



how to: use one board for **multiple applications**

with MultiPurpose Panel





multipurpose panel

MultiPurpose Panel is a versatile A1 fire rated calcium silicate building board, suitable for use in a wide range of internal and semi-exposed applications.

Siniat MultiPurpose Panel



Size and thickness

2440mm X 1220mm

6mm – Floor and ceiling installations

9mm – Walls and soffit installations

12mm – Wall installations

1220mm X 800mm

6mm – Floor and ceiling installations



MultiPurpose Panel is resistant to the effects of moisture and will not physically deteriorate when used in damp or humid conditions. It can withstand constant temperatures up to 80°C and frequent temperature changes, making it ideal for the following applications.

- Boiler backing.
- Soffit, porch and canopy lining.
- Partitions and ceilings requiring 30mins fire resistance.*
- Stove and fire place linings.¹²³
- Bathrooms, wet rooms and tile backing.

This how to guide will demonstrate the installation methods for the projects detailed above. The general installation guide should be used for all projects which do not include tiles.

1. Maximum operating temperature 80°C. Installations must be in accordance with The Building Regulations 2010 and Combustion appliances and fuel storage.
2. Siniat MultiPurpose Panel must not be used as a fire place protection board to protect combustible materials within the fire zone or used as hearth boards or installed around open fires i.e. open log fires.
3. Stove installations must be as per manufacturers requirements. Increased heat beyond 80°C can potentially lead to problems with Siniat MultiPurpose Panel.

*See appendix for installation guidelines on 30 minute fire resistant partitions (timber and steel partitions).

cutting and fixing

MultiPurpose Panel can be worked with conventional woodworking equipment although the use of hand saws with hardened teeth is recommended.

Boards greater than 6mm in thickness may be more easily cut using a power circular saw in conjunction with tungsten carbide tipped blades, or a jigsaw. For rough cutting, 6mm boards can be deeply scribed and broken over a straight edge.

All cutting should be carried out in well ventilated spaces, using dust extractors. Operators should wear protective face masks.

Fixing

1. Nailing

The most economical method of fastening is to use pneumatic nailing and stapling equipment. Nails can be driven directly through boards without pre-drilling, providing they are at least 12mm from the edge of the board and a minimum of 40mm from the corners, the back face of the board needs to be fully supported. In areas of high humidity galvanised nails should be used.

2. Screw fix

Self drilling or self tapping screws should be used when securing boards to steel with a minimum of 10mm into the metal. High thread screws can be used when securing to timber with a minimum of 25mm of the screw in the timber. Screws should be fixed no less than 12mm from the edge of the boards and 40mm from the corners and countersunk* if required (for best results pre-drill holes).

finishing

Plastering

- MultiPurpose Panel has very high suction and therefore it is generally difficult to apply gypsum plaster. However if a skim coat is desired please follow the guide below.
- Apply self adhesive scrim over all joints and internal angles (paper joint tape is not recommended).
- Apply a sealing coat of diluted PVA (1 part PVA and 5 parts water).
- Sealing coat should be allowed to dry for approximately 24 hours.
- Apply bonding coat (3 parts PVA and 1 part water).
- Apply plaster skim (max. 5mm thick) while the bonding coat is tacky.

The plaster manufacturer's recommendations for skimming onto high suction surfaces should be followed at all times.

Decorative coatings

Surfaces should be dry, free from oil, loose surface layers and dust, if required screw holes and board joints may be filled with a joint filler and sanded accordingly.

Paint

Typically water based paints such as emulsions may be used, with a watered down first coat to seal the surface. Alternatively other paint types may require a proprietary sealer, primer or undercoat depending on the paint system. Priming both sides of the board may be required. Consult with the paint manufacturer for their recommendations.

Wallpaper

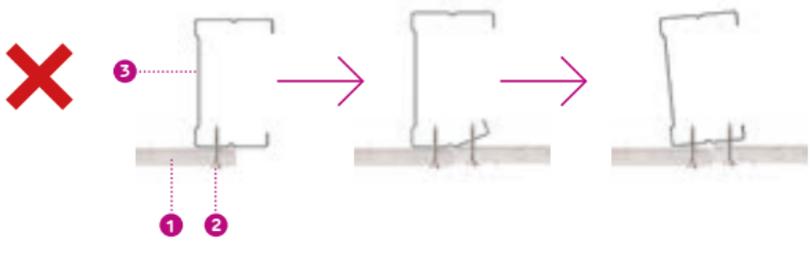
When papering, size the surface to seal against suction and improve slip, then hang papers or vinyls in the normal way.

9mm and 12mm general installation

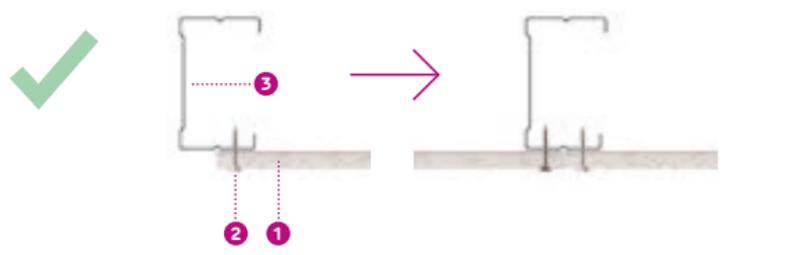
1. Framework

MultiPurpose Panel can be installed either onto timber or metal studs. The studs should be set at a maximum 610mm centres. When fixing to the steel framing always fix to the open side of the flange first, this maintains a flush outside face (see diagram below).

Incorrect sequence of fixing to steel stud



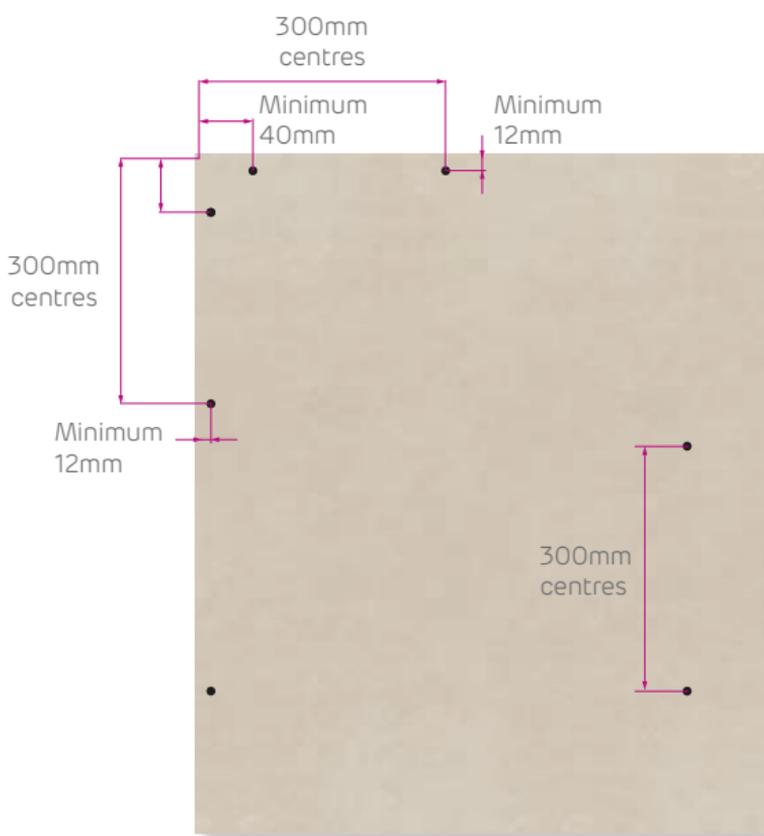
Correct sequence of fixing to steel stud



1. Siniat MultiPurpose Panel of appropriate thickness.
2. Stainless steel or galvanised fixings of appropriate size and length.
3. Siniat GTEC Stud of appropriate thickness and dimensions.

2. Board installation

- a) Use Siniat 25mm Self Drilling Screws when fixing to metal studs, or Siniat 38mm High Thread Screws when fixing to timber studs. The boards require fixing a minimum of 40mm from the corners and 12mm from the edge of the board and at 300mm centres across the remainder of the board.
- b) Ensure the heads of the screws are flush to the board surface.



Screw fixing positions for general installations.

See appendix for installation guidelines on 30 minute fire resistant partitions (timber and steel partitions).

6mm installation for floor tiles

1. Floor type

Ensure the sub-floor is clean and the surface is flat, use a minimum of 15mm WBP plywood or 18mm T&G flooring grade chipboard. Local building regulations should be adhered to and joist spacing should not exceed 400mm centres.

2. Sealing

The boards should be sealed on both faces with PVA or watered down tile adhesive and allowed to dry. This is due to the high suction which in turn can accelerate the setting time of the tile adhesive.

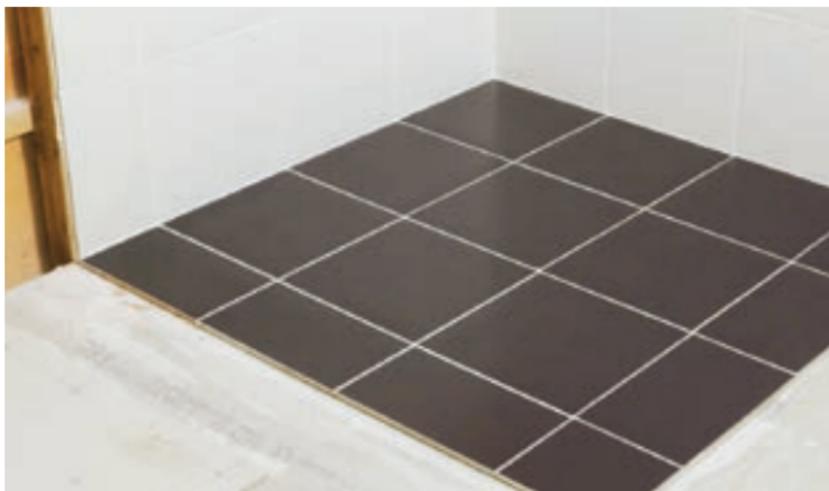
3. Board layout

Stagger the boards as shown below to ensure that no 4 board corners meet and do not align the boards with the sub-floor joints. Ensure the boards are staggered a minimum of 300mm and that a 5mm gap is left between floor and wall edges, and between each board. Ensure all boards are cut to the required size before installation takes place. Laying the boards down to check layout before installation is recommended.



4. Board installation

- a) Apply a complete bed of flexible tile adhesive to the sub-floor. It is advised that the tile adhesive be applied for one board at a time, ensuring an easier installation with limited risk of the adhesive beginning to set whilst applying the boards.
- b) Using Siniat 25mm Self Drilling Wet Area Screws fasten the board in the corners as per the illustration below, then at every 200mm over the entire surface of the board in a grid pattern.
- c) Ensure the heads of the screws are flush to the board surface.



5. Jointing

Apply flexible tile adhesive to all joints and embed Siniat Tile Backer alkaline resistant joint tape. Allow tile adhesive to dry before continuing.

6. Tiling

Apply a complete bed of flexible tile adhesive to the board surface (one board at a time) and lay floor tiles directly on top (as per manufacturers guidelines).

9mm and 12mm installation for wall tiles

1. Framework

MultiPurpose Panel can be installed either onto timber studs minimum 50mm x 50mm or metal studs. The studs should be set at 400mm centres rather than the standard 600mm to take the additional weight of tiles. Maximum tile weight is 30kg/m².

2. Sealing

The boards should be sealed on both faces with PVA or watered down tile adhesive and allowed to dry. This is due to the high suction which in turn can accelerate the setting time of the tile adhesive.

3. Board installation

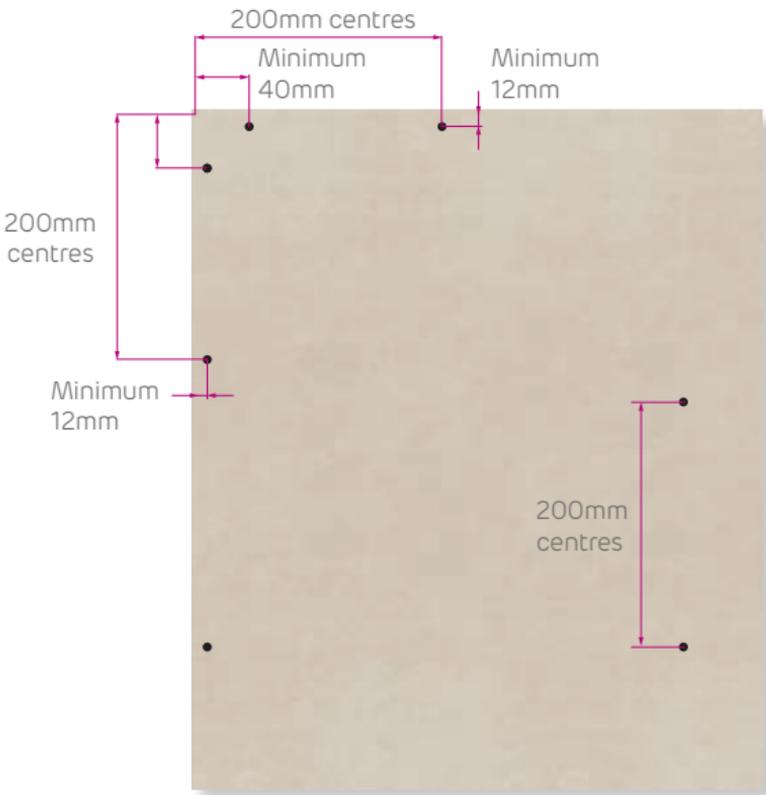
- a) Use Siniat 25mm Self Drilling Wet Area Screws when fixing to metal studs, or Siniat 42mm High Thread Wet Area Screws (when fixing to timber studs). The boards require fixing a minimum of 40mm from the corners and 12mm from the board edges and at 200mm centres across the remainder of the board.
- b) Ensure the heads of the screws are flush with the board surface.
- c) All board joints should be supported.

4. Jointing

Apply flexible tile adhesive to all joints and embed Siniat patching and joint tape. Allow tile adhesive to dry before continuing.

5. Tiling

Apply a complete bed of flexible tile adhesive to the board surface (one board at a time) and lay floor tiles directly on top (as per manufacturers guidelines).



Screw fixing positions for installation for tiles.

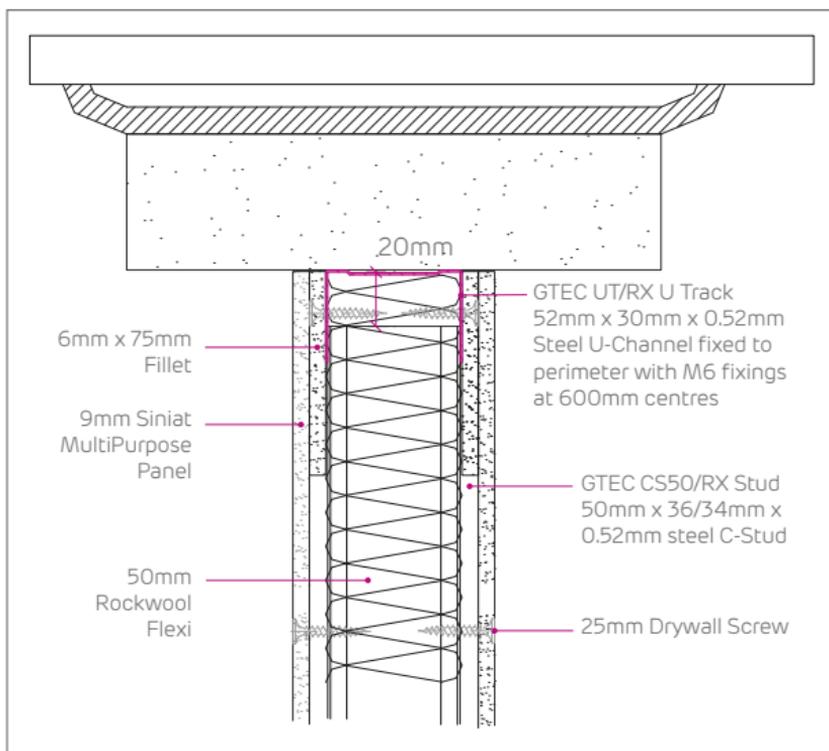
appendix

Installation guidance on 30 minute fire resistant timber and steel partitions.

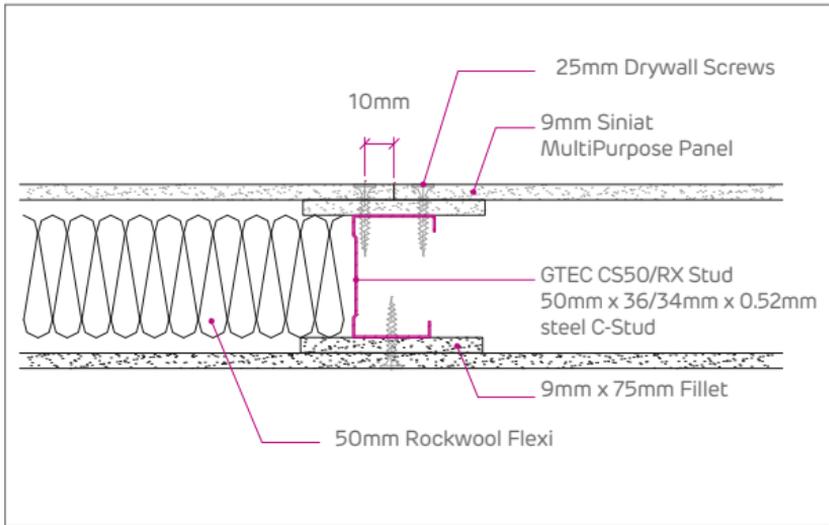
Non load bearing steel stud partition

- Max height 2.7m.
- GTEC CS50/RX studs at 610mm centres and GTEC UT52/RX tracks.
- 9mm thick Siniat MultiPurpose Panel.
- 75mm wide x 9mm thick Siniat MultiPurpose Panel cover strips fixed to studwork on both faces and behind board joints.
- 25mm Drywall screws fixed at 250mm centres.
- 1 layer of 50mm Rockwool Flexi between studs.

Non load bearing steel stud partition



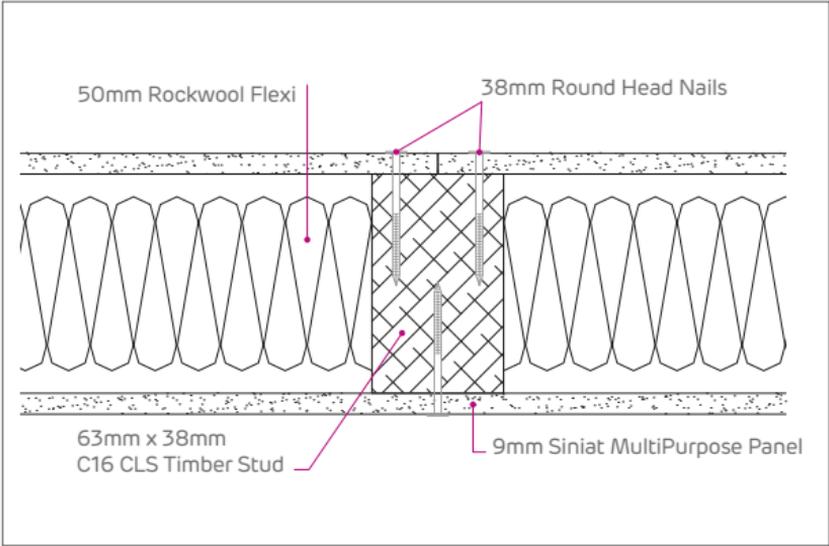
Non load bearing steel stud partition



Non load bearing timber partition

- Max height 4m.
- 63mm x 38mm C16 CLS timber studs at 610mm centres.
- Timber nogging at horizontal board joints.
- 9mm thick Siniat MultiPurpose Panel.
- 38mm x 2.5mm round head nails fixed at 200mm centres.
- 1 layer of 50mm Rockwool Flexi between studs.

Timber frame partitions





Installation tips

For a step-by-step video guide and installation tips check out our Siniat UK YouTube Channel.

youtube.com/siniatukchannel



For advice with installation contact Technical Services at:

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