siniat

drywall manual

shaftwall section

version **1.1.0**

publication date: July 2022

etex inspiring ways of living

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Shaftwall section
This section includes updated information, added since it was first published in December 2018.

Revision history

Version	Date of publication
1.0.0	December 2018
1.1.0	July 2022: Technical content updated, rebranded and compiled as a separate section

Please check that this is the current version by visiting the Siniat website. For archived versions please contact technical services.

shaftwall systems

GTEC Shaftwall range uses a specially designed system to protect voids and shafts in buildings. It resists pressure changes and enables installation from one side of the shaft only.

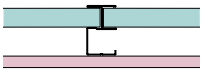
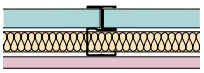
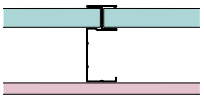
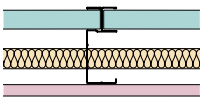
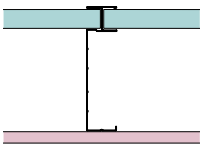
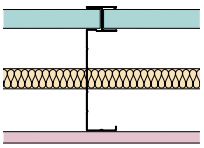
Version: **1.1.0**
Published: **July 2022**

System performance tables

System performance tables

GTEC shaftwall systems

60 minutes fire resistance to BS 476:22 (when exposed from corridor side fire insulation performance is reduced to 30 minutes)*

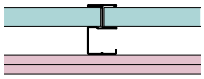
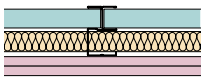
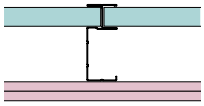
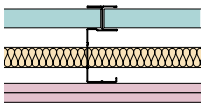
System Ref.	Component	System Weight (kg/m²)	Max Height (m)	Max Height Back-to-Back GTEC E Studs (m)	Nominal Thickness (mm)	Fire Perf. BS476-22 BS EN 1364-1 (mins)	Strength Duty Rating to BS 5234	Acoustic Perf. R_W dB (C_{tr} where applicable)
RNS 102								
	**Facing:** 1x 15mm GTEC Fire Board **Studs:** GTEC CHS1960B CH-Studs at 600mm centres **Core:** 1x 19mm GTEC Fire Core Board **Insulation:** –	30	4.5	2x ES1960B 4.9	75	60* —	Heavy	38
RNS 106								
	**Facing:** 1x 15mm GTEC Fire Board **Studs:** GTEC CHS1960B CH-Studs at 600mm centres **Core:** 1x 19mm GTEC Fire Core Board **Insulation:** 25mm 16kg/m³ glass mineral wool	31	4.5	2x ES1960B 4.9	75	60* —	Heavy	43
RNS 203								
	**Facing:** 1x 15mm GTEC Fire Board **Studs:** GTEC CHS1990B CH-Studs at 600mm centres **Core:** 1x 19mm GTEC Fire Core Board **Insulation:** –	30	5.0	2x ES1990B 5.5	105	60* —	Heavy	39
RNS 208								
	**Facing:** 1x 15mm GTEC Fire Board **Studs:** GTEC CHS1990B CH-Studs at 600mm centres **Core:** 1x 19mm GTEC Fire Core Board **Insulation:** 25mm 16kg/m³ glass mineral wool	31	5.0	2x ES1990B 5.5	105	60* —	Heavy	44
RNS 310								
	**Facing:** 1x 15mm GTEC Fire Board **Studs:** GTEC CHS19146B CH-Studs at 600mm centres **Core:** 1x 19mm GTEC Fire Core Board **Insulation:** –	31	6.4	2x ES19146B 6.7	161	60* —	Heavy	42
RNS 311								
	**Facing:** 1x 15mm GTEC Fire Board **Studs:** GTEC CHS19146B CH-Studs at 600mm centres **Core:** 1x 19mm GTEC Fire Core Board **Insulation:** 25mm 16kg/m³ glass mineral wool	32	6.4	2x ES19146B 6.7	161	60* —	Heavy	46

*Fire ratings quoted in accordance with BS 476: Part 22: 1987 (Integrity Only). The temperature of the exposed flange may exceed the requirements of BS 476: Part 22: 1987 within the quoted fire test period. Relaxation should be sought from the approving Authority on the basis that no combustible materials are likely to be stored adjacent to the structure where the full insulation period is required.

The maximum lining height may vary from the quoted values if the fire resistance of the system is specified according to BS EN 1364-1.

GTEC shaftwall systems continued

90 minutes fire resistance to BS 476:22
(when exposed from corridor side fire insulation performance is reduced to 60 minutes)*
60 minutes fire resistance to EN 1364-1
(60 minutes integrity / 60 minutes insulation both directions separately)

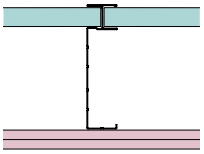
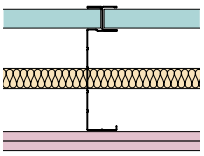
System Ref.	Component	System Weight (kg/m²)	Max Height (m)	Max Height Back-to-Back GTEC E Studs (m)	Nominal Thickness (mm)	Fire Perf. BS476-22 BS EN 1364-1 (mins)	Strength Duty Rating to BS 5234	Acoustic Perf. R_W dB (C_{tr} where applicable)
RNS 103								
	**Facing Inner Layer(s):** 1x 12.5mm GTEC Fire Board **Facing Outer Layer(s):** 1x 12.5mm GTEC Fire Board **Studs:** GTEC CHS1960B CH-Studs at 600mm centres **Core:** 1x 19mm GTEC Fire Core Board **Insulation:** –	34	4.8	2x ES1960B 5.2	85	90* EI 60	Severe	41
RNS 104								
	**Facing Inner Layer(s):** 1x 12.5mm GTEC Fire Board **Facing Outer Layer(s):** 1x 12.5mm GTEC Fire Board **Studs:** GTEC CHS1960B CH-Studs at 600mm centres **Core:** 1x 19mm GTEC Fire Core Board **Insulation:** 25mm 16kg/m³ glass mineral wool	35	4.8	2x ES1960B 5.2	85	90* EI 60	Severe	47
RNS 205								
	**Facing Inner Layer(s):** 1x 12.5mm GTEC Fire Board **Facing Outer Layer(s):** 1x 12.5mm GTEC Fire Board **Studs:** GTEC CHS1990B CH-Studs at 600mm centres **Core:** 1x 19mm GTEC Fire Core Board **Insulation:** –	36	5.3	2x ES1990B 5.8	115	90* EI 60	Severe	42
RNS 207								
	**Facing Inner Layer(s):** 1x 12.5mm GTEC Fire Board **Facing Outer Layer(s):** 1x 12.5mm GTEC Fire Board **Studs:** GTEC CHS1990B CH-Studs at 600mm centres **Core:** 1x 19mm GTEC Fire Core Board **Insulation:** 25mm 16kg/m³ glass mineral wool	37	5.3	2x ES1990B 5.8	115	90* EI 60	Severe	48

*Fire ratings quoted in accordance with BS 476: Part 22: 1987 (Integrity Only). The temperature of the exposed flange may exceed the requirements of BS 476: Part 22: 1987 within the quoted fire test period. Relaxation should be sought from the approving Authority on the basis that no combustible materials are likely to be stored adjacent to the structure where the full insulation period is required.

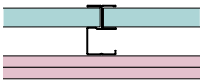
The maximum lining height may vary from the quoted values if the fire resistance of the system is specified according to BS EN 1364-1.

GTEC shaftwall systems continued

90 minutes fire resistance to BS 476:22
(when exposed from corridor side fire insulation performance is reduced to 60 minutes)*
60 minutes fire resistance to EN 1364-1
(60 minutes integrity / 60 minutes insulation both directions separately)

System Ref.	Component	System Weight (kg/m²)	Max Height (m)	Max Height Back-to-Back GTEC E Studs (m)	Nominal Thickness (mm)	Fire Perf. BS476-22 BS EN 1364-1 (mins)	Strength Duty Rating to BS 5234	Acoustic Perf. R_W dB (C_{tr} where applicable)
RNS 301								
	**Facing Inner Layer(s):** 1x 12.5mm GTEC Fire Board **Facing Outer Layer(s):** 1x 12.5mm GTEC Fire Board **Studs:** GTEC CHS19146B CH-Studs at 600mm centres **Core:** 1x 19mm GTEC Fire Core Board **Insulation:** –	37	6.7	2x ES19146B 7.0	171	90* EI 60	Severe	44
RNS 302								
	**Facing Inner Layer(s):** 1x 12.5mm GTEC Fire Board **Facing Outer Layer(s):** 1x 12.5mm GTEC Fire Board **Studs:** GTEC CHS19146B CH-Studs at 600mm centres **Core:** 1x 19mm GTEC Fire Core Board **Insulation:** 25mm 16kg/m³ glass mineral wool	38	6.7	2x ES19146B 7.0	171	90* EI 60	Severe	49

120 minutes fire resistance to BS 476:22
(when exposed from corridor side fire insulation performance is reduced to 90 minutes)*
90 minutes fire resistance to EN 1364-1
(90 minutes integrity / 90 minutes insulation both directions separately)

System Ref.	Component	System Weight (kg/m²)	Max Height (m)	Max Height Back-to-Back GTEC E Studs (m)	Nominal Thickness (mm)	Fire Perf. BS476-22 BS EN 1364-1 (mins)	Strength Duty Rating to BS 5234	Acoustic Perf. R_W dB (C_{tr} where applicable)
RNS 109								
	**Facing Inner Layer(s):** 1x 15mm GTEC Fire Board **Facing Outer Layer(s):** 1x 15mm GTEC Fire Board **Studs:** GTEC CHS1960B CH-Studs at 600mm centres **Core:** 1x 19mm GTEC Fire Core Board **Insulation:** –	38	5.1	2x ES1960B 5.5	90	120* EI 90	Severe	42

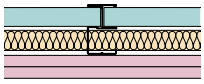
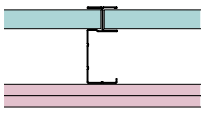
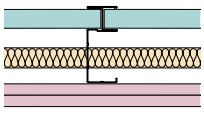
*Fire ratings quoted in accordance with BS 476: Part 22: 1987 (Integrity Only). The temperature of the exposed flange may exceed the requirements of BS 476: Part 22: 1987 within the quoted fire test period. Relaxation should be sought from the approving Authority on the basis that no combustible materials are likely to be stored adjacent to the structure where the full insulation period is required.

The maximum lining height may vary from the quoted values if the fire resistance of the system is specified according to BS EN 1364-1.

GTEC shaftwall systems continued

120 minutes fire resistance to BS 476:22
(when exposed from corridor side fire insulation performance is reduced to 90 minutes)*

90 minutes fire resistance to EN 1364-1
(90 minutes integrity / 90 minutes insulation both directions separately)

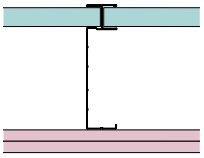
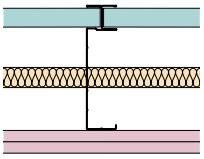
System Ref.	Component	System Weight (kg/m²)	Max Height (m)	Max Height Back-to-Back GTEC E Studs (m)	Nominal Thickness (mm)	Fire Perf. BS476-22 BS EN 1364-1 (mins)	Strength Duty Rating to BS 5234	Acoustic Perf. R_W dB (C_{tr} where applicable)
RNS 110								
	**Facing Inner Layer(s):** 1x 15mm GTEC Fire Board **Facing Outer Layer(s):** 1x 15mm GTEC Fire Board **Studs:** GTEC CHS1960B CH-Studs at 600mm centres **Core:** 1x 19mm GTEC Fire Core Board **Insulation:** 25mm 16kg/m³ glass mineral wool	39	5.1	2x ES1960B 5.5	90	120* EI 90	Severe	47
RNS 206								
	**Facing Inner Layer(s):** 1x 15mm GTEC Fire Board **Facing Outer Layer(s):** 1x 15mm GTEC Fire Board **Studs:** GTEC CHS1990B CH-Studs at 600mm centres **Core:** 1x 19mm GTEC Fire Core Board **Insulation:** –	43	5.6	2x ES1990B 6.1	120	120* EI 90	Severe	43
RNS 210								
	**Facing Inner Layer(s):** 1x 15mm GTEC Fire Board **Facing Outer Layer(s):** 1x 15mm GTEC Fire Board **Studs:** GTEC CHS1990B CH-Studs at 600mm centres **Core:** 1x 19mm GTEC Fire Core Board **Insulation:** 25mm 16kg/m³ glass mineral wool	44	5.6	2x ES1990B 6.1	120	120* EI 90	Severe	47

*Fire ratings quoted in accordance with BS 476: Part 22: 1987 (Integrity Only). The temperature of the exposed flange may exceed the requirements of BS 476: Part 22: 1987 within the quoted fire test period. Relaxation should be sought from the approving Authority on the basis that no combustible materials are likely to be stored adjacent to the structure where the full insulation period is required.

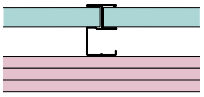
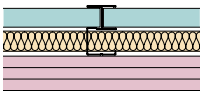
The maximum lining height may vary from the quoted values if the fire resistance of the system is specified according to BS EN 1364-1.

GTEC shaftwall systems continued

120 minutes fire resistance to BS 476:22 (when exposed from corridor side fire insulation performance is reduced to 90 minutes)*
90 minutes fire resistance to EN 1364-1 (90 minutes integrity / 90 minutes insulation both directions separately)

System Ref.	Component	System Weight (kg/m²)	Max Height (m)	Max Height Back-to-Back GTEC E Studs (m)	Nominal Thickness (mm)	Fire Perf. BS476-22 BS EN 1364-1 (mins)	Strength Duty Rating to BS 5234	Acoustic Perf. R_W dB (C_{tr} where applicable)
RNS 303								
	**Facing Inner Layer(s):** 1x 15mm GTEC Fire Board **Facing Outer Layer(s):** 1x 15mm GTEC Fire Board **Studs:** GTEC CHS19146B CH-Studs at 600mm centres **Core:** 1x 19mm GTEC Fire Core Board **Insulation:** –	41	7.0	2x ES19146B 7.3	176	120* EI 90	Severe	46
RNS 304								
	**Facing Inner Layer(s):** 1x 15mm GTEC Fire Board **Facing Outer Layer(s):** 1x 15mm GTEC Fire Board **Studs:** GTEC CHS19146B CH-Studs at 600mm centres **Core:** 1x 19mm GTEC Fire Core Board **Insulation:** 25mm 16kg/m³ glass mineral wool	42	7.0	2x ES19146B 7.3	176	120* EI 90	Severe	49

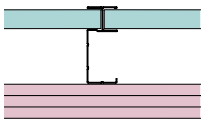
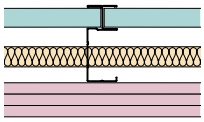
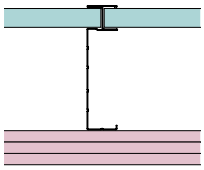
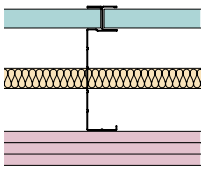
120 minutes fire resistance to BS 476:22 and EN 1364-1 (120 minutes integrity / 120 minutes insulation both directions separately)

System Ref.	Component	System Weight (kg/m²)	Max Height (m)	Max Height Back-to-Back GTEC E Studs (m)	Nominal Thickness (mm)	Fire Perf. BS476-22 BS EN 1364-1 (mins)	Strength Duty Rating to BS 5234	Acoustic Perf. R_W dB (C_{tr} where applicable)
RNS 121								
	**Facing Inner Layer(s):** 2x 15mm GTEC Fire Board **Facing Outer Layer(s):** 1x 15mm GTEC Fire Board **Studs:** GTEC CHS1960B CH-Studs at 600mm centres **Core:** 1x 19mm GTEC Fire Core Board **Insulation:** –	50	5.4	2x ES1960B 5.8	105	120 EI 120	Severe	44
RNS 122								
	**Facing Inner Layer(s):** 2x 15mm GTEC Fire Board **Facing Outer Layer(s):** 1x 15mm GTEC Fire Board **Studs:** GTEC CHS1960B CH-Studs at 600mm centres **Core:** 1x 19mm GTEC Fire Core Board **Insulation:** 25mm 16kg/m³ glass mineral wool	51	5.4	2x ES1960B 5.8	105	120 EI 120	Severe	49

*Fire ratings quoted in accordance with BS 476: Part 22: 1987 (Integrity Only). The temperature of the exposed flange may exceed the requirements of BS 476: Part 22: 1987 within the quoted fire test period. Relaxation should be sought from the approving Authority on the basis that no combustible materials are likely to be stored adjacent to the structure where the full insulation period is required.

The maximum lining height may vary from the quoted values if the fire resistance of the system is specified according to BS EN 1364-1.

GTEC shaftwall systems continued

120 minutes fire resistance to BS 476:22 and EN 1364-1 (120 minutes integrity / 120 minutes insulation both directions separately)		System Weight	Max Height	Max Height Back-to-Back GTEC E Studs	Nominal Thickness	Fire Perf. BS476-22 BS EN 1364-1	Strength Duty Rating to BS 5234	Acoustic Perf. R_W dB (C_{tr} where applicable)
System Ref.	Component	(kg/m²)	(m)	(m)	(mm)	(mins)		
RNS 221								
	**Facing Inner Layer(s):** 2x 15mm GTEC Fire Board **Facing Outer Layer(s):** 1x 15mm GTEC Fire Board **Studs:** GTEC CHS1990B CH-Studs at 600mm centres **Core:** 1x 19mm GTEC Fire Core Board **Insulation:** –	55	5.9	2x ES1990B 6.4	135	120 EI 120	Severe	45
RNS 222								
	**Facing Inner Layer(s):** 2x 15mm GTEC Fire Board **Facing Outer Layer(s):** 1x 15mm GTEC Fire Board **Studs:** GTEC CHS1990B CH-Studs at 600mm centres **Core:** 1x 19mm GTEC Fire Core Board **Insulation:** 25mm 16kg/m³ glass mineral wool	56	5.9	2x ES1990B 6.4	135	120 EI 120	Severe	49
RNS 321								
	**Facing Inner Layer(s):** 2x 15mm GTEC Fire Board **Facing Outer Layer(s):** 1x 15mm GTEC Fire Board **Studs:** GTEC CHS19146B CH-Studs at 600mm centres **Core:** 1x 19mm GTEC Fire Core Board **Insulation:** –	53	7.3	2x ES19146B 7.6	191	120 EI 120	Severe	48
RNS 322								
	**Facing Inner Layer(s):** 2x 15mm GTEC Fire Board **Facing Outer Layer(s):** 1x 15mm GTEC Fire Board **Studs:** GTEC CHS19146B CH-Studs at 600mm centres **Core:** 1x 19mm GTEC Fire Core Board **Insulation:** 25mm 16kg/m³ glass mineral wool	54	7.3	2x ES19146B 7.6	191	120 EI 120	Severe	51

*Fire ratings quoted in accordance with BS 476: Part 22: 1987 (Integrity Only). The temperature of the exposed flange may exceed the requirements of BS 476: Part 22: 1987 within the quoted fire test period. Relaxation should be sought from the approving Authority on the basis that no combustible materials are likely to be stored adjacent to the structure where the full insulation period is required.

The maximum lining height may vary from the quoted values if the fire resistance of the system is specified according to BS EN 1364-1.

System guidance

GTEC shaftwall systems

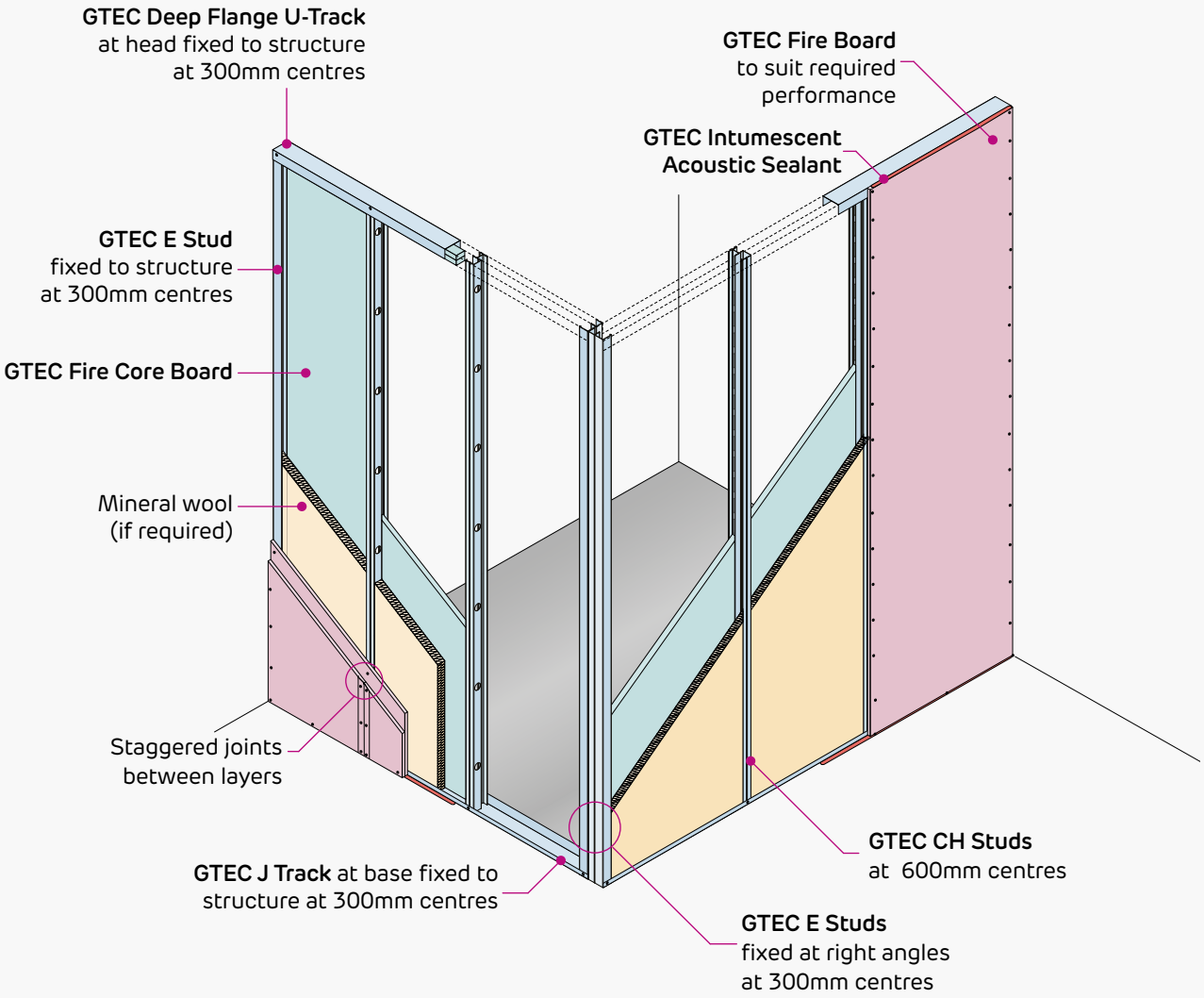
The GTEC Shaftwall fire protection system protects shafts and voids in multi-storey buildings with a rapid installation system preventing continuous routes for the spread of fire.

The system uses a non-symmetrical board assembly for full installation from one side of the shaft, allowing construction in tight spaces. The frame features friction fit channels to receive GTEC Fire Core Board and a fixing flange for the installation of GTEC Fire Board ready to finish on the room side. The shaft side can also be decoratively finished using GTEC Fire Board, this is commonly used in stairwells.

Where to use:

- The system is used in commercial multi-storey construction to ensure structural safety during fire.

Features	Benefits
System designed to be erected from one side only	No scaffolding required
Offers fire protection from both directions	Provides up to 120 minutes fire performance
Lightweight friction fit framing system	Fast to install with less material costs
Specialised components designed as a system	Reliable and easy to specify
Framing includes cavity	Allows space for services to run
High strength frame	Resists pressure changes likely in deep shafts and voids



Note: Since 2018 Siniat Shaftwall systems have used 19mm Fire Core Board. Please refer to system tables for performances.

system components

boards

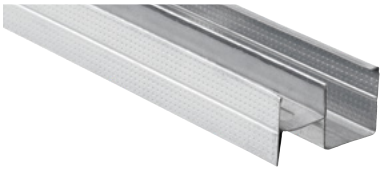
GTEC Fire Core Board
High strength fire and moisture resistant board for use in shaftwall.

See system performance tables on page 3 to 8

GTEC Fire Board
A fire resistant plasterboard.

See system performance tables on page 3 to 8

frame



GTEC CH Stud
Metal profile for vertical frame elements.

CHS1960/B, CHS1990/B, CHS19146/B

GTEC E Stud
Metal profile used for vertical frame element at junctions and end studs.

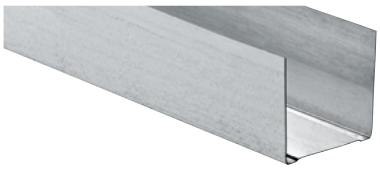
ES1960/B, ES1990/B, ES19146/B

GTEC J Track
Metal profile used for base channel.

JT62/B, JT92/B, JT148/B

GTEC U Track Deep Flange
Deep flange metal profile for deflection heads.

UDT62/B, UDT92/B, UDT148/B



GTEC U Track Extra Deep Flange
Extra deep flange metal profile for deflection heads.

UXT92/W, UXT148/W

GTEC Metal Angle
Multi-purpose galvanised metal section.

MFC2525, MFC2550, MFC2330

GTEC Flat Strap
Provides support for plasterboard joints and fixtures.

FS50/RX, FS90/W

fix

GTEC Drywall Screws (as appropriate)
For connecting plasterboard and metal components.

See annex d: screw selection guide

finishing

GTEC Corner and Edge beads
Corner and edge reinforcement.

Siniat Joint Tape
Joint reinforcement in conjunction with GTEC Jointing Compounds.

GTEC Intumescent Acoustic Sealant
Perimeter sealing to restrict smoke, sound and fire penetration to achieve quoted performances.

Siniat Compounds
To finish joints between boards and bed corner beads prior to decorating. Ensures system performance.

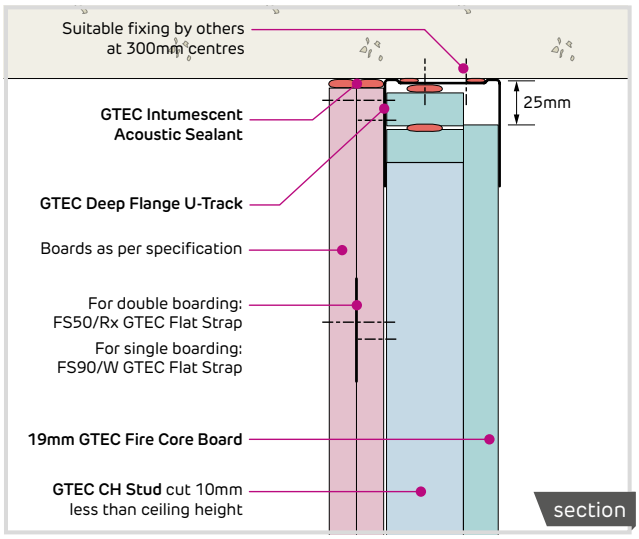
See annex b: product reference

GTEC Sealer
To seal plasterboard prior to decoration.

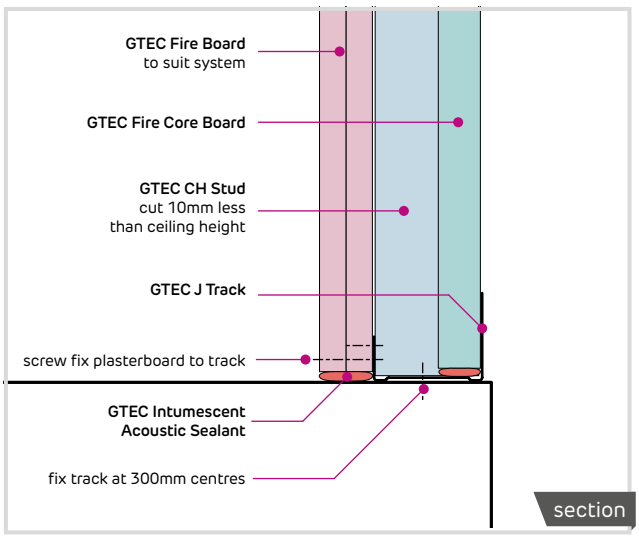
system guidance

Frame and shaft-side boarding

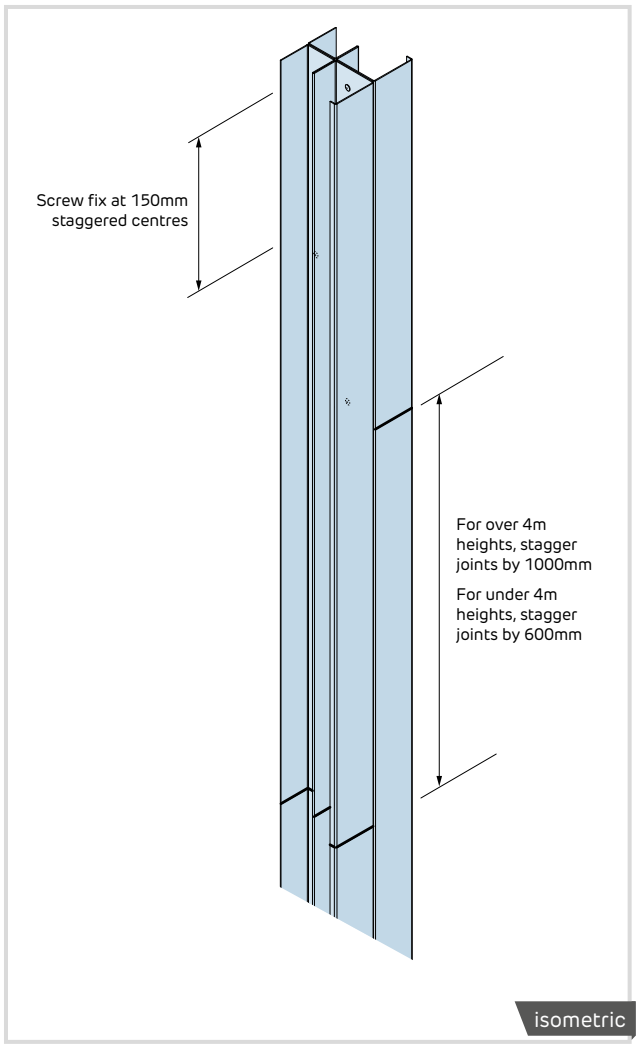
FP-SH-101S-Head



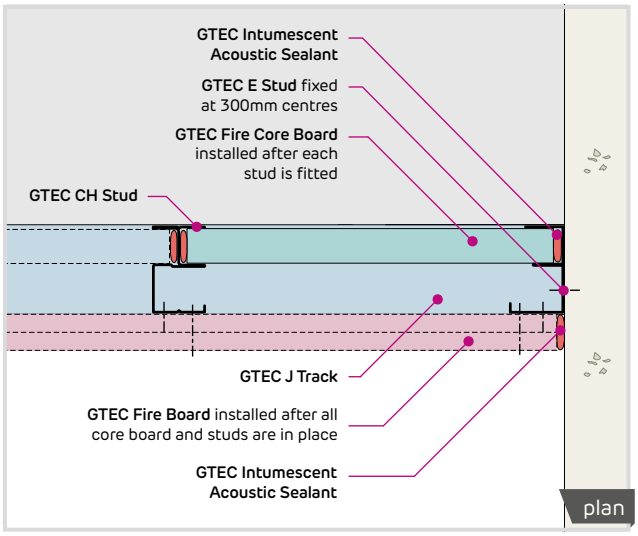
FP-SH-102S-Base



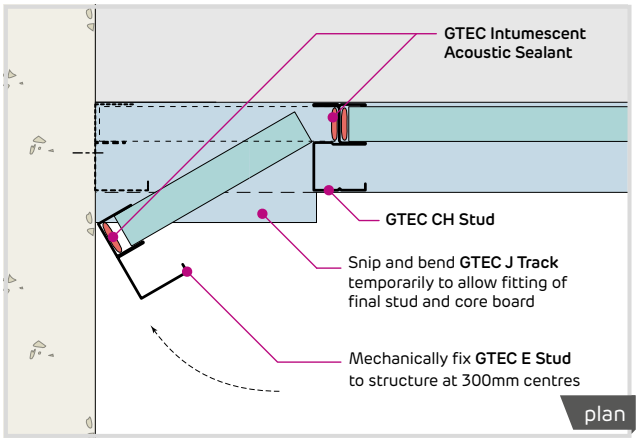
FP-SH-103M-Stud reinforcement (back-to-back E-studs)



FP-SH-201P-Partition assembly – start



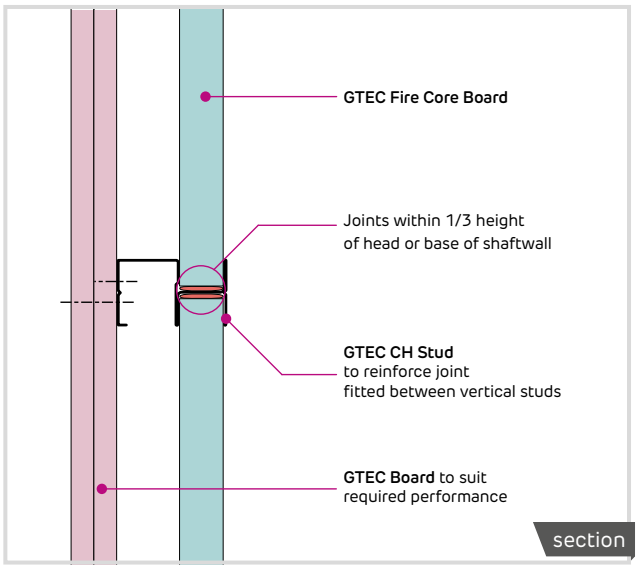
FP-SH-202P-Partition assembly – end



Frame and shaft-side boarding continued

- Select compatible size (e.g. 90mm stud and 92mm track) GTEC CH Stud, GTEC E Stud and GTEC Track framing elements to suit system performance.
- Bead of GTEC Intumescent Acoustic Sealant to be applied at junction of all metal framing with structure, and at all other locations specified in drawings.
- GTEC J Track at base and GTEC Deep Flange U-Track at head to be fixed flat to structure, long leg of track to shaft side, using appropriate fixings at maximum 300mm centres.
- First GTEC E Stud, 10mm less than floor to soffit height, to be fixed abutting structure using appropriate fixings at maximum 300mm centres. Stud to be fixed to head and base track with appropriate GTEC Drywall Screws (annex d: screw selection guide). Final GTEC E Stud to be installed with final GTEC Fire Core Board.
- Protect base track from moisture with damp proof membrane when situated on newly laid concrete floors.
- GTEC Fire Core Board to be 25mm short of floor to ceiling height with 25mm gap at top of Shaftwall frame.
- GTEC Fire Core Board to be installed before intermediate stud with construction proceeding progressively, alternating in sequence between board and GTEC CH Stud.
- All GTEC CH Studs to be 10mm shorter than floor to soffit height except in case of deflection requirement. Each GTEC CH Stud to be firmly fitted to board and friction fitted into track.

FP-SH-204S-Overheight shaftwalls reinforcement

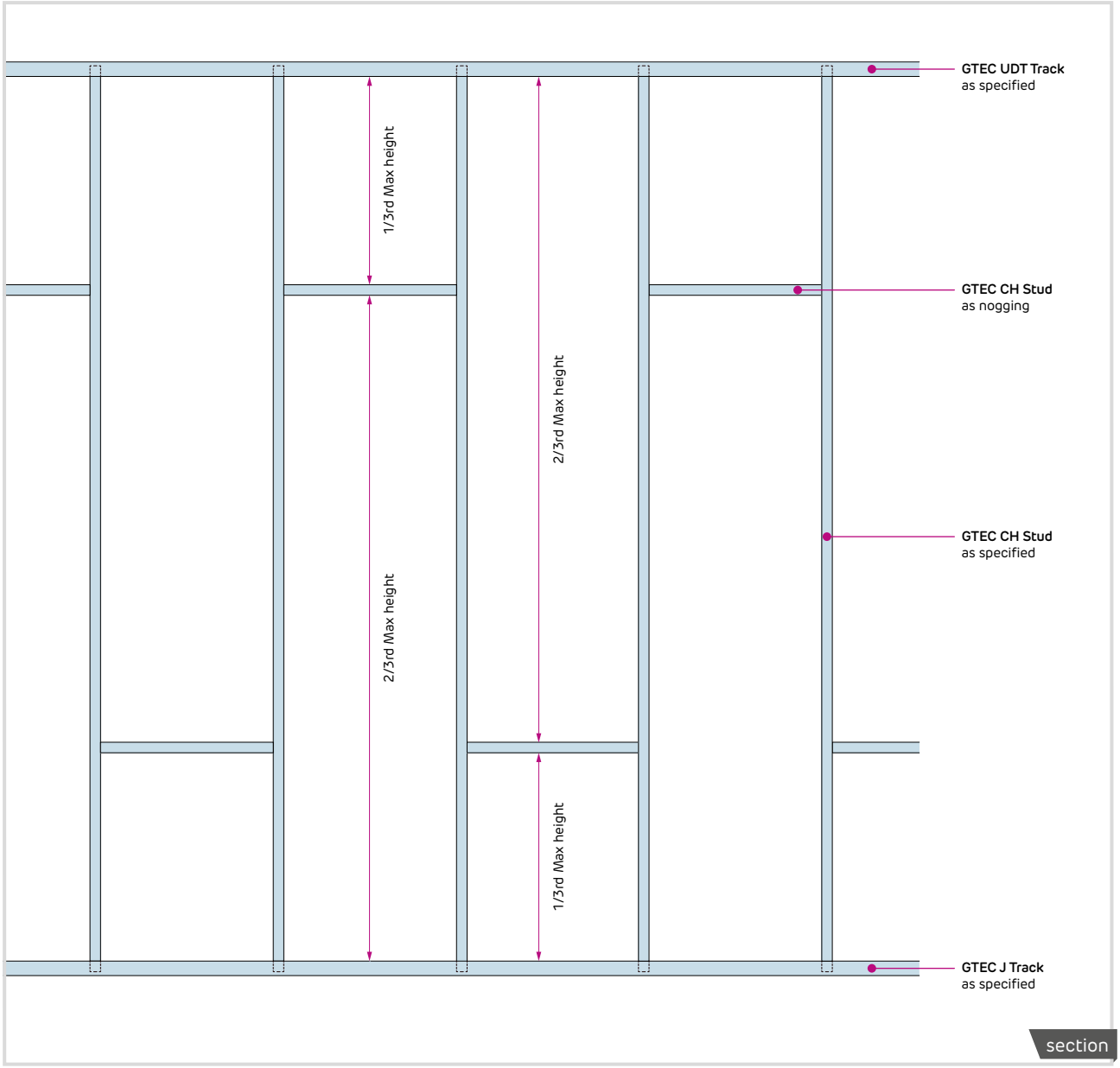


- Where wall height exceeds available GTEC CH Stud length, lengths of GTEC E Stud to be spliced together, back-to-back, ensuring overlaps of 600mm for heights below 4m and 1000mm for heights above 4m.
- Studs and tracks to be clean of fire protective coatings which may have been applied to main structure.

Insulation

- Insulation to be of type and thickness to achieve acoustic performance and installed in a continuous layer between studs.

FP-SH-205S-Nogging Stagger



- Where partition exceeds 3m height, horizontal joints to be at alternating maximum ⅓ or ⅔ height with reinforcement from GTEC CH Stud noggings.

General boarding

- GTEC Fire Core Board to be used as shaft-side boarding.
- GTEC Fire Board to be used as room-side boarding.
- Room side boarding to be fixed at 600mm on inner layers and 300mm on outer layer using appropriate GTEC Drywall Screw (see annex d: screw selection guide).
- Board edges to be centred over studs.
- Stagger all board joints between layers and stagger screws by 100mm compared to adjacent boards and layers.

Over-height single layer boarding:

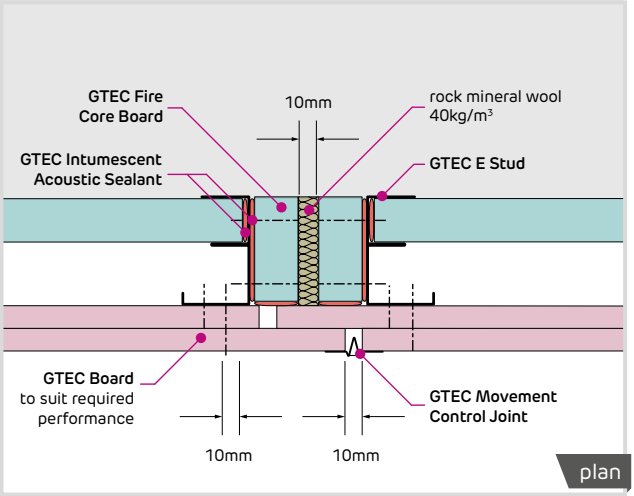
- Where partition height exceeds board height fix boards to continuous band of GTEC Flat Strap FS90/W behind all horizontal joints to maintain fire integrity.

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 GTEC Flat Strap FS50/RX behind all horizontal joints.

Movement control joints

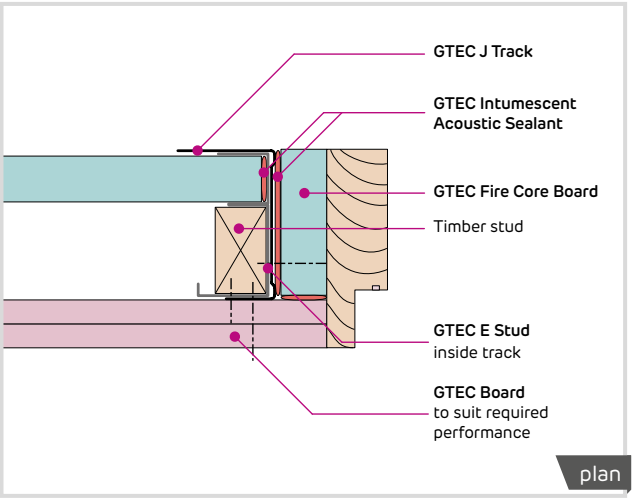
FP-SH-301P-Movement control joint



- Form movement control joints at maximum 10m intervals in the partition run.
- Form movement control joints where the partition crosses a structural movement joint.
- Fix GTEC Movement Control Joint, butted end-to-end, to board with sheradised or galvanised staples.

Openings

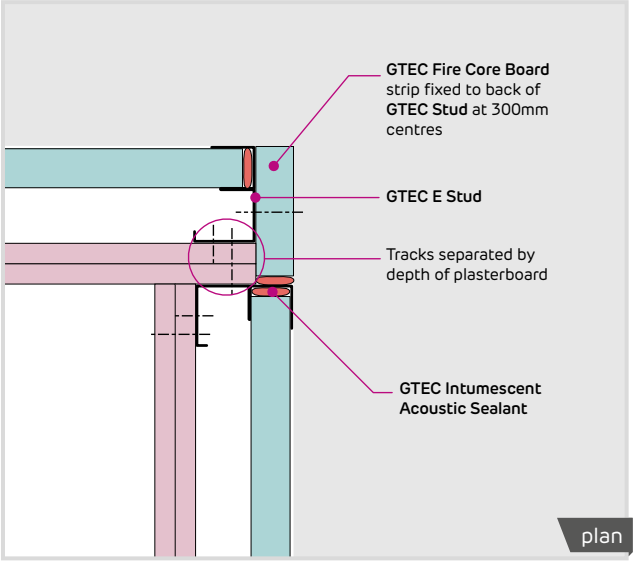
FP-SH-401P-60kg Door Jamb



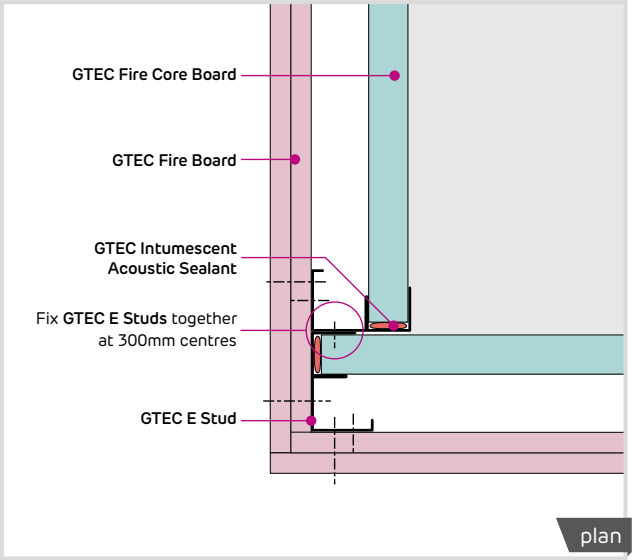
- Form openings following guidance in Construction Detail Drawings to suit duct penetration or door configuration.
- For doors, reinforce head-to-jamb junction down each jamb stud by cutting and folding head track, continue track down full length of jamb and reinforce with timber as described in Construction Detail Drawings.
- Jamb studs to be configured to ensure continuity of GTEC Fire Core Board to inside of opening.
- Jamb studs to be fixed to track with appropriate GTEC Drywall Screws (see annex d: screw selection guide).

Corners and junctions

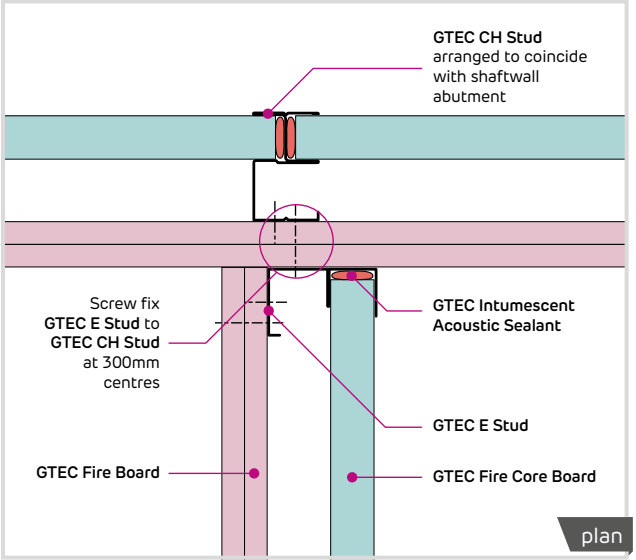
FP-SH-501P-Internal corner



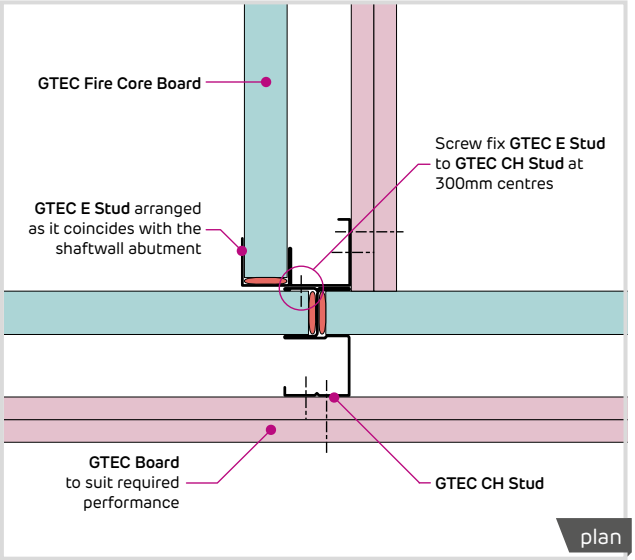
FP-SH-502P-External corner



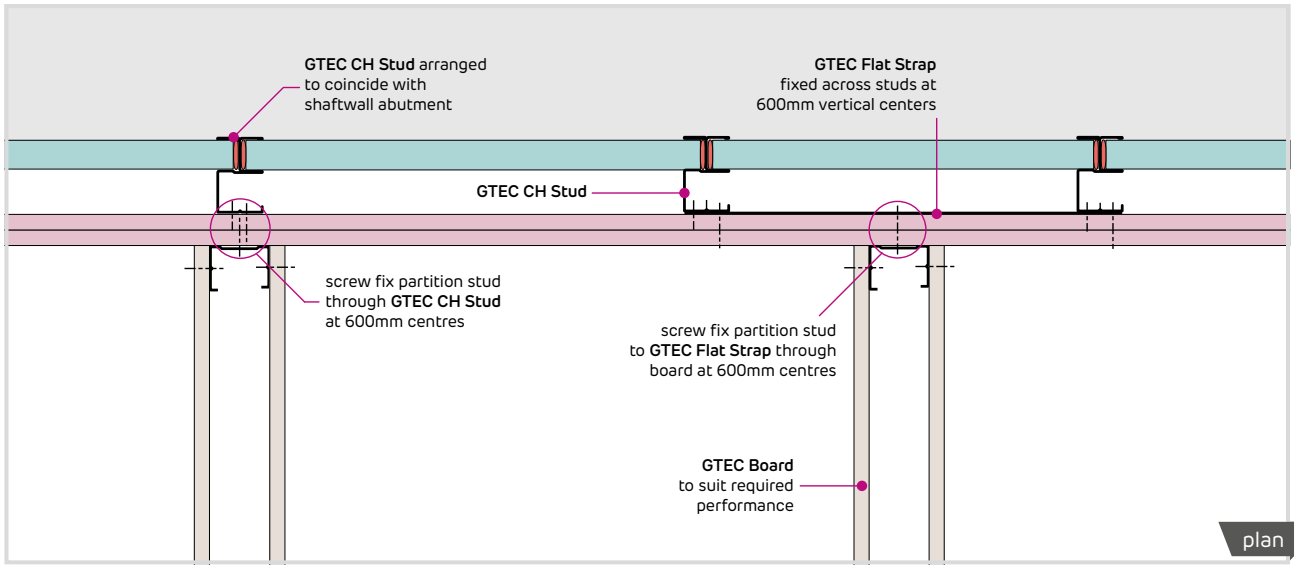
FP-SH-503P-T-junction – room side



FP-SH-504P-T-junction – shaftside



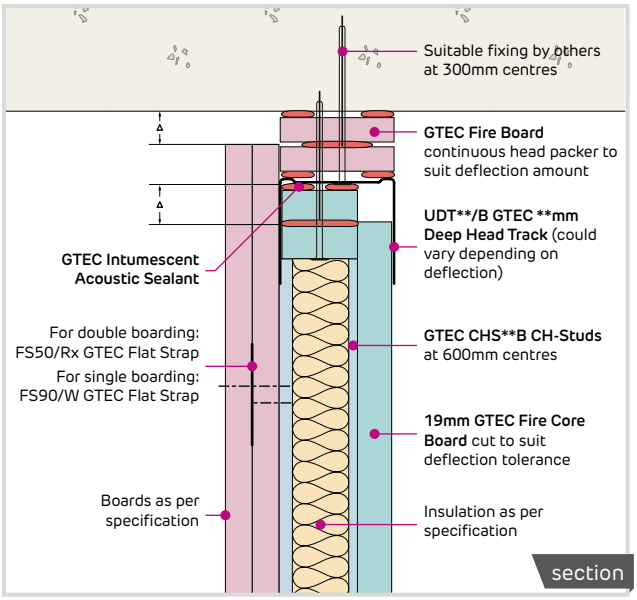
FP-SH-505 P-Junction of partition to shaftwall option 1 and 2



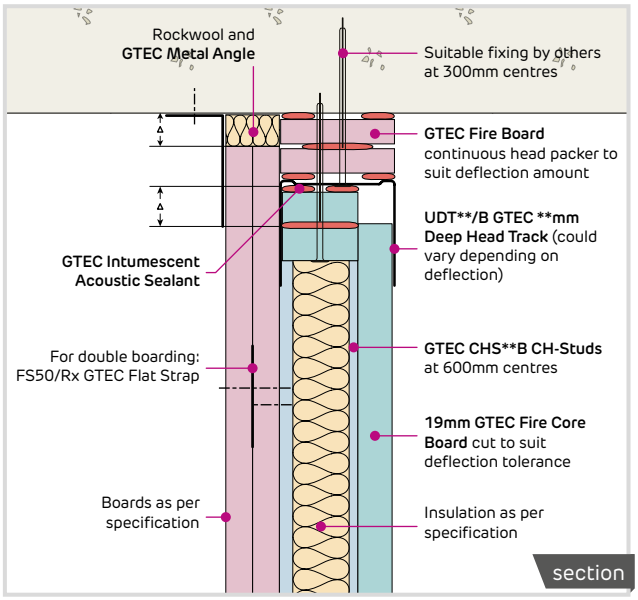
- Abutting partitions to coincide with Shaftwall stud; additional intermediate 'pick-up' GTEC C Stud; or GTEC Flat Strap at 600mm vertical centres (300mm centres if picking up shaftwall partitions).
- Connect studs through plasterboards at corners and junctions.
- Ensure continuity of GTEC Fire Core Board at corners.
- See Construction Details Drawings for further guidance on arrangement and fixing.

Shaftwall deflection head

FP-SH-601S-Shaftwall Deflection Head (30-60mins)



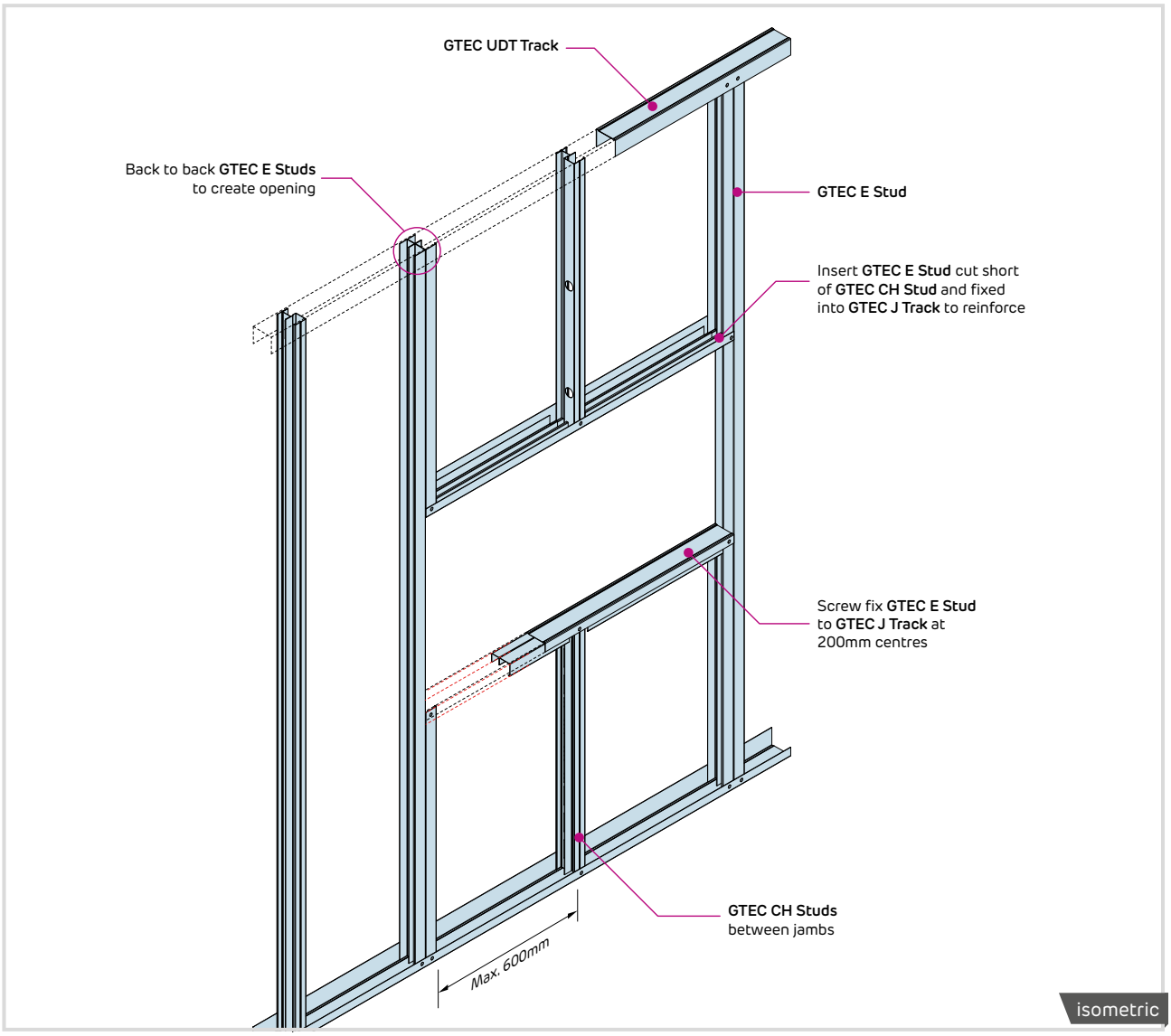
FP-SH-602S-Shaftwall Deflection Head (90-120mins)



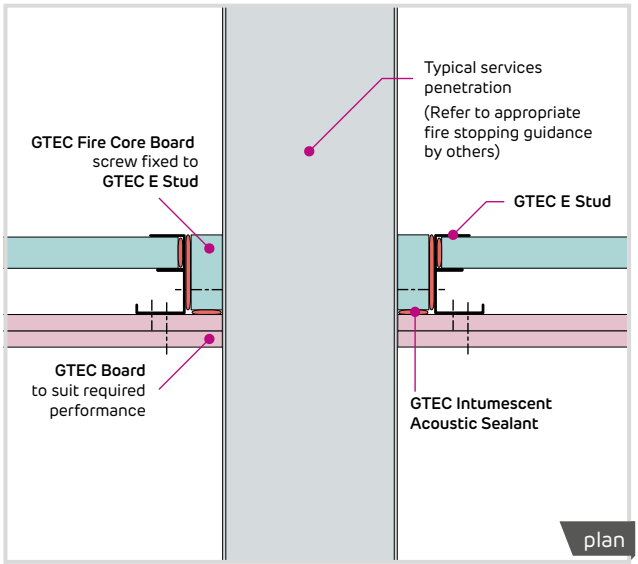
Deflection required (Δ):	Packer for all fire ratings:	Track for all fire ratings:	Fire resistance 30 & 60 mins	Fire resistance 90 & 120 mins
0-5mm	12.5mm GTEC Fire Board	GTEC Deep Flange U Track (UDT)	—	Mineral wool and cloaking angle
6-10mm	15mm GTEC Fire Board	GTEC Deep Flange U Track (UDT)	—	Mineral wool and cloaking angle
11-20mm	2x 12.5mm GTEC Fire Board	GTEC Deep Flange U Track (UDT)	—	Mineral wool and cloaking angle
21-25mm	2x 15mm GTEC Fire Board	GTEC Deep Flange U Track (UDT)	—	Mineral wool and cloaking angle
26-30mm	3x 12.5mm GTEC Fire Board	GTEC Deep Flange U Track (UDT)	—	Mineral wool and cloaking angle
31-40mm	3x 15mm GTEC Fire Board	GTEC Extra Deep Flange U Track (UXT)	—	Mineral wool and cloaking angle
41-45mm	4x 12.5mm GTEC Fire Board	GTEC Extra Deep Flange U Track (UXT)	—	Mineral wool and cloaking angle
46-50mm	4x 15mm GTEC Fire Board	GTEC Extra Deep Flange U Track (UXT)	—	Mineral wool and cloaking angle

Penetrations

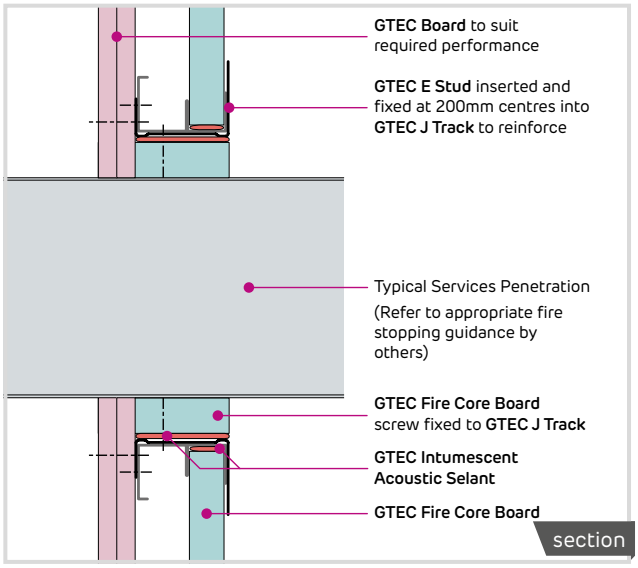
FP-SH-701M-Service penetration isometric



FP-SH-702P-Service penetration plan



FP-SH-703S-Service penetration section



Penetrations

- M&E runs and other services to be pre-planned to minimise or eliminate penetrations through rated Shaftwall systems.
- Continuity of GTEC Fire Core Board to be maintained around penetration openings.
- Penetrations to be fire-stopped with appropriate materials in line with manufacturer and ASFP guidelines.
- Pipe penetrations of 40mm diameter or less may be sealed with GTEC Intumescent Acoustic Sealant (for cPVC pipes use Promat HPex Sealant).
- Ductwork to be independently supported and not supported by the Shaftwall system.

Fixtures

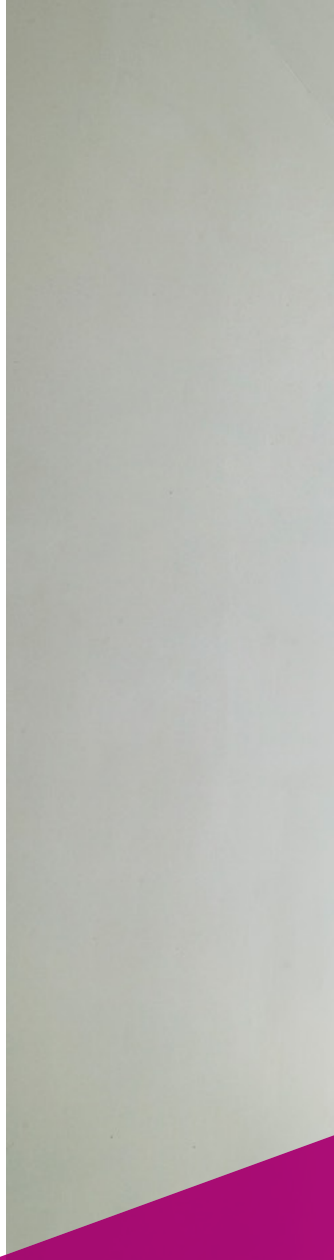
- See fixture guidance in the partitions systems section for further guidance.

Finishing

- All room-side board joints to be taped, jointed or finished according to guidance in the annexes section to achieve system performances.
- GTEC Finish materials appropriate to board type to be used.

System continuity

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



Technical services

Technical advice and project enquiries.

0800 145 6033 or 01275 377 789

technical.siniat@etexbp.co.uk

GB orderline

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+353 (0)162 03114

irelandorders@etexbp.com

Literatureline

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