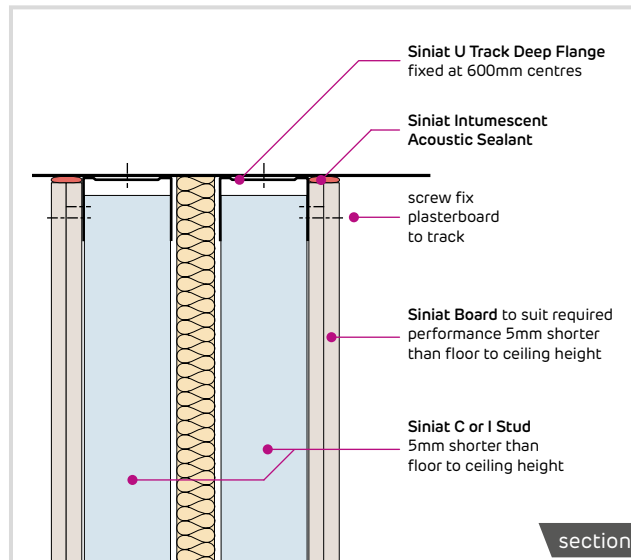


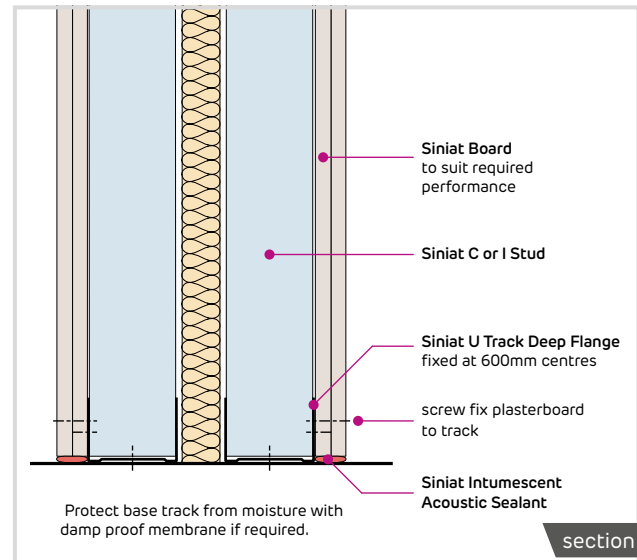
system guidance

Frame

PT-CT-101S-Head – no deflection

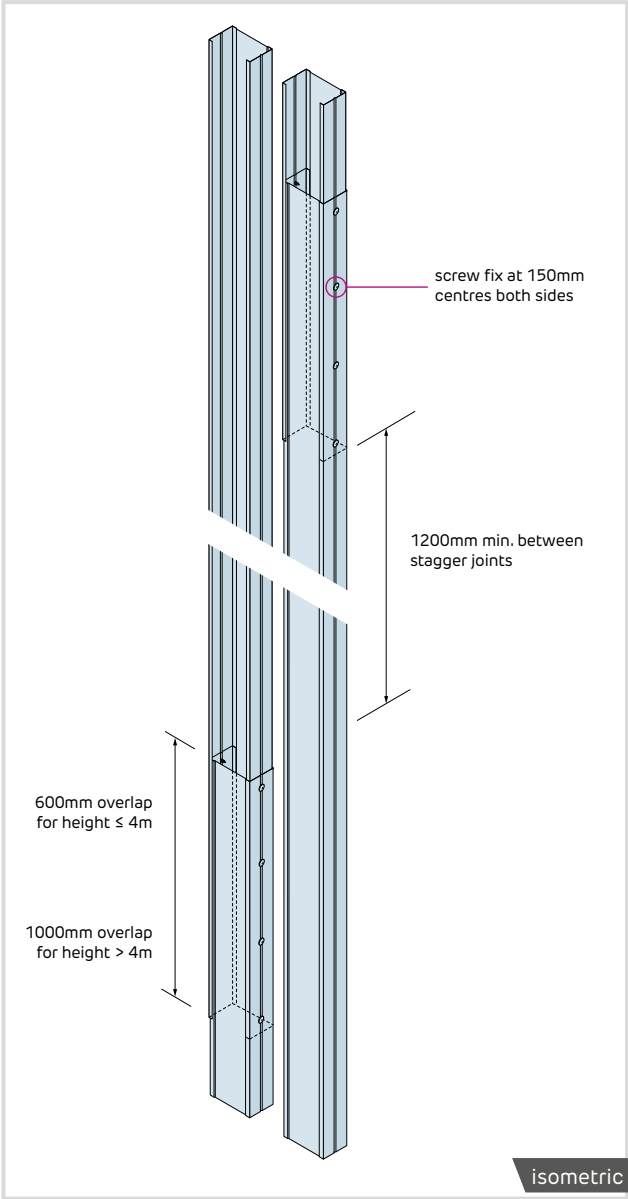


PT-CT-102S-Base

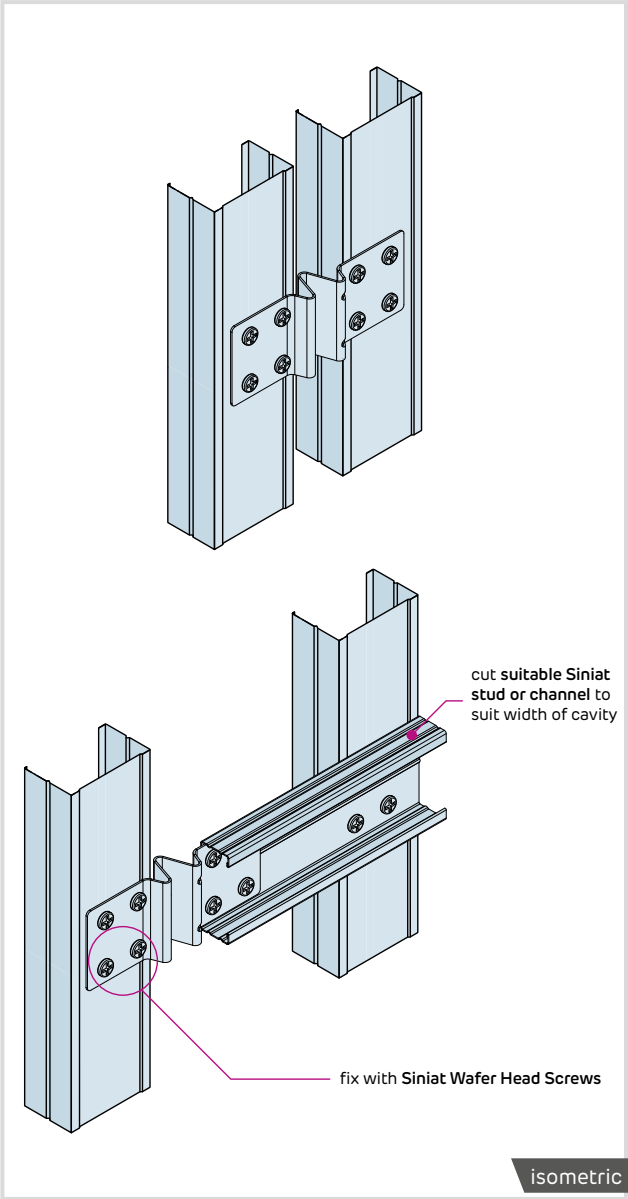


- ▶ Select compatible size (e.g. 50mm stud and 52mm track) Siniat C or I Stud and Siniat U Track framing elements to suit system performance.
- ▶ Siniat U Track deep and Extra deep to be used where deflection allowance is required (see [page 56](#)). Siniat U Track Deep to be used for heights greater than 4.2m or Extra Deep Flange for heights greater than 7.2m and where deflection allowance is required.
- ▶ Siniat Twin Frame partition to be constructed using two parallel track and stud frames braced together (when using C Studs) with Siniat Acoustic V Brace at 1500mm vertical centres, mechanically fixed to both studs with four appropriate Siniat Drywall screws (see [annex d: screw selection guide](#)).
- ▶ Separate parallel frames as required by system performance. Where frame separation is wider than Siniat Acoustic V Brace extend with additional length of suitable Siniat stud or channel.
- ▶ C Studs abutting structure to be fixed with web flat to structure using appropriate fixings at maximum 600mm centres and fixed to head and track with appropriate Siniat Drywall Screws (see [annex d: screw selection guide](#)).
- ▶ Siniat U Track to be fixed flat to structure using appropriate fixings at maximum 600mm centres.
- ▶ Protect base track from moisture with damp proof membrane when situated on newly laid concrete floors.
- ▶ All Siniat Studs to be 5mm shorter than floor to ceiling height or as dictated by the deflection allowance (see [page 56](#)).
- ▶ Intermediate Siniat Studs, facing in same direction, to be friction fitted to allow for adjustment during boarding.
- ▶ Siniat Studs to be at centres required to achieve performance and at a maximum of 600mm centres.
- ▶ Where wall height exceeds available Siniat C Stud length splice two lengths together ensuring overlap of 600mm for heights below 4m and 1000mm for heights above 4m.
- ▶ Acoustic break in slab for party walls may be required.

PT-CT-104M-C Stud splice

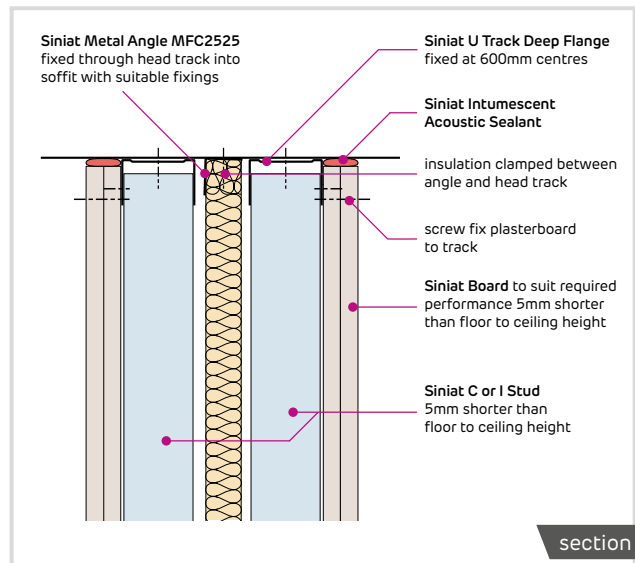


PT-CT-105M-V-brace fixing and extensions



Insulation

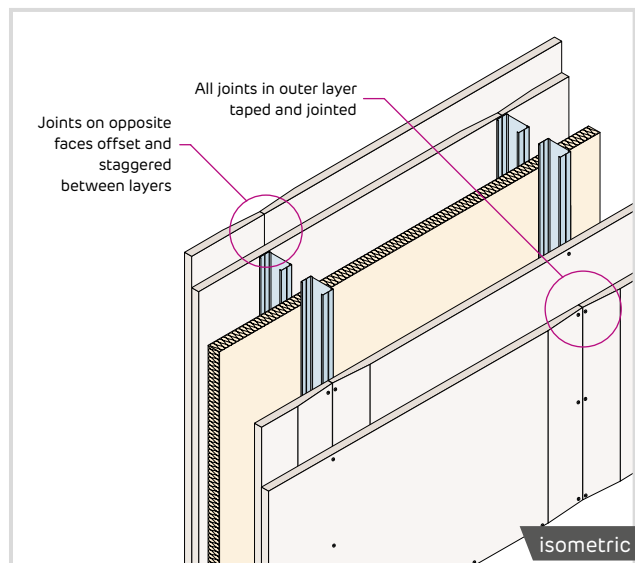
PT-CT-151M-Insulation fixing method



- Insulation, if required, to be of type and thickness to achieve performance and installed in a continuous layer between studs.
- Insulation to be clamped between Siniat Metal Angle fixed through to head track or soffit using suitable fixings. (Two fixings per 600mm strip, approx. 300mm apart.)

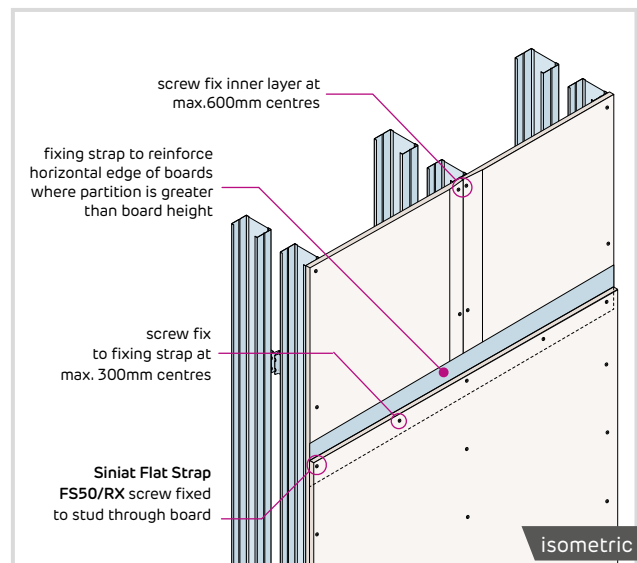
Boarding

PT-CT-201M-Board fixing – double layer



- Siniat Twin Frame partition system is suitable for single, double and multiple layer boarding.
- Select base layer(s) and finishing layer(s) Siniat Boards by consulting System Tables ([pages 7 to 29](#)) and for product specification (see [annex b: product reference](#)) to achieve required performance.
- Boards to be 5mm less than floor to ceiling height except in case of deflection requirement, see below.
- Strips of board 300mm wide or less to be avoided by stud location rearrangement.

PT-CT-202M-Horizontal joint reinforcement



- Boards to be mechanically fixed to studs at 300mm centres using appropriate Siniat Drywall Screws (see [annex d: screw selection guide](#)).
- Base layers of boarding may be temporarily fixed at 600mm centres providing final layer is fixed through to stud at 300mm centres.
- Board edges to be centred over studs.
- Stagger all horizontal and vertical board joints between layers by a minimum of 300mm.
- Stagger all horizontal and vertical board joints on opposing sides of partition.

Over-height single layer boarding:

- ▶ Where partition height exceeds board height fix boards to continuous band of Siniat Flat Strap FS90/W to be installed behind all horizontal joints to maintain fire integrity.

Over-height multiple layer boarding:

- ▶ Where partition height exceeds board height for double or multiple layer boarding fix outer layer of boards to continuous band of Siniat Flat Strap FS50/RX to be installed behind outer horizontal joints between inner and outer layer of board.

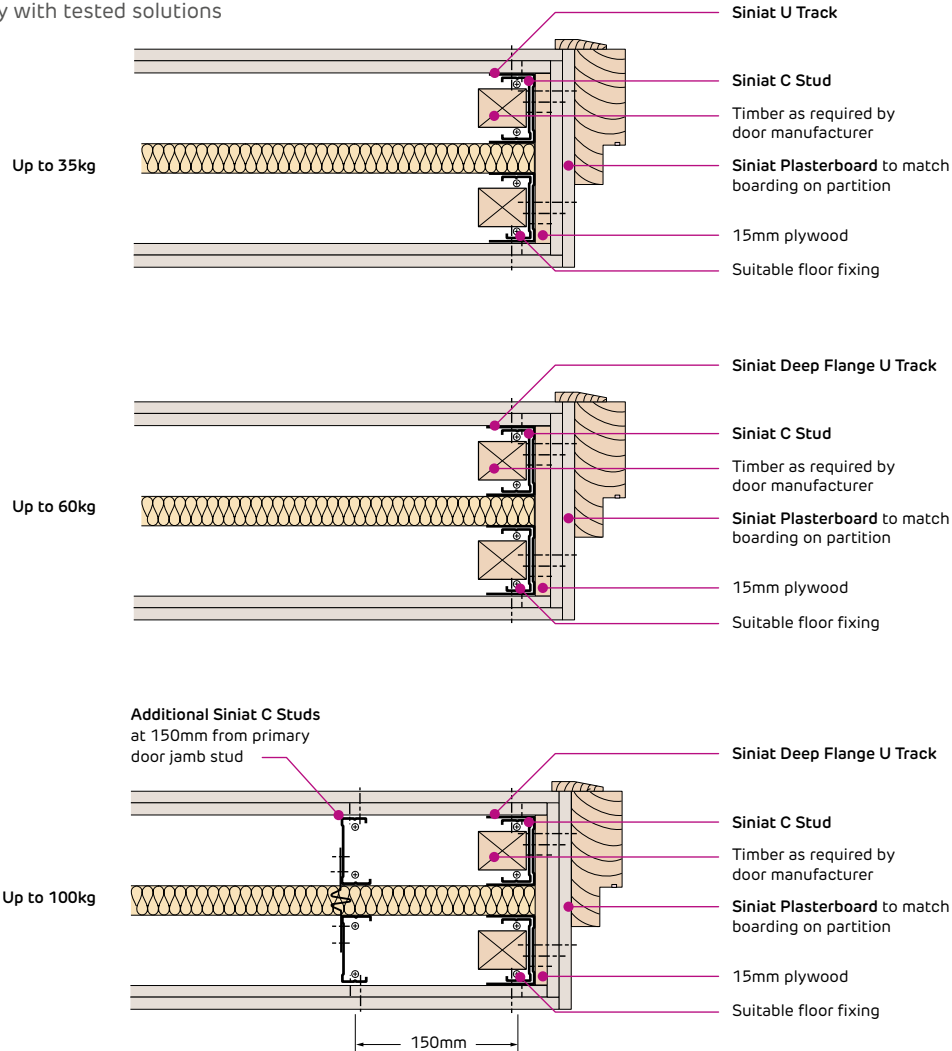
Movement control joints

- ▶ Form movement control joints in uninterrupted partition runs at maximum 10m intervals in the partition run.
- ▶ Form movement control joints where the partition crosses a structural movement joint.

Openings

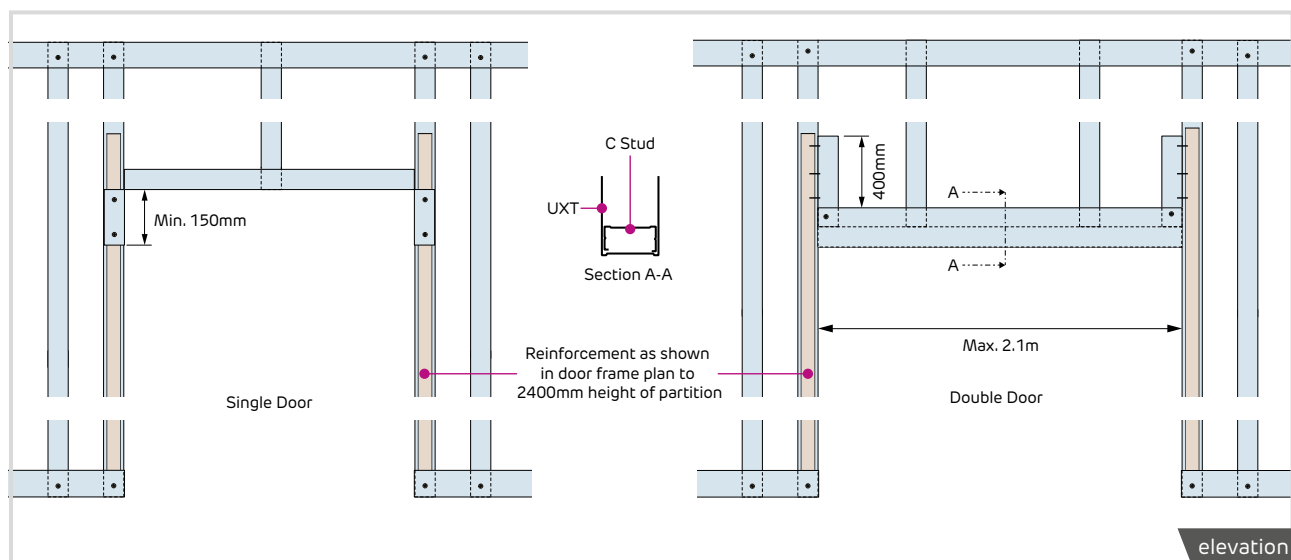
PT-CT-401P-Door frames – 35kg to 100kg door loads

Consult doorset supplier to ensure details comply with tested solutions



plan

PT-CT-403E-Single and double door frames

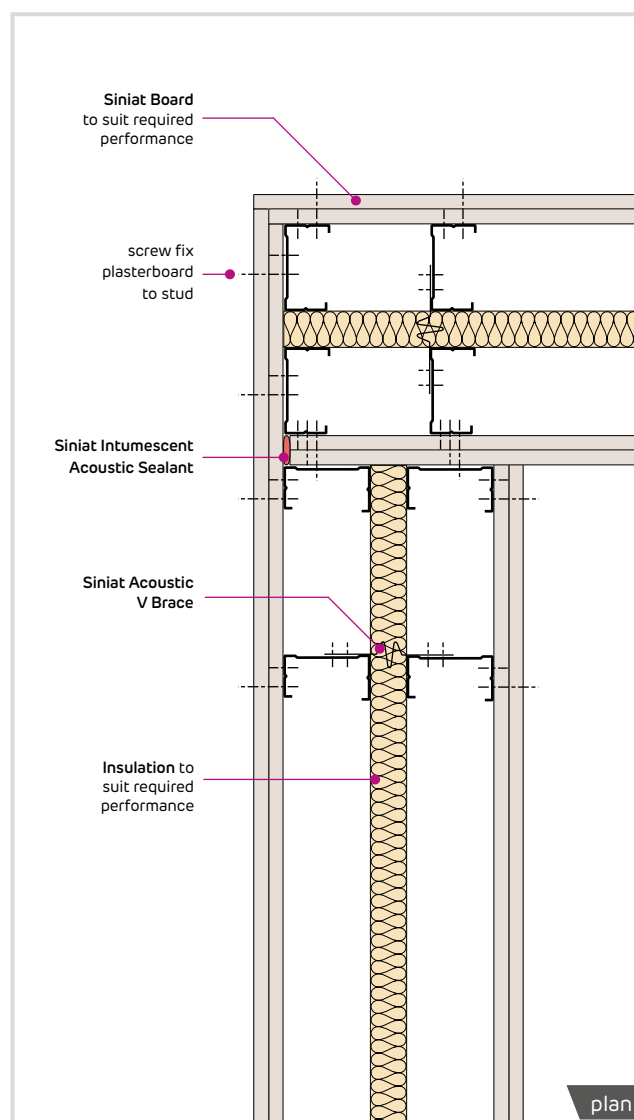


elevation

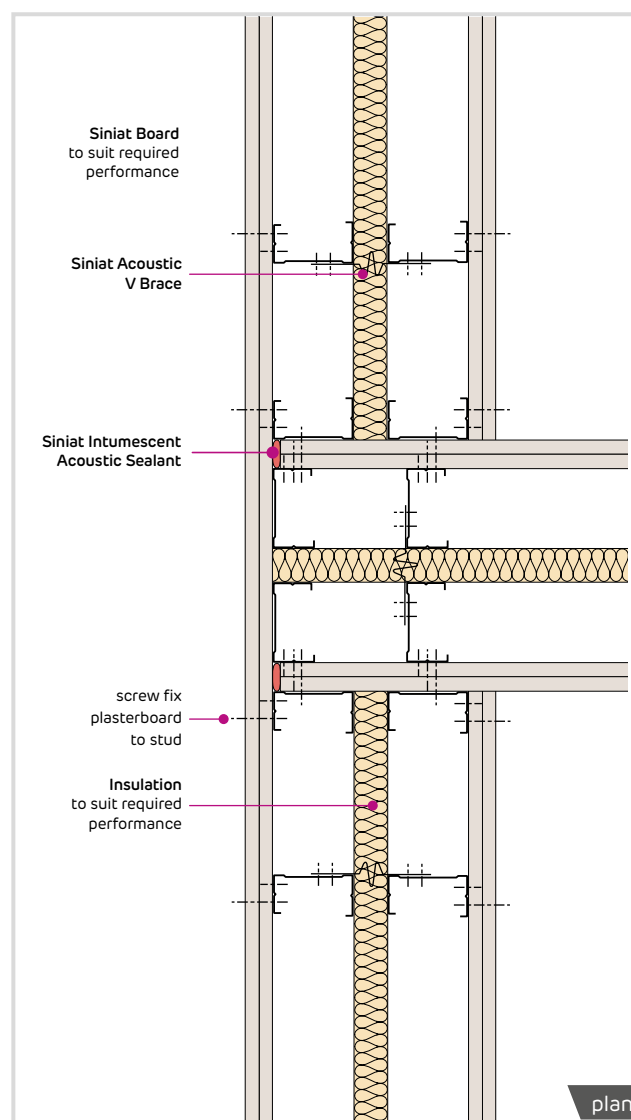
- ▶ Form openings following guidance in Construction Detail Drawings to suit door weights.
- ▶ Reinforce head-to-jamb junction 150mm down each jamb stud by cutting and folding head track.
- ▶ Reinforce jamb studs with timber as described in Construction Detail Drawings.
- ▶ Jamb studs to be fixed to track with appropriate Siniat Drywall Screws (see [annex d: screw selection guide](#)).
- ▶ Consult doorset manufacturer for any additional requirements to allow the installation of the doorset.

Corners and junctions

PT-CT-501P-Corner detail, double layer

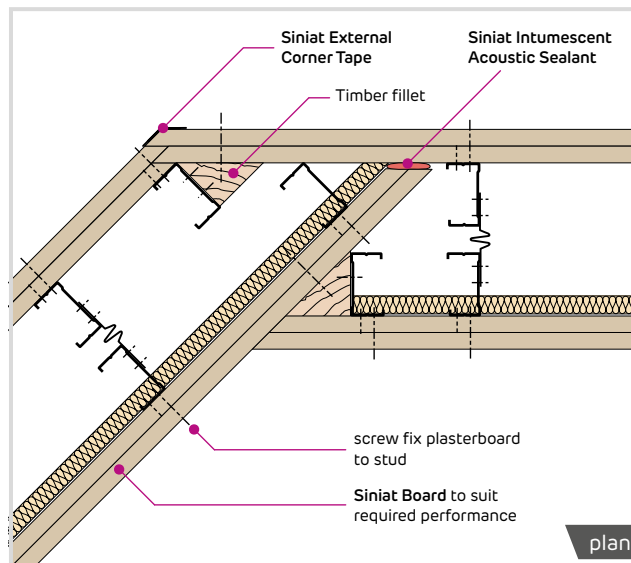


PT-CT-502P-Acoustic T-junctions, double layer

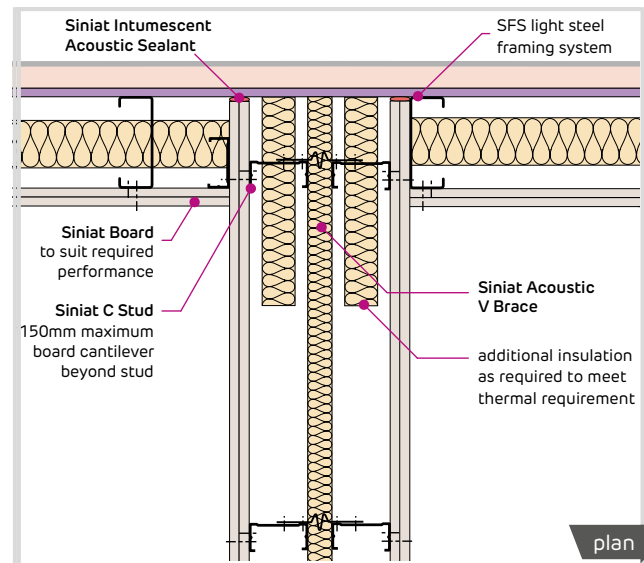


Corners and junctions continued

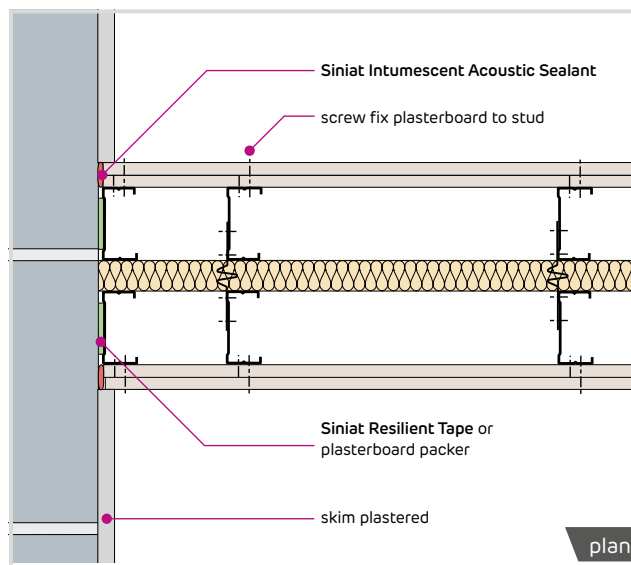
PT-CT-503P-Splayed corners



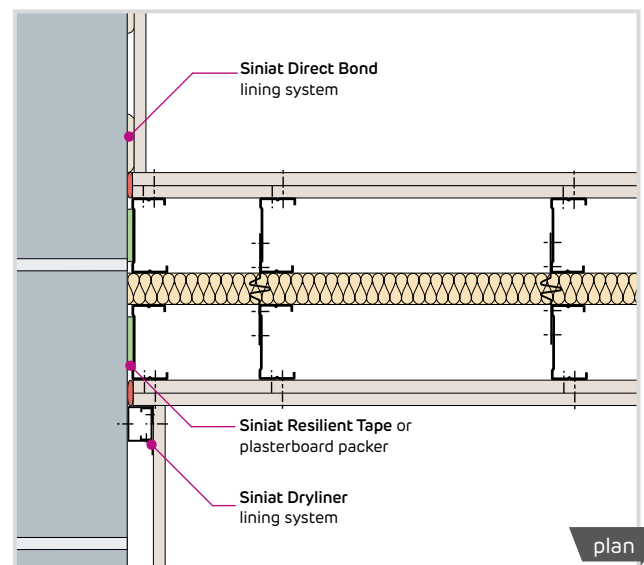
PT-CT-507P-Junction with external SFS wall, acoustic rated



PT-CT-505P-Junction with Masonry – Plastered



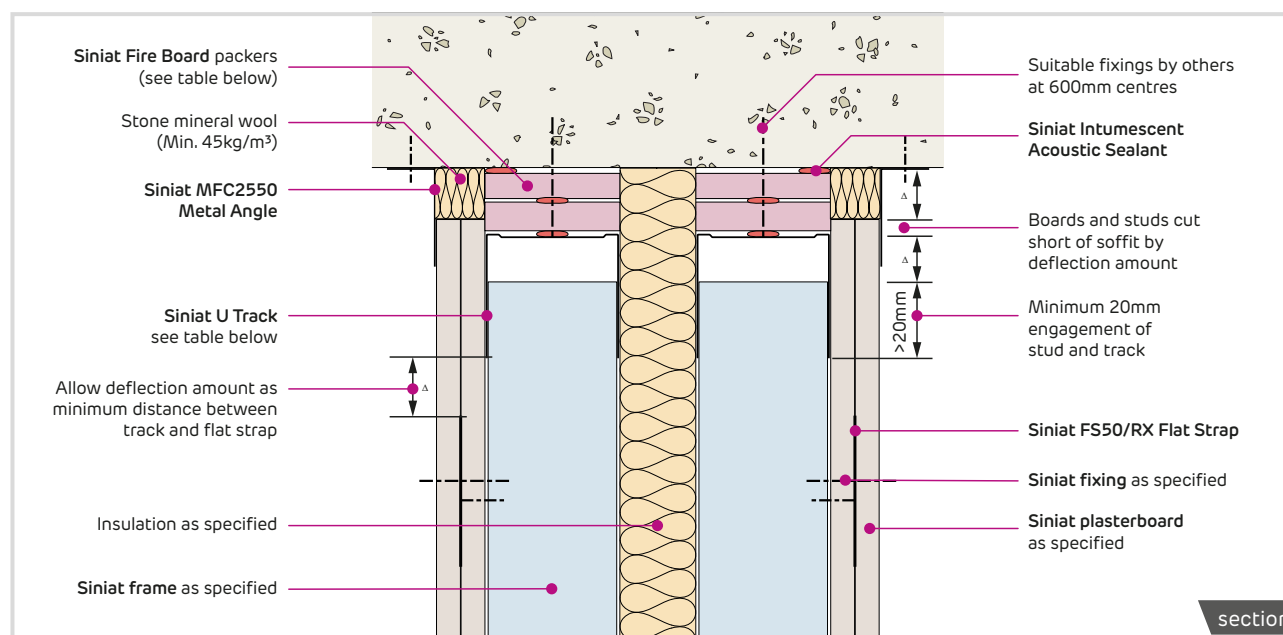
PT-CT-506P-Junction with Masonry – Dryliner & Direct Bond



- ▶ Abutting partitions to coincide with studs, install additional intermediate 'pick-up' stud if required.
- ▶ Connect studs through plasterboards at corners and junctions at 600mm vertical centres using appropriate Siniat Drywall Screws.
- ▶ See Construction Details Drawings for further guidance on arrangement and fixing.

Head deflection

EN Deflection head for up to 120 mins rated partitions

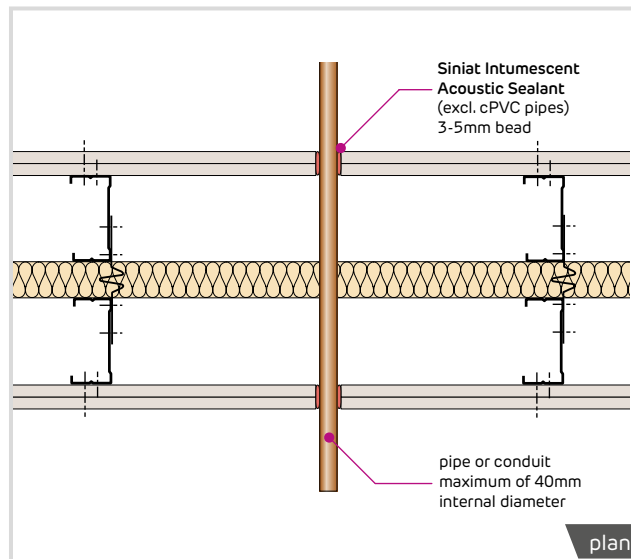


Deflection required	Packer for all fire ratings	Track for all fire ratings	30 - 120 mins
6-10mm	15mm Siniat Fire Board	Siniat U Track (UT)	Siniat MFC2550 and Stone Mineral Wool (Min. 45kg/m³)
11-20mm	2x 12.5mm Siniat Fire Board	Siniat Deep Flange U Track (UDT)	Siniat MFC2550 and Stone Mineral Wool (Min. 45kg/m³)
21-25mm	2x 15mm Siniat Fire Board	Siniat Deep Flange U Track (UDT)	Siniat MFC2550 and Stone Mineral Wool (Min. 45kg/m³)
26-30mm	3x 12.5mm Siniat Fire Board	Siniat Deep Flange U Track (UDT)	Siniat MFC2550 and Stone Mineral Wool (Min. 45kg/m³)
31-40mm	3x 15mm Siniat Fire Board	Siniat Extra Deep Flange U Track (UXT)	Siniat MFC2550 and Stone Mineral Wool (Min. 45kg/m³)

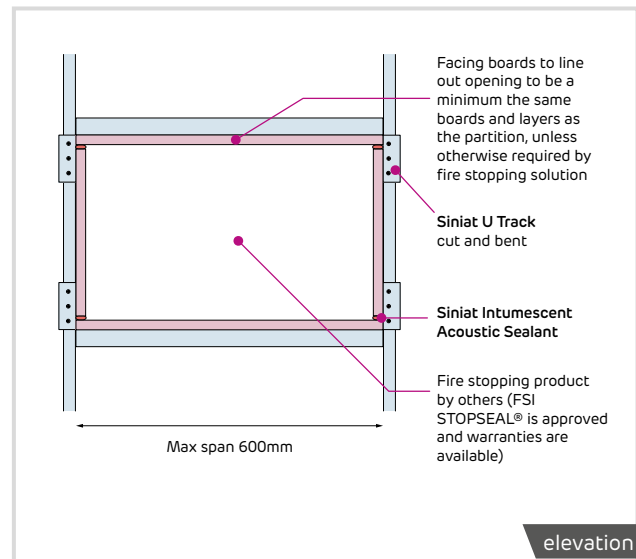
- ▶ See Construction Detail Drawings and Tables for full details. Contact Siniat Technical Services for further information.
- ▶ Continuity of head packer to be maintained.
- ▶ No mechanical connection to be made between stud and head track.
- ▶ All air paths to be sealed with Siniat Intumescent Acoustic Sealant.
- ▶ Siniat Studs to be cut short of track by deflection amount.
- ▶ Siniat Studs and Tracks to overlap by minimum 30mm.
- ▶ Siniat Boards to be cut short of partition height by deflection amount.
- ▶ Siniat Boards to overlap packer by minimum of 5mm.

Penetrations

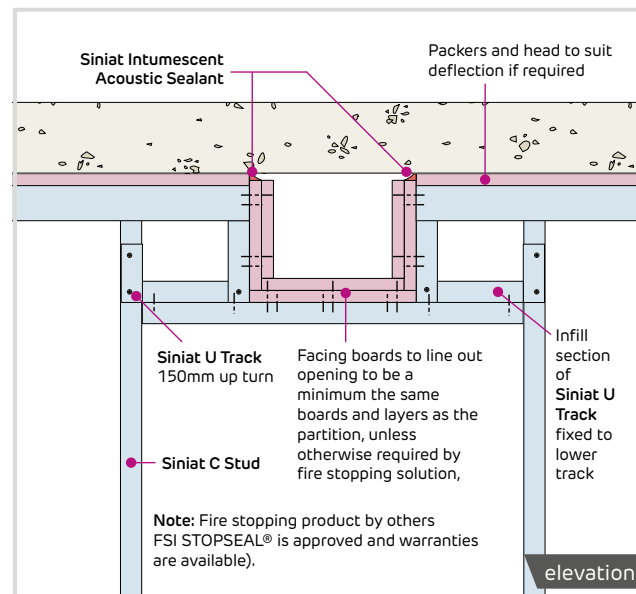
PT-CT-701P-Small diameter pipe penetration



PT-CS-702E-Service penetration detail



PT-CS-703M-Cable tray penetration at soffit



- ▶ M&E runs and other penetrating services to be pre-planned to minimise or eliminate penetrations through rated partitions.
- ▶ Penetrations should not coincide with door jamb studs.
- ▶ Pipe penetrations of 40mm or less may be sealed with Siniat Intumescent Acoustic Sealant. (For cPVC pipes use Promat HPEX Sealant)
- ▶ Protect all electrical cables in cavity with conduit.
- ▶ Details shown are typical supporting constructions for proprietary fire-stopping products, seek further advice from fire-stopping product supplier.
- ▶ All dampers must be independently supported with no load to be taken by the partition. Consult damper manufacturer for tested details.

Fixtures

- Consult fixture details in Siniat C Stud Section ([pages 33 to 34](#)) for recommended fixture provision.

Finishing

- All board joints to be taped, jointed or finished according to guidance see [annex a1: taping and jointing](#) to achieve system performances.
- Siniat Finish materials appropriate to board type to be used.

System continuity

- Bead of Siniat Intumescent Acoustic Sealant to be applied to perimeter of all runs and in all other locations specified in Construction Detail Drawings.
- Siniat Intumescent Acoustic Sealant to seal all other acoustic or air paths to prevent fire/smoke spread and acoustic transmission.
- Full, imperforate system continuity to be maintained to achieve rated performances.



FSi DEVELOP
MANUFACTURE
PROTECT
FIRE STOPPING & COMPARTMENTATION SYSTEMS

FSi fire-stopping products are approved for use with Siniat systems and combined warranties are available.