



**GTEK™ PROTECT  
INTERTENANCY**



WHY GTEK™?

WITH OUR AUSTRALIAN GTEK™ RANGE OF INTERIOR LINING PRODUCTS, YOU BENEFIT FROM SUSTAINABLE, QUALITY-TESTED TECHNOLOGY, FULL BGC INTERIOR LINING SYSTEMS COMPATIBILITY AND OUR CLASS-LEADING SERVICE NETWORK.

- ▶ **TECHNOLOGY** / Light, modular GTEK™ technology eases installation for seamless results
- ▶ **SUSTAINABILITY** / GECA certified: sustainable manufacture means higher Green Star ratings for your building
- ▶ **AUSTRALIAN MADE** / Australian: closest available links between local manufacture and supply
- ▶ **SERVICE** / Vast distribution network assures best-in-class service delivery
- ▶ **QUALITY** / Independent testing accords with Australia's toughest build-quality accreditations
- ▶ **SYSTEMS** / Full compatibility with extensive BGC interior lining systems range

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## GTEK™ PROTECT

The innovative GTEK™ Protect Intertency System is one of Australia's newest separating wall systems providing design flexibility, simple construction and outstanding acoustic performance.



The GTEK™ Protect Intertency System is a double wall system that incorporates fire-resistant GTEK™ Protect 25mm plasterboard panels within the wall cavity.

The GTEK™ Protect Intertency System has been tested and certified to meet a Fire Resistance Level (FRL) of 60/60/60 and acoustic performance up to and exceeding  $R_w + C_{tr} = 50\text{dB}$ .

### What's good about The GTEK™ Protect System

- ▶ Quick and easy to construct.
- ▶ Service penetrations, such as switches, power points, light fittings and pipes are easy to install through the outer layers of the system.
- ▶ Internal wall linings are installed at the plastering stage as per normal construction sequence.
- ▶ No wet trades required.
- ▶ Mould resistant.

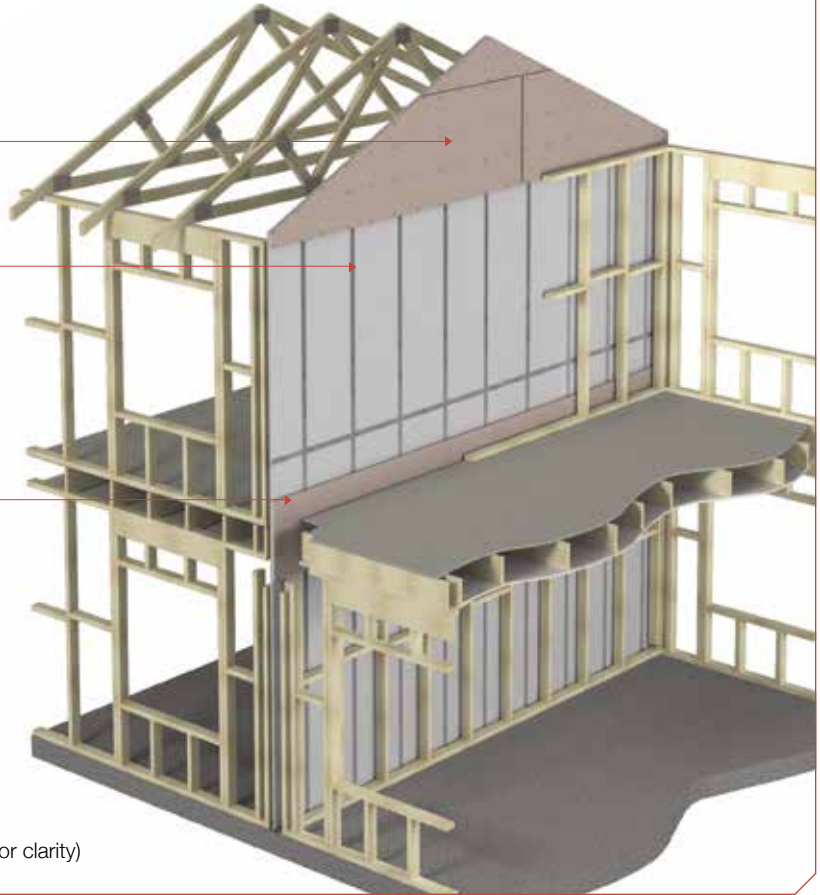


FIGURE 1 – ASSEMBLED SYSTEM

GTEK™ Fire 16mm

GTEK™ Protect 25mm

GTEK™ Fire 16mm

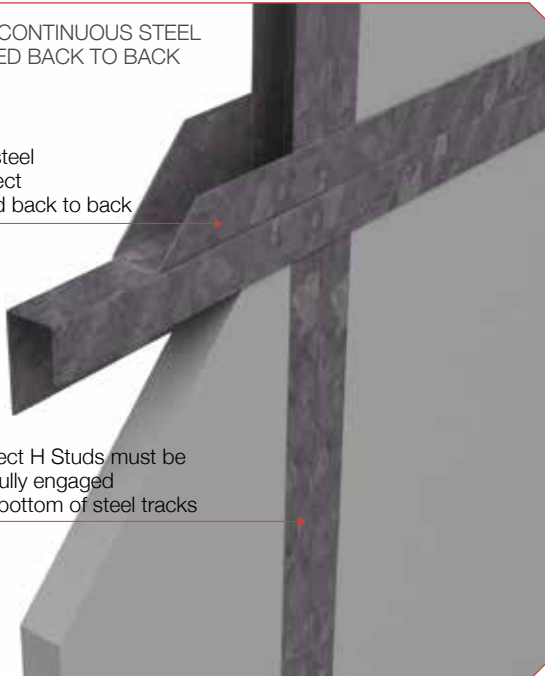


(Separation by GTEK™ Protect 25mm at eaves not shown for clarity)

FIGURE 2 – CONTINUOUS STEEL TRACKS FIXED BACK TO BACK

Continuous steel  
GTEK™ Protect  
J Tracks fixed back to back

GTEK™ Protect H Studs must be  
aligned and fully engaged  
into top and bottom of steel tracks



## HOW GTEK™ PROTECT WORKS

GTEK™ Protect Intertency is unlike a conventional fire rated wall system where fire resistant outer linings provide protection to the wall substrate. In the GTEK™ Protect Intertency System, the main fire barrier is within the wall cavity and is specifically designed to protect the structure on the opposite side of the fire. GTEK™ Protect 25mm depends on this structure for support in the event of the structure on the fire side collapsing or losing stability.

GTEK™ Protect Aluminium Clips are used to attach the GTEK™ Protect 25mm to the timber frames on both sides in order to ensure that the GTEK™ Protect 25mm is not damaged by the collapse of the structure on the fire side. As the clips on the fire side melt, GTEK™ Protect 25mm is disconnected from the collapsing structure and is supported by the clips and the structure on the protected side for the specified fire rating period.

Please note that steel clips must **not** be used in the GTEK™ Protect Intertency System as their use compromises the integrity of the GTEK™ Protect 25mm during the fire.

The inclusion of GTEK™ Sound 13mm or GTEK™ Total Plus 13mm provides additional options where the NCC requires  $R_w + C_{tr} = 50\text{dB}$  acoustic rating.

FIGURE 3 – BEFORE THE FIRE

GTEK™ Protect Aluminium Clips both sides of fire barrier

GTEK™ Protect 25mm

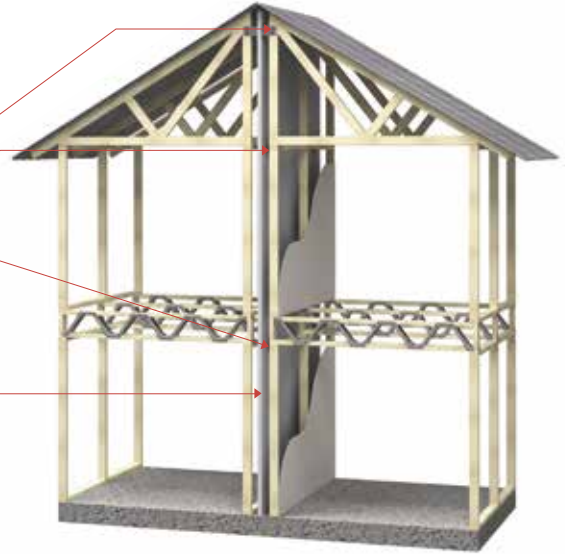


FIGURE 4 – DURING THE FIRE

GTEK™ Protect Aluminium Clips on the fire side melt

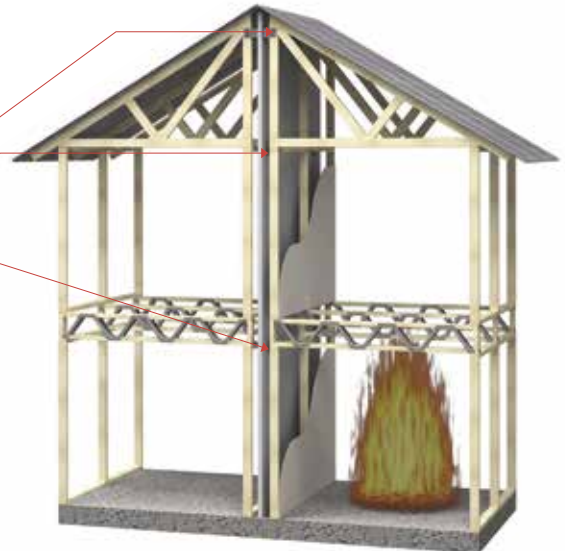
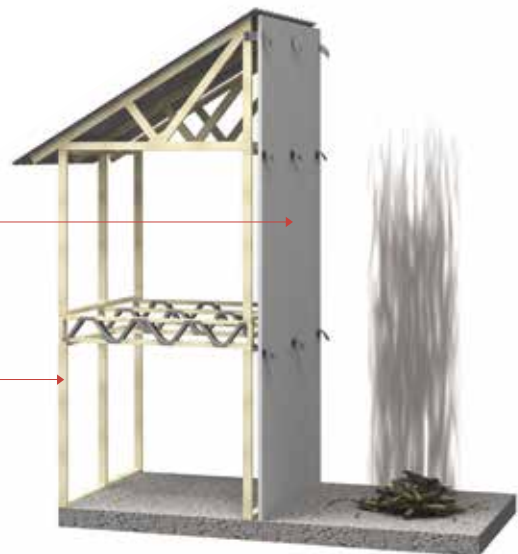


FIGURE 5 – AFTER THE FIRE

If building on the fire side of the GTEK™ Protect 25mm collapses, the fire barrier is held in place by the GTEK™ Protect Aluminium Clips on the other side.

Building on the other side is protected by the GTEK™ Protect 25mm.



## EARLY FIRE INDICES

GTEK™ Protect 25mm complies with AS 1530.3.

▶ Ignitability Index	0
▶ Spread of Flame Index	0
▶ Heat Evolved Index	0
▶ Smoke Developed Index	3

GTEK™ Fire 16mm complies with AS 1530.3.

▶ Ignitability Index	0
▶ Spread of Flame Index	0
▶ Heat Evolved Index	0
▶ Smoke Developed Index	1

## FIRE RESISTANCE

Plasterboard is naturally fire resistant and is classified as non-combustible according to the National Construction Code (NCC) Section C1.12.

## DIMENSIONAL STABILITY

Plasterboard is dimensionally stable when compared to other building materials. Two measures of dimensional stability are:

Thermal coefficient of linear expansion  
(a) =  $16.7 \times 10^{-6} / ^\circ\text{C}$ , measured unrestrained over the temperature range of  $3^\circ\text{C} - 32^\circ\text{C}$

Hygrometric coefficient of expansion  
 $6.5 \times 10^{-6} / \% \text{RH}$ , measured unrestrained over the Relative Humidity (RH) range of 10% - 90%

## THERMAL PROPERTIES

The R value of plasterboard is a measure of its thermal insulation ability. Higher numbers indicate a better insulator. The 'R' values for plasterboard are:

▶ 10mm plasterboard	= 0.05Km <sup>2</sup> /W
▶ 13mm plasterboard	= 0.05Km <sup>2</sup> /W
▶ 16mm plasterboard	= 0.06Km <sup>2</sup> /W
▶ 25mm plasterboard	= 0.08Km <sup>2</sup> /W

## HANDLING AND STORAGE

GTEK™ Fire 16mm and GTEK™ Protect 25mm should be stacked flat, up off the ground and supported on level, equally spaced (max 450mm) gluts, and covered on site until ready for installation. Care should be taken to ensure edges are not damaged when handling.






GTEK™ Fire 16mm and GTEK™ Protect 25mm should be delivered to site immediately prior to installation to reduce the risk of damage.

As per AS/NZ2588 – The area to be lined or partitioned shall be protected from the weather and sufficiently dry to ensure that the fixed gypsum lining will not suffer subsequent deterioration due to moisture absorption.

GTEK™ Protect must be protected and covered over within 2 months of installation at framing stage.

**GTEK™ PROTECT SYSTEM COMPONENTS – TABLE 1**

**GTEK™ Protect Components – supplied by BGC**

GTEK™ Protect 25mm 21.7kg/m <sup>2</sup>	3000 x 600 x 25mm 3600 x 600 x 25mm	
GTEK™ Fire 16mm 13.1kg/m <sup>2</sup>	2400 x 1200 x 16mm 2700 x 1200 x 16mm 3000 x 1200 x 16mm 3600 x 1200 x 16mm	
GTEK™ H Stud	3000 x 25mm 3600 x 25mm	
GTEK™ J Track	3000 x 25mm	
GTEK™ Aluminium Clip		

**GTEK™ Protect System – Other accessories required – may not be supplied by BGC – speak to your local BGC Office for availability**

Stonewool Insulation (see page 9 for further information)		
Fire mastic	10L Tub	
Fire mastic	600ml Sausage	
6g x 25mm Type 'W' timber screws For fixing Aluminium Clip to the top plate		
10g x 40mm Type 'L' laminating screws For laminating 16mm GTEK™ Fire to GTEK™ Protect 25mm		
10g x 16mm Type 'D' Drill point wafer head screws – galvanised For fixing clip to H Stud		
10g x 30mm Type 'D' Drill point wafer head screws For fixing clip to H Stud if GTEK™ Fire 16mm is laminated to GTEK™ Protect 25mm		
30mm galvanised nails		
90mm Glasswool insulation		

## DESIGN CONSIDERATIONS

## FIRE

The GTEK™ Protect Intertenancy System has been fire tested at Exova Warringtonfire AUST Pty Ltd in VIC.

The GTEK™ Protect Intertenancy System provides Fire Resistance Levels (FRL) of 60/60/60. In the case of a fire, the structural adequacy and load bearing capacity is provided by the wall frame on the other side of the GTEK™ Protect 25mm.

As the primary fire barrier (the GTEK™ Protect 25mm panels) is located in the cavity between the frames, the system permits easy inclusion of services such as electrical and communications cables, water and waste pipes, as long as the primary barrier is not penetrated. In primary living areas, penetrations are acceptable in the outer layers. Service penetrations are allowed through the GTEK™ Protect 25mm in the roof space.

The following penetrations are all suitable in the outer linings and are not required to be fire rated:

- ▶ Electrical, data, or communications cables passing through the linings into the cavity.
- ▶ Baths, cabinets, vanities or shower bases.
- ▶ Standard residential electrical switches and power points.
- ▶ Galvanised steel, copper or plastic water or wastewater pipes of up to 50mm nominal diameter passing through the linings into the cavity.

For other penetrations contact BGC Plasterboard on 1300 652 242.

The following requirements are essential to maintain the fire-rating integrity and acoustic performance of the GTEK™ Protect Intertenancy System:

- ▶ Use only the specified GTEK™ Protect Aluminium Clips to attach the GTEK™ Protect H Studs to framing members. In the event of a fire, this aluminium clip is designed to melt to allow the framing members on the fire side to fall away leaving the GTEK™ Protect 25mm intact.
- ▶ Other than the clips, there should be no attachments to the GTEK™ Protect 25mm.
- ▶ There should be no penetrations through the GTEK™ Protect 25mm apart from approved penetrations in the roof space. Refer to a Building Surveyor for advice.

For design and installation requirements of internal plasterboard wall linings, refer to the GTEK™ Wall brochure.

## ISOLATED SUPPORT FOR STAIRS

'NCC COMPLIANT, SOUND AND FIRE RATED TIMBER FRAMED CONSTRUCTION – Design and Construction Guide for Class 1a. Attached Buildings – Townhouses', states that impact sound from stair usage typically vibrates its way into separating walls, thus creating a greater likelihood of sound passing across the wall into attached dwellings. The recommended way to prevent this is by isolating the stair structure. Options include:

- ▶ Using the stringers to support the stairs, at each floor level, without intermediate support from the separating wall in between, i.e. free standing, or alternatively
- ▶ Using newel posts rather than the separating wall to support the stair structure
- ▶ Keeping the treads clear off the separating wall.

FIGURE 6 – BASIC CONFIGURATION



Note: To achieve  $R_{w45}$  or  $R_w + C_r$  50 separation, insulation is required in the wall cavity on the opposite side of the pipe.

## ACOUSTIC

The GTEK™ Protect Intertenancy System has been the subject of a series of acoustic tests at the CSIRO Acoustic Laboratory at Clayton, Victoria.

Acoustical estimates have been determined by Marshall Day Acoustics.

Small penetrations of linings in occupancy areas such as power points, switches, light fittings and pipes do not need to be acoustically sealed.

GTEK™ Protect 25mm base and internal lining junctions with floors must be sealed with an approved fire acoustic sealant.

**The clear distance between the GTEK™ Protect 25mm and wall framing on both sides should not be less than 20mm nor more than 40mm.**

All services should be run through the framing. Insulation thicker than the stud framing is allowed.

GTEK™ Fire 16mm laminated to the GTEK™ Protect 25mm should not come into contact with the stud or floor framing. It is recommended the gap between GTEK™ Protect 25mm and timber framing be increased to a minimum 25mm on the GTEK™ Fire side to ensure adequate clearance.

To maintain acoustic performance, service pipes must not be in contact with the GTEK™ Protect 25mm.

The GTEK™ Protect Intertenancy System complies with NCC requirements for 'discontinuous construction'.



STRUCTURAL

MAXIMUM PERMISSIBLE HEIGHT AND CLIP SPACING

Height of the GTEK™ Protect Intertenancy System should not exceed 14 metres.

FIGURE 7 – MAXIMUM PERMISSIBLE HEIGHT



Maximum Height of GTEK™ Protect Intertenancy 25mm 14 metres continuous

Maximum wall height	Maximum vertical space of clips	Maximum horizontal space of clips
Up to 6.5m	3.0m	600mm
Up to 9.0m	2.6m	
Up to 10.8m	2.3m	
Up to 12.0m	2.2m	
Up to 14.0m	1.9m	

J-TRACKS

Midfloor – Fix back to back at 600mm centres, max 100mm from ends and fill gaps with sealant. Fasten with 10mm 6g fine thread Drill point screws – May not be supplied by BGC – speak to your local BGC office for availability.

Bottom - Fix at 600mm centres, max 100mm from ends. Butt together and fill gaps with sealant. Fasten with 50mm x 6.5mm metal pin anchors supplier by others.

WET AREAS

In areas classified as Wet Areas in accordance with the NCC, the following linings should be used in lieu of the specified internal linings in order to achieve required fire and acoustic ratings:

WET AREA LININGS – TABLE 2

Specified Internal Lining	Wet Area Lining
2 x 10mm GTEK™ Wall	2 x 10mm GTEK™ Wet Area or 1 x 6mm BGC Duraliner™ Plus 1 x 10mm GTEK™ Wet Area
10mm GTEK™ Sound	13mm GTEK™ Wet Area
13mm GTEK™ Total Plus	13mm GTEK™ Fire and Wet Area or 1 x 6mm BGC Duraliner™ Plus 1 x 10mm GTEK™ Wet Area

CONTROL JOINTS

Where control joints are necessary in the outer layers as per AS2589, contact BGC Plasterboard on 1300 652 242 or www.gtekplasterboard.com.au for construction details.

WIND SPEED

The GTEK™ Protect Intertenancy System is suitable for wind classification N1 and N2 as determined by AS 4055, Wind loads for housing. For higher wind classifications BGC Plasterboard recommends temporary propping of GTEK™ Protect 25mm during construction until the building is enclosed. Propping details are to be designed by a suitably qualified Structural Engineer. Where the GTEK™ Protect Intertenancy System is proposed in cyclonic areas contact BGC Plasterboard for advice.

MATERIALS

All materials are available from BGC Plasterboard and must be installed in accordance with current printed instructions. All materials should be stored clear of the ground and provided protection from damage and exposure to the elements.

LININGS FOR OCCUPANCY AREAS

Linings in the occupancy areas (including GTEK™ Fire and Wet Area specified in some GTEK™ Protect Wet Area Systems) do not need to be fire rated and are constructed using the normal installation and finishing methods outlined in the GTEK™ Wall & Ceiling Brochure. The base of linings must be acoustically sealed.

FRAMING

Timber framing sizes can be varied provided that they are designed and constructed in accordance with AS1720.1 and/or AS1684 and a minimum 90mm deep. Stud spacing not to exceed 600mm.

Steel structural framing is to be designed in accordance with AS/NZS4600 or AS3623 and a minimum of 92mm deep. Stud spacing not to exceed 600mm.

STONE WOOL INSULATION

The use of mineral wool (stone wool) non-combustible insulation blankets with a min density of 80kg/m3 after min 10% compression as cavity barrier as per Specification 3.7.3.2c(ii) of the National Construction Code of Australia (NCC) Vol2.

GTEK™ PROTECT SYSTEMS



Side 1 – 1 x GTEK™ Wet Area 10mm  
Side 2 – 1 x GTEK™ Wet Area 10mm

GTEK-PR25001

FRL	STUD DEPTH mm	70	90
	CAVITY INFILL	Rw/Rw+Ctr	
60/60/60	75mm Glasswool R1.8	57/39	61/44
	90mm Glasswool R2.5	57/39	61/44
	90mm Glasswool R2.7	58/40	62/45
	<b>WALL THICKNESS mm</b>	<b>225</b>	<b>265</b>



Side 1 – 1 x GTEK™ Sound 10mm  
Side 2 – 1 x GTEK™ Sound 10mm

GTEK-PR25002

FRL	STUD DEPTH mm	70	90
	CAVITY INFILL	Rw/Rw+Ctr	
60/60/60	75mm Glasswool R1.8	62/43	66/51
	90mm Glasswool R2.5	62/43	66/51
	90mm Glasswool R2.7	63/44	67/52
	<b>WALL THICKNESS mm</b>	<b>225</b>	<b>265</b>



Side 1 – 1 x GTEK™ Wet Area 13mm  
Side 2 – 1 x GTEK™ Wet Area 13mm

GTEK-PR25003

FRL	STUD DEPTH mm	70	90
	CAVITY INFILL	Rw/Rw+Ctr	
60/60/60	75mm Glasswool R1.8	62/44	67/51
	90mm Glasswool R2.5	62/44	67/51
	90mm Glasswool R2.7	63/45	68/52
	<b>WALL THICKNESS mm</b>	<b>231</b>	<b>271</b>

GTEK™ PROTECT SYSTEMS



Side 1 – 1 x GTEK™ Wall 13mm  
Side 2 – 1 x GTEK™ Wall 13mm

GTEK-PR25004

FRL	STUD DEPTH mm	70	90
	CAVITY INFILL	Rw/Rw+Ctr	
60/60/60	75mm Glasswool R1.8	62/43	67/51
	90mm Glasswool R2.5	62/43	67/51
	90mm Glasswool R2.7	63/44	68/52
	<b>WALL THICKNESS mm</b>	<b>225</b>	<b>265</b>



Side 1 – 1 x BGC Duraliner Plus 6mm  
Side 2 – 1 x BGC Duraliner Plus 6mm

GTEK-PR25005

FRL	STUD DEPTH mm	70	90
	CAVITY INFILL	Rw/Rw+Ctr	
60/60/60	75mm Glasswool R1.8	62/44	67/52
	90mm Glasswool R2.5	62/44	67/52
	90mm Glasswool R2.7	63/45	68/53
	<b>WALL THICKNESS mm</b>	<b>217</b>	<b>257</b>



Side 1 – 1 x GTEK™ Fire 13mm  
Side 2 – 1 x GTEK™ Fire 13mm

GTEK-PR25006

FRL	STUD DEPTH mm	70	90
	CAVITY INFILL	Rw/Rw+Ctr	
60/60/60	75mm Glasswool R1.8	64/47	68/53
	90mm Glasswool R2.5	64/47	68/53
	90mm Glasswool R2.7	65/48	69/53
	<b>WALL THICKNESS mm</b>	<b>231</b>	<b>271</b>

GTEK™ PROTECT SYSTEMS



Side 1 – 1 x GTEK™ Sound 13mm  
Side 2 – 1 x GTEK™ Sound 13mm

GTEK-PR25007

FRL	STUD DEPTH mm	70	90
	CAVITY INFILL	Rw/Rw+Ctr	
60/60/60	75mm Glasswool R1.8	65/47	69/53
	90mm Glasswool R2.5	65/47	69/53
	90mm Glasswool R2.7	66/48	70/54
	<b>WALL THICKNESS mm</b>	<b>231</b>	<b>271</b>



Side 1 – 1 x GTEK™ Total Plus 13mm  
Side 2 – 1 x GTEK™ Total Plus 13mm

GTEK-PR25008

FRL	STUD DEPTH mm	70	90
	CAVITY INFILL	Rw/Rw+Ctr	
60/60/60	75mm Glasswool R1.8	65/47	69/53
	90mm Glasswool R2.5	65/47	69/53
	90mm Glasswool R2.7	66/48	70/54
	<b>WALL THICKNESS mm</b>	<b>231</b>	<b>271</b>



Side 1 – 1 x GTEK™ Fire 16mm  
Side 2 – 1 x GTEK™ Fire 16mm

GTEK-PR25009

FRL	STUD DEPTH mm	70	90
	CAVITY INFILL	Rw/Rw+Ctr	
60/60/60	75mm Glasswool R1.8	66/48	70/54
	90mm Glasswool R2.5	66/48	70/54
	90mm Glasswool R2.7	67/49	71/55
	<b>WALL THICKNESS mm</b>	<b>237</b>	<b>277</b>



GTEK™ PROTECT SYSTEMS



Side 1 – 1 x GTEK™ Fire and Wet Area 13mm  
Side 2 – 1 x GTEK™ Fire and Wet Area 13mm

GTEK-PR25010

FRL	STUD DEPTH mm	70	90
	CAVITY INFILL	Rw/Rw+Ctr	
60/60/60	75mm Glasswool R1.8	65/48	69/54
	90mm Glasswool R2.5	65/48	69/54
	90mm Glasswool R2.7	66/49	70/55
	<b>WALL THICKNESS mm</b>	<b>231</b>	<b>271</b>



Side 1 – 2 x GTEK™ Wall 10mm  
Side 2 – 2 x GTEK™ Wall 10mm

GTEK-PR25011

FRL	STUD DEPTH mm	70	90
	CAVITY INFILL	Rw/Rw+Ctr	
60/60/60	75mm Glasswool R1.8	66/48	70/55
	90mm Glasswool R2.5	66/48	70/55
	90mm Glasswool R2.7	67/49	71/56
	<b>WALL THICKNESS mm</b>	<b>245</b>	<b>285</b>



Side 1 – 1 x BGC Duraliner Plus 9mm  
Side 2 – 1 x BGC Duraliner Plus 9mm

GTEK-PR25012

FRL	STUD DEPTH mm	70	90
	CAVITY INFILL	Rw/Rw+Ctr	
60/60/60	75mm Glasswool R1.8	67/50	71/55
	90mm Glasswool R2.5	67/50	71/55
	90mm Glasswool R2.7	68/51	72/56
	<b>WALL THICKNESS mm</b>	<b>223</b>	<b>263</b>

GTEK™ PROTECT SYSTEMS



Side 1 – 1 x GTEK™ Sound 10mm  
 1 x GTEK™ Wall 10mm  
 Side 2 – 1 x GTEK™ Sound 10mm  
 1 x GTEK™ Wall 10mm

GTEK-PR25013

FRL	STUD DEPTH mm	70	90
	CAVITY INFILL	Rw/Rw+Ctr	
60/60/60	75mm Glasswool R1.8	67/53	71/56
	90mm Glasswool R2.5	67/53	71/56
	90mm Glasswool R2.7	68/54	72/57
	<b>WALL THICKNESS mm</b>	<b>245</b>	<b>285</b>



Side 1 – 1 x GTEK™ Wet Area 10mm  
 1 x BGC Duraliner Plus 6mm  
 Side 2 – 1 x GTEK™ Wet Area 10mm  
 1 x BGC Duraliner Plus 6mm

GTEK-PR25014

FRL	STUD DEPTH mm	70	90
	CAVITY INFILL	Rw/Rw+Ctr	
60/60/60	75mm Glasswool R1.8	69/54	72/57
	90mm Glasswool R2.5	69/54	72/57
	90mm Glasswool R2.7	70/55	73/58
	<b>WALL THICKNESS mm</b>	<b>237</b>	<b>277</b>



Side 1 – 2 x GTEK™ Wall 13mm  
 Side 2 – 2 x GTEK™ Wall 13mm

GTEK-PR25015

FRL	STUD DEPTH mm	70	90
	CAVITY INFILL	Rw/Rw+Ctr	
60/60/60	75mm Glasswool R1.8	70/55	73/59
	90mm Glasswool R2.5	70/55	73/59
	90mm Glasswool R2.7	71/55	74/60
	<b>WALL THICKNESS mm</b>	<b>257</b>	<b>297</b>

**FIGURE 8 – TYPICAL FLOOR/WALL JUNCTION**

Timber wall framing (back-to-back continuous top tracks. Horizontal joints in the GTEK™ Protect 25mm)

GTEK™ Protect 25mm

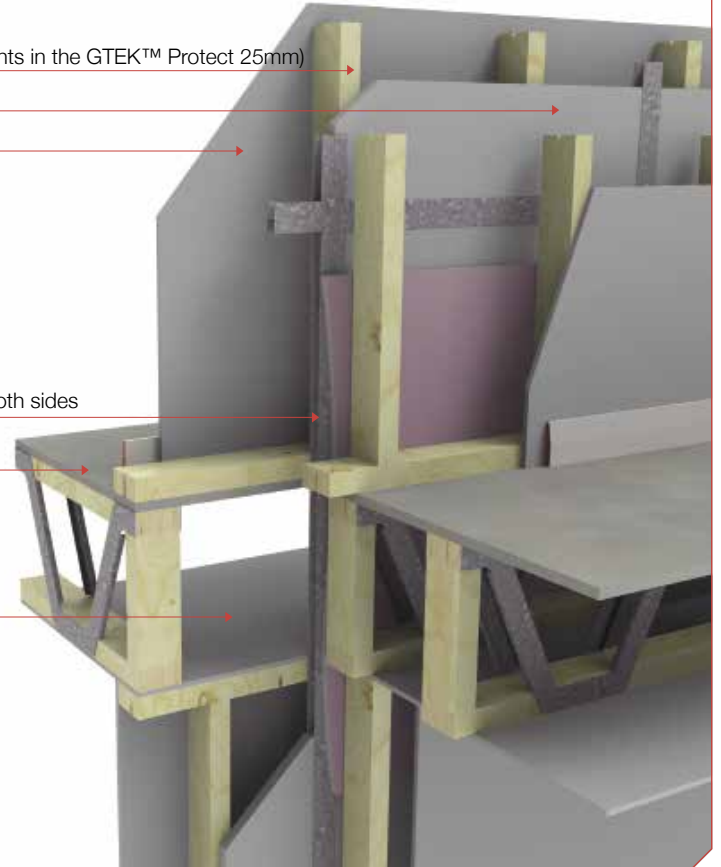
GTEK™ plasterboard as specified

GTEK™ Protect H Stud restrained by clips fastened to wall plates on both sides

Flooring material

GTEK™ Ceiling

Provide additional layer of GTEK™ Fire 16mm screw laminated to GTEK™ Protect 25mm as specified



**FIGURE 9 – TYPICAL ARRANGEMENT OF SERVICES**

Minimum 10mm GTEK™ plasterboard both sides

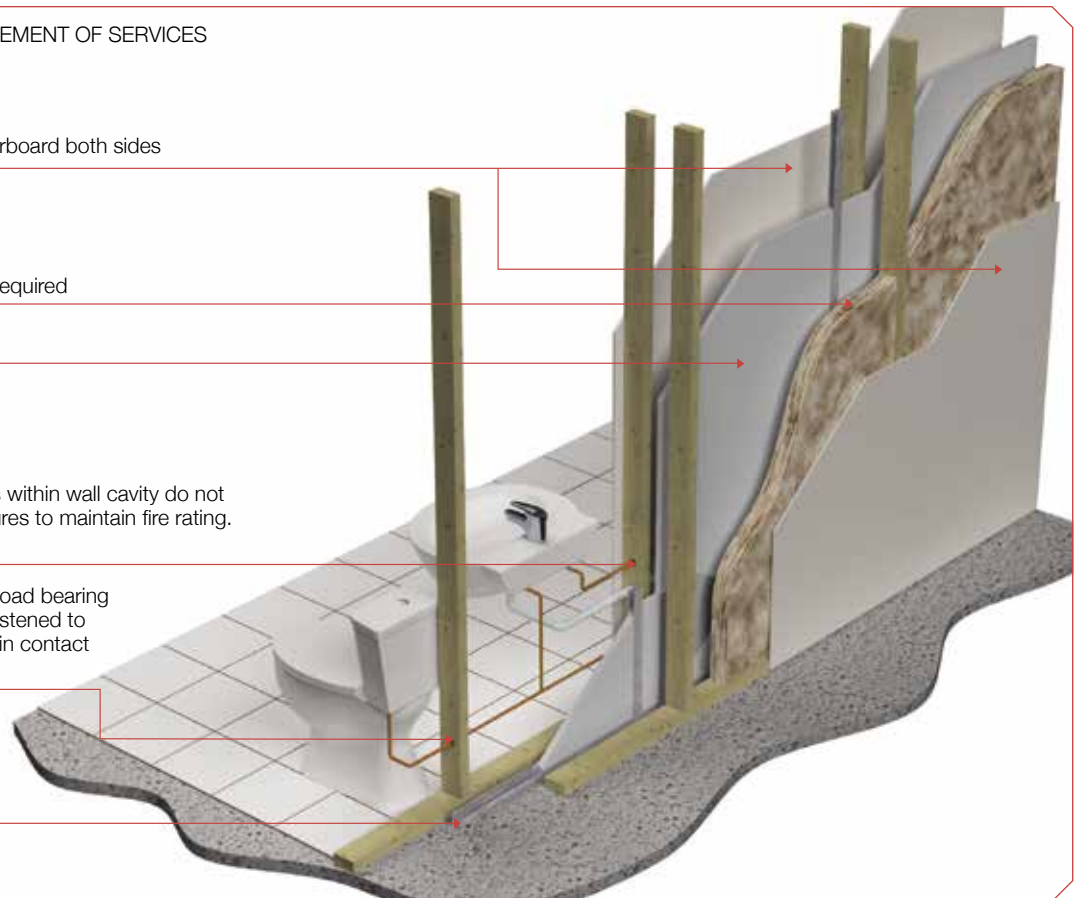
90mm Glasswool insulation as required

GTEK™ Protect 25mm

Plumbing and electrical services within wall cavity do not require special treatment or fixtures to maintain fire rating. Seal for acoustic isolation.

Pipes may be installed through load bearing studs. They must be securely fastened to the wall frame and must not be in contact with the GTEK™ Protect 25mm

Continuous bottom track to bottom of GTEK™ Protect 25mm and GTEK™ Protect H Studs



**FIGURE 10 – CONCRETE BASE**

Timber studs both sides

GTEK™ Protect 25mm

GTEK™ plasterboard as specified

90mm Glasswool as specified

Note: The clear distance between the GTEK™ Protect 25mm and wall framing on both sides should not be less than 20mm nor more than 40mm.

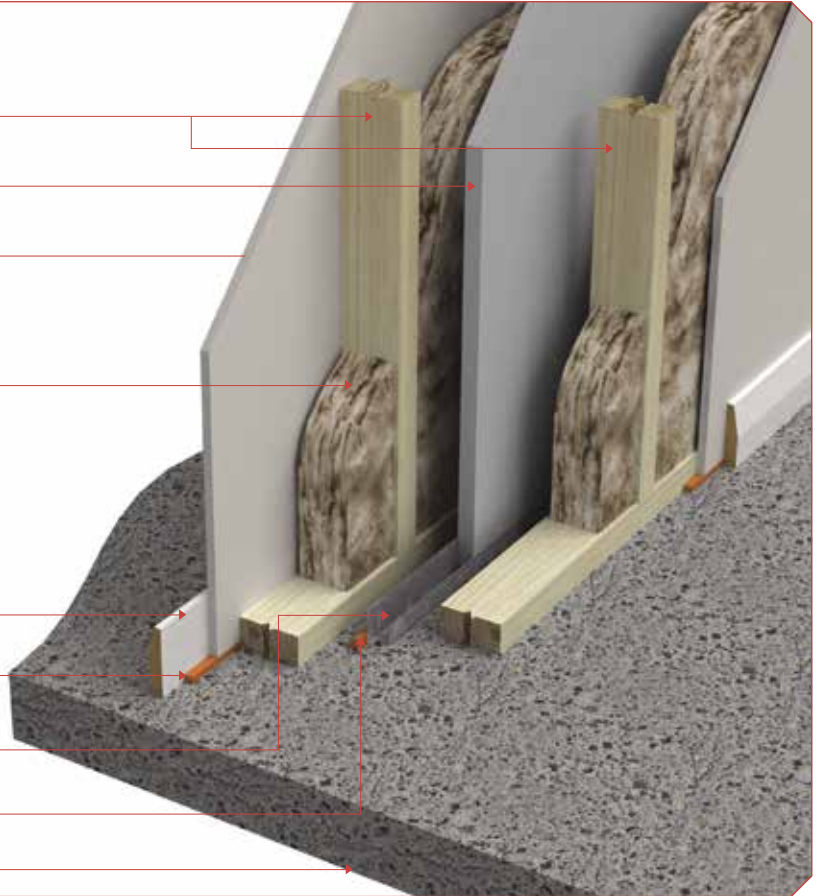
Skirting as required

All gaps to be sealed with Firemastic sealant

Continuous GTEK™ Protect J Track.  
Fasten to slab @ 600mm ctrs

Seal track with Fire Mastic sealant

Concrete Slab



**FIGURE 11 – MASONRY BASE**

Timber studs both sides

20-40mm gap both sides (typical)

GTEK™ Protect 25mm

GTEK™ plasterboard as specified

90mm Glasswool as specified

Skirting as required

All gaps to be sealed with Firemastic sealant

Flooring

GTEK™ Protect Aluminium Clip @ each  
GTEK™ Protect H Stud and max 3000mm vertically

Continuous GTEK™ Protect J Track.  
Fasten to masonry @ 600mm ctrs

Seal track with Firemastic sealant

Continuous strip of GTEK™ Fire 16mm screw laminated  
to GTEK™ Protect 25mm fixed @ 400mm x 400mm ctrs

Termite and moisture barrier as required

Concrete or masonry wall of equal FRL. Place top bricks frog  
down and fill/parge all hollows under GTEK™ Protect J Track

FRL of brickwork to match FRL of GTEK™ Protect 25mm

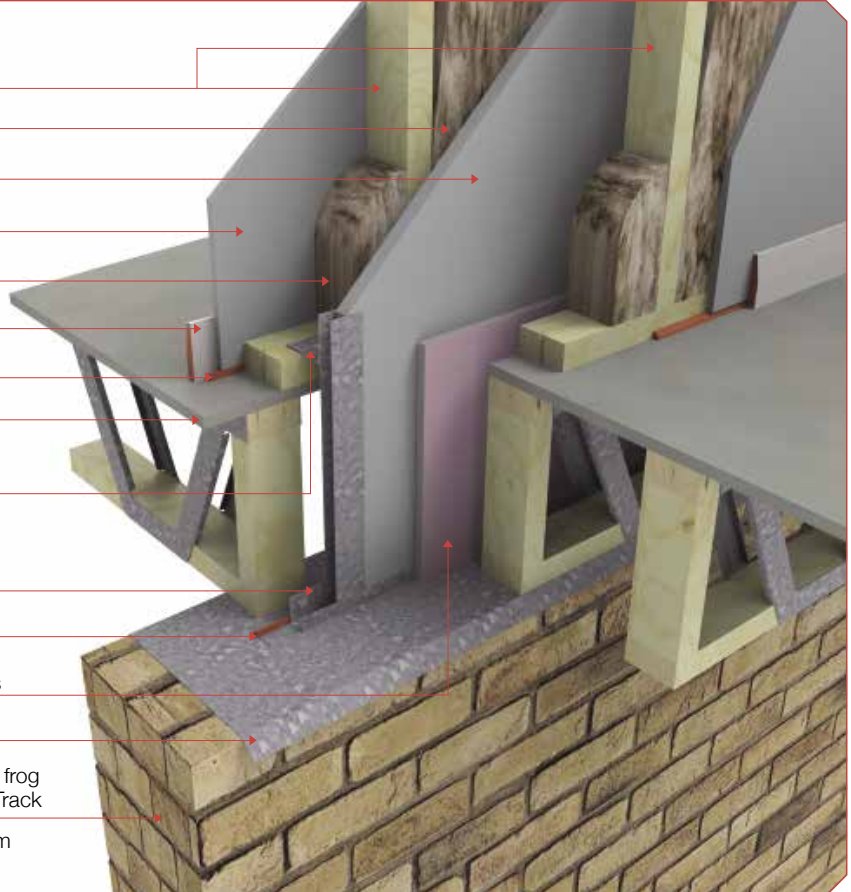




FIGURE 12 – STEP IN SLAB 1

20-40mm gap both sides

GTEK™ plasterboard as specified

Timber studs both sides

GTEK™ Protect 25mm

Seal track with Firemastic sealant

All gaps to be sealed with Firemastic sealant

Continuous GTEK™ Protect J Track fasten to slab @ 600mm ctrs. Ensure fasteners have adequate edge distance

Concrete slab to engineer's design

Note: The clear distance between the GTEK™ Protect 25mm and wall framing on both sides should not be less than 20mm nor more than 40mm.

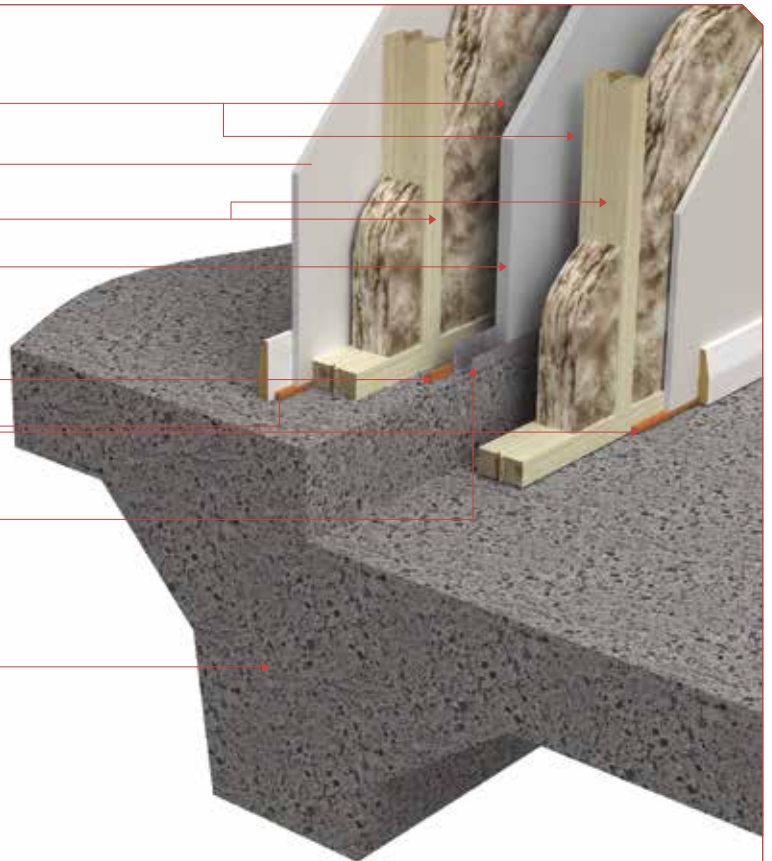


FIGURE 13 – STEP IN SLAB 2

GTEK™ Protect 25mm

20-40mm gap both sides

GTEK™ plasterboard as specified

GTEK™ Protect Aluminium Clip required if vertical support of GTEK™ Protect 25mm exceeds 3000mm

Firemastic sealant

Timber studs both sides

90mm Glasswool as specified

All gaps to be sealed with Firemastic sealant

Continuous GTEK™ Protect J Track fasten to slab @ 600mm ctrs. Ensure fasteners have adequate edge distance

Seal track with Fire Mastic sealant

Concrete slab to engineer's design

Note: The clear distance between the GTEK™ Protect 25mm and wall framing on both sides should not be less than 20mm nor more than 40mm.



**FIGURE 14 – TYPICAL FLOOR/WALL JUNCTION 1**

20-40mm gap each side

GTEK™ Protect 25mm and GTEK™ Protect H Studs

Continuous top and bottom track. Fasten together with 10 gauge screws @ 600mm max ctrs

Where no trimmers or end blocks exist between floor joists, screw laminate an additional layer of GTEK™ Fire 16mm @ floor levels extending 150mm, above floor and below ceiling. Fixings @ 400mm x 400mm ctrs

Flooring

Skirting as required

All gaps to be sealed with Firemastic sealant

Floor joist

GTEK™ Ceiling plasterboard as specified

GTEK™ Protect Aluminium Clips @ each stud

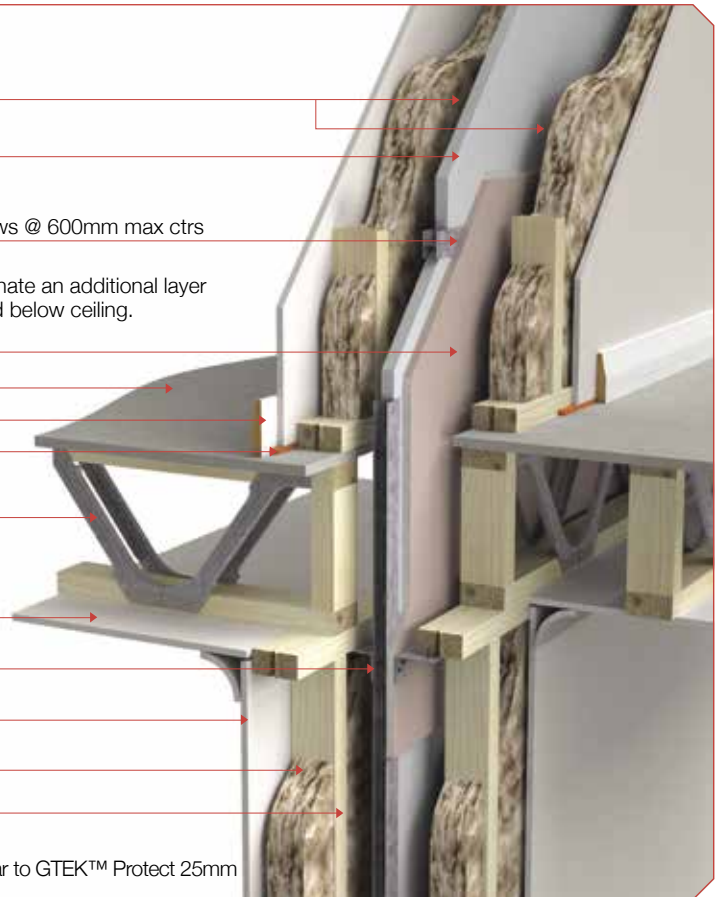
GTEK™ plasterboard as specified both sides

90mm Glasswool as specified

Timber studs

Notes: 1) Floors may be staggered to meet design requirements.

2) Floor joists can be of any type and can run parallel or perpendicular to GTEK™ Protect 25mm



**FIGURE 15 – TYPICAL FLOOR/WALL JUNCTION 2**

Additional GTEK™ Fire 16mm at floor/roof junction

GTEK™ Protect 25mm

Roof or floor (floor shown for illustrative purposes)

Where GTEK™ Protect 25mm horizontal joint exceeds 600mm and no greater than 1500mm vertically from a GTEK™ Protect 25mm Aluminium Clip, laminate additional GTEK™ Fire 16mm as indicated @ 400mm x 400mm ctrs with 10g x 38mm Type L laminating screws

Continuous top and bottom track fasten together with 10 gauge screws @ 600mm ctrs

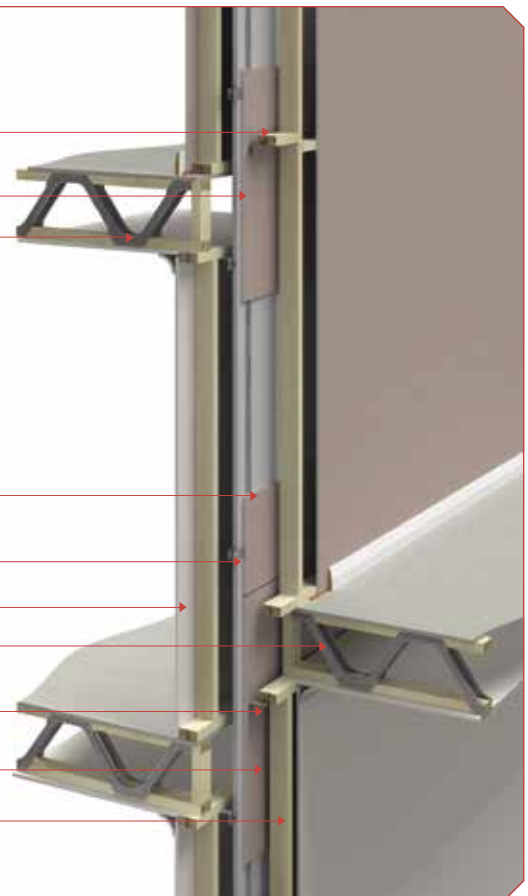
GTEK™ plasterboard as specified

Position of posi-strut or timber floor is for illustrative purposes only

GTEK™ Protect Aluminium Clips

Additional GTEK™ Fire 16mm at floor junction

Timber studs

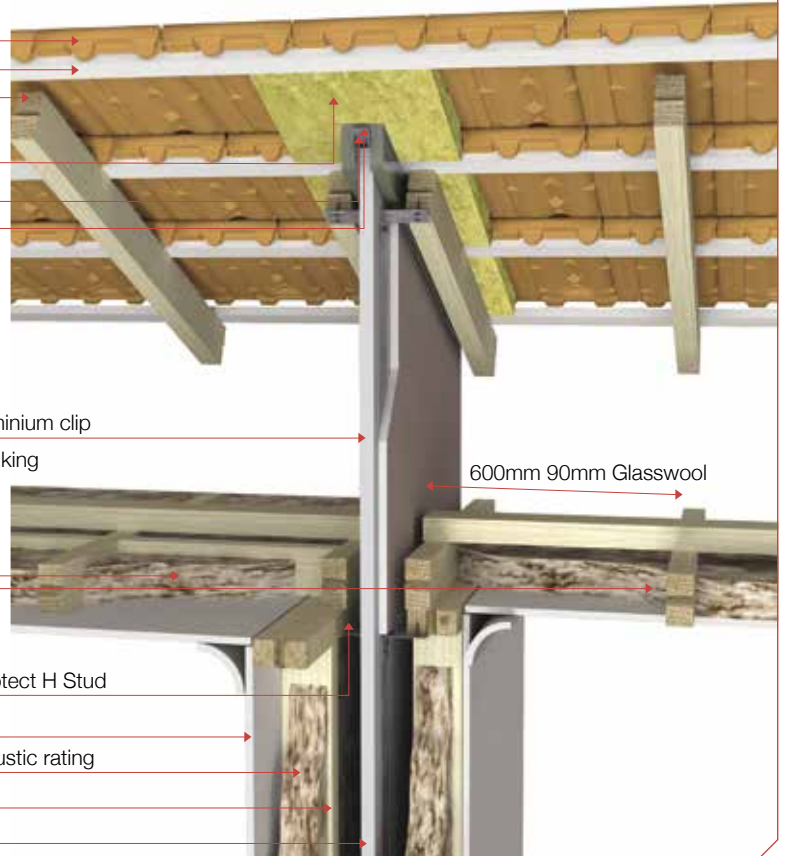


**FIGURE 16 – PITCHED ROOF - WALL/ROOF**

Non-combustible roofing  
 Roof battens  
 Roof framing  
 Compressed Stonewool insulation, min 80kg/m<sup>3</sup> between battens and over capping min 300mm width  
 Allow gap for frame shrinkage and roof movement  
 Continuous capping ex GTEK™ Protect J Track  
 Additional layer of GTEK™ Fire 16mm laminated to GTEK™ Protect 25mm with 10g x 38mm laminating screws @ 400mm x 400mm max ctrs (roof space only)

Provide timber packing where distance of truss face to GTEK™ Protect 25mm does not provide adequate fixing of aluminium clip  
 90mm Glasswool extending 600mm both sides (required for flanking sound control) not required if average height of roof space above ceiling is greater than 600mm (thermal insulation as utilised to achieve system thermal performance is acceptable for flanking sound control)

Opposing GTEK™ Protect Aluminium Clips at each GTEK™ Protect H Stud  
 GTEK™ plasterboard as specified both sides  
 90mm Glasswool to one/both sides as specified to achieve acoustic rating  
 Timber studs  
 GTEK™ Protect 25mm

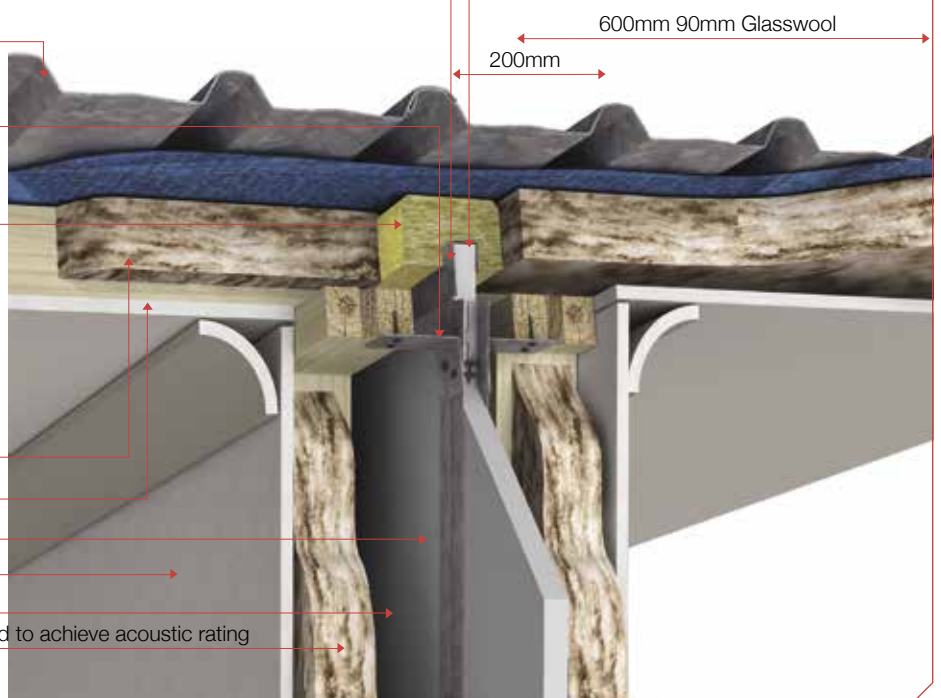


**FIGURE 17 – FLAT ROOF - WALL/ROOF**

Max 25mm gap between underside of roofing and GTEK™ Protect 25mm  
 Continuous capping ex GTEK™ Protect 25mm J Track

Non-combustible roofing  
 Opposing GTEK™ Protect Aluminium Clips @ each stud  
 Compressed Stonewool insulation, min 80kg/m<sup>3</sup> min 300mm width  
 90mm Glasswool extending 600mm both sides (required for flanking sound control) not required if average height of roof above ceiling is greater than 600mm (thermal insulation as utilised to achieve system thermal performance is acceptable for flanking sound control)

GTEK™ plasterboard as specified  
 GTEK™ Protect 25mm  
 GTEK™ plasterboard as specified both sides  
 20-40mm gap each side  
 90mm Glasswool to one/both sides as specified to achieve acoustic rating





**FIGURE 18 – ROOF PARAPET**

Continuous capping ex GTEK™ Protect J Track

Compressed Stonewool insulation, min 80kg/m<sup>3</sup> min 300mm width

Corrosion resistant metal parapet capping

Opposing GTEK™ Protect Aluminium Clips @ each GTEK™ Protect H Stud

External cladding and sarking as required

Non-combustible roofing

Box gutter

Roof framing

Additional layer of GTEK™ Fire 16mm laminated to GTEK™ Protect 25mm with type 'L' 10 x 38 laminating screws @ 400mm x 400mm max ctrs - extending above and below ceiling as shown

Top plate

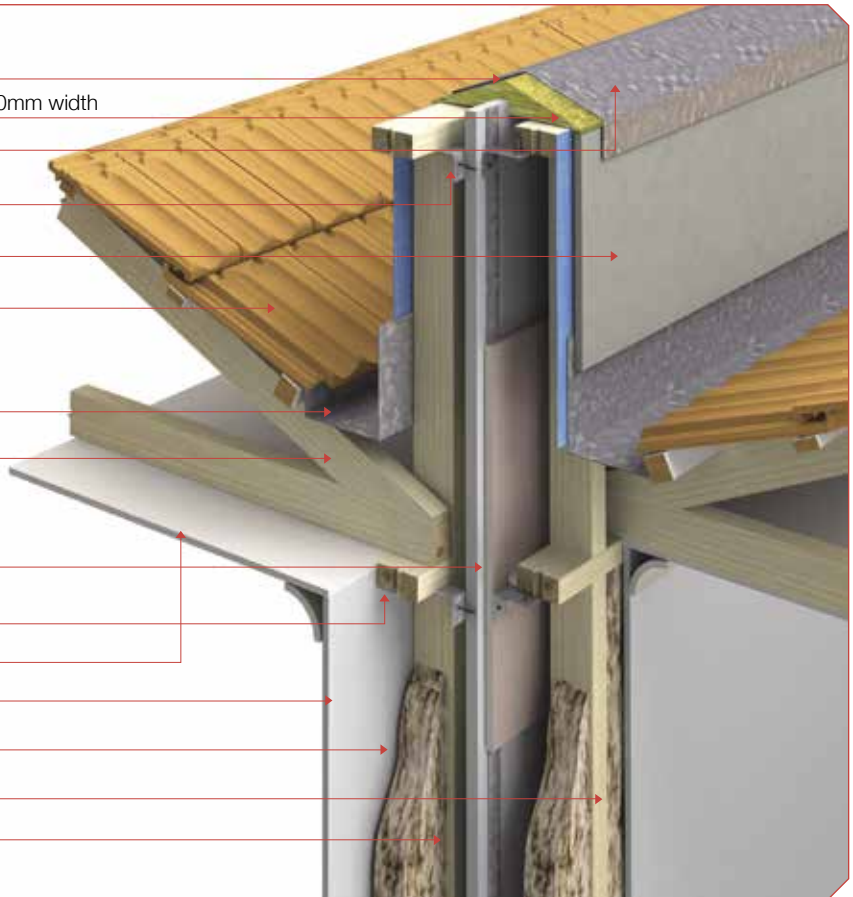
GTEK™ Ceiling

GTEK™ plasterboard as specified both sides

90mm Glasswool

Timber studs

GTEK™ Protect 25mm



**FIGURE 19 – BOX GUTTER**

Non-combustible roofing

Continuous capping ex GTEK™ Protect J Track

Compressed Stonewool insulation, min 80kg/m<sup>3</sup>

GTEK™ Ceiling

25mm gap between underside of gutter and GTEK™ Protect 25mm

90mm Glasswool extending 600mm both sides required for sound control (thermal insulation as utilised to achieve system thermal performance is acceptable for flanking sound control)

GTEK™ plasterboard as specified both sides

90mm Glasswool as specified

Opposing GTEK™ Protect Aluminium Clips @ each GTEK™ Protect stud

GTEK™ Protect 25mm

Timber studs





FIGURE 20 – EAVE CLOSURE

Roofing, sarking and battens

Compressed Stonewool insulation, min 80kg/m<sup>3</sup>

Continuous capping track min 1200mm back span

GTEK™ Protect J Tracks

GTEK™ Protect J Track

GTEK™ Protect Aluminium Clip

Fascia

Fire mastic Sealant

Eave lining. Provide control joint at GTEK™ Protect 25mm location

GTEK™ Protect 25mm and one layer GTEK™ Fire 16mm laminated together in eave space @ 400mm x 400mm ctrs

Stonewool insulation

Brick veneer

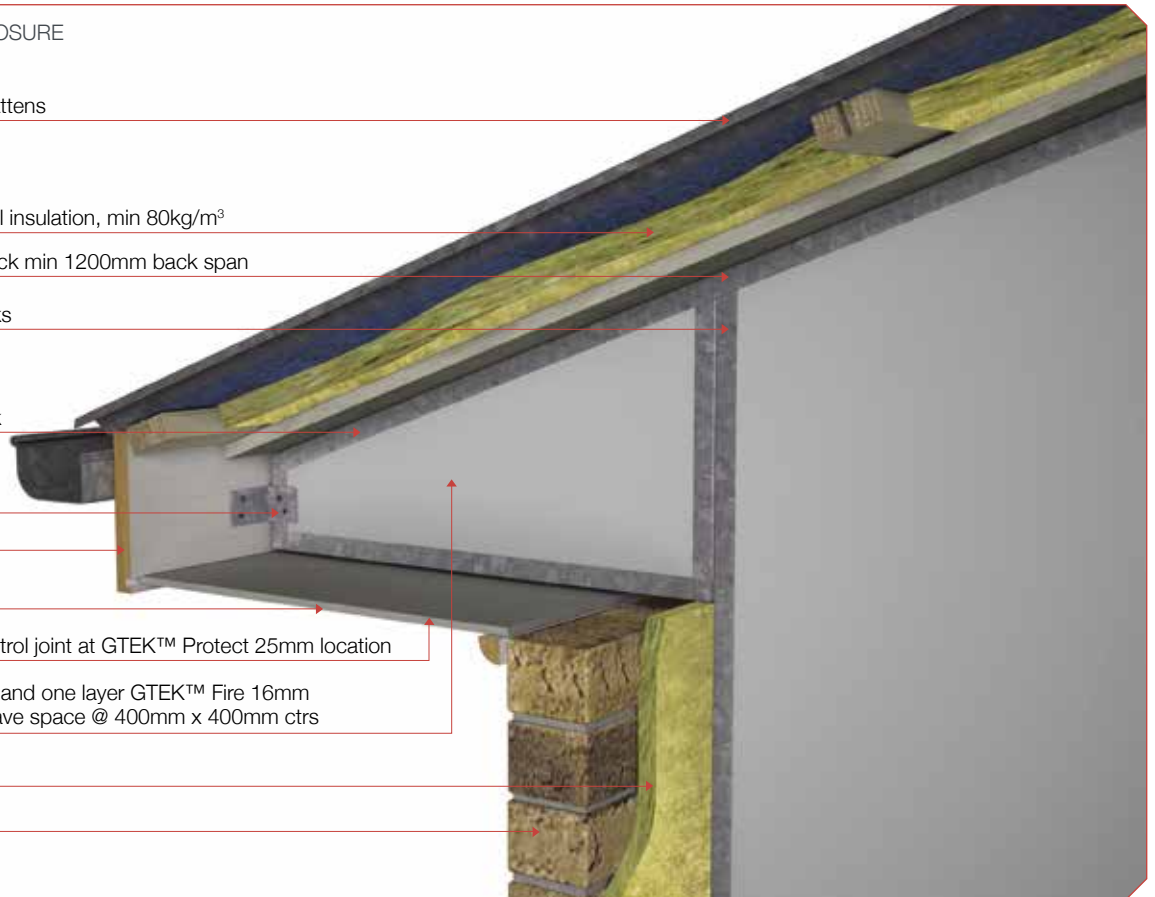


FIGURE 21 – GTEK™ PROTECT SYSTEM TO BOUNDARY WALL-DOUBLE STOREY TO SINGLE STORY

10mm GTEK™ plasterboard as specified

Cladding to Architect's details. Batten to suit external cladding

GTEK™ Fire and Wet Area 16mm

Skirting as required

All gaps to be sealed with Firemastic sealant

Compressed Stonewool insulation, min 80kg/m<sup>3</sup>

Continuous capping ex GTEK™ Protect J Track

Sarking

GTEK™ Ceiling

20-40mm gap both sides

GTEK™ plasterboard as specified

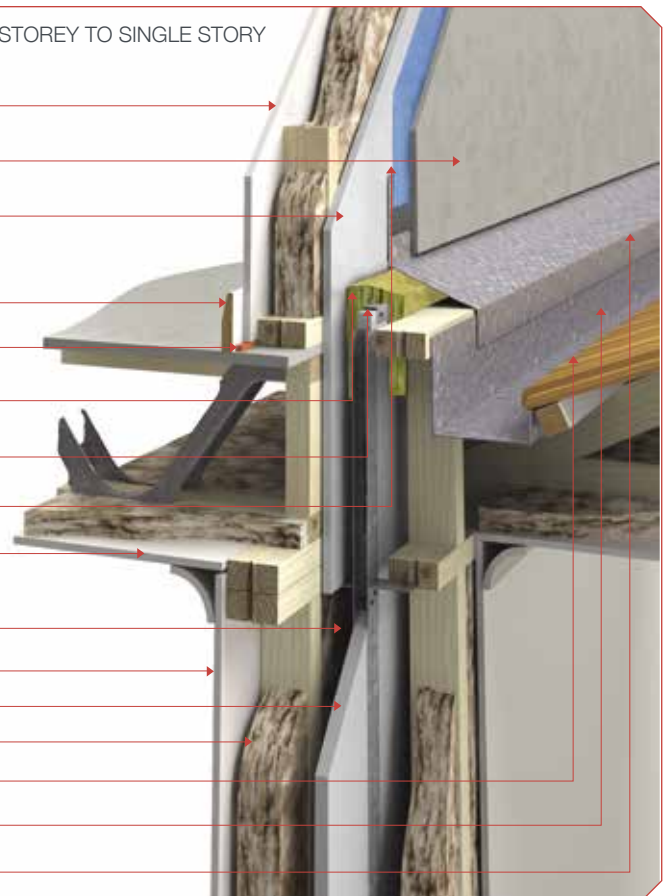
GTEK™ Protect 25mm

90mm Glasswool as specified

Roofing as required

Box gutter

Flashing as specified



Note: FRL 60/60/60 for upper storey external wall fire rating is from outside only.

**FIGURE 22 – GTEK™ PROTECT SYSTEM TO BOUNDARY WALL**

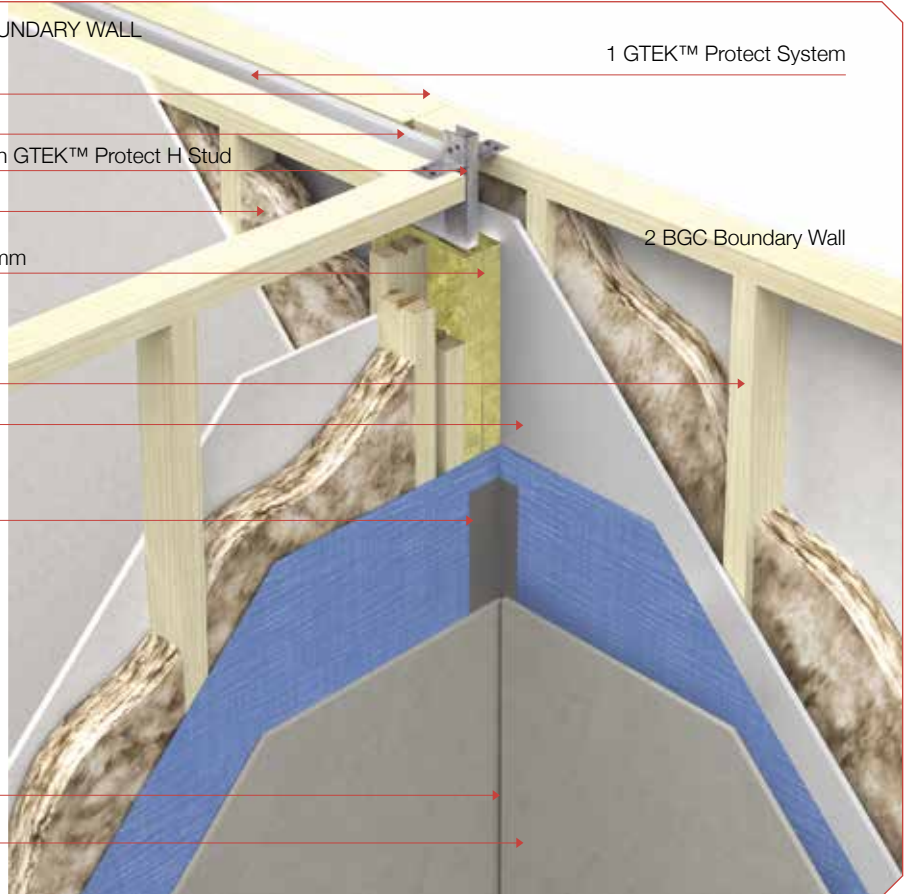
- GTEK™ plasterboard
- GTEK™ Protect 25mm (20-40mm gap both sides)
- Opposing GTEK™ Protect Aluminium Clips at each GTEK™ Protect H Stud
- 90mm Glasswool as required
- Compressed Stonewool insulation, min 80kg/m<sup>3</sup> min 200mm both sides of the GTEK™ Protect 25mm

- Batten to suit external cladding
- GTEK™ Fire & Wet Area 16mm

Backing angle

Weather sealant

External cladding as specified



**FIGURE 23 – BRICK VENEER WALL 1**

- Opposing GTEK™ Protect Aluminium Clips @ each GTEK™ Protect H Stud
- GTEK™ plasterboard as specified both sides
- GTEK™ Protect H Stud
- 20-40mm gap each side
- GTEK™ Protect 25mm

90mm Glasswool to one/both sides as specified to achieve required acoustic rating

Continuous GTEK™ Protect J Track fastened at top and bottom

Compressed Stonewool insulation, min 80kg/m<sup>3</sup>

Sarking covers Stonewool insulation

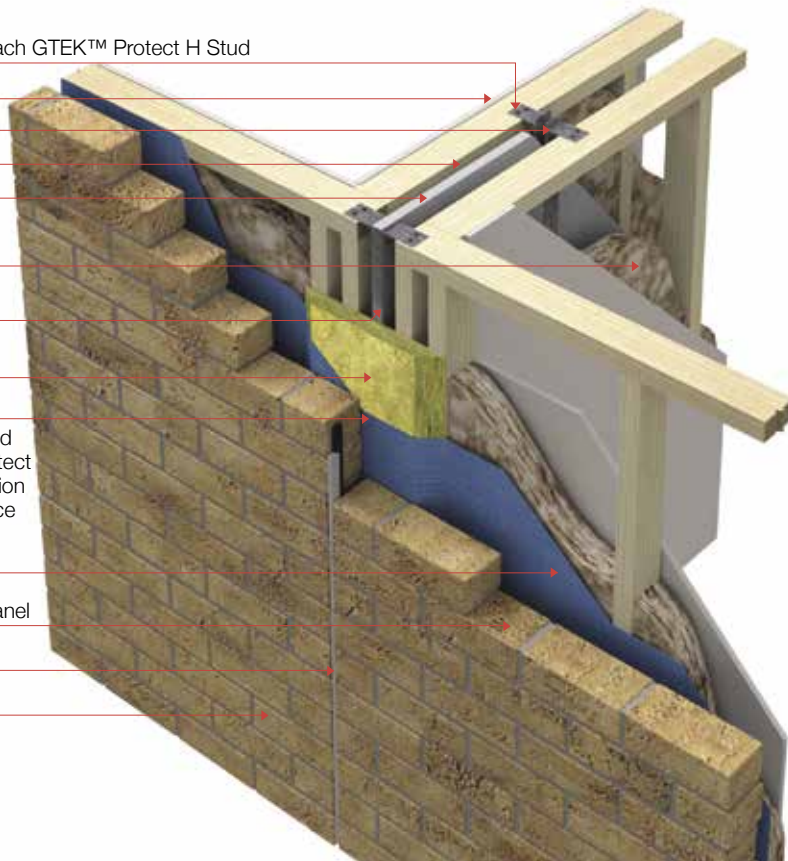
Continuous 90mm Glasswool insulation to extend 600mm from junction both sides of GTEK™ Protect 25mm for flanking sound control (thermal insulation as utilised to achieve system thermal performance is acceptable for flanking sound control)

Maximum 40mm gap between brickwork and panel

Control joint opposite GTEK™ Protect 25mm

Brick veneer cladding

Note: The clear distance between the GTEK™ Protect 25mm and wall framing on both sides should not be less than 20mm nor more than 40mm.





**FIGURE 24 – BRICK VENEER WALL**

GTEK™ plasterboard as specified both sides

Opposing GTEK™ Protect Aluminium Clips at each GTEK™ Protect H Stud

GTEK™ Protect 25mm

20-40mm gap each side

90mm Glasswool to one/both sides as specified to achieve required acoustic rating

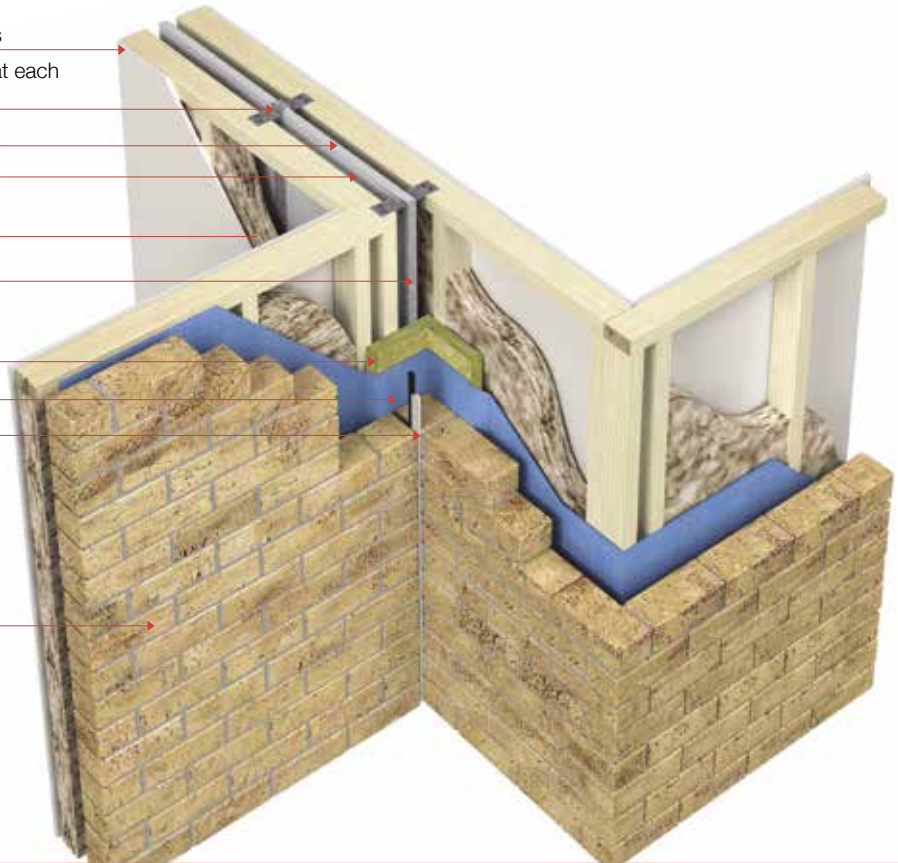
Continuous end track

Compressed Stonewool insulation, min 80kg/m<sup>3</sup> min 200mm

Sarking

Articulation joint fire sealant with backing

Brick veneer cladding



**FIGURE 25 – CLAD WALL**

GTEK™ Protect 25mm

Opposing GTEK™ Protect Aluminium Clips

Continuous bead of acoustic sealant or closed cell acoustic foam to capping track (seal all gaps)

Continuous GTEK™ Protect J Track to end of GTEK™ Protect 25mm

External cladding as specified

20-40 mm gap each side

Sarking as required

Exterior sealant

GTEK™ Protect H Stud

Opposing GTEK™ Protect Aluminium Clips @ each GTEK™ Protect H Stud

Continuous 90mm Glasswool extend 600mm from junction both sides of GTEK™ Protect 25mm for flanking sound control (thermal 90mm Glasswool as utilised to achieve system thermal performance is acceptable for flanking sound control)

90mm Glasswool to one/both sides as specified to achieve required acoustic rating

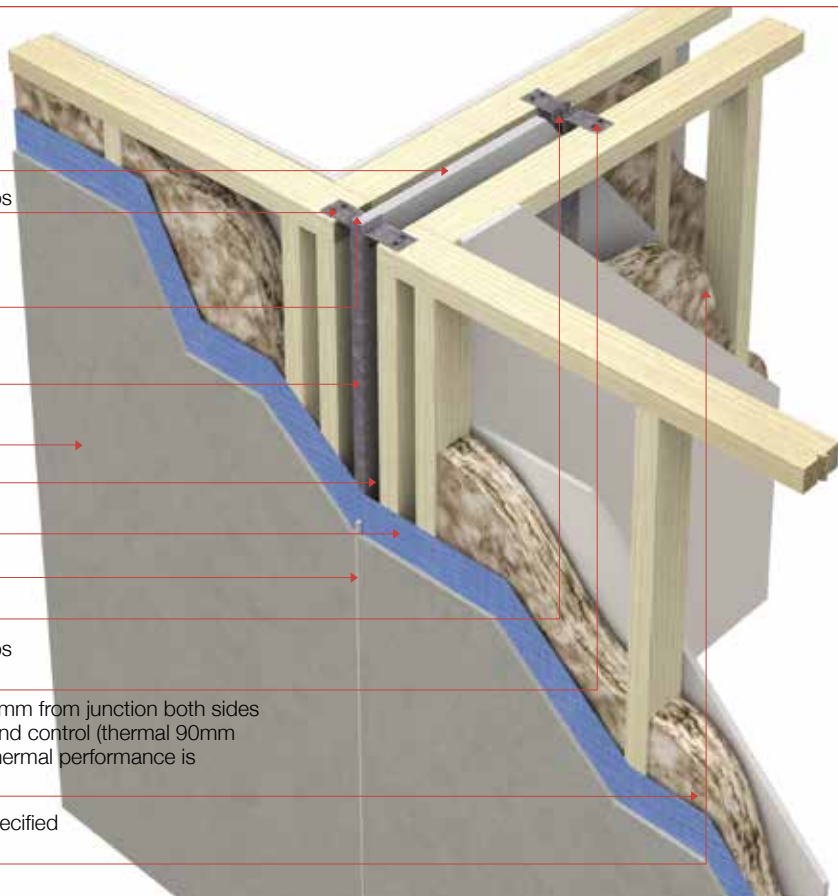


FIGURE 26 – 4-WAY INTERSECTING WALL

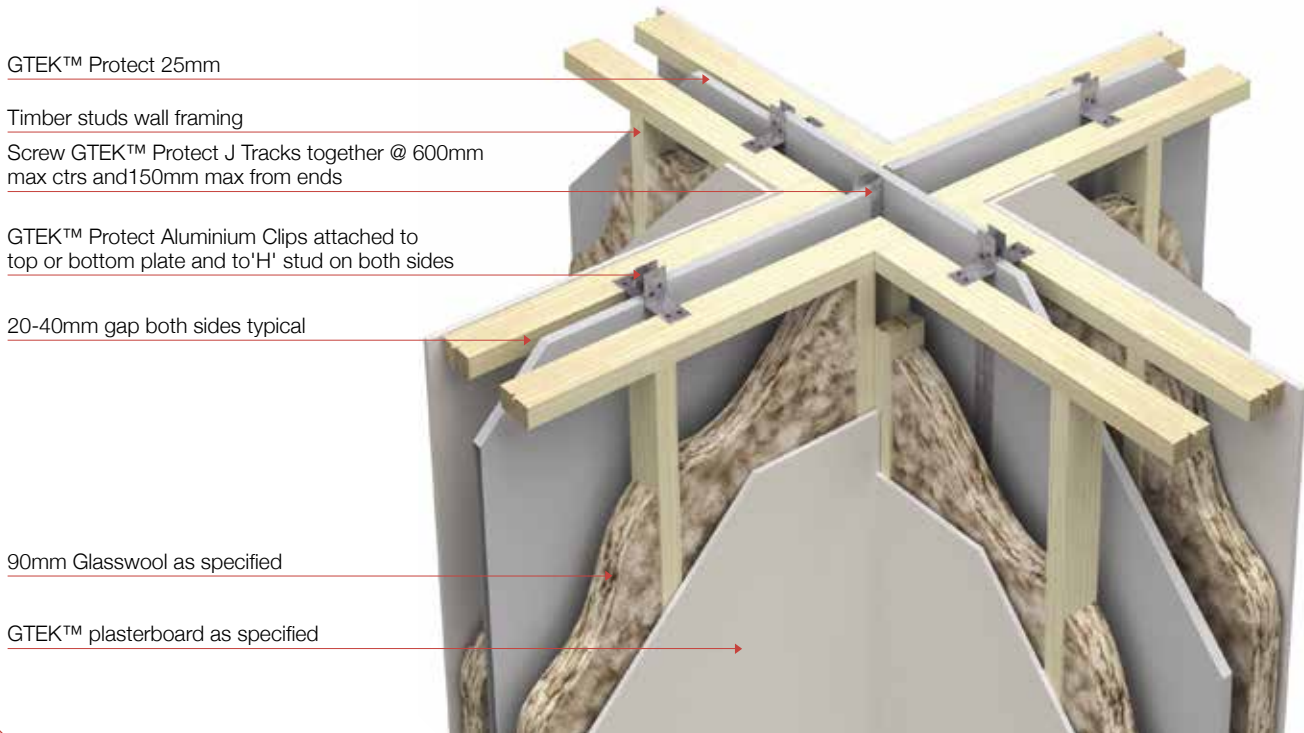


FIGURE 27 – TYPICAL CORNER

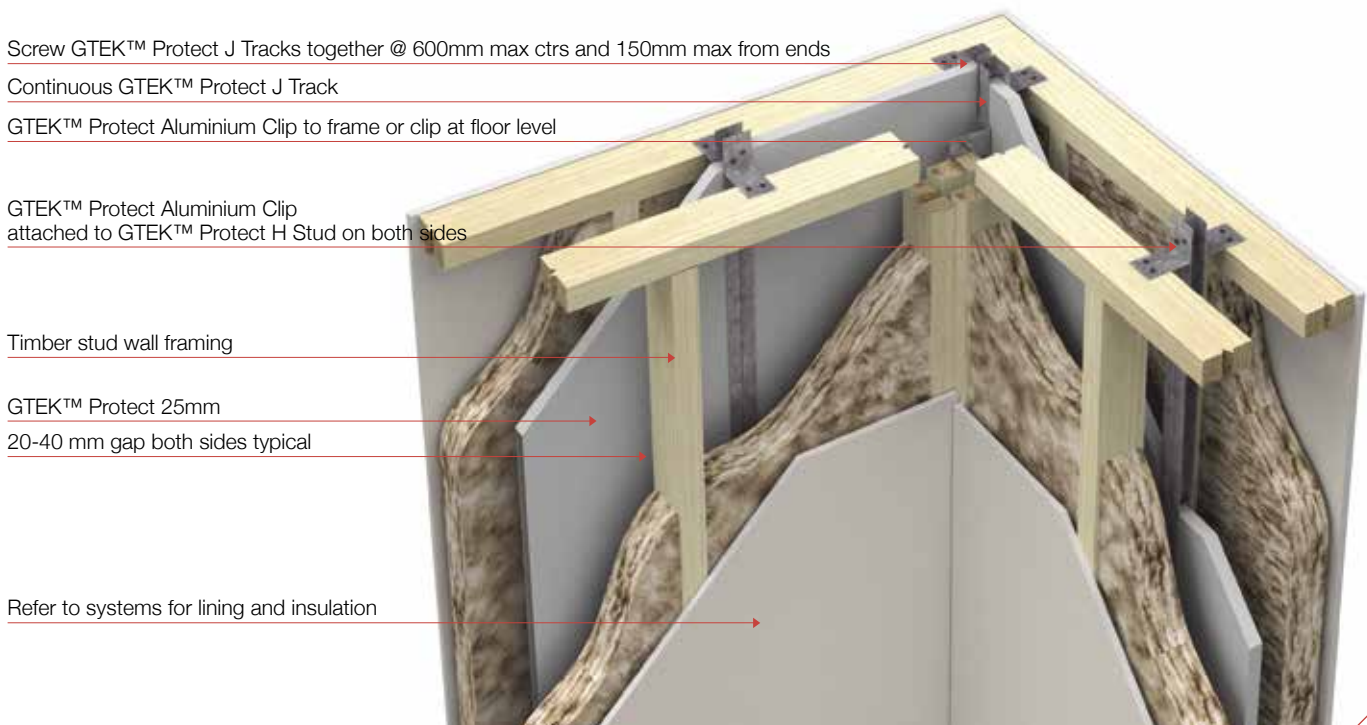




FIGURE 28 – INTERNAL WALL

Opposing GTEK™ Protect Aluminium Clips  
@ each GTEK™ Protect H Stud

90mm Glasswool as specified

Non fire-rated wall

GTEK™ Protect 25mm

Notes:

- 1) Refer to GTEK™ Protect Systems Components table for insulation and wall linings.
- 2) Ensure all gaps are sealed with Firemastic sealant.

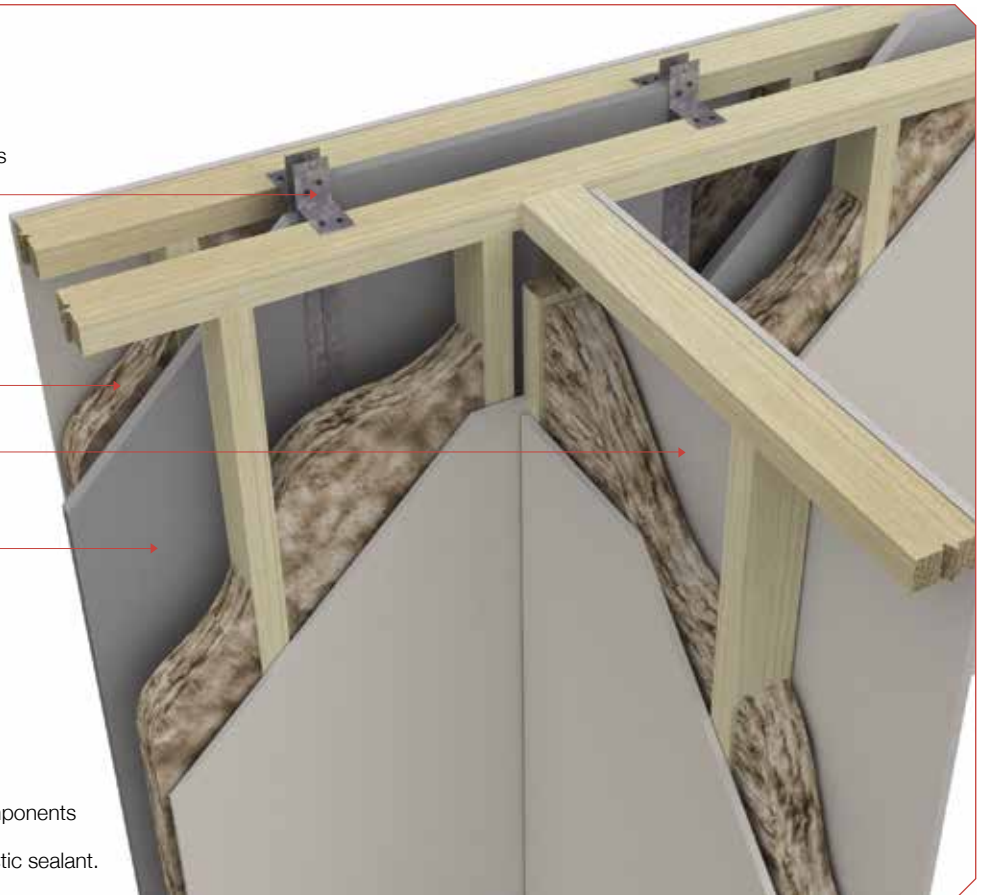


FIGURE 29 – WALL PENETRATIONS

Provide trimmers as required for services

Stud bracket for power point (GPO)

Power point (GPO)

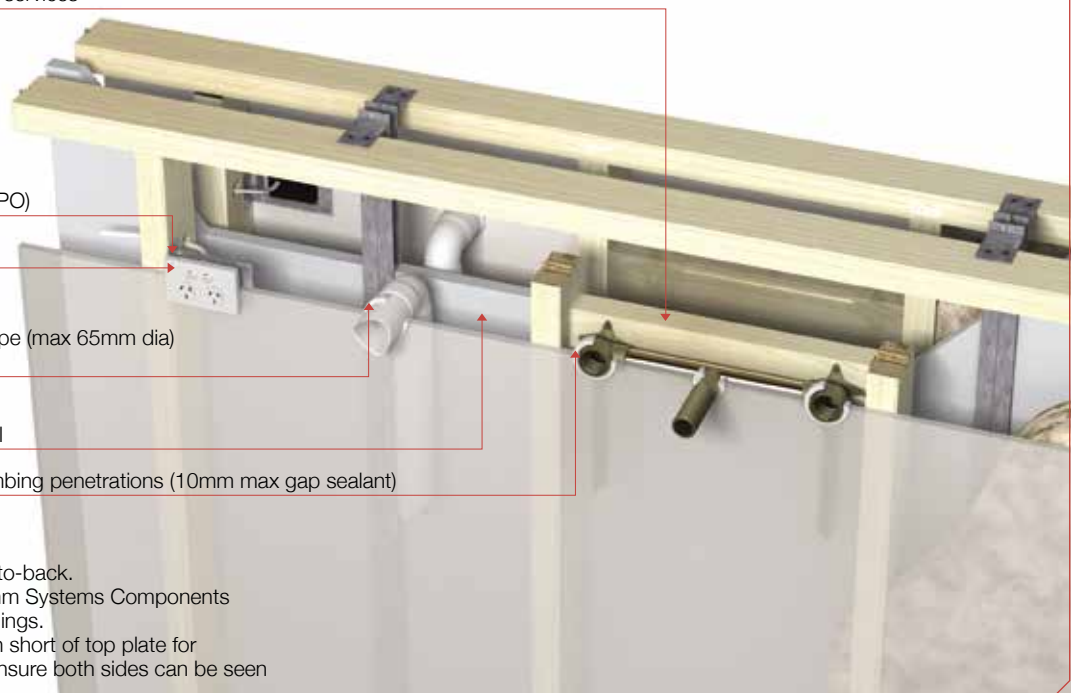
Wet area sealant around PVC pipe (max 65mm dia)  
10mm max (gap sealant)

20-40mm gap both sides typical

Wet area sealant around all plumbing penetrations (10mm max gap sealant)

Notes:

- 1) All penetrations can be back-to-back.
- 2) Refer to GTEK™ Protect 25mm Systems Components table for insulation and wall linings.
- 3) GTEK™ Protect 25mm shown short of top plate for illustration purposes only to ensure both sides can be seen



**FIGURE 30 – UPVC PIPE PENETRATION AT ROOF SPACE**

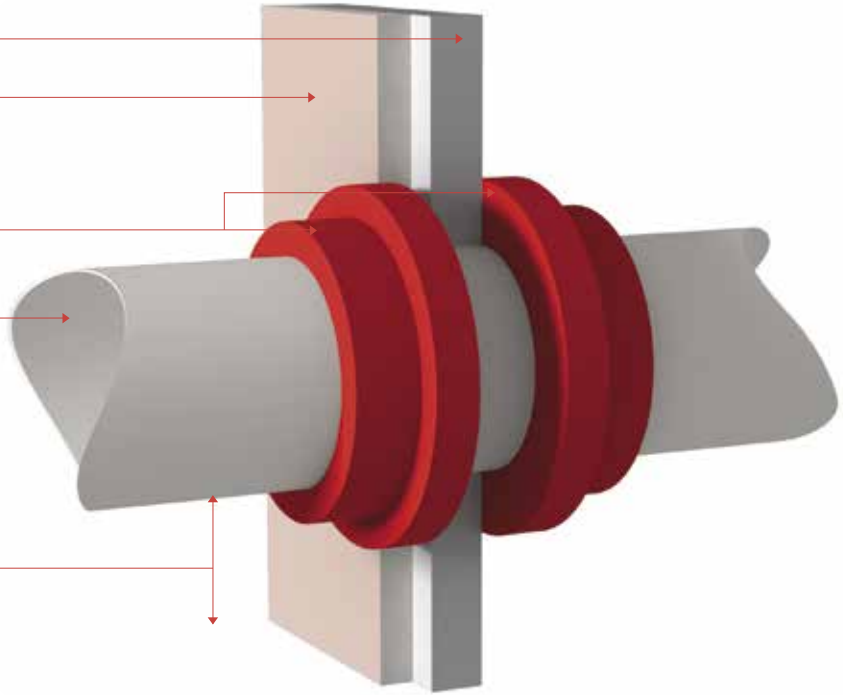
GTEK™ Protect 25mm

GTEK™ Fire 16mm

Fire collar as per AS 1530.4

uPVC pipe 100mm diameter

150mm min framing



Note: Penetrations through the GTEK™ Protect 25mm and the GTEK™ Fire 16mm should be approved by a Building sureyor prior to installation.

**FIGURE 31 – POWER CABLES PENETRATIONS AT ROOF SPACE**

GTEK™ Protect 25mm

GTEK™ Fire 16mm

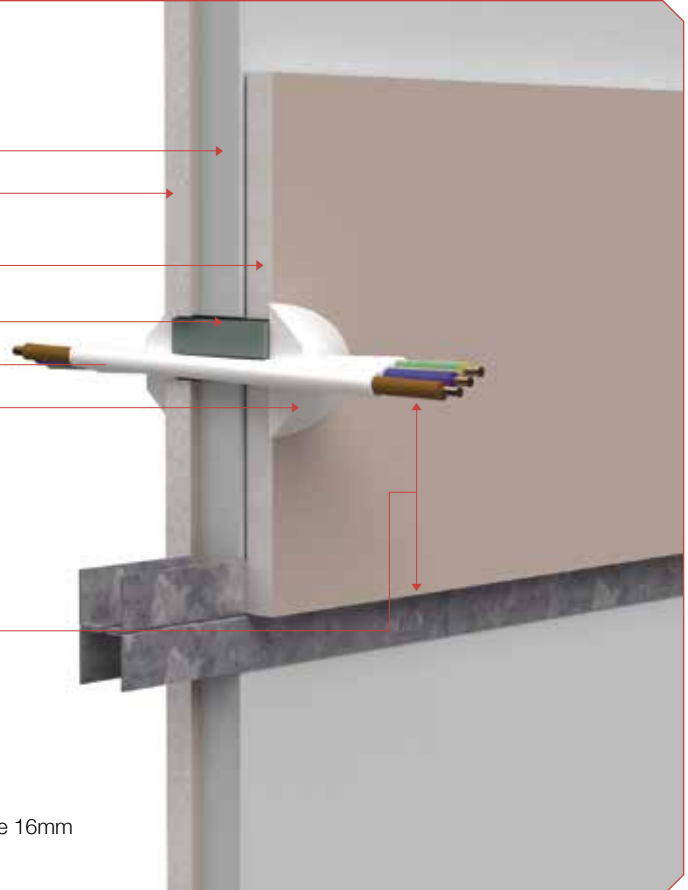
150mm (min) additional layer of GTEK™ Fire 16mm around services  
(can be applied to either side of wall)

50mm x 19mm IBS strip

PVC insulated power cable (D1 group)

Fire rated acrylic sealant

150mm min framing



Note: Penetrations through the GTEK™ Protect 25mm and the GTEK™ Fire 16mm should be approved by a Building sureyor prior to installation.

**FIGURE 32 – COPPER PIPE PENETRATION AT ROOF SPACE**

GTEK™ Protect 25mm

GTEK™ Fire 16mm

150mm (min) additional layer of GTEK™ Fire 16mm around services  
(can be applied to either side of wall)

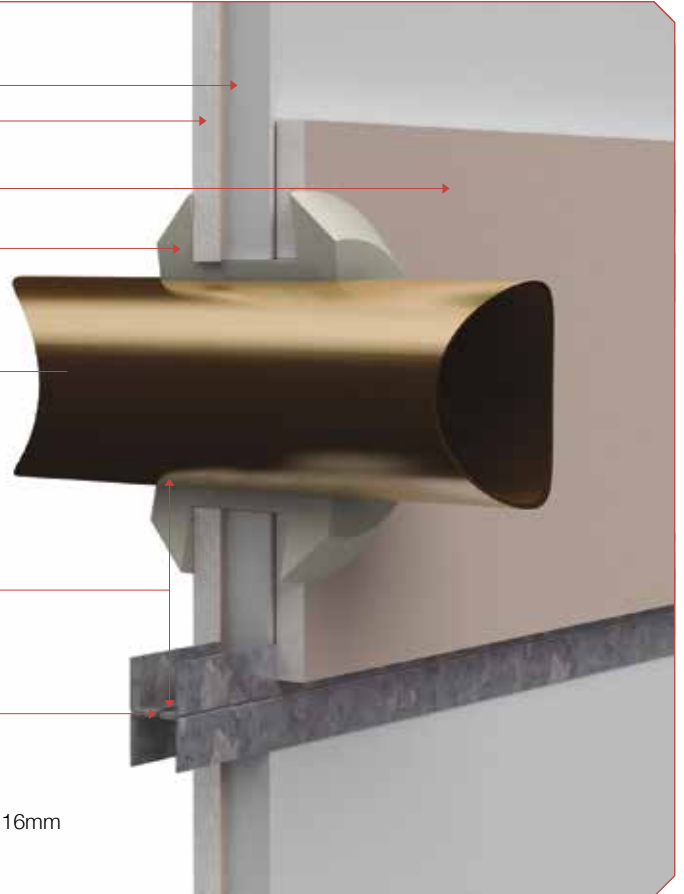
Fire rated acrylic sealant (50mm)

32mm-150mm dia copper pipe. Thickness 0.91mm-2.03mm

150mm min from framing

GTEK™ Protect H Stud

Note: Penetrations through the GTEK™ Protect 25mm and the GTEK™ Fire 16mm should be approved by a Building sureyor prior to installation.





## GTEK™ PROTECT INTERTENANCY

### Slab to Slab – Class 2-9 Buildings

The systems within the section of the GTEK™ Protect Intertency brochure specifically deal with slab to slab Class 2 to 9 intertenancy systems.

The systems use the same GTEK™ products and systems components as the standard GTEK™ Protect Intertency systems incorporating Steel Studs.

#### System Considerations:

- ▶ Maximum wall height of 3m
- ▶ The maximum vertical spacing of aluminium clips shall be 3m high and the maximum horizontal spacing shall be 600mm wide
- ▶ Wall framing on each side may be non-load bearing timber framing and may be varied provided they are designed and constructed in accordance with AS1720.1 and/or AS1684 and a minimum of 70mm deep
- ▶ Wall framing on each side may be non-load bearing steel framing and may be varied provided they are designed in accordance with AS/NZS4600, AS3623 and a minimum of 64mm deep
- ▶ A minimum 20mm gap shall be provided between the framing and the GTEK™ Protect panels
- ▶ Linings fixed to the wall frame on each side shall be a minimum of 10mm thick standard core plasterboard or 6.5mm thick fibre cement sheets
- ▶ Framing and linings will not exceed into the ceiling space
- ▶ The wall cavity shall be fully filled with Glasswool or Rockwool
- ▶ Service penetrations are allowed in the wall linings though not through the GTEK™ Protect 25mm except in the roof space
- ▶ Any adjoining walls perpendicular to the intertenancy shall be constructed after the intertenancy wall is lined
- ▶ Outer stud walls to be noggined in accordance with the manufacturers recommendations



STEEL STUD HEIGHTS – NON LOAD BEARING WALLS

Table 1: 0.25kPa - NON LOAD BEARING WALLS

WALL FRAME AND LINING CONFIGURATION	STUD SIZE	51		64			76			92			150	
	BMT	0.5	0.75	0.5	0.75	1.15	0.55	0.75	1.15	0.55	0.75	1.15	0.75	1.15
	LININGS (MM)	MAXIMUM WALL HEIGHT (mm)												
600mm CENTRES ONE SIDE	10	2310	2620	2720	3130	3520	3230	3590	4060	3740	4160	4710	5300	*6800
	13	2310	2620	2720	3240	3570	3260	3830	4060	3740	4210	4710	5300	6800
	16	2310	2620	2750	3270	3590	3260	3880	4060	3740	4220	4710	5290	6800

Table 2: 0.35kPa - NON LOAD BEARING WALLS

WALL FRAME AND LINING CONFIGURATION	STUD SIZE	51		64			76			92			150	
	BMT	0.5	0.75	0.5	0.75	1.15	0.55	0.75	1.15	0.55	0.75	1.15	0.75	1.15
	LININGS (MM)	MAXIMUM WALL HEIGHT (mm)												
600mm CENTRES ONE SIDE	10	2070	2340	2430	2800	3150	2890	3210	3630	3340	3720	*4210	*4790	*6210
	13	2070	2340	2430	2880	3170	2890	3380	3630	3340	3720	4210	4790	*6210
	16	2070	2340	2430	2900	3180	2890	3420	3630	3340	3720	4210	4780	6210

Table 3: NOGGING REQUIREMENTS

LINING CONFIGURATION	WALL HEIGHT	NO. OF NOGGINGS
LINED ONE SIDE	0 - 3000	1
	3000 - 6000	2
	6000 - 8000	3

Table 4: WALL HEIGHT LIMITS BASED ON WALL LININGS

LINING CONFIGURATION	WALL HEIGHT	MAX WALL HEIGHTS	
		0.25kPa	0.35kPa
LINED ONE SIDE	0.50/0.55BMT	5330	3800
	1 x 10mm	5330	3800
	1 x 13mm	8000	5710
	1 x 16mm	10000	7140

Notes to Tables: Information provided by Rondo Building Services and as such the performances detailed are limited to the Rondo range of products.

Deflection limited to the lesser of H/240 or 30mm, in accordance with the BCA Specification C1.8

All walls are non load bearing, except for self weight

Table 1 loadings: Pultimate = 0.375kPa, Pservice = 0.25kPa

Table 2 loadings: Pultimate = 0.525kPa, Pservice = 0.35kPa

All loadings in accordance with AS1170:2002

Walls analysed in accordance with AS/NZS4600 / Noggings are to be installed as per Table 3

Staggered stud walls have been checked based on zero noggings, and assumed 92mm tracks

Tables have been prepared by Rondo Building Services Pty Ltd / The design pressures are not suitable for external wall applications

The wall heights assume the stud and track sections are of the same, or similar; gauge / Wall heights do not consider connection

capacity, which should be checked as per Table 4 / \*Green highlights indicate wall height may be limited by plasterboard linings

The following tables provide acoustic values for steel frames. For Timber frame acoustic values please see p10-14

GTEK™ PROTECT SYSTEMS



Side 1 – 1 x GTEK™ Wet Area 10mm  
Side 2 – 1 x GTEK™ Wet Area 10mm

GTEK-S2SPR25001

FRL	STUD DEPTH mm	64	76	92	150
	CAVITY INFILL	Rw/Rw+Ctr			
- /60/60	75mm Glasswool R1.8	54/35	57/38	61/45	65/49
	90mm Glasswool R2.5		57/38	61/45	65/49
	90mm Glasswool R2.7		58/39	62/46	65/49
	WALL THICKNESS mm	213	237	269	385



Side 1 – 1 x GTEK™ Sound 10mm  
Side 2 – 1 x GTEK™ Sound 10mm

GTEK-S2SPR25002

FRL	STUD DEPTH mm	64	76	92	150
	CAVITY INFILL	Rw/Rw+Ctr			
- /60/60	75mm Glasswool R1.8	59/40	62/43	67/51	73/57
	90mm Glasswool R2.5		62/43	67/51	73/57
	90mm Glasswool R2.7		63/44	68/52	74/58
	WALL THICKNESS mm	213	237	269	385

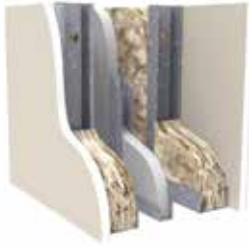


Side 1 – 1 x GTEK™ Wet Area 13mm  
Side 2 – 1 x GTEK™ Wet Area 13mm

GTEK-S2SPR25003

FRL	STUD DEPTH mm	64	76	92	150
	CAVITY INFILL	Rw/Rw+Ctr			
- /60/60	75mm Glasswool R1.8	59/41	62/44	67/51	73/58
	90mm Glasswool R2.5		62/44	67/51	73/58
	90mm Glasswool R2.7		63/45	68/52	74/59
	WALL THICKNESS mm	219	243	275	391

GTEK™ PROTECT SYSTEMS



Side 1 – 1 x GTEK™ Wall 13mm  
Side 2 – 1 x GTEK™ Wall 13mm

GTEK-S2SPR25004

FRL	STUD DEPTH mm	64	76	92	150
	CAVITY INFILL	Rw/Rw+Ctr			
- /60/60	75mm Glasswool R1.8	59/40	62/43	67/51	73/57
	90mm Glasswool R2.5		62/43	67/51	73/57
	90mm Glasswool R2.7		63/44	68/52	74/58
	<b>WALL THICKNESS mm</b>	<b>219</b>	<b>243</b>	<b>275</b>	<b>391</b>



Side 1 – 1 x GTEK™ Fire 13mm  
Side 2 – 1 x GTEK™ Fire 13mm

GTEK-S2SPR25006

FRL	STUD DEPTH mm	64	76	92	150
	CAVITY INFILL	Rw/Rw+Ctr			
- /60/60	75mm Glasswool R1.8	61/44	64/47	68/53	74/59
	90mm Glasswool R2.5		64/47	68/53	74/59
	90mm Glasswool R2.7		65/48	69/54	75/60
	<b>WALL THICKNESS mm</b>	<b>219</b>	<b>243</b>	<b>275</b>	<b>391</b>



Side 1 – 1 x GTEK™ Sound 13mm  
Side 2 – 1 x GTEK™ Sound 13mm

GTEK-S2SPR25007

FRL	STUD DEPTH mm	64	76	92	150
	CAVITY INFILL	Rw/Rw+Ctr			
- /60/60	75mm Glasswool R1.8	63/45	66/48	69/53	75/59
	90mm Glasswool R2.5		66/48	69/53	75/59
	90mm Glasswool R2.7		67/49	70/54	76/60
	<b>WALL THICKNESS mm</b>	<b>219</b>	<b>243</b>	<b>275</b>	<b>391</b>

GTEK™ PROTECT SYSTEMS



Side 1 – 1 x GTEK™ Total Plus 13mm  
Side 2 – 1 x GTEK™ Total Plus 13mm

**GTEK-S2SPR25008**

FRL	STUD DEPTH mm	64	76	92	150
	CAVITY INFILL	Rw/Rw+Ctr			
- /60/60	75mm Glasswool R1.8	63/45	66/48	69/53	75/59
	90mm Glasswool R2.5		66/48	69/53	75/59
	90mm Glasswool R2.7		67/49	70/54	76/60
	<b>WALL THICKNESS mm</b>	<b>219</b>	<b>243</b>	<b>275</b>	<b>391</b>



Side 1 – 1 x GTEK™ Fire 16mm  
Side 2 – 1 x GTEK™ Fire 16mm

**GTEK-S2SPR25009**

FRL	STUD DEPTH mm	64	76	92	150
	CAVITY INFILL	Rw/Rw+Ctr			
- /60/60	75mm Glasswool R1.8	63/45	66/48	70/54	76/60
	90mm Glasswool R2.5		66/48	70/54	76/60
	90mm Glasswool R2.7		67/49	71/55	77/61
	<b>WALL THICKNESS mm</b>	<b>225</b>	<b>249</b>	<b>281</b>	<b>397</b>



Side 1 – 1 x GTEK™ Fire and Wet Area 13mm  
Side 2 – 1 x GTEK™ Fire and Wet Area 13mm

**GTEK-S2SPR25010**

FRL	STUD DEPTH mm	64	76	92	150
	CAVITY INFILL	Rw/Rw+Ctr			
- /60/60	75mm Glasswool R1.8	61/44	64/47	68/53	74/59
	90mm Glasswool R2.5		64/47	68/53	74/59
	90mm Glasswool R2.7		65/48	69/54	75/60
	<b>WALL THICKNESS mm</b>	<b>219</b>	<b>243</b>	<b>275</b>	<b>391</b>



GTEK™ PROTECT SYSTEMS



Side 1 – 2 x GTEK™ Wall 10mm  
Side 2 – 2 x GTEK™ Wall 10mm

GTEK-S2SPR25011

FRL	STUD DEPTH mm	64	76	92	150
	CAVITY INFILL	Rw/Rw+Ctr			
- /60/60	75mm Glasswool R1.8	63/45	66/48	70/55	76/61
	90mm Glasswool R2.5		66/48	70/55	76/61
	90mm Glasswool R2.7		67/49	71/56	77/62
	WALL THICKNESS mm	233	257	289	405



Side 1 – 1 x BGC Duraliner™ Plus 9mm  
Side 2 – 1 x BGC Duraliner™ Plus 9mm

GTEK-S2SPR25012

FRL	STUD DEPTH mm	64	76	92	150
	CAVITY INFILL	Rw/Rw+Ctr			
- /60/60	75mm Glasswool R1.8	64/47	67/50	71/55	77/61
	90mm Glasswool R2.5		67/50	71/55	77/61
	90mm Glasswool R2.7		68/51	72/56	78/62
	WALL THICKNESS mm	211	235	267	383

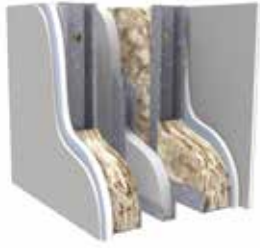


Side 1 – 1 x GTEK™ Sound 10mm  
1 x GTEK™ Wall 10mm  
Side 2 – 1 x GTEK™ Sound 10mm  
1 x GTEK™ Wall 10mm

GTEK-S2SPR25013

FRL	STUD DEPTH mm	64	76	92	150
	CAVITY INFILL	Rw/Rw+Ctr			
- /60/60	75mm Glasswool R1.8	64/49	67/53	71/56	77/62
	90mm Glasswool R2.5		67/53	71/56	77/62
	90mm Glasswool R2.7		68/54	72/57	78/63
	WALL THICKNESS mm	233	257	289	405

GTEK™ PROTECT SYSTEMS



Side 1 – 1 x GTEK™ Wet Area 10mm  
 1 x BGC Duraliner™ Plus 6mm  
 Side 2 – 1 x GTEK™ Wet Area 10mm  
 1 x BGC Duraliner™ Plus 6mm

**GTEK-S2SPR25014**

FRL	STUD DEPTH mm	64	76	92	150
	CAVITY INFILL	Rw/Rw+Ctr			
- /60/60	75mm Glasswool R1.8	66/51	69/54	72/57	78/63
	90mm Glasswool R2.5		69/54	72/57	78/63
	90mm Glasswool R2.7		70/55	73/58	79/64
	<b>WALL THICKNESS mm</b>	<b>225</b>	<b>249</b>	<b>281</b>	<b>397</b>



Side 1 – 2 x GTEK™ Wall 13mm  
 Side 2 – 2 x GTEK™ Wall 13mm

**GTEK-S2SPR25015**

FRL	STUD DEPTH mm	64	76	92	150
	CAVITY INFILL	Rw/Rw+Ctr			
- /60/60	75mm Glasswool R1.8	67/52	70/55	73/59	80/66
	90mm Glasswool R2.5		70/55	73/59	80/66
	90mm Glasswool R2.7		71/56	74/60	80/66
	<b>WALL THICKNESS mm</b>	<b>245</b>	<b>269</b>	<b>301</b>	<b>417</b>

FIGURE 33 – CONCRETE BASE

Steel studs both sides

GTEK™ Protect 25mm

GTEK™ plasterboard as specified

90mm Glasswool as specified

Skirting as required

All gaps to be sealed with Firemastic sealant

Continuous GTEK™ Protect J Track.  
Fasten to slab @ 600mm ctrs

Seal track with Firemastic sealant

Concrete Slab

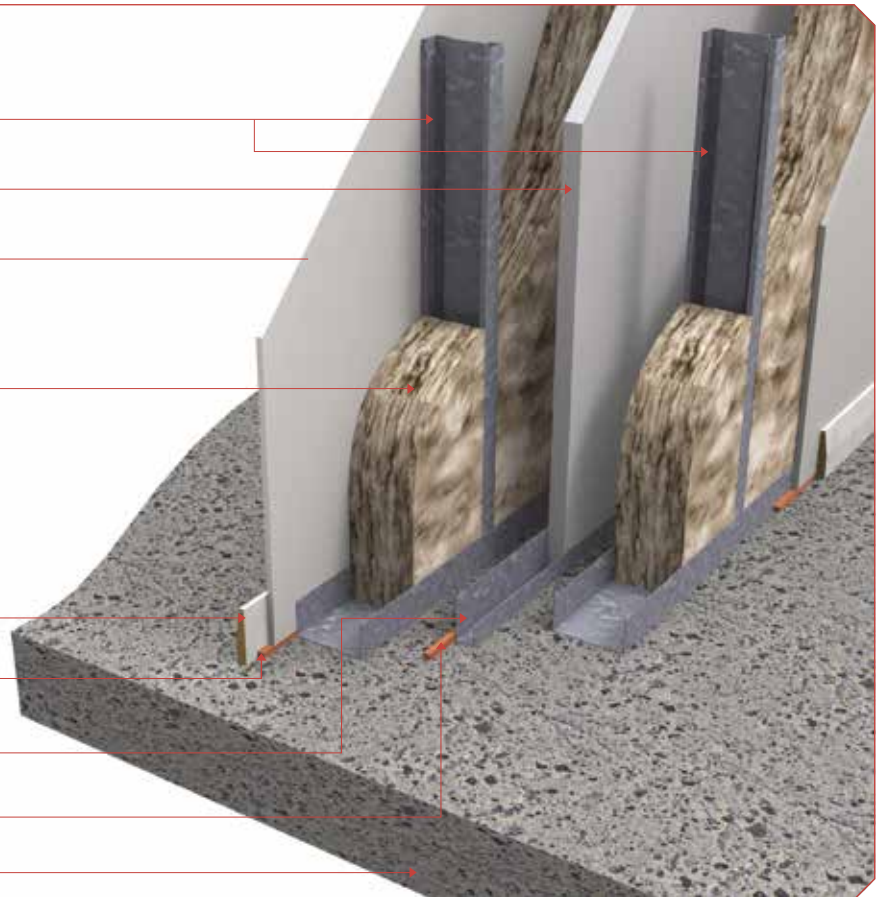


FIGURE 34 – INTERNAL WALL

90mm Glasswool as specified

Non fire-rated wall

GTEK™ Protect 25mm

Notes:

- 1) Refer to GTEK™ Protect Systems Components table for insulation and wall linings.
- 2) Ensure all gaps are sealed with Firemastic sealant.

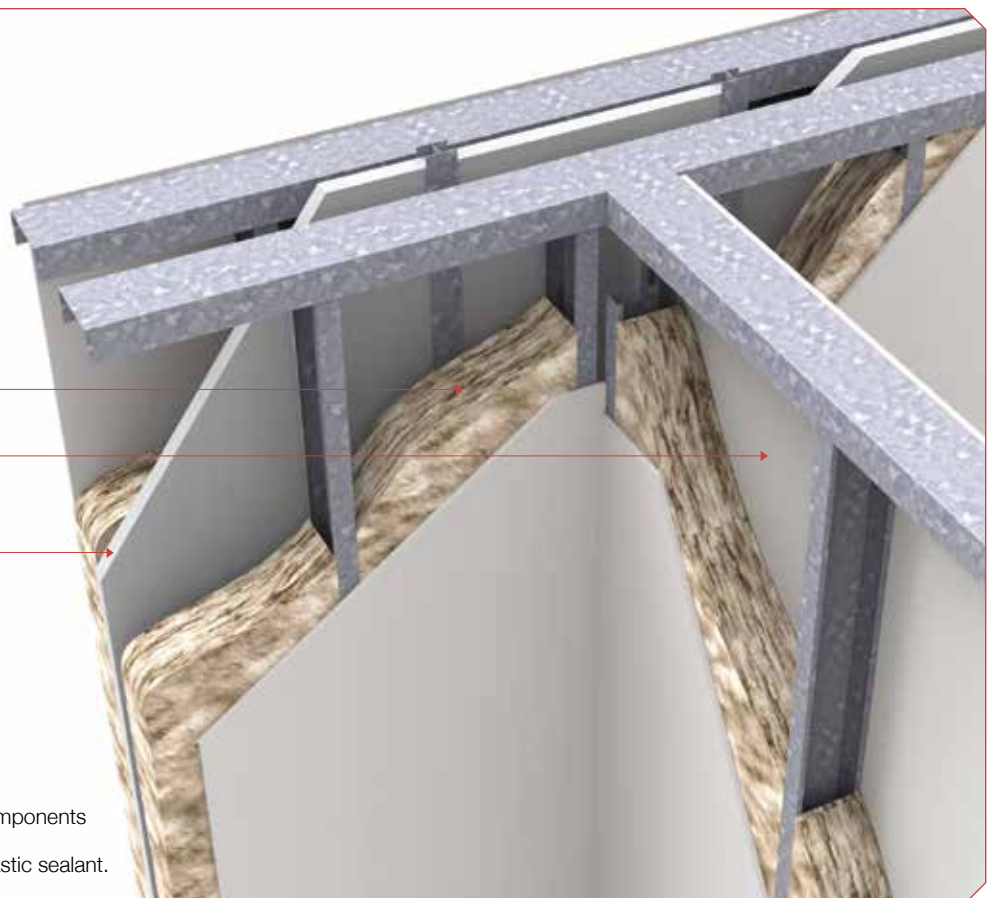


FIGURE 35 – WALL PENETRATIONS

Stud bracket for power point (GPO)

Power point (GPO)

Provide trimmers as required for services

Wet area sealant around all plumbing penetrations (10mm max gap sealant)

20-40mm gap both sides typical

Wet area sealant around PVC pipe (max 65mm dia) 10mm max (gap sealant)

Notes:

- 1) All penetrations can be back-to-back.
- 2) Refer to GTEK™ Protect 25mm Systems Components table for insulation and wall linings.
- 3) GTEK™ Protect 25mm shown short of top plate for illustration purposes only to ensure both sides can be seen

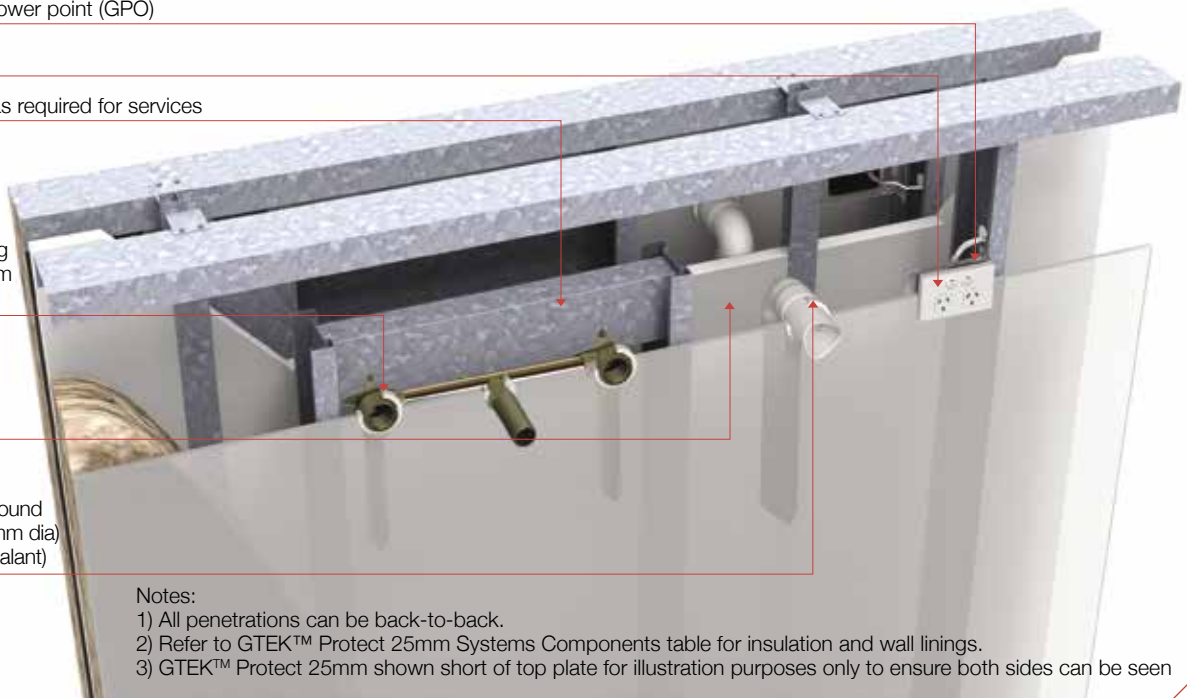


FIGURE 36 – SECTION OF STEEL FRAME SLAB TO SLAB PARTY WALL SYSTEM

Continuous GTEK™ Protect J Track

Continuous bead of fire mastic when acoustic integrity required

Corncing as required

IBS rod

90mm Glasswool as specified

GTEK™ plasterboard as specified

GTEK™ Protect 25mm

Steel studs both sides

100mm max gap to nogging

60mm max

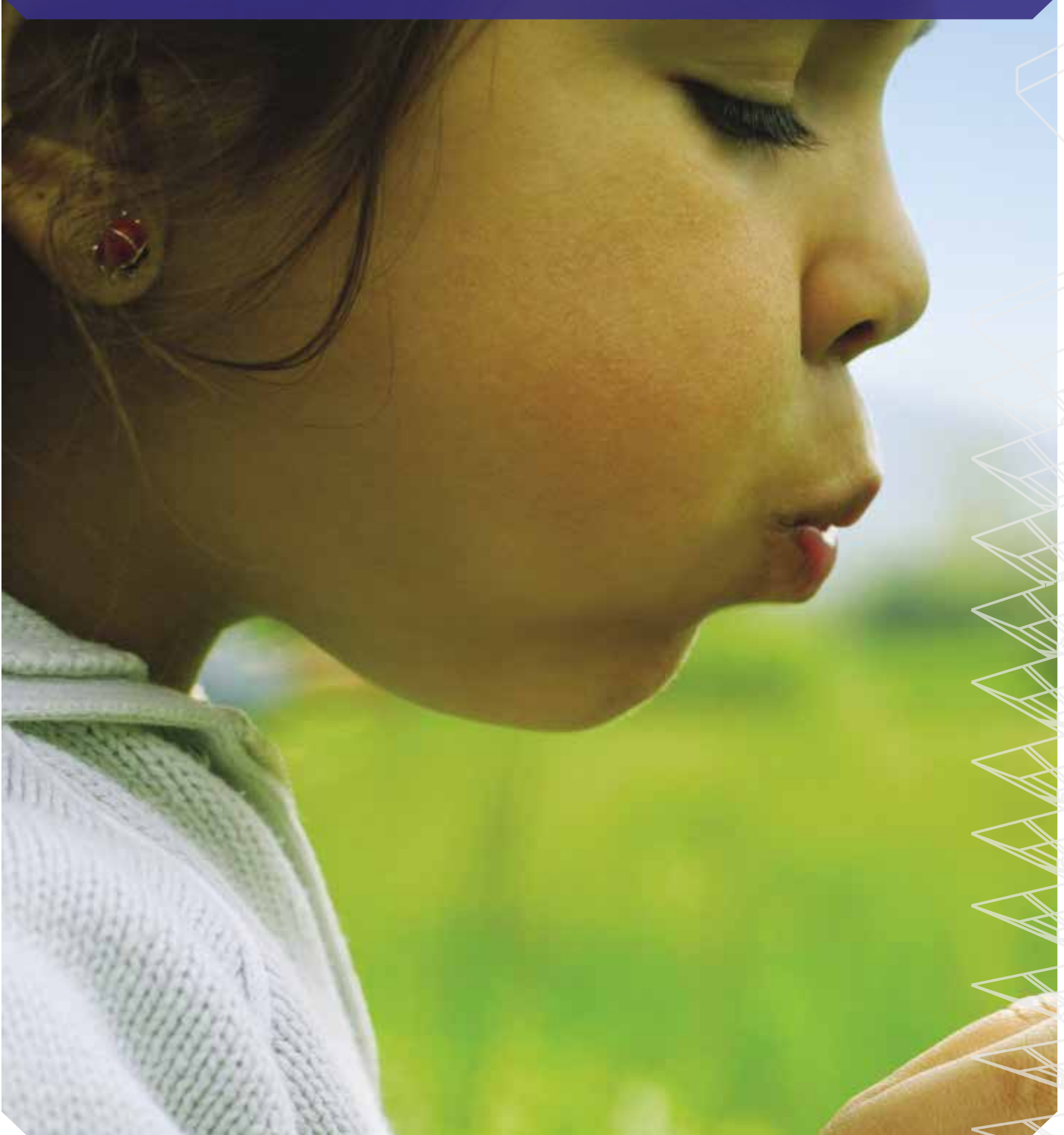




NOTES

A series of horizontal dashed lines for taking notes.

At BGC we care about the environment and now have a range of GECA Certified Plasterboard Products available. As part of our commitment to sustainability we are offering our Environmentally Certified GTEK™ range at no extra cost to you. So now you save money whilst together we save the environment.



**BGC Plasterboard shares the general community concern for the environment and seeks to reduce its environmental footprint in all aspects of its operations. That means you can specify GTEK™ to help create your next green star rated home or project.**

We use up to 15% recycled gypsum in our boards and we use 100% recycled paper lining front and back.

BGC Plasterboard has set prudent environmental targets for waste minimisation and energy and water use, and is an active participant in environmental reporting through the Energy Efficiency, Waterwise and Emissions reporting programs.

Through strict quality control systems, production waste is minimised and wastage is recycled back into new plasterboard.

Good Environmental Choice Australia is an environmental labelling program which aims to provide consumers with the knowledge that the product they are purchasing has met certain environmental performance standards which have been developed and assessed in line with International labelling standards.

Scientifically recognised benchmarks for environmental performance have been developed against which products and services are assessed and evaluated to determine whether the product or service should be awarded the Good Environmental Choice Label. GECA certification is recognised by the Green Building Council of Australia and may assist in achieving up to 3 Green Star points.

GTEK™ products have been certified by GECA which means that the products and their manufacturing environment have been evaluated and deemed to comply with the strict guidelines set by GECA.

We're proud to wear the Good Environmental Choice label, it shows our products and manufacturing environment comply with GECA's strict guidelines.

Now 'Building it better with BGC' also means building a cleaner and more sustainable environment.

## CONTACT

TO CONTACT  
YOUR NEAREST  
BGC STOCKIST,  
PLEASE CALL:

**ADELAIDE**  
TELEPHONE  
08 8480 1700

**BRISBANE**  
TELEPHONE  
07 3548 8400

**MELBOURNE**  
TELEPHONE  
03 9492 1700

**PERTH**  
TELEPHONE  
08 9374 2900

**SYDNEY**  
TELEPHONE  
02 8107 9500

**NEW ZEALAND**  
TELEPHONE  
0011 64 9273 1457

**TECHNICAL HELP LINE**  
1300 652 242



Quality  
ISO 9001  
SAI GLOBAL



GECA  
CERTIFIED

## GTEK™ PRODUCT RANGE

- ▶ **GTEK™ Wall** is an interior wall lining system where cost effectiveness and economy of effort is crucial.
- ▶ **GTEK™ Curve** flexible plasterboard enables the creative execution of curves on interior walls and ceilings.
- ▶ **GTEK™ Ceiling** is a 10mm plasterboard sheet designed specifically for ceiling use where joists are at 600mm.
- ▶ **GTEK™ Cornice** adds exciting finishing touches to interior wall and ceiling joints in new builds and renovations.
- ▶ **GTEK™ Fire** is used in fire-rated systems, consisting of single or multiple layers of board.
- ▶ **GTEK™ Fire & Wet Area** is designed for use in wet areas governed by fire resistance limitations (FRLs).
- ▶ **GTEK™ Wet Area** is water-resistant plasterboard for walls in such wet areas as bathrooms, laundries, toilets and cleaning rooms.
- ▶ **GTEK™ Sound** is high-density plasterboard specifically designed to reduce unwanted noise detectable through walls and ceilings.
- ▶ **GTEK™ Impact** is ideal for high-traffic areas where walls are subjected to regular stress.
- ▶ **GTEK™ Total Plus** offers market-leading fire, water, sound and impact resistance, together with GECA certification in recognition of high percentages of recycled materials.
- ▶ **GTEK™ Protect System** is one of Australia's newest separating wall systems providing design flexibility, simple construction and outstanding acoustic performance.
- ▶ **GTEK™ Phonic** is a perforated plasterboard designed to create beautiful ceilings and walls and achieve high levels of acoustic performance.

## WARRANTY

We warrant that our products are free from defects caused by faulty manufacture or materials for a period of 15 years from the date of purchase. If you acquire any defective products, we will repair or replace them, supply equivalent replacement products or refund the purchase price within 30 days of receiving a valid claim subject to product inspection and confirmation of the existence of a defect by BGC. We will bear the cost of any such repair, replacement or refund.

This warranty is given by:  
**BGC PLASTERBOARD PTY LTD**  
Ground Floor, 290 Bushmead Rd,  
Hazelmere, WA 6055 Phone: (08) 9374 2900  
Fax: (08) 9374 2901

To claim under this warranty, you must provide proof of purchase as a consumer and make a written claim (including any costs of claiming) to us at the address specified above within 30 days after the defect was reasonably apparent, or if the defect was reasonably apparent prior to installation, the claim must be made prior to installation. You may not claim under this warranty for loss or damage caused by:

- ▶ faulty or incorrect installation by non-BGC installers (BGC's installation procedures are at [gtekplasterboard.com.au](http://gtekplasterboard.com.au));
- ▶ failure to comply with the National Construction Code or any applicable legislation, regulations approvals and standards;
- ▶ products not made or supplied by BGC;
- ▶ abnormal use of the product; or
- ▶ normal wear and tear.

The benefits available under this warranty are in addition to other rights and remedies of the consumer under the law. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure

### Terms and Conditions

BGC Fibre Cement's Terms and Conditions of Sale ("Agreement"), as in place and published at the date of this quote, which are available upon request or on our website at [www.bgcinnovadesign.com.au](http://www.bgcinnovadesign.com.au). The purchaser's terms and conditions, howsoever provided, do not form part of the Agreement.