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how to:
create metal stud
partitions, wall linings
and ceilings

GTEC Frames

KNOWLEDGE direct from the MANUFACTURER

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metal or timber?

When creating stud partitions and wall linings the traditional method of installation has been to use timber.

Modern building methods are changing. Moving from timber to metal, in the commercial sector has been much quicker than in the residential sector. Nearly all installations are now completed using metal. Housing Developers and Renovation Maintenance and Improvement (RMI) installers are also making the change.

The change is due to a number of factors:
— Metal partitions are up to 50% faster to install.
— No noggins are required.
— Higher fire, sound and moisture resistance levels can be achieved.
— Metal is easier to handle, has consistent accurate dimensions and does not warp and twist like timber.

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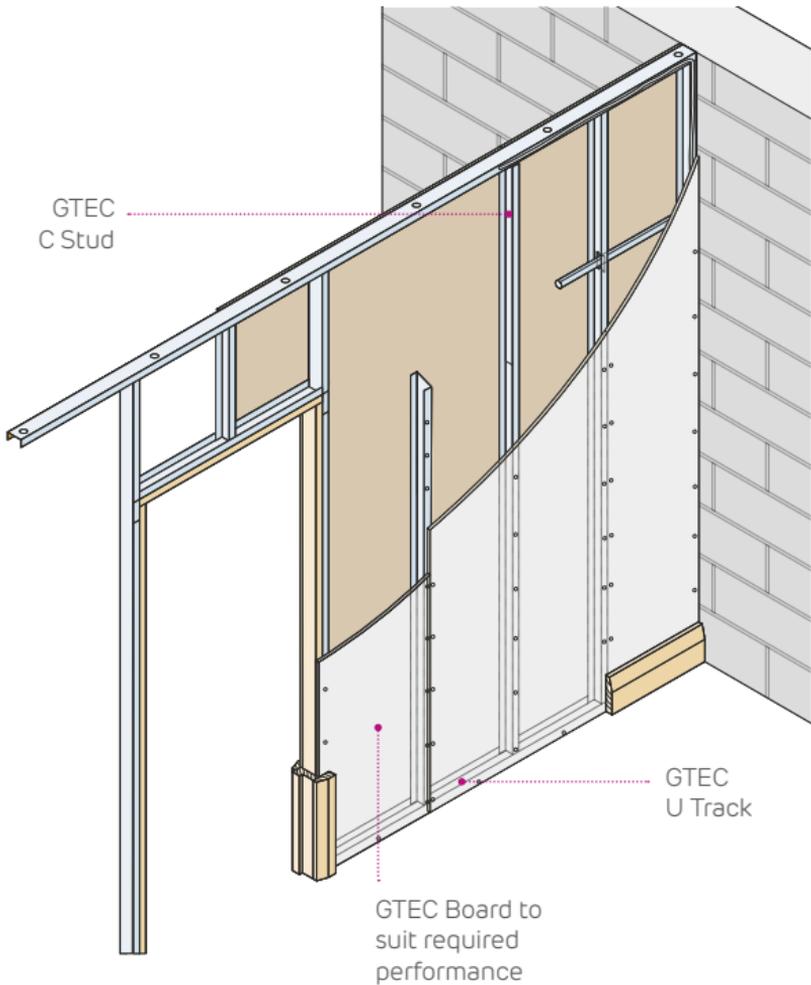
Metal stud partition

Timber stud partition
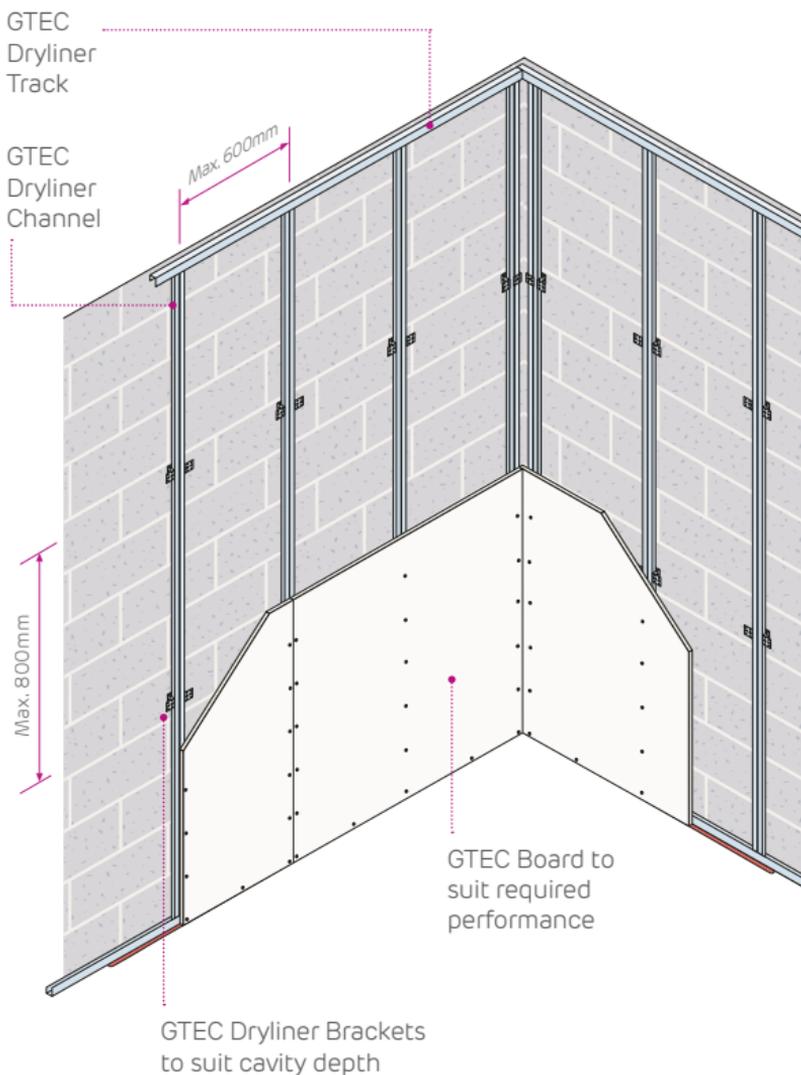
how to install a
metal stud partition

GTEC
C Stud

GTEC
U Track

GTEC Board to
suit required
performance

Installation

1. Fix GTEC U Track to structural or timber ceilings and floors at the desired location, starting at the adjoining wall. Use the GTEC C Studs to assist in aligning ceiling and floor studs if required.

2. Starting at the adjoining wall end cut each GTEC C Stud 5mm shorter in height from the floor to the ceiling and place into the GTEC U track and screw to the wall at 600mm centres using suitable fixings.

3. Cut each of the remaining studs individually leaving each one 5mm short, place studs at approximately 600mm in (400mm if tiling) into the GTEC U Track but do not fix into position so it can be moved during board installation.

4. Starting with half a board cut the board 5mm shorter than the floor to ceiling height. Butt the board firmly against ceiling and wall and fix with GTEC Drywall Self Tapping screws at 300mm centres. Move the unsecured stud to the end of the board allowing room for the next board to be attached.

5. Moving to the other side of the partition install a full board marking the position of the stud and moving the next stud into location at the end of the board. Fix screws at 300mm centres on all 3 studs.

6. Finish boards as per instructions at the back of this guide.
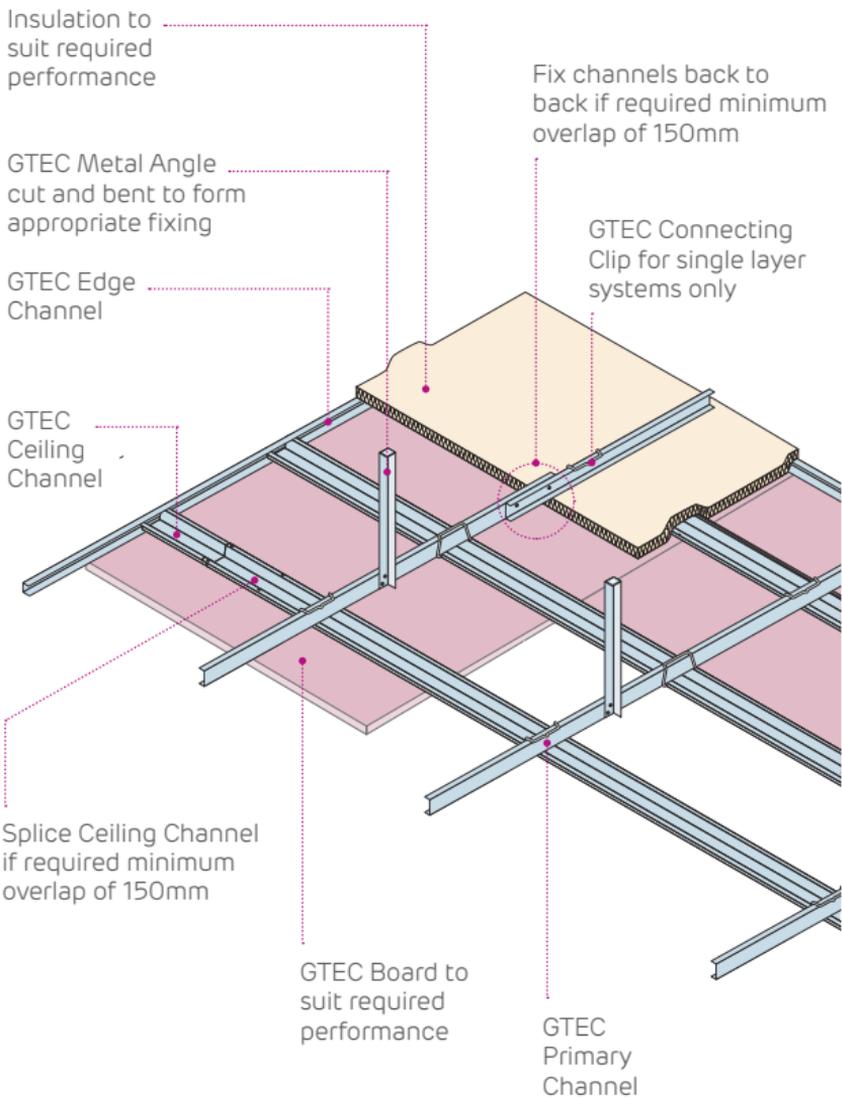
how to install
a wall lining

GTEC
Dryliner
Track

GTEC
Dryliner
Channel

Max. 600mm

Max. 800mm

GTEC Board to
suit required
performance

GTEC Dryliner Brackets
to suit cavity depth

Installation

1. Fix a GTEC Dryliner Track at 600mm centres to the floor and ceiling using suitable fixings. Allow for required cavity of at least 25mm.
2. If applying direct to concrete make sure that the surface is dry and a damp proof membrane has been used. Ensure that the large flange of the dryliner tracks is on the plasterboard side.
3. Mark vertical lines at 600mm horizontal centres to fix the dryliner channels.
4. Start at the centre of the wall and position the dryliner brackets directly to the wall at a maximum 800mm vertical centres on the marked lines (at shoulder and waist height). Secure using suitable fixings.
5. Cut each GTEC Dryliner Channel 3-5mm shorter in height from the floor to the ceiling and place into the dryliner track.
6. Ensure channel is plumb and secure to each bracket using a GTEC Wafer Head screw. Fold out the toothed wings of each bracket to form legs.
7. Cut plasterboard 5mm shorter than the floor to ceiling height. Butt the board firmly against ceiling and fix with GTEC Drywall Self Tapping screws at 300mm centres.
8. Place the plasterboard edges lightly against each other and centre the edges over the channels.
9. Finish boards as per instructions at the back of this guide.

how to install an
mf ceiling

Insulation to suit required performance

Fix channels back to back if required minimum overlap of 150mm

GTEC Metal Angle cut and bent to form appropriate fixing

GTEC Connecting Clip for single layer systems only

GTEC Edge Channel

GTEC Ceiling Channel

Splice Ceiling Channel if required minimum overlap of 150mm

GTEC Board to suit required performance

GTEC Primary Channel

Check out our MF Ceiling **'how to'** video on our dedicated Siniat UK Channel: **youtube.com/siniatukchannel**

Installation

1. Mark a level line around the perimeter of the room at the required height of the ceiling, taking into account the thickness of the board or boards being used.
2. Fix the GTEC Edge Channel above the line around the whole perimeter of the room with suitable fixings at 600mm centres.
3. Install GTEC Metal Angle perpendicular to structural soffits or to the sides of the timber joists with centres at 1200mm along GTEC Primary Channel.

Max. primary channel centres	Maximum loading including system and board weight
600mm	74kg/m^2
900mm	50kg/m^2
1200mm	35kg/m^2

4. Install the GTEC Primary Channel at the required centres across the room (see table above), sitting on the top of the GTEC Edge Channel and screw to the metal angle using GTEC Wafer Head screws.
5. Install GTEC Ceiling Channel at right angle to the GTEC Primary Channels at a maximum of 450mm centres. Slot in to GTEC Edge Channel and fix to the GTEC Primary Channel with GTEC Connecting Clips for single layer boarding or screw in place with GTEC Self Tapping screws for multi layer systems.
6. Install insulation if required, fix the boards at 230mm centres along GTEC Ceiling Channels, and 150mm centres along the ceiling perimeter and cut board edges.

# how to choose the
correct screws

Often the part of installations where people look to cut corners or costs are with screws of the incorrect type, length, quantity and quality.

The screws often are the component which is holding everything together and poor quality or installation can lead to issues in performance and/or safety.

This guide will assist in the correct selection of Siniat screws for your project. The screws are available in various sizes.

Wet Area Screws are available for installation in humid environments such as showers and bathrooms.

Screw types
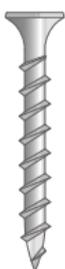
GTEC High Thread Screws
Used for installations into timber. For correct screw length add the thickness of all boards plus a minimum of 25mm of the screw length for fixing into the timber.

GTEC Self Tapping Screws
Used for installations into metal up to 0.7mm gauge, for correct screw length add the thickness of all boards plus a minimum of 10mm of screw length for fixing into the metal.
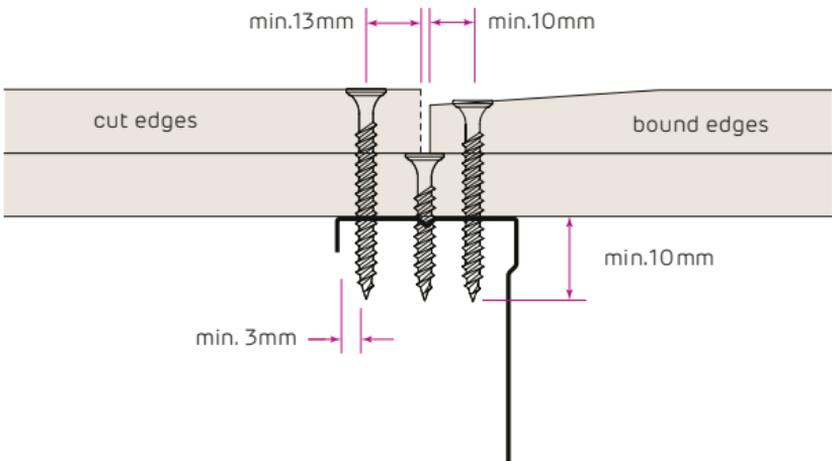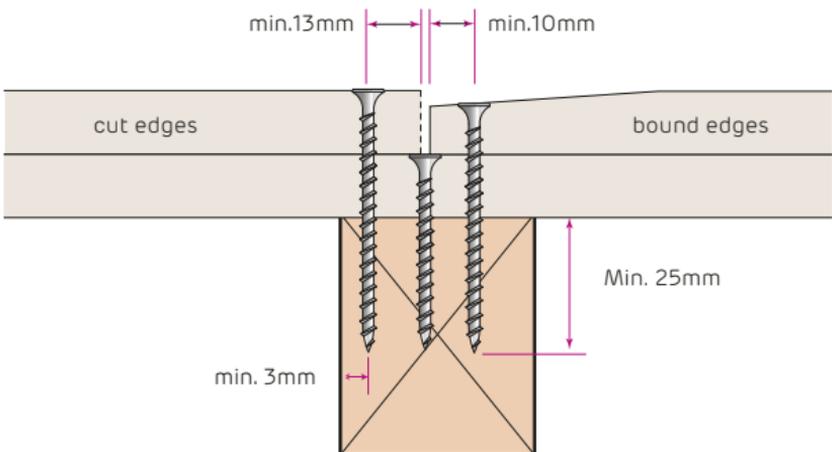
Tapered edge

GTEC Self Drilling Screws

Used for installations into metal between 0.7mm and 2.5mm gauge or joining 2 metal components together. For correct screw length add all the layers being fixed together and then add a minimum of 10mm of the screw into the metal.

Fixing boards to metal framing

min.13mm | min.10mm

cut edges | bound edges

min.10mm

min. 3mm

Fixing boards to timber framing

min.13mm | min.10mm

cut edges | bound edges

Min. 25mm

min. 3mm

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Installation tips
For a step-by-step video guide
and installation tips on using
Metal Frame Systems, check out
our Siniat UK YouTube Channel.

youtube.com/siniatukchannel

For advice with installation
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