



GTEK™ WALL
GTEK™ CURVE
GTEK™ CEILING
GTEK™ CORNICE



WHY GTEK™?

WITH OUR ALL-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** / All-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

CONTENTS

GTEK™ WALL

- PAGE__04. Product Information
- PAGE__04. Finish Selection
- PAGE__04. Early Fire Indices
- PAGE__04. Fire Resistance
- PAGE__04. Dimensional Stability
- PAGE__04. Thermal Properties
- PAGE__04. Handling and Storage
- PAGE__05. Sheet Sizes and Weight
- PAGE__05. Installation
- PAGE__06. Control Joints
- PAGE__06. Wall Framing
- PAGE__08. Fixing to Framing
- PAGE__09. Fixing to Curved Walls
- PAGE__09. Fixing to Masonry Walls

GTEK™ CURVE

- PAGE__13. Product Description
- PAGE__13. Wetting GTEK™ Curve
- PAGE__13. Framing
- PAGE__13. Fasteners
- PAGE__13. Installation

GTEK™ CEILING

- PAGE__17. Interior Ceilings
- PAGE__18. Exterior Ceilings
- PAGE__18. Condensation
- PAGE__18. Installation
- PAGE__18. Ceiling Areas
- PAGE__19. Garage Areas
- PAGE__19. Considerations
- PAGE__20. Back Blocking

- PAGE__21. Jointing Information for GTEK™ WALL, GTEK™ CEILING and GTEK™ CURVE
- PAGE__23. Decoration for GTEK™ WALL, GTEK™ CEILING, GTEK™ CURVE and GTEK™ CORNICE

GTEK™ CORNICE

- PAGE__26. Cove Cornice
- PAGE__26. Decorative Cornice
- PAGE__26. Cornice Installation

- PAGE__28. GECA

TECHNOLOGY

SUSTAINABILITY

AUSTRALIAN MADE

SERVICE

QUALITY

SYSTEMS





GTEK™ WALL

GTEK™ Wall realises a flat, smooth, blemish-free and monolithic surface that will readily take decorative paints and thin cover finishes. For residential and commercial applications where economy of effort and cost-effectiveness are crucial.



GTEK™ Wall comprises a gypsum core wrapped by a protective linerboard. Recesses in the long edges help provide a smooth, continuous surface on installation.

What's good about GTEK™ Wall

- ▶ Interior wall lining system for consistently smooth surfaces
- ▶ Suitable for residential and commercial applications
- ▶ Takes readily to decorative paints and thin cover finishes
- ▶ Cost-effective, quick and easy to install
- ▶ An excellent substrate for all types of decoration

PRODUCT INFORMATION

GTEK™ Wall is purpose designed as a complete plasterboard wall and lining system, which complies with the requirements of the Building Code of Australia (BCA).

GTEK™ Wall interior lining provides a blemish free, monolithic, smooth surface ready for decorative paint and thin cover finishes for homes, offices and institutional buildings.

GTEK™ Wall is to be installed as detailed in AS 2589:2007 'Gypsum Linings – Application and Finishes'.

This manual is written to conform to the requirements of the Building Code of Australia (BCA) and AS 2589 Gypsum Linings - Applications and Finishes. Any deviations to these requirements can be made on the basis of an "alternate solution" as provided for by the BCA. Any "alternate solution" certifications must be provided by a certified practicing structural engineer and the responsibility for performance is then guaranteed by the engineer. Support framing must conform to the BCA and Australian Standards, be plumb, true and level, prior to the application of the plasterboard, see table 2 page 5. Refer to section 4.2.2 AS2589:2007

GTEK™ Wall may be fixed to timber or CFS (Cold-Formed Steel) light-steel framing or masonry, using plasterboard screws, nails and or adhesive.

Only screws or nails must be used for tiled areas and over existing lining or vapour barriers.

FINISH SELECTION

Selecting the level of finish of the interior lining depends on the function of the space, lighting and the desired decorative surfaces required.

For most applications, Finish Levels 4 or 5 are used, as detailed in AS 2589:2007.

Level 3 is used, where heavy to medium texture finishes are applied and the lighting is non-critical.

Level 4 is most commonly used in commercial and residential work, where the finishes are satin, flat or low sheen paint systems and the lighting is non-critical.

For large area walls and ceilings, where critical and severe glancing lighting have an effect, a Level 5 finish must be used to minimise any adverse effects of harsh lighting.

EARLY FIRE HAZARD INDICES

GTEK™ Wall has been tested by the NATA accredited AWTA for fire resistance in accordance with AS 1530.3; see Report Test Number: 7-518246-CN, April 2003.

- ▶ Ignitability Index - 13
- ▶ Spread of Flame Index - 0
- ▶ Heat Evolved Index - 1
- ▶ Smoke Developed Index - 3

FIRE RESISTANCE

Plasterboard is naturally fire resistant and is classified as non-combustible according to the Building Code of Australia (BCA) 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 GTEK™ Wall = 0.05K^m/W
- ▶ 13mm GTEK™ Fire = 0.05K^m/W
- ▶ 16mm GTEK™ Fire = 0.06K^m/W

HANDLING AND STORAGE

Plasterboard should be stacked flat, up off the ground and supported on level, equally spaced (max 450mm) gluts.

Care should be taken to ensure edges of the Plasterboard are not damaged when handling.

Plasterboard 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™ SHEET SIZES AND WEIGHTS – TABLE 1

PRODUCT AND THICKNESS (mm)	WEIGHT (kg/m²)	WIDTH (mm)	LENGTH (mm)							
			2400	2700	3000	3600	4200	4800	5400	6000
GTEK™ Wall 10mm	6.5	1200	✓	✓	✓	✓	✓	✓	✓	✓
		1350				✓	✓	✓		✓
GTEK™ Wall 13mm	8.6	1200	✓	✓	✓	✓	✓	✓		✓
		1350			✓	✓	✓	✓		
GTEK™ Ceiling 10mm	6.5	1200	✓	✓	✓	✓	✓	✓	✓	✓
		1350	✓		✓	✓	✓	✓		✓
GTEK™ Wet Area 10mm	7.2	1200	✓	✓	✓	✓	✓	✓		
		1350	✓		✓	✓	✓	✓		
GTEK™ Wet Area 13mm	8.8	1200	✓	✓	✓	✓	✓			
		1350			✓	✓	✓			
GTEK™ Fire 13mm	10.5	1200	✓	✓	✓	✓				
		1350				✓				
GTEK™ Fire 16mm	12.7	1200	✓	✓	✓	✓				
		1350				✓				
GTEK™ Fire & Wet Area 13mm	10.5	1200				✓				
GTEK™ Fire & Wet Area 16mm	12.7	1350				✓				
GTEK™ Sound 10mm	8.5	1200			✓	✓		✓		
		1350				✓		✓		
GTEK™ Sound 13mm	11.8	1200			✓	✓				
		1350				✓				
GTEK™ Curve 6.5mm	4.5	1350				✓				
GTEK™ Impact 13mm	11.8	1200			✓	✓				
		1350				✓				
GTEK™ Total Plus 13mm	11.8	1200				✓				
		1350				✓				
Cove Cornice 55	0.65	55			✓	✓	✓	✓		
Cove Cornice 75	1	75			✓	✓	✓	✓		
Cove Cornice 90	1.25	90			✓	✓	✓	✓		
Esperance Cornice 75	1	75						✓		

Some sizes may not be available in all states, please check with your local BGC Plasterboard office for availability.

INSTALLATION

BGC Plasterboard recommends that this section should be read in conjunction with the architects' specifications to determine the Level of Finishes.

GTEK™ Wall should be installed after all preceding trades have been completed.

Ceilings should be installed first. GTEK™ Ceiling should preferably be fixed with their long edges perpendicular to the windows or light sources, to obviate unwanted light reflections across the joints.

For the walls, GTEK™ Wall sheets should be laid with their long edges horizontal, to minimise the number of joints as well as light reflections across the joints. This is most important when Finish Levels 4 or 5 are specified, as indicated in Table 2 page 5.

GTEK™ Wall and Ceiling may be cut by scoring the face side and snapping back away from the score. Then cut the paper on the second side following the original score line. Neat straight cuts can be made using a straight edge.

The cut edges should be sanded smooth to form clean joints.

When **temporary fasteners** are used to hold the plasterboard firmly against the framing members, they shall remain in place for a minimum of 24 hours under normal drying conditions.

Temporary fasteners may be fixed directly into the board or driven through gypsum plasterboard blocks or other methods of support that hold the board firmly against the framing members.

Fasteners are normally located so that they are separated from the positions of the daubs of adhesive. This may not be the case with temporary fasteners. Failure to remove temporary fasteners may result in the fasteners popping.

CONTROL JOINTS

AS/NZ 2589 states control joints shall be installed in walls and ceilings at a maximum spacing of 12m, or at control/construction joints, whichever is the lesser.

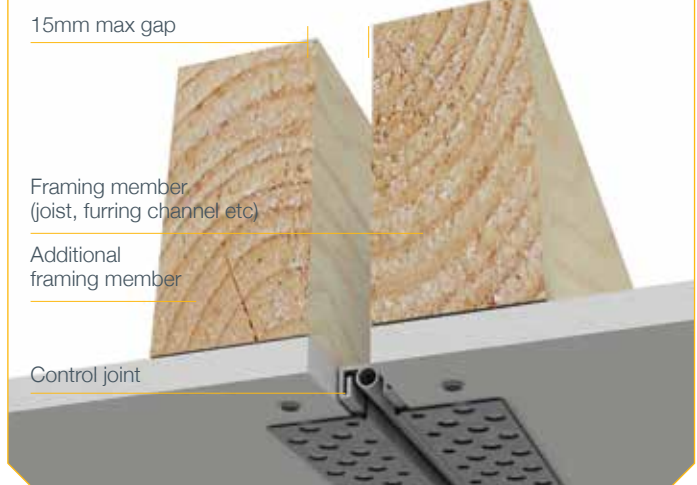
External Ceilings are to be no greater than 6m spans.

Architectural features, openings, and the like may be used as control joint set out points.

Rondo 'P35' is suitable control/expansion joints.

Control joints are centrally located across the 15mm minimum gap between adjacent GTEK™ Wall sheets, and the flanges nailed at 300mm centres to the framing behind.

FIGURE 1 – CONTROL JOINT



WALL FRAMING

GTEK™ Wall may be fixed to timber, CFS light steel framing or furring channels, which satisfy the BCA requirements and which have been plumbed true and straight.

Timber framing must comply with the requirement of AS1684 'National Timber Framing Code' and AS1720.1&2 'Timber Structures' and have a moisture content less than 16% at time of lining.

CFS light-steel framing must be in accordance with AS/NZS4600 'Cold-Formed Steel Structure Code', AS3623 'Domestic Metal Framing' and AS1397.

GTEK™ Wall may be fixed to CFS steel framing not exceeding 1.25mm BMT. Framing members must have a 35mm minimum face width for nail fixing and 32mm for screw fixing.

FIGURE 2 – STEEL FRAME APPLICATION

Top track

GTEK™ Stud Adhesive daubs as per Table 4

Where butt joints occur, back block joint. Refer to back blocking page 18.

Stud

Centre support screw at every second stud (temporary fastener)

GTEK™ Wall

Set sheets 6-10mm clear of floor



WALL FRAMING

Frames must be plumbed true and straight, to comply with the degree of finish required of the GTEK™ Wall.

The tolerance deviation over 1.8m spans, along and across members, for 90% of the wall and ceiling framing, shall be as set out in Table 2.

FRAME ALIGNMENT DEVIATION – TABLE 2

LEVEL 3 AND 4		LEVEL 5	
Deviation of 90% of area (mm)	Deviation of remaining area (mm)	Deviation of 90% of area (mm)	Deviation of remaining area (mm)
4	5	3	4

Maximum spacing of framing members depends on the structural requirements for the building, in accordance with AS1170 and AS4055, however the maximum allowable spacing for studs, joists, furring channels or battens shall be as set out in the Table 3.

SPACING OF FRAME MEMBER – TABLE 3

PRODUCT AND THICKNESS (mm)	APPLICATION	MAX. SPACING OF FRAMING MEMBER (mm)
GTEK™ Wall 10mm	Walls	600
	Ceilings	450
GTEK™ Wall 13mm	Walls	600
	Ceilings	600
GTEK™ Ceiling 10mm	Walls	600
	Ceilings	600
GTEK™ Wet Area 10mm	Walls	600
	Ceilings	450
GTEK™ Wet Area 13mm	Walls	600
	Ceilings	600
GTEK™ Fire 13mm	Walls	600
	Ceilings	600
GTEK™ Fire 16mm	Walls	600
	Ceilings	600
GTEK™ Fire & Wet Area 13mm	Walls	600
	Ceilings	600
GTEK™ Fire & Wet Area 16mm	Walls	600
	Ceilings	600
GTEK™ Sound 10mm	Walls	600
	Ceilings	450
GTEK™ Sound 13mm	Walls	600
	Ceilings	600
GTEK™ Impact 13mm	Walls	600
	Ceilings	600
GTEK™ Total Plus 13mm	Walls	600
	Ceilings	600

Trimmers are to be used where the main structural members change direction and all openings must be framed.

ADHESIVE, NAILS OR SCREWS

GTEK™ Wall may be fixed to the framing with either adhesive and nails or adhesive and screws as appropriate.

Water-based acrylic gypsum plaster adhesives such as GTEK™ Stud Adhesive, which comply with AS2753, are suitable for fixing GTEK™ Wall to both metal and timber framing.

Adhesive fixing is used in conjunction with fasteners, except for tiled areas, fire-rated construction, over vapour-barriers or existing work, where mechanical fasteners, nails or screws only must be used.

The position of daubs of GTEK™ Stud Adhesive 'O' and permanent fasteners 'X' should be as set out as shown in Table 4.

POSITION AND NUMBER OF ADHESIVE DAUBS AND FASTENERS ACROSS SHEET – TABLE 4

SHEET WIDTH (mm)	WALL	INTERNAL CEILINGS	GARAGE CEILINGS	EXTERIOR CEILINGS
Fasteners and Adhesive				
1200	XOOOOX	XOOXOOX or XOXOXOX	XOXOXOX or XXXXX	XXXXX
1350	XOOOOOX	XOOXOOX or XOXOXOX	XOXOXOX or XXXXX	XXXXXX
Fasteners only				
1200	XXXX	XXXXX	XXXXX	XXXXX
1350	XXXXX	XXXXXX	XXXXX	XXXXXX

Ensure that contact surfaces are free from grease, oil, dust or other loose material prior to placing GTEK™ Stud Adhesive daubs (always clean down steel furring before fixing plasterboard sheeting).

MINIMUM NAIL FASTENER LENGTH – TABLE 5

THICKNESS (mm)	SUBSTRATE MATERIAL	
	HARDWOOD	SOFTWOOD
10	2.8mm x 30mm galvanised nail or 2.8mm x 25mm ring shanked nail	2.8mm x 40mm galvanised nail or 2.8mm x 30mm ring shanked nail
13	2.8mm x 30mm galvanised nail or 2.8mm x 25mm ring shanked nail	2.8mm x 40mm galvanised nail or 2.8mm x 30mm ring shanked nail
16	2.8mm x 40mm galvanised nail	2.8mm x 50mm galvanised nail

WALL FRAMING

Screws will be bugle head and comply with AS2455 and be compatible with the substrate. Screws shall be driven slightly below the surface without punching through the face liner paper.

MINIMUM SCREW FASTENER LENGTH - TABLE 6

THICKNESS (mm)	SUBSTRATE MATERIAL					
	HARDWOOD		SOFTWOOD		STEEL	
	SCREW LENGTH mm	SCREW GAUGE NO.	SCREW LENGTH mm	SCREW GAUGE NO.	SCREW LENGTH mm	SCREW GAUGE NO.
10	25 needle point (see note 1)	6	25 Type W	6	25 needle point (see note 2&3)	6
13	25 needle point (see note 1)	6	30 Type W	6	25 needle point (see note 2&3)	6
16	30 needle point (see note 1)	6	45 needle point	6	30 needle point (see note 2&3)	6

1. Screws used for fixing plasterboard to timber ceiling substrates (hardwood and softwood) shall have a minimum length of 30mm and be Type W.
2. S point screws shall be used for steel thickness less than or equal to 0.75mm base material thickness (BMT)

3. Drill point screws shall be used for steel thickness greater than 0.75mm base material thickness (BMT)

Note: When fixing into preservative treated timbers, Class A AS 3566 coatings of screws and nails are to be used.

FIXING TO FRAMING

WALLS

Daubs of GTEK™ Stud Adhesive, 25mm diameter x 15mm high are positioned in the pattern as shown in Table 4, spaced at a maximum of 300mm and a minimum of 200mm.

GTEK™ Stud Adhesive must not be used at wall-to-wall and wall-to-ceiling junctions, around openings, butt joints or fastener points.

GTEK™ Wall is placed horizontally along each wall. Sheets to be packed 6-10mm from floor and fastened along the top recessed edge at each stud or furring channel.

The sheets are then pressed firmly against the studs and fastened midway across the sheet at every second stud or furring channel.

Next, fasten the other recessed edge at each stud, or furring channel.

Fasteners must not coincide with GTEK™ Stud Adhesive daubs, and fasteners should be kept to a minimum distance of 200mm from adhesive daubs.

Fasteners around openings should be placed at a maximum spacing of 300mm centres. Allow at least 24 hours for the adhesive to set.

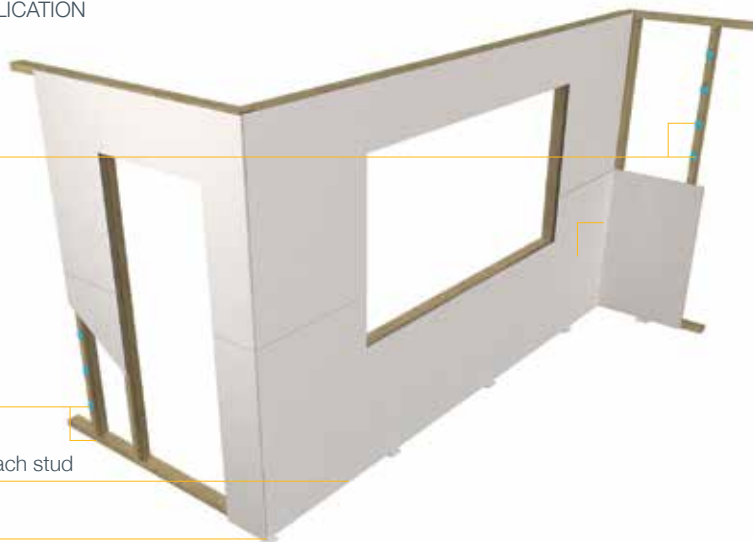
FIGURE 3 – TIMBER FRAME APPLICATION

GTEK™ Stud Adhesive daubs as per table 4

GTEK™ Stud Adhesive daubs as per table 4

Secure sheet edges by nailing at each stud

Set sheets 6-10mm clear of floor



FIXING TO CURVED WALLS

GTEK™ Wall may be used on curved walls or ceilings where the radius is 900mm or greater.

If a tighter radius is required GTEK™ Curve is the ideal alternative.

Framing Requirements

Ensure frames do not exceed maximum spacing recommendations.

Where tight radii are required ensure double studs are used at the end of the curve in order to prevent any deflection.

As an alternative to timber plates, Rondo manufactures and supplies a Flexi Track for the use and installation of studs. Refer to Rondo for more information.

FIXING TO MASONRY WALLS

DESIGN CONSIDERATIONS

Services should be installed prior to the GTEK™ Wall being fixed.

All wall fixtures MUST be fastened to the masonry wall. To prevent distortion of the plasterboard around the point of attachment:

- Apply additional daubs of GTEK™ Masonry Adhesive where the fixture is to be located.
- Locate metal spacers or ferrules between masonry wall and face of GTEK™ Wall.
- Fix packing pieces between masonry wall and back of GTEK™ Wall during installation. Control joints incorporated in a building to permit movement in the structure must be carried through all areas lined with GTEK™ Wall.

Surfaces are to be isolated from structural elements by installing control joints:

- When a GTEK™ Wall surface abuts any structural element or dissimilar wall assembly.
- In long wall runs, at not more than 12m centres.
- Where control joints exist in masonry wall.

Basic wall systems are not to be used where they may be exposed to excessive moisture or humidity. Specific designs are available for bathroom and shower locations.

GTEK™ Wall is an alternative to solid plaster - not a means of isolating dampness.

All new masonry surfaces must be allowed to dry out to normal levels before installation of GTEK™ Wall. All contamination i.e. dust, release agents etc are to be removed to provide a suitable surface for adhesion.

When lining true wall surfaces, an allowance of about 5mm should be made for adhesive thickness (per side).

INSTALLATION

Masonry surfaces are to be firm, clean, dry and free of dust, oil, form release agents and curing compounds.

Establish the basis of a true wall plane before commencing installation. Levelling pads are to be used where irregularities in wall surface exceed 15mm.

GTEK™ Wall sheets can be fixed horizontally or vertically.

Daubs of GTEK™ Masonry Adhesive can be applied to the wall surface or to the back of the sheets.

Hold sheets in position until adhesive sets by using temporary masonry nails.

Because GTEK™ Masonry Adhesive is a setting type cement, do not use mix after setting or hardening has commenced.

Mix only a sufficient quantity so that:

- The wall area prepared for lining at any time can be covered with one sheet of GTEK™ Wall.
- The GTEK™ Masonry Adhesive will maintain its working properties for the duration of the installation and final positioning of the sheets.

TRUE WALL SURFACES

Check alignment of the wall with a straight edge to establish the wall alignment.

Strike a chalk line on ceiling and floor for use as a guide to align the face of the GTEK™ Wall.

If you intend to apply the daubs to the wall, mark the wall where the sheet edges fall to keep daubs 50mm away from the edges of the sheet.

Measure and cut the sheets to fit horizontally or vertically and stagger butt joints a minimum of 900mm.

Mix the GTEK™ Masonry Adhesive to a fairly thick consistency.

If the wall alignment is flat and true, using a 75mm broad knife, apply 50mm diameter daubs of adhesive, standing up a minimum of 15mm high, at not more than 50mm from all sheet edges and at 450mm maximum centres vertically and horizontally to the wall or to the back of the sheet. If the wall is out of alignment by up to 15mm, bigger daubs are recommended.

Additional daubs must be applied at butt joints, external angles and around power points, plumbing fixtures, doors, windows and skirtings.

Position boards and use a straightedge to tamp the boards into alignment both vertically and horizontally. Hold sheets in position for at least 80 to 100 minutes, to allow adhesive to set, by temporary masonry nails through sheet edges. If necessary, use temporary blocks in the field of the board.

Alternatively, if the wall alignment is flat and true, and a 'solid wall' effect is desired, apply GTEK™ Masonry Adhesive over the entire board surface of the wall with a 10mm x 10mm notched trowel before positioning the sheet and aligning.

FIXING TO MASONRY WALLS

IRREGULAR WALL SURFACES

Levelling pads are to be used where irregularities in the wall surface exceed 15mm.

Where the wall requires more than 25mm of packing to bring it back to a true line, a furring system should be used.

Irregular wall surfaces require straightening with a series of levelling pads, spaced to suit width of sheets.

Check the wall with string lines or straight edge to find high spots and use these as a guide for the level to be set.

Determine the true line for finished wall surface, and mark out GTEK™ Wall widths on the wall.

Position 75mm x 50mm alignment pads of GTEK™ Wall as illustrated, and attach to wall with GTEK™ Masonry Adhesive to a true line.

Space pads about 100mm from floor and at midpoints as illustrated. Alternatively, a 100mm wide GTEK™ Wall strip can be used at the skirting line.

Measure and cut sheets to fit horizontally or vertically.

Mix the GTEK™ Masonry Adhesive to a fairly thick consistency.

Apply 50mm diameter daubs of adhesive to the wall, standing up a minimum of 25mm high, at not more than 50mm from all sheet edges and at 450mm maximum centres vertically and horizontally.

Apply higher daubs where necessary.

Additional daubs must be applied at butt joints, external angles and around power points, plumbing fixtures, doors, windows and skirting.

Position boards and use a straight edge to press the boards back onto the levelling pads. Hold sheets in position for at least 80 to 100 minutes, to allow adhesive to set, by temporary masonry nails through sheet edges into the levelling pads. If necessary, use temporary blocks in the field of the board.

Set sheets 6-10mm clear of floor

DIRECT ADHESIVE FIXING

Sheets may be installed horizontally or vertically.

Ensure wall is:

- ▶ Clean and dry
- ▶ Free from contaminants such as dust, oil or grease which will prevent good bonding.

Using a good quality plaster based masonry adhesive, such as GTEK™ Masonry Adhesive, apply 50mm x 15mm high daubs of adhesive to the wall. Daubs must be applied at a maximum spacing of 450mm throughout the body of the sheet and less than 50mm from all sheet edges. It is recommended that the daubs be spaced at 200mm centres around the sheet edges, particularly if cornices or architraves are to be fitted.

Position the GTEK™ Wall sheets so that they are 6mm clear of the floor.

Press the GTEK™ Wall sheets into the adhesive, ensuring the sheet finishes flat and true; use of a straight edge is recommended.

Apply temporary restraints, either props or nails into the base wall mortar joints until the adhesive is dry – normally 24 hours. Nail the temporary restraints at about 600mm centres around the sheet perimeter and at about 1200mm centres in the body of the GTEK™ Wall.

Because GTEK™ Masonry Adhesive is a setting type cement, do not use mix after setting or hardening has commenced.

Mix only a sufficient quantity so that:

- (a) The wall area prepared for lining at any time can be covered with one sheet of GTEK™Wall.
- (b) The GTEK™ Masonry Adhesive will maintain its working properties for the duration of the installation and final positioning of the sheets.

Control joints should be installed:

- ▶ To coincide with any movement control (expansion) joints in the structure.
- ▶ At the junction of any dissimilar base wall type or construction.
- ▶ To break any continuous run of plasterboard greater than 4.2m.

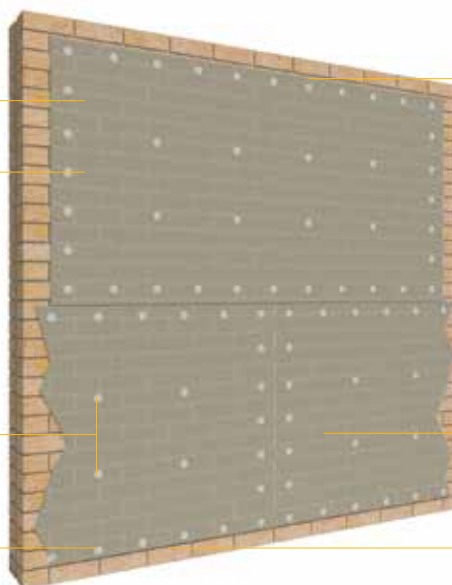
FIGURE 4 – INSTALLATION TO MASONRY

GTEK™ Wall

Daubs of GTEK™ Masonry Adhesive 50mm diameter x 15mm thick

GTEK™ Masonry Adhesive daubs at 450mm max. in body of sheet

GTEK™ Masonry Adhesive at 200mm centres to sheet edges



GTEK™ Masonry Adhesive daubs at 50mm max. from sheet

Sheet fixed horizontally stagger end points

Set sheets 6mm above floor

FIXING TO MASONRY WALLS

BATTENS AND FURRINGS

FIGURE 5 – INSTALLATION USING BATTENS/FURRINGS



Install services before installing GTEK™ Wall.

Sheet ends to be joined centrally over a batten or furring channel. For untiled walls fix at a maximum of 200mm centres on sheet ends and at 300mm maximum centres in the body of the sheet.

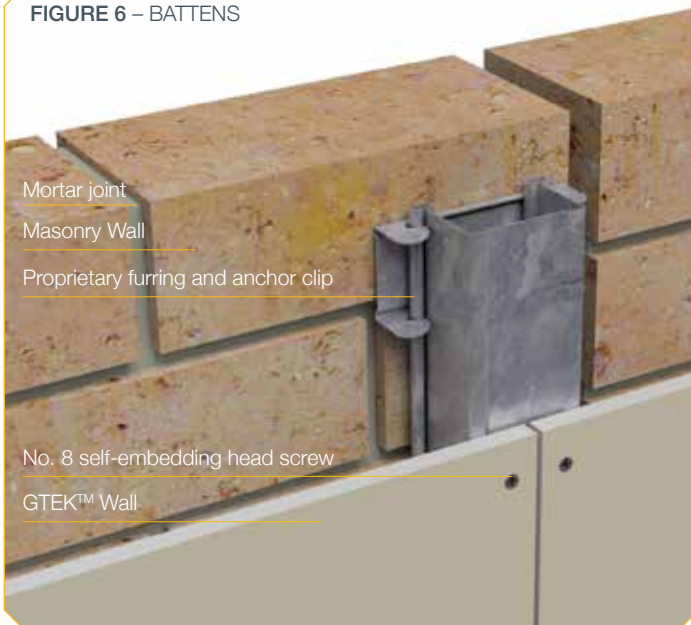
For tiled walls, fixings are to be at a maximum of 200mm centres on the sheet ends and also in the body of the sheet. Where the wall is to be tiled, it is recommended that noggings be installed under all sheet joints to alleviate any sheet deflection upon impact.

Control joints should be installed:

- ▶ To coincide with any movement control (expansion) joints in the structure.
- ▶ At the junction of any dissimilar base wall type or construction.
- ▶ To break any continuous run of plasterboard greater than 4.2m tiled applications or 6m untiled applications.

TIMBER AND STEEL BATTENS

FIGURE 6 – BATTENS



Sheets may be installed horizontally or vertically.

The wall should be battened out generally in accordance with Figure 6.

Timber battens should have a minimum thickness of 35mm to allow adequate nail penetration and holding.

Timber battens that support sheet joints should have a minimum face width of 45mm. All other battens should have a minimum face width of 35mm.

Steel battens/furrings that support sheet joints should have a minimum face width of 38mm. All other steel battens/furrings should have a minimum face width of 30mm.

Typical steel batten systems are Rondo Part No 129 or 308 furring channels with Rondo Part No 237 clips, or Peer FC18/FC28 channels with C37 clips.

Vertical battens must be provided at a maximum of 600mm centres to suit sheet joints.

The battens should be packed to correct any misalignment or unevenness in the base wall.

Fix the battens to the base wall using suitable masonry nails or wall anchors.



GTEK™ CURVE

GTEK™ Curve is a flexible plasterboard that enables the creative execution of curves on interior walls and ceilings. With its 6.5mm-thick design that may be bent around tight radii without wetting, GTEK™ Curve can easily be applied to timber or light-steel framing in a number of attractive finishes.



Ideally suited to a flat, blemish-free surface ready for decorative paint and thin cover finishes for homes and offices, GTEK™ Curve can be fixed to timber or CFS (Cold Formed Steel), light-steel framing or masonry using plasterboard screws, nails or adhesive.

What's good about GTEK™ Curve

- ▶ Freedom and flexibility to create contoured walls and ceilings on interior walls and ceilings
- ▶ Saves time and money on curved surfaces installation
- ▶ Quick and easy bending to small radii – no need to wet
- ▶ Recessed edges for continuous surface once flushed

PRODUCT DESCRIPTION

GTEK™ Curve enables the creation of curves on interior walls and ceilings. GTEK™ Curve is manufactured as 6.5mm thick plasterboard enabling the plasterboard to bend to tight radii without prior wetting.

GTEK™ Curve is purpose designed as a complete plasterboard wall and ceiling lining system which complies with the requirements of the Building Code of Australia (BCA).

GTEK™ Curve provides a flat, blemish free, monolithic, smooth surface ready for decoration.

GTEK™ Curve can be fixed to timber or CFS (Cold Formed Steel) light-steel framing using plasterboard screws or nails.

APPLICATIONS

GTEK™ Curve is suitable for creating curved surfaces on interior walls and ceilings.

GTEK™ Curve is available in a sheet size of 3600mm x 1200mm x 6.5mm.

PERFORMANCE

GTEK™ Curve must be installed in accordance with the requirements of Australian Standard AS 2589:2007 – Gypsum Linings – Application and Finish.

FASTENERS

BGC recommends the following fasteners are used:

For Softwood – 25 x 2.8mm
 For Timber Framing – 32mm x No.6 Type W
 For Lightweight Steel Framing and Furring Channel up to 0.8mm thickness – 25mm x No.6 Type S Needle Point.

For Loadbearing Steel framing 0.8 to 1.2mm thickness – 25mm x No.6 Type S Drill Point

Always ensure that screw guns are adjusted to the appropriate depth.

WETTING GTEK CURVE

Wetting plasterboard is usually not a recommended practice, however when conditions of low humidity and temperatures occur, or an extremely tight radius is to be attempted, it may be necessary to roll on a small amount of water with a clean paint roller.

Only wet the surface of the plasterboard that will be in compression.

Allow 15 minutes for water to soak into the core before attempting to bend the board.

FRAMING

GTEK™ Curve may be fixed to timber, CFS light-steel framing or furring channels, which satisfy the BCA requirements and which have been plumbed true and straight.

Timber

Timber framing must comply with the requirements of AS1684.1, AS1684.2, AS1684.3, AS1684.4, AS1720.1, AS1720.2 or the BCA.

Light-Steel

CFS light-steel framing must be in accordance with AS4600 Cold Formed Steel Structure Code, AS3623-1993 Domestic Metal Framing and AS1397-2001. GTEK™ Curve may be fixed to CFS steel framing but must not exceed 1.25mm BMT.

INSTALLATION

Fasteners should be positioned 10-15mm from edges of the sheet and the head should be slightly below the surface of the plasterboard. Care should be taken to avoid damage to the face of the sheet.

Two layers of GTEK™ Curve are recommended for most applications with the 2nd layer staggered by at least 200mm to avoid joint alignment.

GTEK™ Curve may be attached horizontally or vertically depending upon the framing support and application, however BGC Plasterboard recommend fixing in a horizontal direction which enables GTEK™ Curve to bend easier.

The maximum stud spacing will depend upon the radius required. Additional studs are usually required to support a tight radius. Please refer to diagrams for recommended spacing.

MAXIMUM CURVE RADIUS & MINIMUM CURVE RADIUS – TABLE 7

SHEETS INSTALLED VERTICALLY

Application	Min Radius	Max Spacing
Convex	250mm	125mm
Concave	450mm	150mm

SHEETS INSTALLED HORIZONTALLY

Application	Min Radius	Max Spacing
Convex	450mm	200mm
Concave	650mm	200mm

Low temperature and humidity will reduce GTEK™ Curve's flexibility.

FIGURE 7 – VERTICAL FIX CONVEX - 1/3 SPACE METHOD

Convex curved area
250mm minimum radius

Fasten both layers at max. 100mm centres
at start and finish of curve and at min.
200mm from edge of curve

Recessed edge of second layer

100mm

No curve in this area

Sheet bottom edge 6mm
above finished floor level

200mm min.

125mm max.

Fasten both layers at top and bottom of sheets

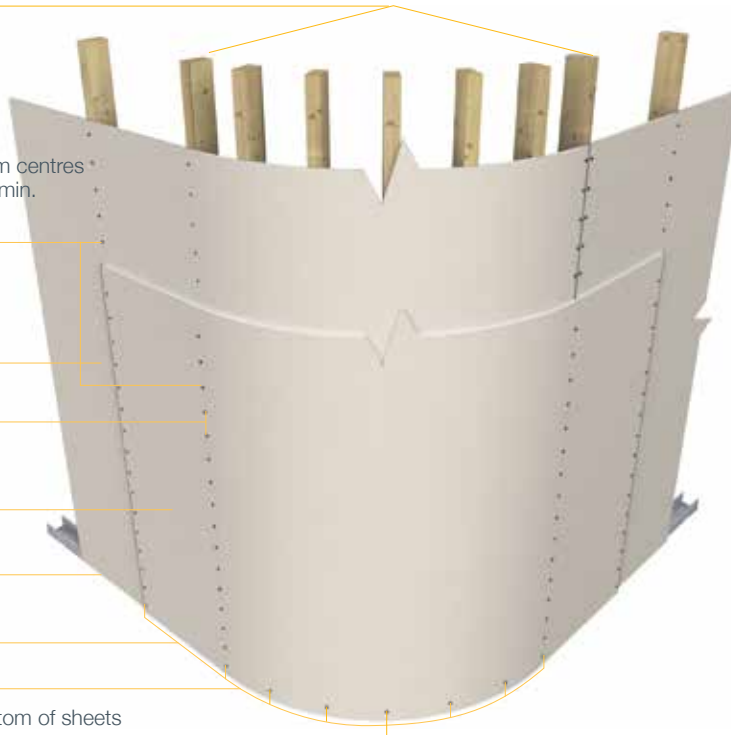


FIGURE 8 – HORIZONTAL FIX CONVEX

Convex curved area
450mm minimum radius

Fasten both layers at max. 100mm centres
at start and finish of curve and at min.
200mm from edge of curve

Fasten both layers at top and bottom of sheets

100mm

No curve in this area

Recessed edge of first layer

First layer and second layer staggered a minimum,
200mm to prevent aligned joints

Recessed edge of second layer

200mm min.

200mm max.

Secure sheet edges by nailing at each stud

Sheet bottom edge 6mm
above finished floor level

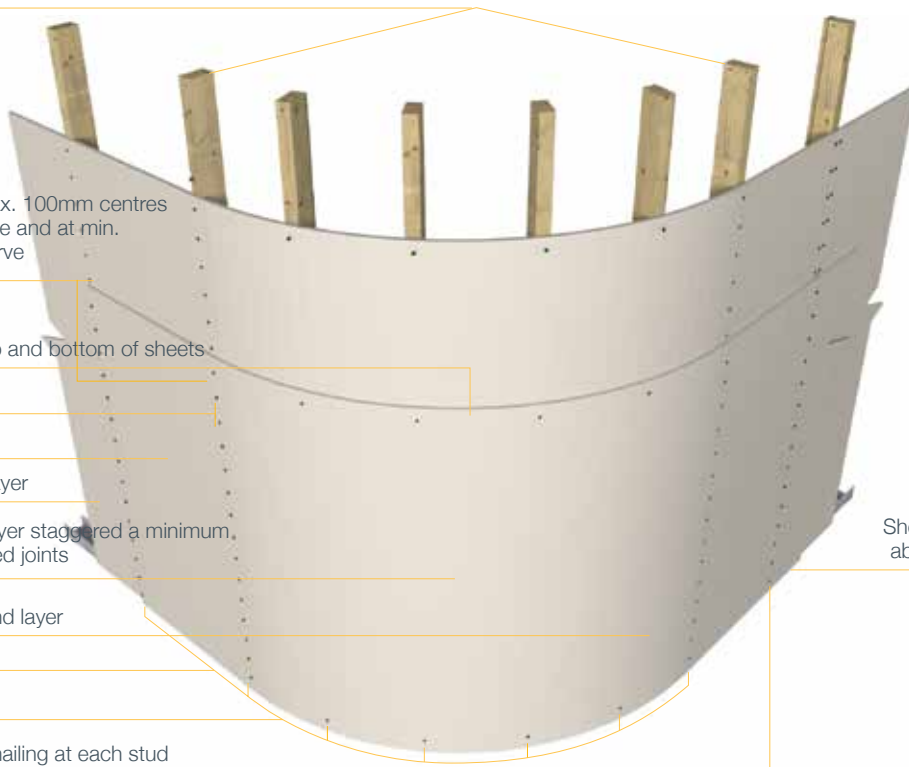


FIGURE 9 – VERTICAL FIX CONCAVE

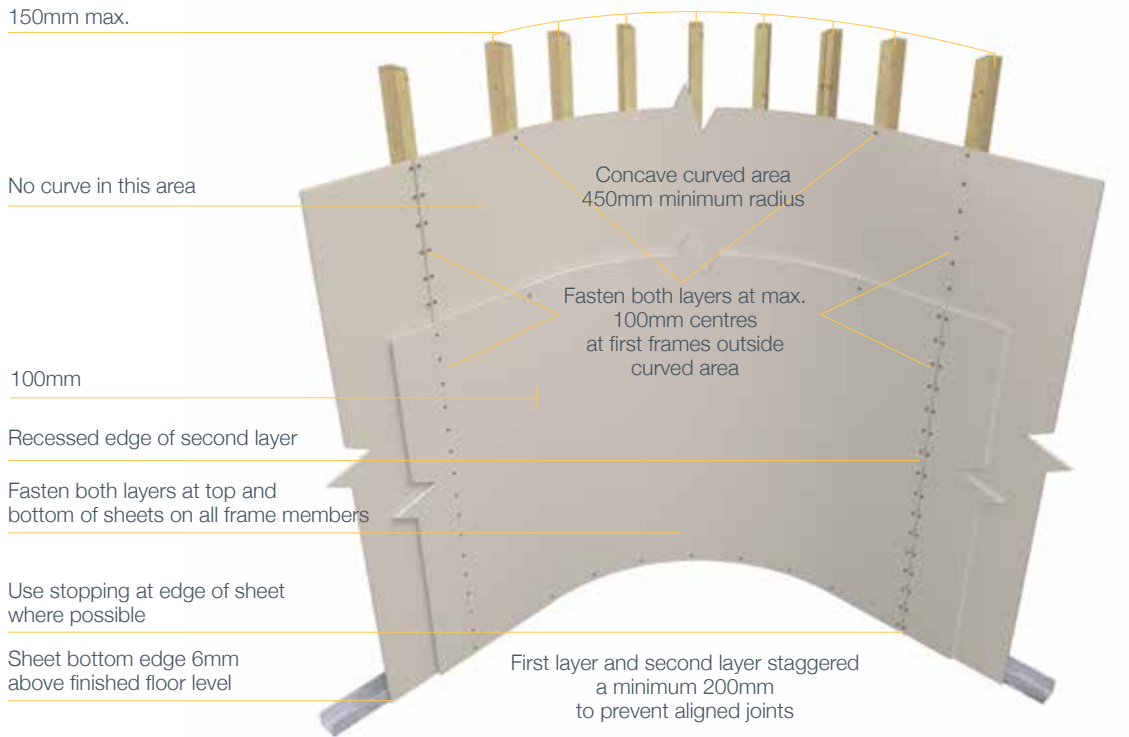
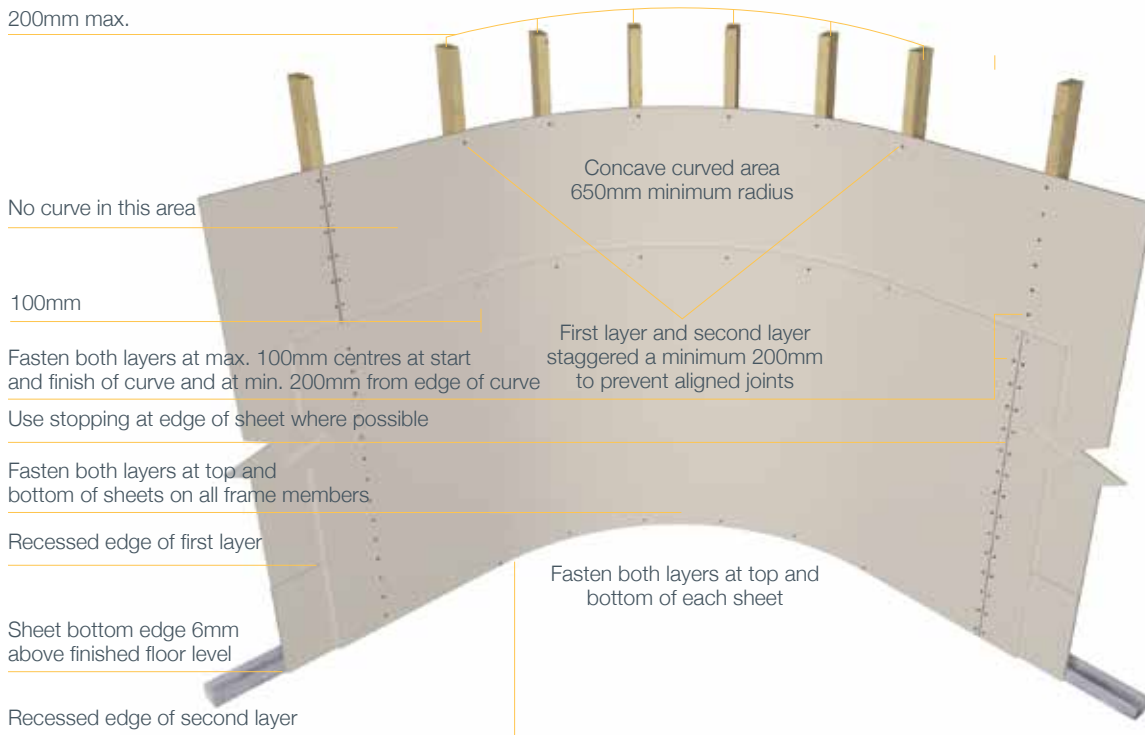


FIGURE 10 – HORIZONTAL FIX CONCAVE





GTEK™ CEILING

GTEK™ Ceiling is a 10mm plasterboard sheet designed specifically for ceiling use. Suitable for residential and commercial applications, GTEK™ Ceiling can be used in ceilings where ceiling joists lie at 600mm intervals.



GTEK™ Ceiling is a lightweight, easily-installed alternative to standard 13mm plasterboard. Featuring useful recesses on the long edges, a smooth continuous surface is assured on completion of installation.

What's good about GTEK™ Ceiling

- ▶ Residential and commercial interior ceiling lining system
- ▶ Cost-effective: quick and easy to install

INTERIOR CEILINGS

GTEK™ Stud Adhesive, 25mm dia. x 15mm high, are positioned in the pattern as shown in Table 4, spaced at maximum of 250mm and minimum of 200mm centres.

GTEK™ Stud Adhesive must not be used at wall-to-wall and wall-to-ceiling junctions, around openings, butt joints or fastener points.

GTEK™ Ceiling is placed at right angles to the ceiling joists, battens or furring channels, and fastened along one recessed edge at each joist, batten or furring channel.

Next, press the sheets firmly against the framing, and fix two nails (for timber framing) or one screw (for CFS steel framing), toward the centre of the sheet at each framing member.

Then, fasten off the sheets along the other recessed edge, at each framing member. Fasteners must not coincide with GTEK™ Stud Adhesive daubs, and fasteners should be kept to a minimum distance of 200mm from GTEK™ Stud Adhesive daubs.

Where allowed, fasteners at butt joints and around openings should be placed at a maximum spacing of 150mm for nails and 200mm for screws.

Allow at least 24 hours or 48 hours in slow drying weather, for the GTEK™ Stud Adhesive to cure.

FIGURE 11 – RECOMMENDED CEILING SHEET APPLICATION (1/3 SPACE METHOD)

GTEK™ Stud Adhesive daubs

Framing centres 450mm typical – 600mm max.

Nail both sheet edges

This nail & adhesive pattern to be used throughout

Stagger sheet joints, back block butt joints

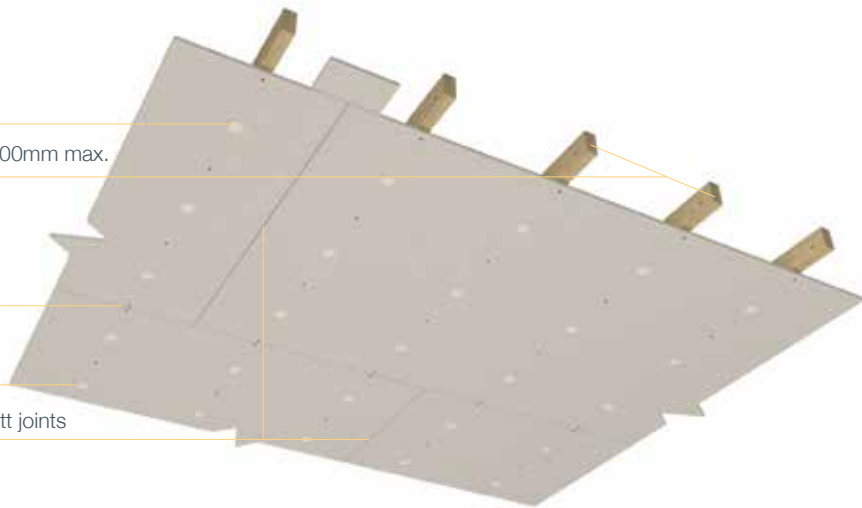


FIGURE 12 – TYPICAL CEILING SHEET APPLICATION

Nail both sheet edges

GTEK™ Stud Adhesive daubs 200 – 250mm centres

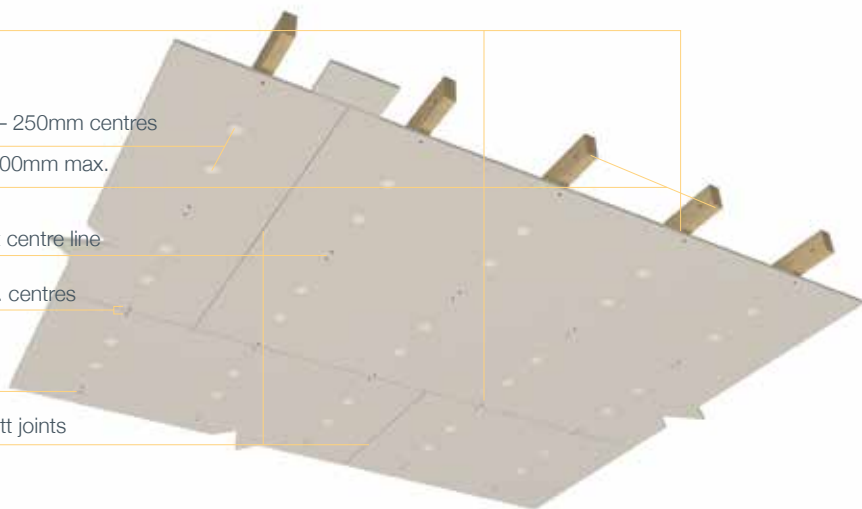
Framing centres 450mm typical – 600mm max.

Two nails @ each purlin along sheet centre line

Nail pairs 50mm min. – 75mm max. centres

This nail & adhesive pattern to be used throughout

Stagger sheet joints, back block butt joints



EXTERNAL CEILINGS

In view of higher wind loadings and other influences on external ceilings, the industry has upgraded its specifications for these areas as follows:

Plasterboard is suitable for N1 and N2 wind zones only.

Framing members should be spaced at max 450mm centres. In areas where ceiling joists or roof trusses are spaced at more than 450mm, trimming or suitable ceiling battens should be provided at max. 450mm centres. Metal ceiling battens and furring channels should be installed in accordance with manufacturer's specification.

Run plasterboard sheets at right angles to framing members. Provide a min 6mm gap between edges of the plasterboard sheet and adjacent walls, beams, columns and fascia's.

Ceiling linings should be fully screw fixed at max 300mm centres, 32mm 'W' types screws should be used for fixing into timber framing. 25mm 'S' or 'D' type screws, as appropriate should be used for fixing into steel framing. External application corrosive resistant screws and protective coated angles should be used within coastal areas.

Back block all joints in ceiling linings as per back blocking specifications.

Control joints should be provided in external ceilings at max 6m centres in both directions.

External ceilings should be painted with a three coat external paint system in accordance with manufacturer's recommendations.

Roof sarking and cross flow ventilations to the ceiling cavity can improve long term performance of external ceilings by reducing the possibility of condensation on top of the ceiling lining.

External ceilings require strict adherence to specification. Non-compliance will reflect in the finish.

CONDENSATION

Surface condensation and wind loads can be the main causes of lining board and jointing system failure. Insufficient protection can lead to the plasterboard distorting as well as potential mould attack.

Metal roofing is more susceptible to condensation build up than roofing tiles; if sarking or foil backed insulation is used under metal roofing ensure installation complies with the BCA and relevant Australian Standards.

It is important that ceiling cavity areas are well ventilated to prevent condensation build up. The installation of eave and gable vents, roof ventilators etc. can assist in this by providing permanent cross flow ventilation.

Building materials and systems may be adversely affected by these severe environmental and physical conditions, which if not installed correctly can lead to ceiling failure and or collapse.

RECOMMENDED GTEK™ PLASTERBOARD MATERIALS

- 10mm GTEK™ Ceiling
- 13mm GTEK™ Wall
- 13mm GTEK™ Wet Area

INSTALLATION

All perimeters must have appropriate framing/noggings etc. in order to support all sheet edges. Perimeters to be screw fixed only at 300mm centres. The perimeter may be fixed out with timber noggings, metal plasterers angle (Rondo P18) or equivalent.

Plasterboard sheets fixed to exterior ceilings must be mechanically fixed with appropriate screws at 300mm centres. Paper tape must be used in conjunction with setting type base products in the joints. Base and topping to comply with ASTM C475. Back block joints in accordance with AS/NZS 2589.

We have a range of Exterior Base and Topping compounds that are ideal for flushed joints on exterior walls and ceilings.

Plasterboard sheets to have a minimum 6-10mm space from perimeter walls.

Fascia boards/perimeter beams should continue at least 100mm below the bottom of the plasterboard ceiling or the perimeter wall/ceiling trim.

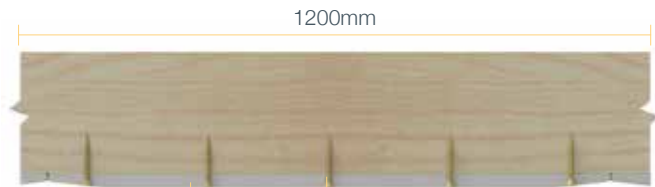
Framing centres to be at a maximum of 450mm.

CEILING AREAS

Movement control (expansion) joints must occur at maximum distances of 6mtr x 6mtr in either direction.

Paint with a three coat exterior paint system applied to manufacturers' recommendations.

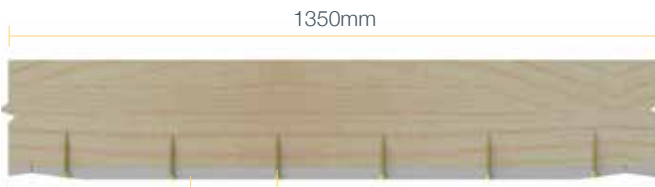
FIGURE 13 / A



GTEK™ Ceiling

Fastener

FIGURE 13 / B



GTEK™ Ceiling

Fastener

GARAGE CEILINGS

Garage ceilings are subject to conditions that are more demanding than in any other part of the homes. This is the case even when garages are located under the same roof as the rest of the home. Garages have large doors that when open let in rain and strong wind, cars are garaged wet and these are not normally heated spaces. Garage doors also cause a large amount of constant vibration when in use that can affect board fixing and adhesion. These factors call for a more durable installation to avoid maintenance issues.

Installation requirements for Garage Ceilings:

- ▶ Fix the ceiling sheets using the screw only method or the one third fixing method.
- ▶ Provide additional framing around the perimeter by inserting trimmers between ceiling frames or installing a steel angle.
- ▶ Fix the perimeter sheets using screws at 300mm max spacing.
- ▶ Avoid windy conditions during and immediately after installation to ensure adhesives set intact.
- ▶ Back block all plasterboard joints.
- ▶ Roll or brush on a high quality sealer undercoat designed for exterior use and use a premium exterior paint system.

CONSIDERATIONS

Before lining the building it is prudent to consider the following design and construction issues:

- ▶ Consideration must be given to the framing, this may vary throughout Australia especially in high wind and coastal areas.
- ▶ It is highly recommended to batten out the ceiling with Rondo 16mm metal battens or 16mm Furring Channel or 28mm Furring Channel or equivalent. These are to be fixed on the appropriate direct fix clips.
- ▶ High-pressure differentials across a wall, may cause the wall to bend and move.

Ensure that wall and ceiling areas do not exceed maximum allowable areas, heights or lengths, and provide movement and or relief control joints where necessary.

- ▶ Decoration is as important as the plasterboard installation and is vital in protecting both plasterboard and the set trowelled areas. The surface of the installed plasterboard ceiling should be decorated with an approved 3 coats exterior grade paint. Please refer to your paint manufacturer for the appropriate grade required.

FIGURE 14 – ALFRESCO COFFER DETAIL

- Timber roof framing (typical)
- Ceiling joist
- GTEK™ Wet Area
- GTEK™ Cove Cornice
- Bulkhead behind
- BGC Durasheet™ eaves lining
- Exterior angle casing bead
- 230 x 230mm brick pier (typical)



TABLE 8 – POSITION AND NUMBER OF ADHESIVE DAUBS AND FASTENEERS ACROSS SHEET

SHEET WIDTH (mm)	GARAGE CEILINGS	EXTERIOR CEILINGS
Fasteners and Adhesive		
1200	XOXOXO or XXXXX	XXXXX
1350	XOXOXO or XXXXX	XXXXXX
Fasteners only		
1200	XXXXX	XXXXX
1350	XXXXX	XXXXXX

BACK BLOCKING

Back blocking is used to reinforce unsupported butt or recessed joints and must be positioned midway between supporting members, in ceilings and walls.

Back blocking must be used in open areas of ceilings (back of recessed joints) with 3 or more joints and where there is a likelihood of excessive shrinkage and movement in the structure.

FIGURE 15



GTEK™ Ceiling back blocking – min 400mm wide

Bond back block to ceiling sheets with GTEK™ Back Blocking Cement (apply using notched spreader)

Position joint on centreline between ceiling joist or stud offset 50mm max.

Install temporary batten and packer to produce 3mm depression at joint. Leave in place for 24 hours min. after bonding the back block

GTEK™ Ceiling

FIGURE 16



GTEK™ Ceiling

3mm depression at sheet joint. Fill – following recessed joint instructions

GTEK™ Ceiling

BLACK BLOCKING PROCEDURE FOR RECESSED EDGE JOINS

- (a) Cut back blocks at least 200 mm wide and long enough to fit between the framing members with a gap not greater than 25mm at each end.
- (b) Apply GTEK™ Back Blocking Cement over the full face of the back block. A notched spreader providing 6 mm x 6 mm beads at approximately 20mm centres at right angle to the joint would be satisfactory.
- (c) Fix the plasterboard to framing members.

- (d) Place back blocks centrally along the full length of the board edge.
- (e) Immediately after the back blocks are in place, fix the next sheet.

Alternatively, ceilings back blocks may be cemented into position from above the ceiling after the sheets have been fixed and before they are flush jointed.

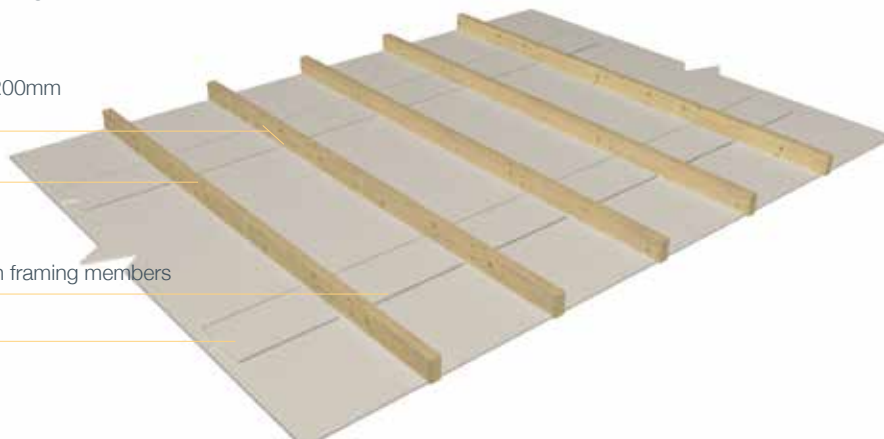
FIGURE 17 – BACK BLOCKING PROCEDURE

GTEK™ Ceiling back blocking at least 200mm width & centred over recess joint

Framing or battens

Back blocking cut to fit loosely between framing members

Recessed joint



JOINTING INFORMATION FOR GTEK™ WALL, GTEK™ CEILING AND GTEK™ CURVE

JOINTING APPLICATION

Paper tape joints produce stronger and more enduring results than those that are set with fibreglass tapes.

BGC Plasterboard recommends the use of paper tapes.

- ▶ Self-adhesive paper tapes should not be used.
- ▶ Where fibreglass tape joints are used, they must be back blocked before the joints are set (in accordance with the instructions set out in Back Blocking, page 20).

TAPE AND FIRST COAT

Apply the GTEK™ Base Coat bedding cement to fully fill the recess of the joint.

Centrally bed the perforated paper tape into the bedding coat and remove any air bubbles. Apply additional cement and cover lightly with GTEK™ Base Coat.

Stop-up all fixing points and apply GTEK™ Base Coat to any damaged areas.

Allow the GTEK™ Base Coat to set and dry for a minimum of 24 hours in damp or humid conditions or 1 hour for setting type cements (or as per compound manufacturer's recommendation).

For drying types (pre-mixed) allow a minimum of 24 hours between coats.

FIGURE 18 – TAPE FIRST COAT

First coat GTEK™ Base Coat 100mm approx.

1 / Fill recess with GTEK™ Base Coat

2 / Install perforated paper tape over joint centre line

3 / Lightly cover paper tape with GTEK™ Top Coat

FIGURE 19 – SECOND COAT

4 / Second coat GTEK™ Base Coat 180mm approx.

THIRD COAT

Lightly sand the second coat.

Apply a thin finish coat of GTEK™ Top Coat centrally over second coat, after it has set and hardened. Dampen the outer edges of the finish coat, with a sponge to feather out the GTEK™ Top Coat about 280mm approx wide.

Apply a thin final coat of GTEK™ Top Coat over all fasteners and damaged areas.

FIGURE 20 – THIRD COAT

5 / Apply GTEK™ Top Coat 280mm approx.

SECOND COAT

Lightly sand the first coat.

Check the Level of Finish prior to beginning required in the architects' specification, before applying the second coat as detailed in Plasterboard Finish Selection (page 4).

Apply a second coat of GTEK™ Base Coat 180mm wide over the joints, making sure to feather out the edges.

Apply a second coat to all fasteners and damaged areas, feathering out by about 25mm.

Allow the second coat to set and dry for a minimum of 24 hours or 1 hour for setting type cements (or as per compound manufacturer's recommendation).

For drying types (pre-mixed) allow a minimum of 24 hours between coats.

JOINTING – BUTT JOINTS

Butt or end joints should be flush-jointed and finished with a 3 coat system widening each coat. The Tape/First Coat should cover approx. 300mm, second coat approx. 400mm and the third coat approx. 500mm.

FIGURE 21 - BUTT JOINTS

SANDING AND FINISHING

Allow the GTEK™ Top Coat to dry for at least 24 hours.

Lightly sand smooth with 150 grit paper or with 220 sanding mesh.

Wipe off excess dust with a slightly damp cloth.

FIGURE 22 – SANDING AND FINISHING

Allow 24 hours min. drying time then lightly sand joint

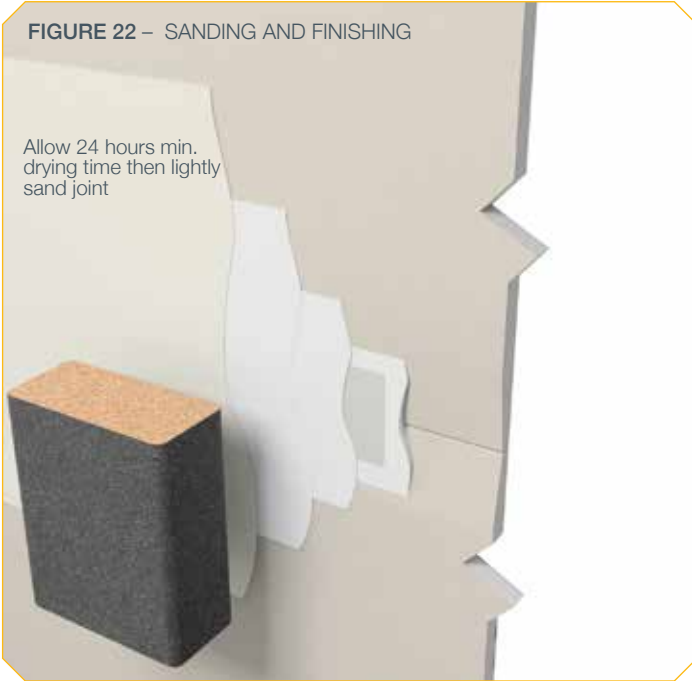
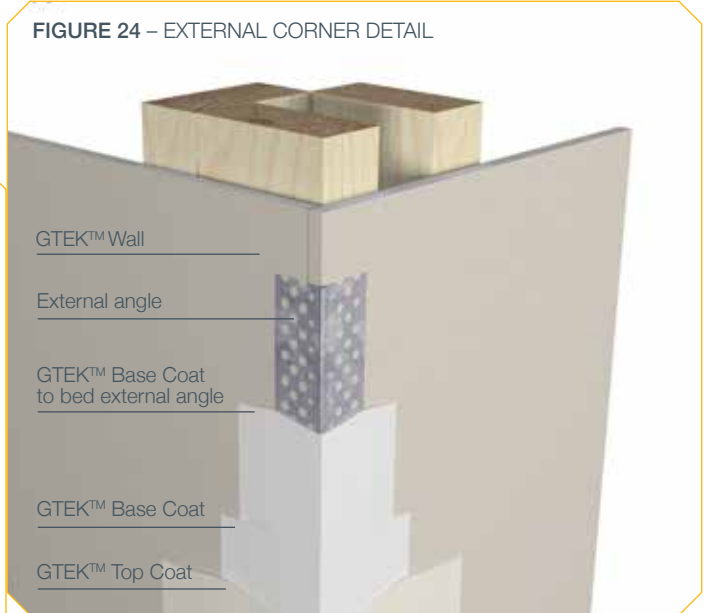
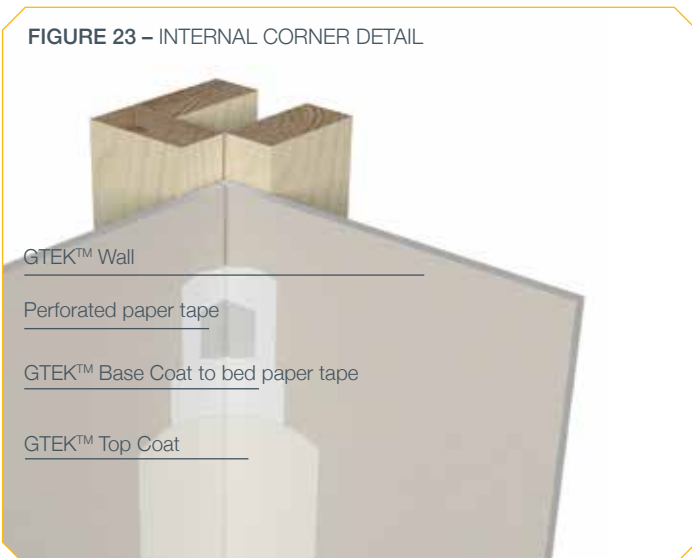


FIGURE 24 – EXTERNAL CORNER DETAIL



GTEK™ Wall will perform to the architects' specification and the Australian Building Codes, provided all procedures are followed as per the compound manufacturers' specification.

FIGURE 23 – INTERNAL CORNER DETAIL



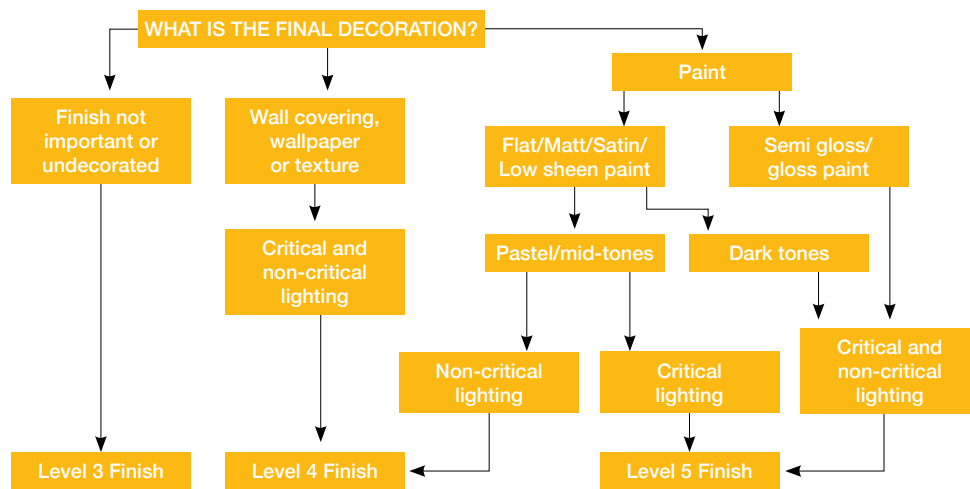
DECORATION FOR GTEK™ WALL, GTEK™ CEILING, GTEK™ CURVE AND GTEK™ CORNICE

LEVELS OF FINISH

The adoption of the levels of finish clauses into the Australian Standard AS/NZS2589 provides designers, builders, manufacturers, plasterboard installers and finishers with a best practice roadmap for achieving an acceptable quality of finish with a decorated plasterboard surface.

Establishing the required level of finish in the design stage is absolutely critical to the outcome of a project.

The quality of finish can be influenced by many factors including the workmanship of each trade. For example if the frame is constructed outside tolerance defined for a level five finish, no matter what the quality of wall and ceiling lining and decoration that follow – a Level 5 finish will not be achieved.



*Critical lighting: natural or artificial light projected across a surface at a low incidence angle.
Non-critical lighting: when the light striking the surface is diffused or at right angles, or both.

It is important to take into account the following:

- ▶ No sheeting lining material or substrate has a surface that is perfectly flat or totally free from minor imperfections
- ▶ A Level 4 finish is the default industry standard
- ▶ A requirement for a Level 5 finish has to be defined up front and written into the contract
- ▶ A Level 5 finish has allowable tolerances and will never be a dead flat finish or a car duco mirror finish
- ▶ Level 5 can only be achieved through a coordinated approach between the builder and all trades especially the carpenter, wall and ceiling contractor and painter

Level 5 Requirements

- ▶ A Level 5 background
- ▶ All paint coats to be rolled
- ▶ A three coat paint system must be applied
- ▶ All ceilings must be battened
- ▶ Ceiling joists to run with the light source
- ▶ Wall joints to be fixed horizontally (some exceptions apply e.g. for narrow spaces)
- ▶ Back-blocking to butt joints in ceilings of all rooms

Possible pitfalls

- ▶ Full height glass
- ▶ Windows abutting walls
- ▶ Glancing light
- ▶ Directional lighting
- ▶ Skylights
- ▶ Glass, semi-gloss and dark tone paint
- ▶ Vertical joints

Glancing Light

Consideration of the effect of glancing light is one of the most important factors in the design of a building. Although a flat finish is the common expectation this is not always possible with present building technology. No matter how flat a surface may appear, there are always undulations and deviations from flatness, though this is dependent on the level of finish and the lighting sources and design.

With an acute or critical angle of light (i.e. the light that shines directly along the surface), illumination of one side of the most minute undulation can create a shadow of the other side. This highlights joints, patches and surface texture variations, which is why it is important to do the lighting design when determining the level of finish for the specified area.

Not taking into account the effect of lighting when deciding where to locate windows, ceiling and wall lighting can lead to serious disputes on completion of a project as the satisfaction of the consumer is compromised by lighting that demands more than the surface and current practices can deliver.

DECORATION FOR GTEK™ WALL, GTEK™ CEILING AND GTEK™ CURVE

FIGURE 25
GLANCING LIGHT 1

Even light reflection

min

Non critical light

FIGURE 26
GLANCING LIGHT 2

Low incident light

Joint

Shadow

Critical light

FIGURE 28 - GLANCING LIGHT 4

Joint

Shadow

Critical light

FIGURE 27 - GLANCING LIGHT 3

Joint

Shadow

Critical light

Window or door

FIGURE 29 - GLANCING LIGHT 5

Joint

Shadow

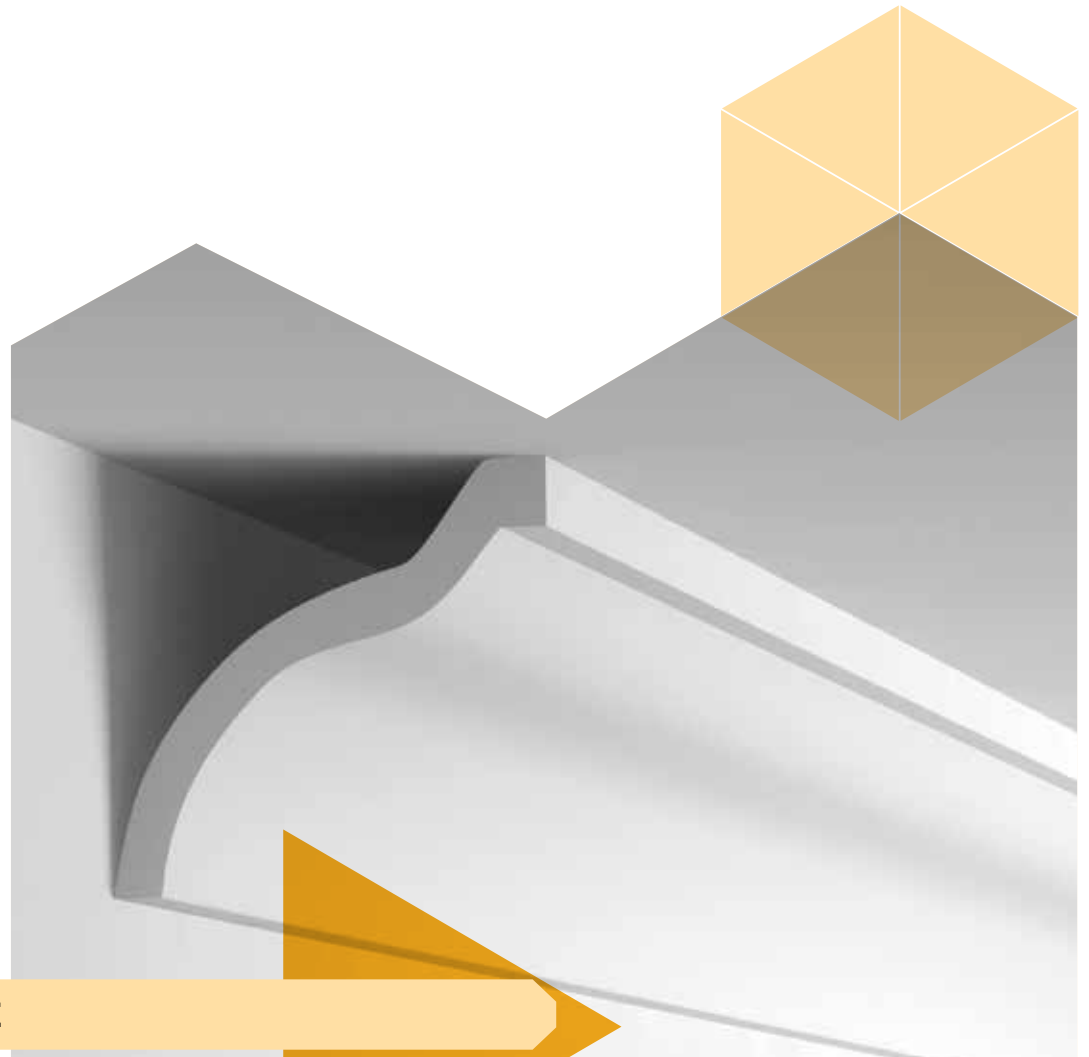
Joint

No shadow

Good choices of window placement and consideration of appropriate types of ceiling and wall lights and shades will support an even and consistent look to the surfaces.

Designers, builders and home owners should take the following into account:

- ▶ Where possible ceiling and wall joints should run in the direction of the source of light e.g. at right angles to windows or large openings. Avoid butt joints where ever possible. Finished joints are subject to a variety of lighting conditions. Light intensities are constantly changing throughout the day, depending on the position of the sun, sky conditions, window, door or the location of artificial light sources and reflections from surrounding buildings, ground etc. subjecting the ceilings to diffused light from all directions.
- ▶ At night, the intensity varies again.
- ▶ High output light sources are more severe in their effect because they create deeper shadows. The whiter the light, the stronger the contrast, the greater the perceived imperfection.
- ▶ Energy efficient fluorescent globes are non-sympathetic to plasterboard ceilings and placement is critical to control glancing light.
- ▶ Light shades are some of the most effective devices for enhancing the appearance of plasterboard ceiling. By understanding the role that fittings play and the consequences of their position it is possible to minimise adverse shadowing on surfaces.
- ▶ Down lights (although not the total solution) have proven excellent value for the presentation of large ceilings.
- ▶ Wall mounted lights may well show up a ceiling in a kindly manner, because they are some distance below it. They will however, tend to accentuate minor imperfections in the walls.
- ▶ The ideal lighting technique is to use a series of fittings hung as low as possible below the ceiling. The angle of light striking the surface is as great as possible and the multiple light sources cancel out each other's shadows.
- ▶ Soft low wattage diffused lighting provides reasonable results.
- ▶ The positioning of feature lighting using small spots or floodlights should be well planned. The fittings should allow for a generous angle of incidence to the feature surface to minimise visibility of minor imperfections.
- ▶ In general terms, recessed fittings and ceiling surfaces are compatible. However they should be kept well away from walls. This is assuming that they are deeply recessed and do not have a flush mounted diffuser, which transmits light to the ceiling surface.
- ▶ Pools and water sources directly outside the building reflect natural light at angles that can show up and emphasise plasterboard joints.
- ▶ Large gloss floor tiles can reflect light at angles that can show up and emphasise plasterboard joints.
- ▶ Floor to ceiling windows or windows that extend up to (or close) the corner of the room allow natural light to shine directly along the surface can show up and emphasise plasterboard joints. This effect will vary through the day as the angle of light varies.
- ▶ Raked ceiling coupled with high level windows facing critical light or louvered windows. In this case the problem is invariably complicated by reflections from adjacent surfaces.
- ▶ **REMEDIAL MEASURES** – Where the physical circumstance producing glancing light effect already exists, the situation can be improved by appropriate soft furnishings, pelmets, curtaining, blinds or redecorating with light matt finishes. Also consider changes to type and location of artificial lighting.



GTEK™ CORNICE

Complementing our GTEK™ plasterboard sheets, BGC offers a range of GTEK™ cove and decorative cornices, adding exciting finishing touches to interior wall and ceiling joints in new builds and renovations.



GTEK™ Cove and decorative cornices are available in three profile sizes suited to all applications.

What's good about GTEK™ Cove and Decorative Cornices

- ▶ Designed to improve appearance of junctions at walls and ceilings
- ▶ Easy-on-the-eye designs
- ▶ Quick and simple to install
- ▶ Three cove cornice profile sizes:
 - 55mm – 70mm – 90mm
- ▶ Also GTEK™ Esperance 75mm profile

COVE CORNICE

FIGURE 30
95mm



FIGURE 31
75mm



FIGURE 32
55mm



DECORATIVE CORNICE

FIGURE 33
75mm



GTEK™ Cove Cornice is designed to give a clean continuous line at the junction of walls and ceilings, and can be used with confidence on both Plasterboard lining and cement plastered walls alike.

GTEK™ Cove Cornice is made of a plaster core with paper face to complement GTEK™ Wall & Ceiling. GTEK™ Cove Cornice should be fixed using GTEK™ Cornice Cement with few special tools required.

The use of a mitre box and hand saw for cutting internal and external corner mitres is recommended.

DECORATIVE CORNICE SIZES - TABLE 10

DESIGN	SIZE (mm)	LENGTH (mm)
		4800
Esperance	75	✓

COVE CORNICE SIZES - TABLE 9

SIZE (mm)	LENGTH (mm)			
	3000	3600	4200	4800
55	✓	✓	✓	✓
75	✓	✓	✓	✓
90	✓	✓	✓	✓

CORNICE INSTALLATION

Clean down area where cornice is to be applied, remove any excess render or loose material.

Mark a guide line to suite the bottom edge of the cornice (90, 75 or 55 down) and pre-cut lengths as required.

All corner joints, internal and external, are to be mitred.

Where butt joints are unavoidable, ensure both ends are prepared to align accurately.

Apply (butter) a 10mm bead of cornice cement to both long edges and ends of the cornice.

Locate cornice to guide lines and temporarily block as required.

Fill mitres, cleaning off excess cement as you go.

Remove temporary blocking after GTEK™ Cornice Cement has set.

Apply second topping coat to mitres and joints as required.

Note: only ever butter one length at a time and install immediately.

Contact surface may require damping down prior to fixing cornice, depending on drying conditions.

DECORATIVE CORNICE

The Decorative Cornice range from GTEK™ adds the finishing touch to the interior décor of your new home or renovation.

Esperance provides a timeless design suiting many different styles of home. The soft undulation of the curve provides a stylish finish to any room.

NOTES

A series of horizontal dashed lines for taking notes.

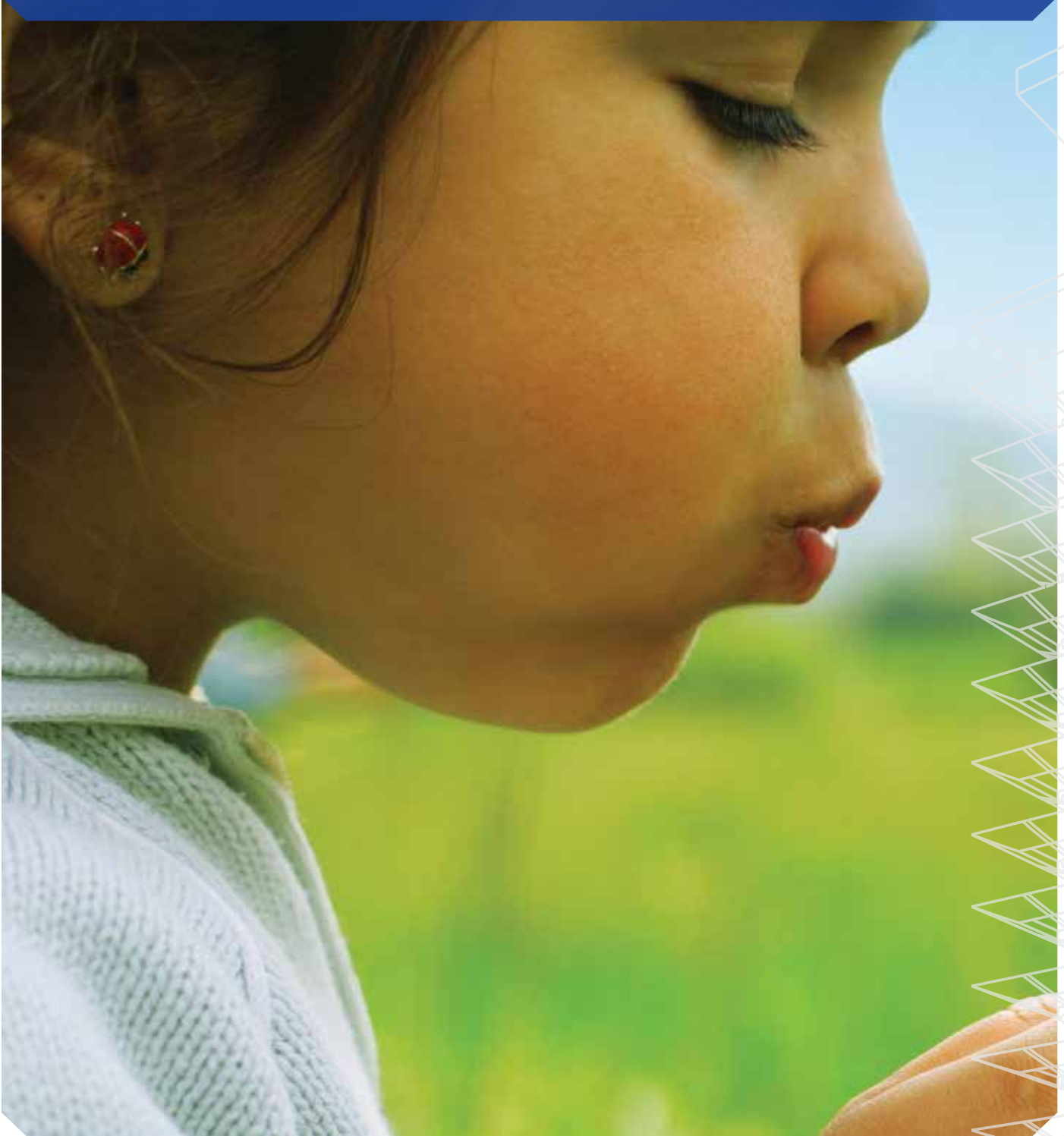
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NOTES

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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,
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07 3271 1711

MELBOURNE
TELEPHONE
03 9392 9444

PERTH
TELEPHONE
08 9374 2900

SYDNEY
TELEPHONE
02 9771 9660

NEW ZEALAND
TELEPHONE
0011 64 9273 1457

TECHNICAL HELP LINE
1300 652 242



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™ 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™ Cornice** adds exciting finishing touches to interior wall and ceiling joints in new builds and renovations.

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);
- ▶ failure to comply with the Building Code of Australia 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.