construction Products South Africa, the 10 year system warranty is designed to give you total confidence that the systems you have chosen will meet the most rigorous of building requirements.

All of our systems are developed using the highest quality components designed to work together, and are specifically developed to give you a lifetime of confidence.

SpecSure is more than just a performance warranty. It means that the Saint-Gobain Construction Products SA systems you specify:

- Have a guaranteed 10 year performance.
- Have the technical expertise and experience of the SA's leading construction products specialist behind it.
- Have been tested in accredited fire, acoustic and structural test laboratories.
- Have been site tested to demonstrate installation integrity and simplicity.
- Will be supported at every stage of the project by SA's leading on and off-site technical support personnel.
- Will perform to published parameters if installed in accordance to our specifications.
- Will be repaired or replaced by Saint-Gobain Construction Products South Africa in the unlikely event of system failure attributed to unsatisfactory product/system performance.
- Project Packs offer technical guidance and compliance to the building methodology prescribed which will ensure optimal system performance.

Customer contact centre: **0860 27 28 29 | www.gyproc.co.za** 

