

# DURAPLANK™

WEATHERBOARD



Build it better with **BGC**


**BGC**

Fibre Cement

# DURAPLANK™

WEATHERBOARD

BGC FIBRE CEMENT PRODUCTS ARE EXTREMELY VERSATILE – PERFECT FOR ARCHITECTURAL FLOURISHES, EXTERNAL AND INTERNAL WET AREAS. COMING IN AN EXTENSIVE ARRAY OF SIZES AND THICKNESSES, THEY MAKE CONSTRUCTION AND RENOVATION PROJECT DESIGN DREAMS COME TRUE.

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- 4 // PRODUCT DESCRIPTION INCLUDING SIZES AND WEIGHT
  - 4 // PRODUCT INFORMATION
  - 4 // FIRE RESISTANCE AND WEATHER RESISTANCE
  - 5 // VAPOUR PERMEABLE MOISTURE BARRIER
  - 5 // CUTTING AND DRILLING
  - 6 // ACCESSORIES
  - 6 // DURAPLANK™ FASTENERS
  - 7 // THERMAL BREAKS
  - 7 // DURAPLANK™ STUD SPACING
  - 7 // DURAPLANK™ LAYOUT
  - 9 // DURAPLANK™ INSTALLATION DETAILS
  - 10 // 13 // DURAPLANK™ FASTENERS AND STUD SPACING
  - 14 // BUSHFIRE AND BOUNDARY WALL AREAS
  - 14 // PAINTING AND MAINTENANCE
  - 14 // WARRANTY

# DURAPLANK™

WEATHERBOARD



IN ITS APPEALING LOOKS AND EASY INSTALLATION, THE DESIGN OF BGC DURAPLANK™ EVOKES TRADITIONAL WEATHERBOARDS. DURAPLANK™ WON'T DECAY, ROT OR BECOME DAMAGED BY WHITE ANTS, AND IT'S NON-COMBUSTIBLE.

**BEAUTIFULLY ATTRACTIVE –**  
YOU HAVE THE OPTION OF A SMOOTH FINISH, OR A WOODGRAIN TEXTURE FOR AN AUTHENTIC WEATHERBOARD LOOK.

DURAPLANK™ ALSO HAS THE STRENGTH TO WITHSTAND THE RIGOURS OF FAMILY LIFE.

#### **WHAT'S GOOD ABOUT DURAPLANK™?**

- // Similar style to traditional weatherboards
- // No decay, rot or white ant damage
- // Safe and durable – requires minimal maintenance
- // Accepts a variety of finishes
- // Complies with BAL29 as required in AS3959:2018 – Construction of buildings in bushfire prone areas

## PRODUCT DESCRIPTION

Duraplank™ is a general-purpose fibre cement cladding for exterior applications. It is manufactured as a plank, which is reminiscent of traditional weatherboards both in appearance and installation methods.

Unlike timber weatherboards, Duraplank™ is not subject to timber rot, decay, or white ant damage. It will not support combustion. The result is a safer, more durable cladding that requires minimum maintenance.

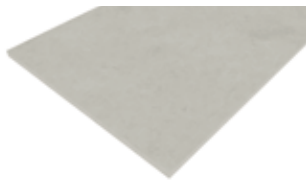
Duraplank™ is available in a smooth or woodgrain texture for that authentic timber weatherboard look. At 7.5mm thick, Duraplank™ has the strength to withstand the rigours of all normal family activities.

## ADVANTAGES

- // Offers a traditional look without the maintenance associated with timber
- // Cost effective option compared to other weatherboards
- // Quick and easy to cut to minimise waste
- // Acrylic sealed, ready for painting
- // Durable and low maintenance

## WEATHERBOARD SIZES AND WEIGHT – TABLE 1

THICKNESS mm	PROFILE	WEIGHT kg l/m	WIDTH mm	LENGTH mm
				4200
7.5	Smooth & Woodgrain	2.5	230	✓
	Smooth & Woodgrain	3.3	300	✓



Duraplank™  
Smooth



Duraplank™  
Woodgrain

## WEATHERBOARD TOLERANCES

- // Duraplank™ complies with the requirements of AS2908.2

## PRODUCT INFORMATION

Duraplank™ is manufactured from Portland cement, finely ground silica, cellulose fibres and water. Weatherboards are cured in a high-pressure steam autoclave to create a durable, dimensionally stable product.

Duraplank™ is manufactured to conform to the requirements of AS/NZS 2908.2-2000 Cellulose-Cement Products, Part 2: Flat sheets and Duraplank™ is classified as Type A Category 2.

## FIRE RESISTANCE

BGC Fibre Cement products have been tested in accordance to Australian Standard AS1530.3.

These tests deemed the following Early Fire Hazard Indices:

- // Ignitability Index 0
- // Spread of Flame Index 0
- // Heat Evolved Index 0
- // Smoke Developed Index 0 ~ 1

Duraplank™ weatherboards are deemed non-combustible and may be used where non-combustible materials are required.

Duraplank™ has been tested in accordance with AS5637.1 and is classified as a Group 1 product.

## THERMAL CONDUCTIVITY

Duraplank™ weatherboards have thermal conductivity of 0.088 W/mk at equilibrium moisture content.

## WEATHER RESISTANCE

Duraplank™ conforms to the National Construction Code (NCC) requirements for exterior wall applications.

Duraplank™ that is subject to freeze/thaw conditions must be painted. Duraplank™ should not be used in situations where it will be in direct contact with snow or ice for prolonged periods.

## MOISTURE MANAGEMENT

Designers, specifiers and builders have a duty of care to identify moisture-associated risks with any individual building design.

Wall construction design should consider both the interior and exterior environments of the building to effectively manage moisture.

Special consideration should be given to buildings that are in extreme climates or at higher risk of wind driven rain.

In addition, all wall openings, penetrations, junctions, connections, window heads, sills and jambs must incorporate appropriate flashing for waterproofing. All other components, materials and installation methods used to manage moisture in walls should comply with the relevant Australian standards and the National Construction Code (NCC).

## DURABILITY

- // Duraplank™ is immune to permanent water damage in both short and long-term exposure.
- // Duraplank™ will not rot or burn and is unaffected by termites, air, steam, salt and sunlight.
- // Duraplank™ is not adversely affected over a temperature range of 0°C to 95°C.

## VAPOUR PERMEABLE MOISTURE BARRIER

A vapour permeable moisture barrier must be installed in accordance with the AS 4200.2 – 'Pliable building membranes and underlays – installation and the vapour permeable moisture barrier manufacturers' guidelines.

The vapour permeable moisture barrier shall comply with AS/NZS 4200.1 and have the following properties:

// Vapour barrier – low or medium  
// Water barrier – high

A vapour permeable moisture barrier is used to prevent moisture ingress by acting as a drainage plane while enabling water vapour build up from inside the frame to escape.

Please refer to NCC for information on the climate zone requirements for your project.

## FLASHING

It is a requirement of the NCC to install flashings to all penetrations which includes but not limited to windows, doors, meter boxes, intersections etc.

## INSULATION

Duraplank™ weatherboards will require insulation to be installed in some regions that have thermal loss regulations. Insulation should be installed in accordance with the manufacturer's instructions. Insulation batt must fit snugly between framing members to minimise heat loss.

## CUTTING AND DRILLING

Duraplank™ may be cut to size on site. If using power tools for cutting, drilling or sanding they must be fitted with appropriate dust collection devices or alternatively an approved (P1 or P2) dust mask and safety glasses shall be worn. It is recommended that work always be carried out in a well-ventilated location.

The most suitable cutting methods are:

### Durablade

180mm diameter. This unique cutting blade is ideal for cutting fibre cement. It can be fitted to a 185mm circular saw, ie Makita or similar. Please ensure safe working practices when using.



### Notching

Notches can be made by cutting the two sides of the notch. Score along the back edge then snap upwards to remove the notch.

### Drilling

Use normal high-speed masonry drill bits. Do not use the drill's hammer function. For small round holes, the use of a hole-saw is recommended. For small rectangular or circular penetrations, drill a series of small holes around the perimeter of the cut out. Tap out the waste piece from the sheet face while supporting the underside of the opening to avoid damage. Clean rough edges with a rasp.

### Cutting Around Openings

When cutting weatherboard around window or door openings, a 5mm nominal clearance must be provided at the jamb, head and sill. Under a window, keep as near to a full weatherboard width as practical.

Weatherboard courses should be set out so that as near to a full weatherboard width as possible remains under a window, or similar openings.

Flashing and mouldings must be installed as appropriate to prevent ingress of water.

## HANDLING AND STORAGE

Duraplank™ must be stacked flat, up off the ground and supported on equally spaced (max 400mm) level gluts. Care should be taken to avoid damage to the ends, edges and surfaces.

Weatherboards must be kept dry. When stored outdoors it must be protected from the weather. Weatherboards must be dry prior to fixing or finishing.

## AVOID INHALING DUST

When cutting sheets, work in a well-ventilated area and use the methods recommended in this literature to minimise dust generation. If using power tools wear an approved (P1 or P2) dust mask and safety glasses.

These precautions are not necessary when stacking, unloading or handling fibre cement products.

For further information or a Material Safety Data Sheet contact the nearest BGC Sales Office or go to [www.bgcinnovadesign.com.au](http://www.bgcinnovadesign.com.au)

## COASTAL AREAS

The durability of galvanised nails and screws used for exterior cladding in coastal or similar corrosive environments can be as low as 10 years.

For this reason, BGC recommend the use of stainless-steel fasteners within 1km of the coast or other large expanses of salt water.

## ACCESSORIES – TABLE 2

PRODUCT	LENGTH//SIZE	BGC CODE	
Joiner – Smooth	230mm	565	
	300mm	566	
Joiner – Woodgrain	230mm	567	
	300mm	568	
Internal Corner	3000mm x 25mm	INTCNR25	
External Corner	3000mm x 25mm	EXTCNR25	

Speak to your local BGC State office for availability of Off Stud Soakers and Pre-formed Aluminium corner soakers.

## FASTENERS

### Duraplank™ to timber frame

Min. 2.8 x 50mm Fibre Cement Nail min Class 3



### Duraplank™ to steel frame

No.8 x 40 Galvanised Self-embedding Head Screw



## DURAPLANK™ COVERAGE – TABLE 3

No. of planks	Weatherboard size 4200 x 230	Weatherboard size 4200 x 300
	Weatherboard overlap 25mm	Weatherboard overlap 25mm
	Effective cover per weatherboard 4200 x 205mm or 0.861m <sup>2</sup>	Effective cover per weatherboard 4200 x 275mm or 1.155m <sup>2</sup>
1	230	300
2	435	575
3	640	850
4	845	1125
5	1050	1400
6	1255	1675
7	1460	1950
8	1665	2225
9	1870	2500
10	2075	2775
11	2280	3050
12	2485	3325
13	2690	3600
14	2895	3875
15	3100	4250
16	3305	4525
17	3510	4800
18	3715	5075
19	3920	5350
20	4125	5625

Table 3 is provided to assist in calculating the number of weatherboards required to cover a given wall height.

For triangular areas such as Gable ends, halve the quantities derived for a rectangular wall then add 10% to cover off cuts.

## PRE-COUNTERSINK

When using screws to fasten Duraplank™, pre-countersinking is suggested so that the fastener is 2mm under the plank surface for filling with epoxy filler and then finished with BGC Exterior and Wet Area Top Coat.

## FRAMING

In general, the layouts presented in this publication will be satisfactory for low-rise (up to two storey) domestic and light commercial buildings in non-cyclonic regions.

Buildings in cyclonic regions, high-rise buildings, large industrial and commercial complexes will generally require a specific design to be undertaken.

Duraplank™ is designed to be installed horizontally to both timber and lightweight steel frames.

Ensure that the frame is square and work from a central datum line. The frame must be straight and true to provide a flush face to receive the weatherboards. BGC suggest a maximum tolerance of 3mm-4mm in any 3000mm length of frame.

Duraplank™ will not straighten warped or distorted frames and any warping may still be visible after Duraplank™ weatherboards are applied. Warped framing will require remedial action.

## THERMAL BREAKS

Thermal breaks may be required for steel framed buildings, in walls that are required to have a minimum total R value. Careful consideration of thermal heat transfer and the position of thermal breaks needs to be addressed by the architects, engineers and building designers.

Balustrades, parapets, and other non-enclosed wall elements may not require thermal breaks, except where the possibility of high thermal heat transfer exists through the steel sections to the main structural steel element of the building.

Thermal breaks are required to have an R value of R0.2 in order to meet the NCC requirement for a Thermal Break.

## TIMBER FRAMING

Use of a timber frame must be in accordance with AS1684 – residential timber-framed construction and the framing manufacturers' specifications.

Use only seasoned timber. Do not use unseasoned timber as it is prone to shrinkage and can cause weatherboards and frames to move.

"Timber used for house construction must have the level of durability appropriate for the relevant climate and expected service life conditions including exposure to insect attacks or to moisture which could cause decay" – Reference AS 1684.2.

## LIGHTWEIGHT STEEL FRAMING

Use of a steel frame must be in accordance with AS3623 – Domestic metal framing and the framing manufacturer's specifications.

Framing members must have a Base Metal Thickness (BMT) between 0.55 to 1.6mm. The steel framing must have the appropriate level of durability required to prevent corrosion.

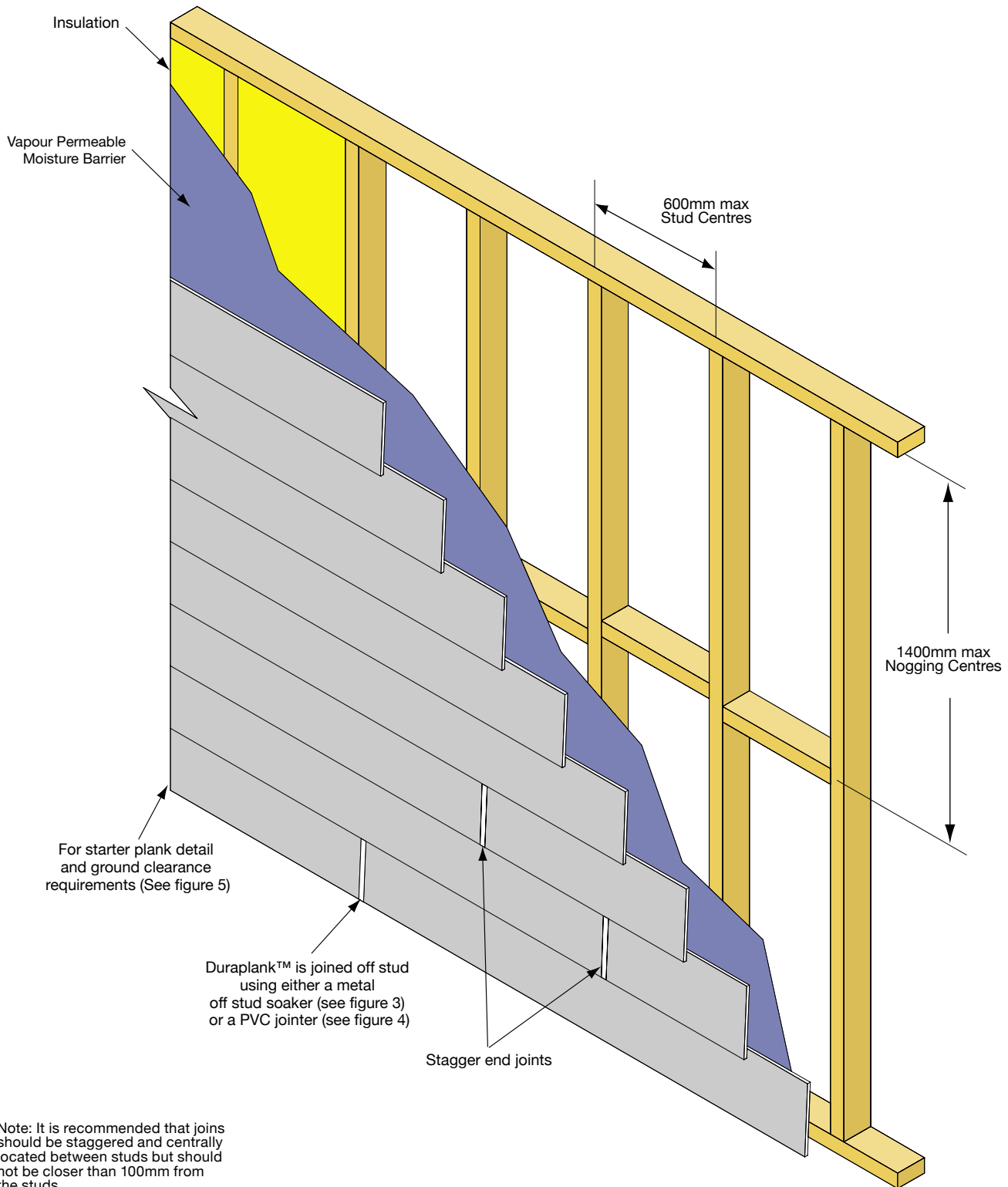
## RIGID STEEL FRAMING

When rigid steel framing is used, it must be battened out with either timber or lightweight steel battens prior to fixing the Duraplank™ weatherboards.

## FRAMING CENTRES – TABLE 4

WIND ZONE	230mm Duraplank™		300mm Duraplank™	
	Stud Spacing within 1200mm of corners (mm)	Stud Spacing elsewhere (mm)	Stud Spacing within 1200mm of corners (mm)	Stud Spacing elsewhere (mm)
N1	600	600	600	600
N2	600	600	600	600
N3	600	600	600	600
N4	450	450	350	450
N5	325	450	240	450
N6	240	300	180	300
C1	450	450	450	450
C2	450	450	350	450
C3	325	450	240	450
C4	240	300	180	300

FIGURE 2 //  
DURAPLANK™ LAYOUT

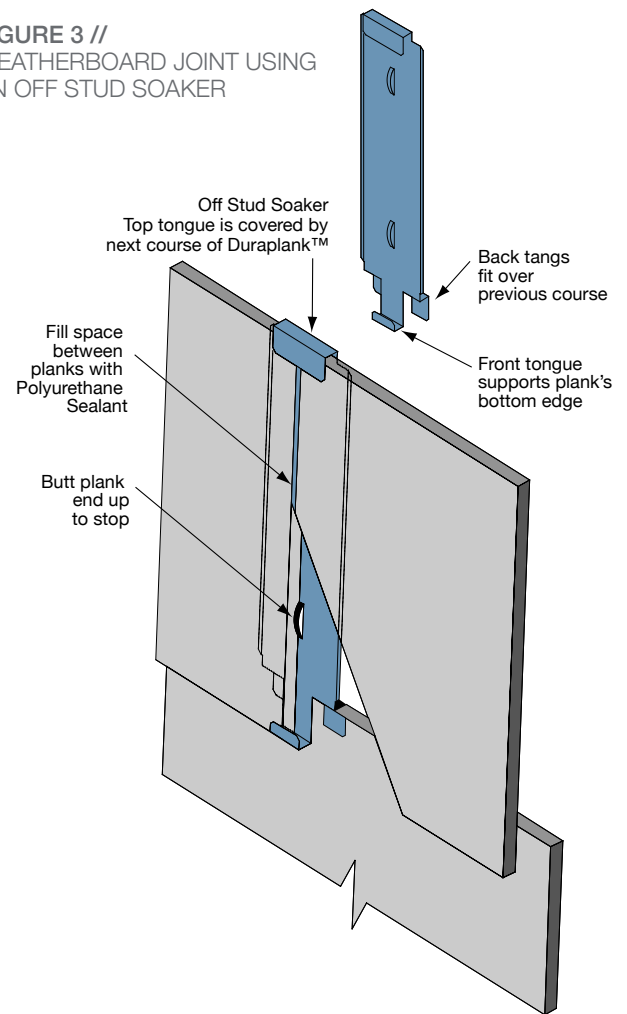




## INSTALLATION DETAILS

- Calculate the number of weatherboards required using the Weatherboard Course Ready Reckoner as detailed in Table 3.
- Install Vapour Permeable Moisture Barrier to manufacturers specifications.
- Fix all flashings to wall openings and external and internal corners.
- Fix a starter strip or starter plank to the bottom plate to ensure the first row of planks are packed out to the correct angle. This starter strip is to be continuous around the perimeter of the building allowing the cladding to overhang the bottom plate by 50mm. See figure 5.
- Set a horizontal datum line around the perimeter of the building using a string line or spirit level. Fix guide nails/screws along this line to act as a stop for the correct placement of the first course of planks.
- Duraplank™ is best suited to be joined off the studs using a metal off stud soaker or PVC joiner. See figures 3 and 4.
- Commence fixing the bottom course of plank from an external corner. Fasten the bottom edge of the plank to each stud through the starter strip. Ensure that the plank is level and flush with the corner.
- Fit the plank joiner (off stud soaker or PVC joiner) to the end of the plank and continue fixing the bottom course.
- The plank must overlap a minimum of 25mm, and before fixing the second row of planks calculate the overlap so a near full width of plank will finish at the top of the building. Using a piece of timber or plank, fabricate a lap gauge to ensure that the plank coverage is uniform. See figure 7.
- Commence fixing the second row of planks from an external corner using this lap gauge. Use a shorter length of plank than the bottom course to allow for staggered end joints. See figure 2. Continue fixing the Duraplank™ around the building following this method.
- Fixings must not be driven closer than 50mm from the end of the plank. For fixings between 20mm – 50mm from the end, the plank must be predrilled with a 3mm hole.
- When fixing woodgrain Duraplank™, the pattern is repeated every 4th or 5th plank. To achieve a genuine woodgrain pattern, avoid starting each course with a new plank and rotate to avoid pattern repeats.

**FIGURE 3 //**  
WEATHERBOARD JOINT USING  
AN OFF STUD SOAKER



**FIGURE 4 //**  
WEATHERBOARD JOINT USING A PVC JOINER

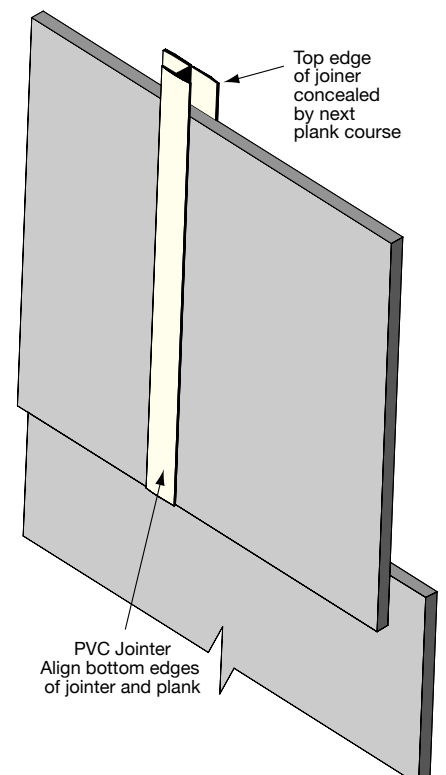


FIGURE 5 // FOUNDATION DETAIL

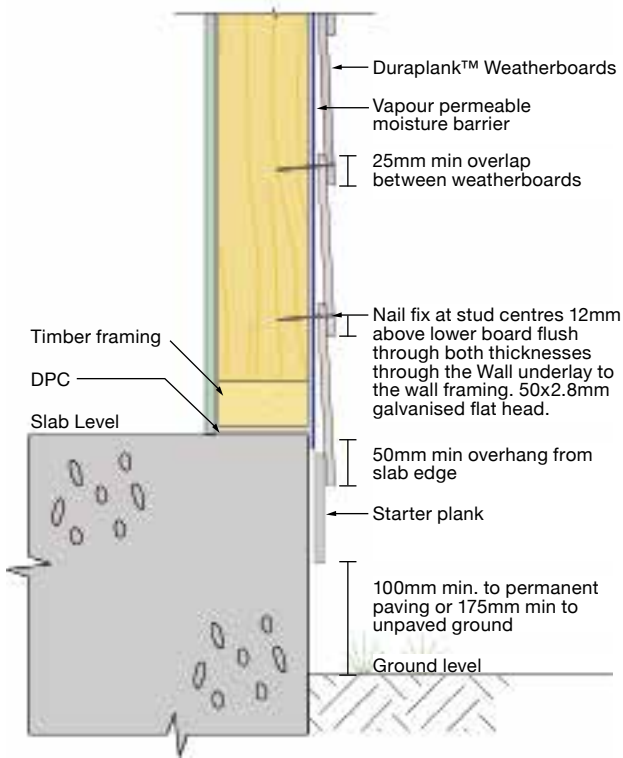


FIGURE 7 // DURAPLANK™ LAP GAUGE

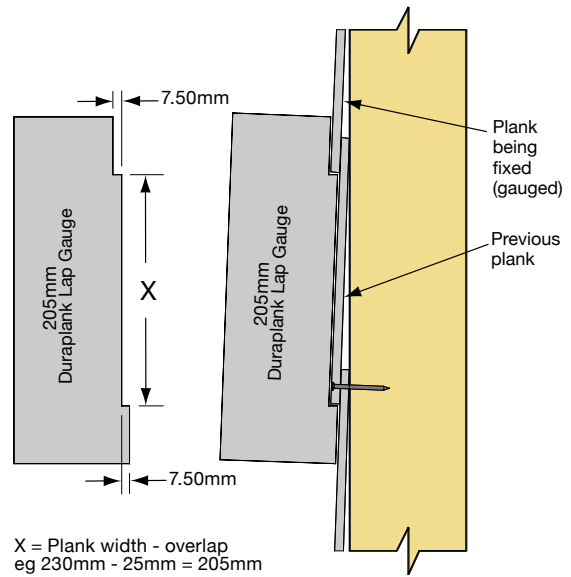


FIGURE 6 // SOFFIT DETAIL

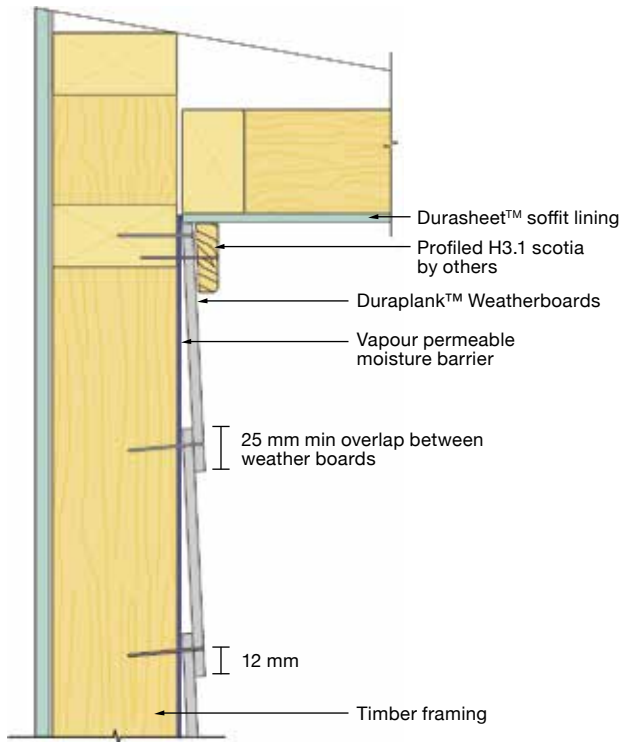


FIGURE 8 // FASTENER DETAIL

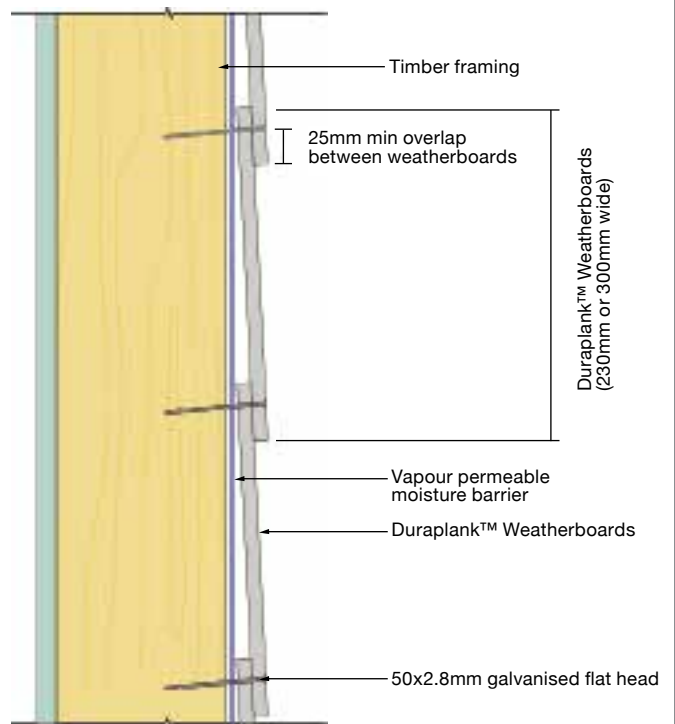


FIGURE 9 // WINDOW HEAD

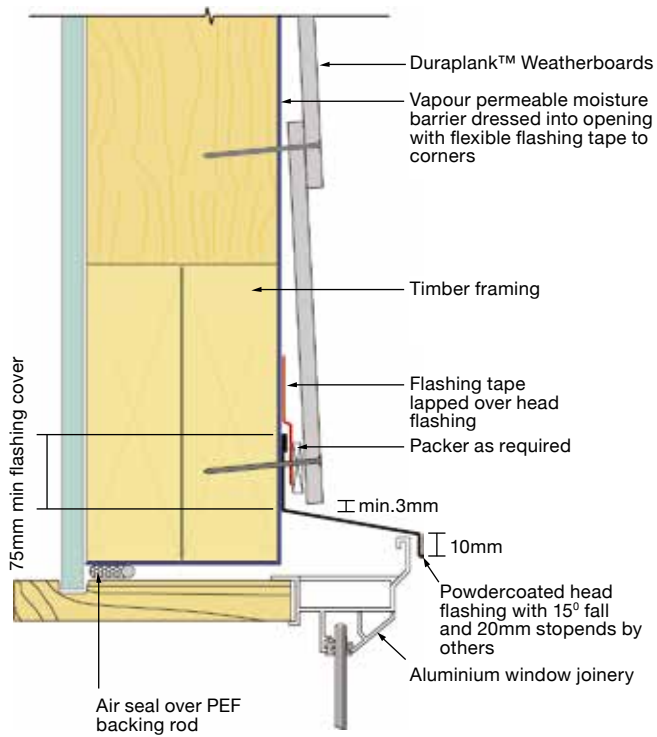


FIGURE 11 // WINDOW JAMB

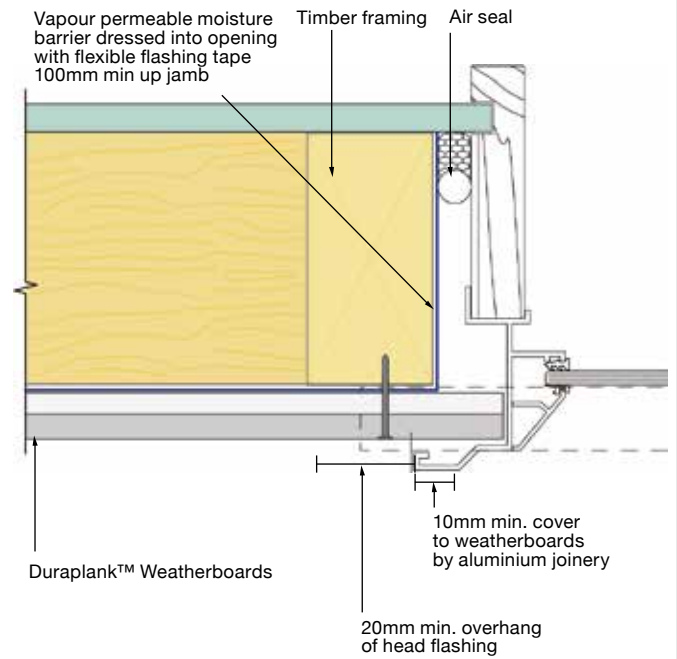


FIGURE 10 // WINDOW SILL

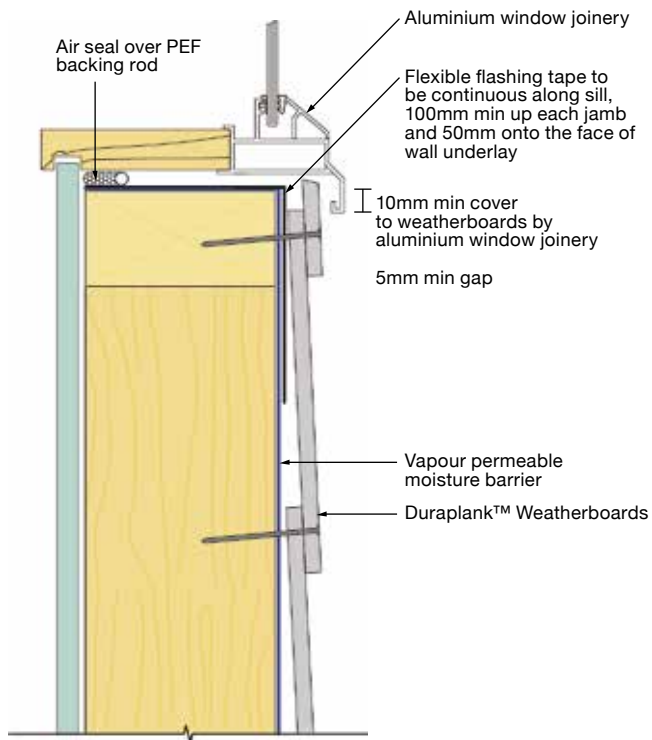
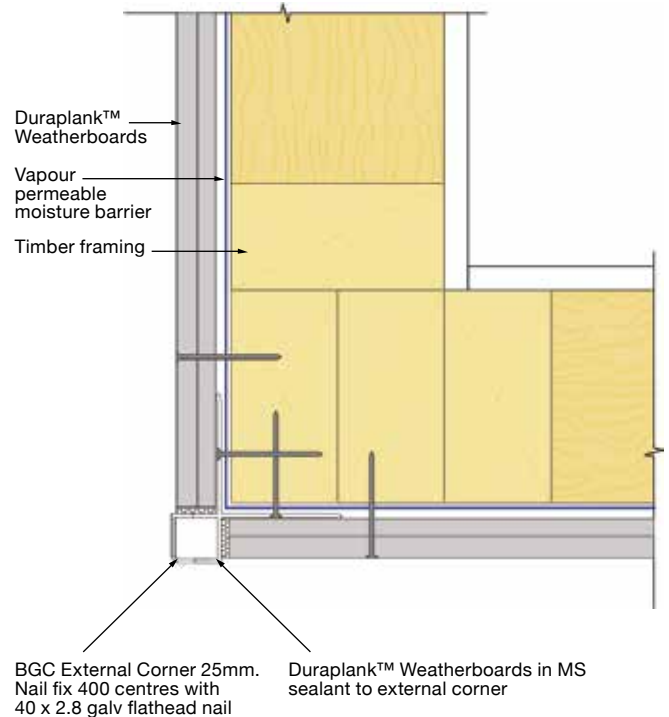
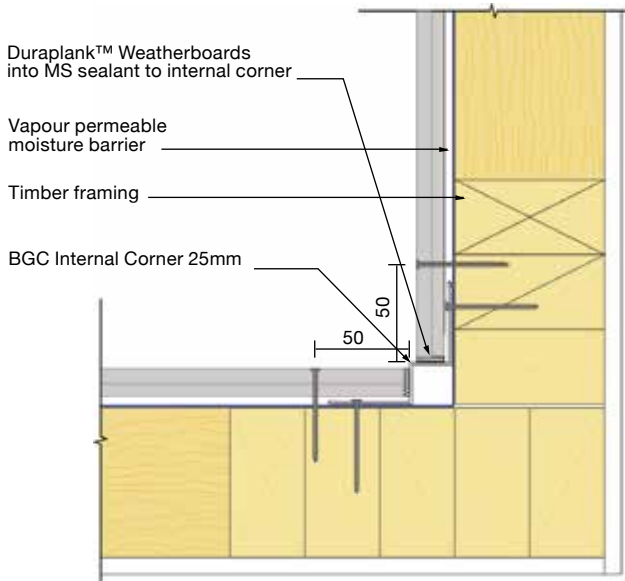


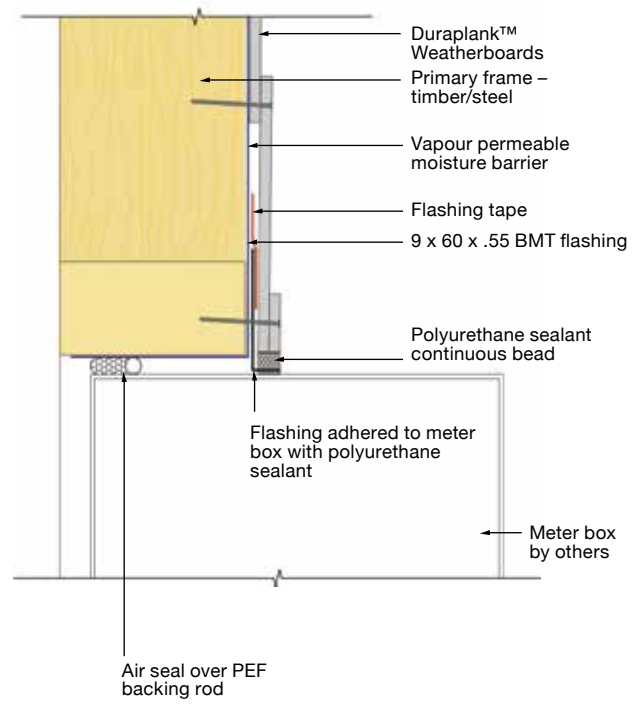
FIGURE 12 // EXTERNAL CORNER DETAIL WITH BGC PROFILE



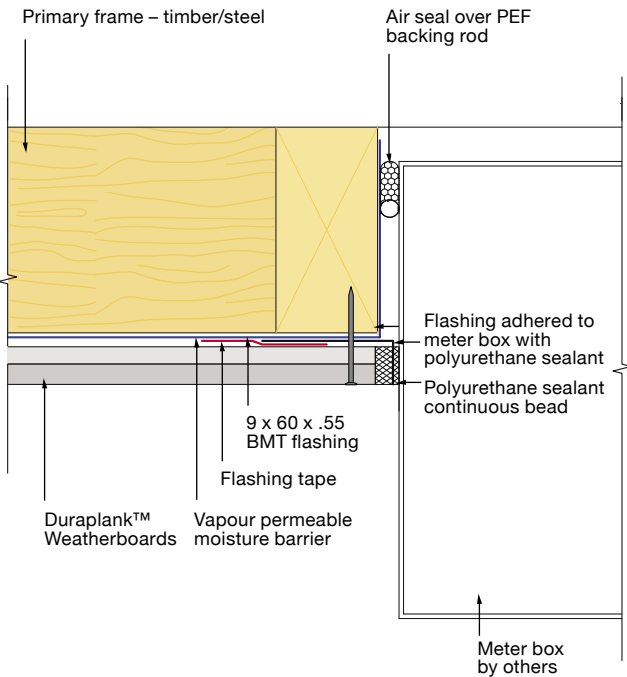
**FIGURE 13 //**  
INTERNAL CORNER DETAIL WITH BGC PROFILE



**FIGURE 15 //**  
METER BOX HEAD



**FIGURE 14 //**  
METER BOX JAMB



**FIGURE 16 //**  
METER BOX SILL

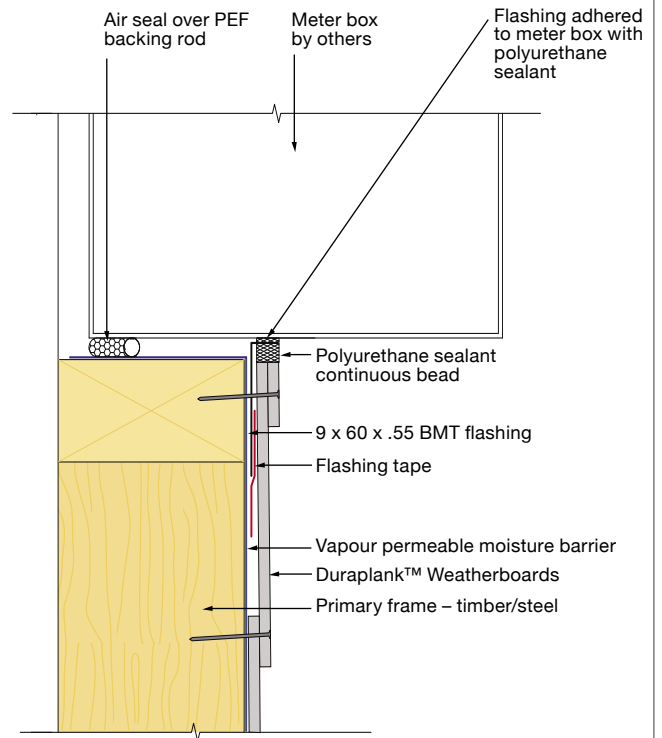
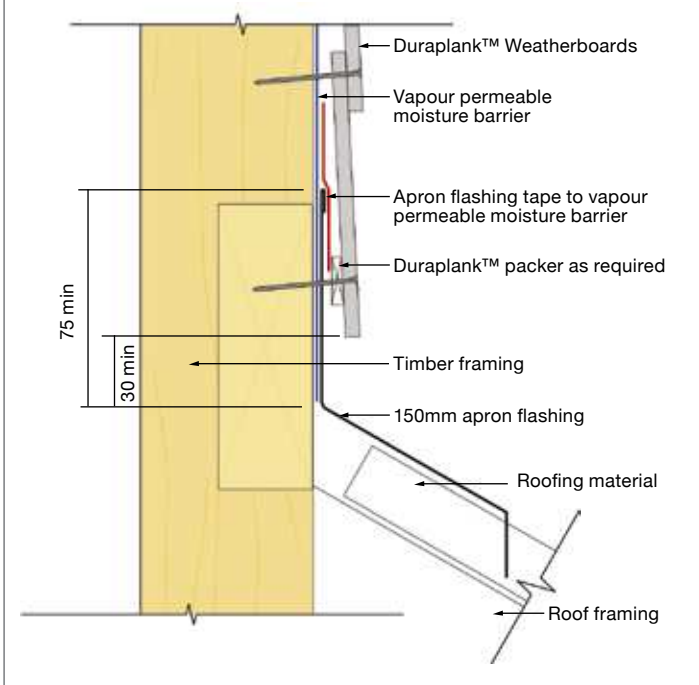


FIGURE 17 //  
TRANSVERSE APRON FLASHING DETAIL



## MAINTENANCE

Duraplank™ when used in accordance with this literature requires no direct maintenance.

To guard against water penetrating the structure and damaging the framework, annual inspections of the cladding system should be carried out. Check flashing sealant joints and paint work.

Flashings and sealants must continue to perform their design function.

Damaged weatherboards should be replaced as originally installed. Paintwork should be maintained in accordance with the manufacturer's instructions.

## PAINTING

To enhance both the appearance and performance of Duraplank™, BGC recommend that at least two coats of an exterior grade paint be applied. The paint manufacturers recommendation on application and maintenance of the paint system should be followed.

## BUSHFIRE INFORMATION

AS3959:2018 sets out a series of bushfire threat levels to buildings described as BAL (bushfire Attack Levels) as follows:

BAL-Low, BAL-12.5, BAL-19, BAL-29, BAL-40 or BAL-FZ (Flamezone).

Duraplank™ can be used as a standalone product to achieve up to BAL-29 when fixed to frame as per the fixing instructions in this manual.

## DEEMED TO COMPLY

For an up to date and complete list of BGC Products that are 'Deemed to Comply' please refer to [www.ntlis.nt.gov.au/deemedtocomply](http://www.ntlis.nt.gov.au/deemedtocomply)

## WARRANTY

We warrant that our products are free from defects caused by faulty manufacture or materials for the following period from the date of purchase:

- 25 years for the Nuline™ Plus, Stratum™ and Duraplank™ ranges
- 10 years for the Montage™ range and
- 15 years for all other BGC Fibre Cement and Innova™ ranges

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 Fibre Cement Pty Ltd**

Ground Floor, 290 Bushmead Road, 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 [www.bgcinnovadesign.com.au](http://www.bgcinnovadesign.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.

## TERMS AND CONDITIONS

BGC Fibre Cement's Terms and Conditions of Sale ("Agreement"), as in place and published at the date of this brochure, 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.

## WARRANTY ON METAL COMPONENTS

For warranty information on the metal components specified in this design manual please contact BGC on 1300 652 242 from anywhere in Australia.

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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

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TELEPHONE  
02 8107 9500

NEW ZEALAND  
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0011 64 9273 1457

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1300 652 242

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## BGC FIBRE CEMENT PROVIDES BUILDERS, DEVELOPERS AND ARCHITECTS WITH A RANGE OF DESIGN ALTERNATIVES AND INNOVATIVE PRODUCTS, SUCH AS:

### EXTERIOR PRODUCTS AND APPLICATIONS INNOVA RANGE OF PRODUCTS

**DURACOM™** / A compressed fibre cement facade system.

**DURAFLOOR™** / Is the ultimate flooring product that can be used in both interior and exterior applications.

**DURAGRID™ RESIDENTIAL & DURAGRID™ LIGHT COMMERCIAL** / A light weight facade giving a modern and durable finish.

**DURAGROOVE™** / A vertically grooved exterior facade panel.

**DURASCAPE™** / A lightweight exterior facade base sheet with a subtle vertical shadow line.

**NULINE™ PLUS** / A weatherboard style cladding system.

**MONTAGE™** / A pre-finished versatile facade system that can be used internally and externally.

**STONESHEET™** / Purpose designed substrate for stone tile facade.

**STRATUM™** / Is a trio of plank products, each of which can be used as stand alone products or used together to create a striking exterior cladding solution.

### INTERIOR PRODUCTS AND APPLICATIONS BGC FIBRE CEMENT RANGE OF PRODUCTS

**DURALUX™ PLUS** / An interior lining board suitable for ceilings and soffits.

**DURALINER™ PLUS** / An interior lining board, this is the perfect substrate for tiles and is ideal for wet areas.

### EXTERIOR PRODUCTS AND APPLICATIONS BGC FIBRE CEMENT RANGE OF PRODUCTS

**DURASHEET™** / Ideal for the cladding of gables and lining of eaves. Can also be used on commercial soffits and cladding on non impact areas.

**DURAPLANK™** / Available in Smooth and Woodgrain finishes, Duraplank™ is ideal for exterior cladding of upper storey conversions or ground level extensions.

**DURATEX™** / A base sheet used for textured coatings on exterior wall applications.

**COMPRESSED** / Used for domestic, commercial sheet for wet areas, flooring, partitions, exterior decking, fascia and facade cladding.

**DURALUX™ PLUS** / Suitable for exterior applications where it will be sheltered from direct weather.

**DURALINER™ PLUS** / Suitable for exterior applications where it will be sheltered from direct weather.

Build it better with **BGC**

**BGC**

Fibre Cement

**Safe working practices** - Please wear a P1 or P2 mask and safety goggles (approved to AS/NZW1337 standards) whilst cutting or installing Duraplank™. Duraplank™ can be safely handled during unloading or stacking without the use of these precautions.

**Cleaning up** - Always wet down your work area when cutting Duraplank™, to ensure that dust is managed. Dispose of any vacuumed dust with care and using containment procedures.