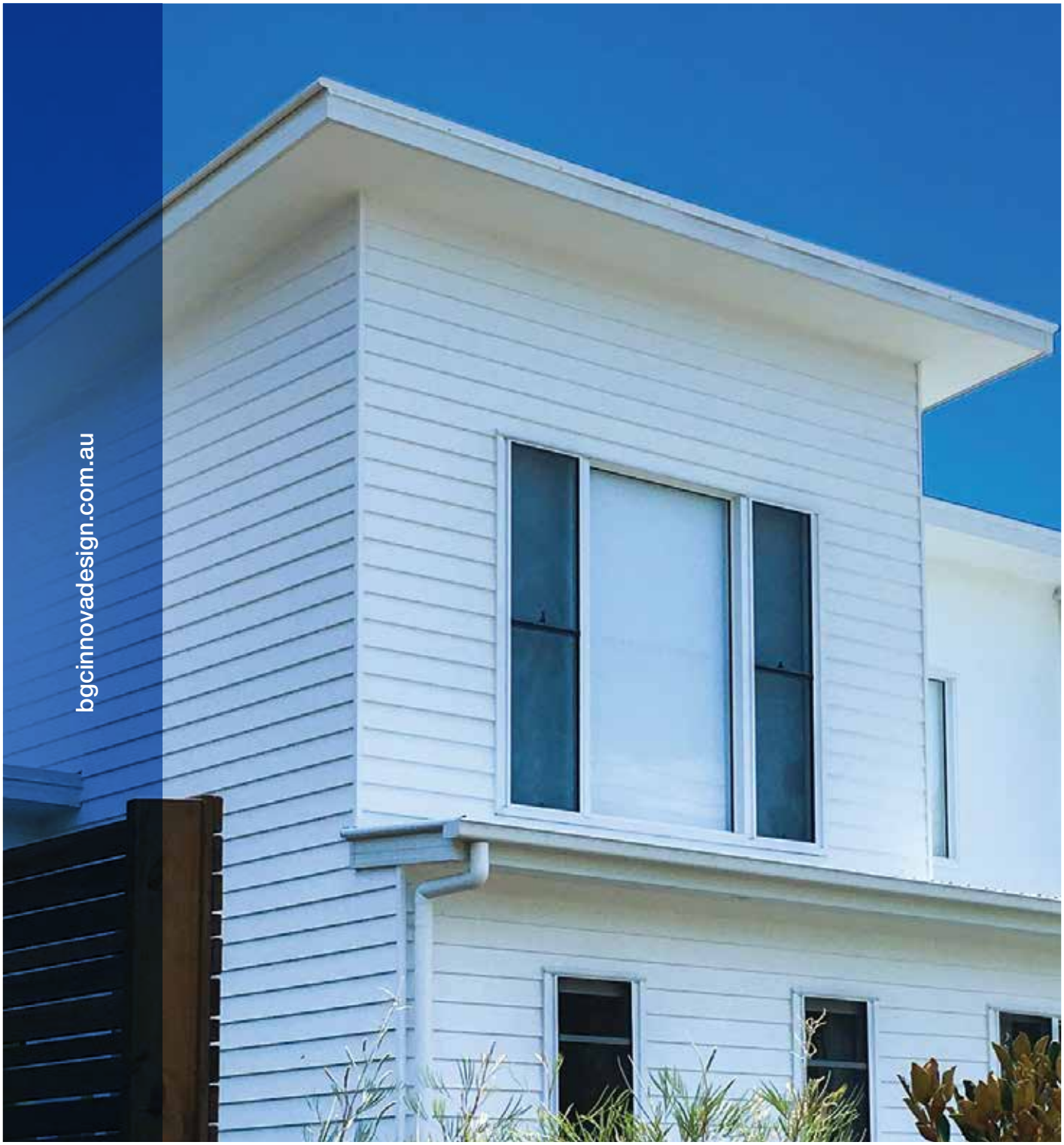
Technical brochure
April 2018

innova™

NULINE™ PLUS WEATHERBOARDS



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BGC Fibre Cement

innova™ INNOVATIVE BUILDING SYSTEMS

innova™
INNOVATIVE BUILDING SYSTEMS

BGC's stunning Innova™ range of facade, lining and flooring products will move you to reassess your concept of excellence in facades and flooring systems. Innova™ is durable and dynamic, fresh and contemporary. Now let the Innova™ range of cladding and flooring products breathe new life into your creativity and project specification.

Contents

BGC Fibre Cement

Introduction.

NULINE™ PLUS
WEATHERBOARDS

NULINE™ PLUS is a weatherboard-style cladding system. With its perfect join and a seductive look that echoes real timber, NULINE™ PLUS is the natural evolution of the ever-popular NULINE™ weatherboard.

The NULINE™ PLUS tongue & groove fitting will deliver seamlessly consistent joins throughout your project.

With its slight bevel on the rear of the weatherboard allowing a 25mm bearing face on the stud, you'll find fixing and nailing exceptionally easy.

NULINE™ PLUS Weatherboards

- Extend your options with 2 different profiles: square & bullnose
- Factory sealed, ready for painting
- Quick, simple installation: Manual nailing, gun nailing or screw fixing
- Highly durable: No rot or decay
- Achieves BAL40 as required in AS3959:2009 construction of buildings in bushfire-prone areas

Specify Nuline™ Plus with confidence

bgcinnovadesign.com.au/fire-resistant

Innova™ deemed to comply external facade systems.

/ Compressed Fibre Cement range
/ Architectural designed weatherboard range
/ Grooved and profiled cladding range

BGC's products have superior fire performance against four key indicies.

Ignition index = 0
Fibre cement does not ignite

Spread of flame index = 0
There is no spread of fire with fibre cement

Heat evolved index = 0
Heat does not evolve from fibre cement

Smoke developed index = 0-1
Smoke is not emitted from fibre cement

Up to **BAL 40**
as per AS3959:2009

Tested in Australia by accredited Australian authorities **CSIRO** and **Exova Warrington**

Case Study 01.

Project: Four Townhouses
Location: Noosaville, Queensland
Builder: Jason Williams

The four-townhouse project in Noosaville required an up-market design appeal with practical features. Innova™ Nuline™ Plus was chosen because of its weatherboard look, lower on wall cost, non-combustibility qualities and ease of installation.

" The real benefit with Nuline™ Plus is the shadow line effect the board brings to the development. It is positioned perfectly along with other weatherboard homes in a very upmarket street. The fixings of the board are also seamless"

Jason Williams
Project Builder

bgcinnovadesign.com.au/noosaville-townhouse

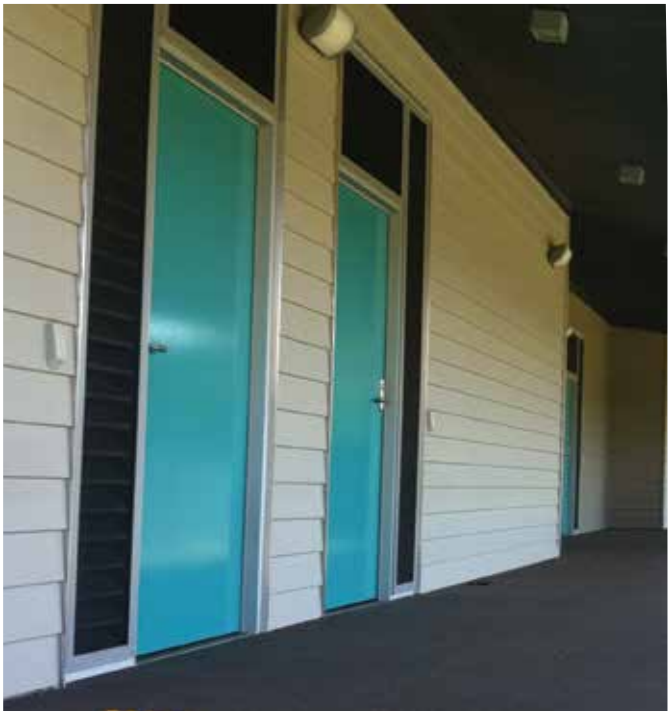
Case Study 02.

Project: HA Smith Reserve Sport Pavillion
Location: Hawthorn, Victoria
Architect: Tyquin Architects
Builder: Kirchner Constructions
Products used: Duragrid™/ Duracom™ / Nuline™ Plus / Stratum™ / Durascape™

BGC supplied a variety of BGC's Innova™ facade system products to Kirchner Constructions, the builders of this contemporary sports pavilion. The architect and their client wanted a lightweight appearance but a robust cladding solution, which the BGC product has delivered.

" BGC were great to work with on the HA Smith Reserve project. Kirchner wanted the most cost effective solution, which we were able to provide using BGC's Innova™ range".

Peter S
BGC's reseller



bgcinnovadesign.com.au/ha-smith

Product Description

Nuline™ Plus is an evolution on the original Nuline™ product which has been on the market for many years. Nuline™ Plus has enhanced features which ensures that your project is completed with as much ease and perfection as possible.

Nuline™ Plus features a tongue and groove joining system. The tongue and groove method of joining ensures a more consistent joint is achieved and gives enhanced weather proofing.

Another feature on Nuline™ Plus is the bevel edge on the back of each weatherboard. This bevel allows the weatherboard to have a 25mm bearing face on the stud giving superior fixing and nailing.

Nuline™ Plus weatherboards are not subject to timber rot, decay or white ant damage and will not support combustion. The result is a safer, more durable cladding that requires minimal maintenance.

Advantages

/ Tongue and groove joining gives consistent joints
/ Superior fixing due to the bevel on the back of the weatherboard
/ Quick and easy to cut, handle and install
/ Acrylic sealed, ready for painting
/ Durable and low maintenance
/ Can be joined off stud

Energy Efficiency Considerations

Energy efficiency requirements have been introduced into the Building Code of Australia (BCA) for both commercial and residential buildings. Thermal heat transfer into and out of the building envelope will effect the running cost of the building and careful consideration of thermal heat transfer needs to be addressed by architects, engineers and building designers. Thermal bridging through steel framing will diminish the total R-Value; thermal conductance of the wall. Thermal breaks are required for steel framed buildings.

Product Information

Nuline™ Plus weatherboards are 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.

Nuline™ Plus weatherboard fibre cement products are manufactured to conform to the requirements of AS2908.2 Cellulose-Cement Products and are classified as Type A Category 3 for external use.

Fire Resistance

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

These tests deemed the following Early Fire Hazard Indices:

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

Sheet Sizes and Weight

THICKNESS mm	WEIGHT l/m	WIDTH mm	LENGTH mm
14	3.5	175	4200
	4.2	205	4200

Weatherboard Tolerances

Nuline™ Plus complies with the requirements of AS2908.2.

Profiles

Square

Bullnose

Health and Safety

Nuline™ Plus is manufactured from cellulose fibre, finely ground sand, Portland cement and additives. As manufactured, the product will not release airborne dust but during drilling, cutting and sanding operations cellulose fibres, silica and calcium silicate dust may be released.

Breathing in fine silica dust is hazardous and prolonged exposure (usually over several years) may cause bronchitis, silicosis or cancer.

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.**

Quantities Ready Reckoner

Table 1 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.

Table 1

NO. OF PLANKS	WEATHERBOARD SIZE 4200 x 175 WEATHERBOARD OVERLAP 30MM EFFECTIVE COVER PER WEATHERBOARD 4200 x 145MM OR 0.609M²	WEATHERBOARD SIZE 4200 x 205 WEATHERBOARD OVERLAP 30MM EFFECTIVE COVER PER WEATHERBOARD 4200 x 175MM OR 0.735M²
1	175	205
2	320	380
3	465	555
4	610	730
5	755	905
6	900	1080
7	1045	1255
8	1190	1430
9	1335	1605
10	1480	1780
11	1625	1955
12	1770	2130
13	1915	2305
14	2060	2480
15	2205	2655
16	2350	2830
17	2495	3005
18	2640	3180
19	2785	3355
20	2930	3530

Cutting and Drilling

Nuline™ Plus 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 should 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. 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.

Large rectangular openings are formed by deeply scoring the perimeter of the opening. Next, form a hole in the centre of the opening (refer method above) then saw cut from the hole to the corners of the opening. Snap out the four triangular segments. Clean rough edges with a rasp (see method above).

Handling and Storage

Nuline™ Plus weatherboards must be stacked flat, up off the ground and supported on equally spaced (max 300mm) level gluts.

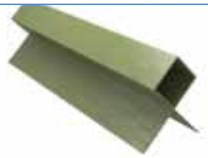
Weatherboards must be kept dry. When stored outdoors it must be protected from the weather. Care should be taken to avoid damage to the ends, edges and surfaces. Weatherboards must be dry prior to fixing, jointing or finishing.

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 recommends the use of Stainless Steel fasteners within 1km of the coast or other large expanses of salt water.

Accessories available from BGC

INTERNAL ALUMINIUM CORNER	3000mm	BGC PRODUCT CODE INTCNR36	
EXTERNAL ALUMINIUM CORNER	3000mm	BGC PRODUCT CODE EXTCNR36	
J MOULD	2700mm	BGC PRODUCT CODE 805	
STARTER STRIP	2700mm	BGC PRODUCT CODE 825	

Fasteners - Supplied by others

Nuline™ Plus must be fastened at every stud. Nails must not be driven closer than 50mm from the weatherboard end. Fasteners can be located 20mm minimum from the weather-board end if the fastener hole is predrilled. Fasteners must not be placed closer than 12mm from the weatherboard edge.

Nuline™ Plus to timber frame

FACE FIXING
No. 65 x 2.8mm Galvanised Flat Head Nails Class 3

No.60 x 3.15mm Galvanised Flat Head Nail Class 3

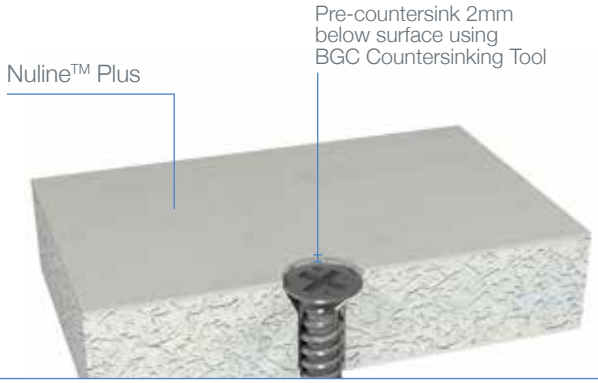
CONCEALED FIXING
No. 50 x 2.8mm Galvanised Flat Head Nail Class 3

60mm Bullet Head Nail Class 3*

*CONCEALED FIXING IN BUSHFIRE/COASTAL AREAS
Where Nuline™ Plus is being fixed in a bushfire/coastal area a 60mm bullet head nail should be applied at every 3rd or 4th stud 35mm from the bottom of the weatherboard. Nuline™ Plus will need to be pre drilled and nailed, filled with Megapoxy and topped with BGC Exterior & Wet Area Top Coat.

Please note that Australian Standard AS3959:2009 states that no gaps greater that 3mm are permitted when weatherboards are being installed into bushfire prone areas.

PRE COUNTERSINK
When using screws to fasten Nuline™ Plus, pre-countersinking is suggested so that the fastener is 2mm under the weatherboard surface for filling with epoxy filler and BGC exterior finishing compounds.



- For renovation projects where the original cladding is not removed, longer nails will be required.
- Nails must be driven a minimum of 30mm into the frame.
- Care is needed when using nail guns. If variability occurs the gun should be set to under drive and the nails tapped home with a hammer.

Nuline™ Plus to steel frame

FACE FIXING – STEEL FRAME 0.55 – 0.99 BMT
10-16 x 50 Self Drilling CSK screw Class 3

FACE FIXING – STEEL FRAME BMT 1 – 1.6MM
8 x 52mm Self Drilling CSK Wingtek Class 3

CONCEALED FIXING – STEEL FRAME BMT 0.55 – 0.99 BMT
10 x 30mm Flower Head Self Drilling screw Class 3

8 x 30mm Countersunk Self Drilling Class 3

CONCEALED FIXING – STEEL FRAME BMT 1 – 1.6MM
8 x 40mm Self Drilling CSK Wingtek Class 3

10 x 30mm Flower Head Self Drilling screw Class 3

Construction Details

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.

Nuline™ Plus is suitable for installation on either timber or lightweight steel framing.

Timber Frames
Timber framing must be dry prior to fixing Nuline™ Plus. If weatherboards are fixed to 'wet' framing, problems may occur at a later date due to excessive timber shrinkage.

It is strongly recommended that kiln dried framing is used.

Lightweight Steel Frames
Nuline™ Plus may be fixed directly to lightweight steel framing. The steel framing must not exceed 1.6 mm in thickness.

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

Timber Battens

Timber battens must have a minimum thickness of 40mm to allow adequate nail penetration.

Steel Battens

Steel battens are typically 50mm wide on the face x 35mm deep x 0.75mm thick.

Joining

Nuline™ Plus has a tongue and groove end joining system and is designed for off stud joining – refer to Figure 4.

It is recommended that the joins be staggered and centrally located between studs but should not be closer than 100mm from the studs.

A bead of sealant should be applied to the back of the joint as per Figure 5.

Maximum Stud and Fastener Guide

Wind Classification AS4055	General Area of Walls	Within 1200mm of Corners	Fixing Method
	Stud Spacing (mm)	Stud Spacing (mm)	
N1	600	600	Face Fix **OR** Conceal Fix
N2	600	600	Face Fix **OR** Conceal Fix
N3	600	600	Face Fix **OR** Conceal Fix
N4	450	450	Face Fix
N5	450	300	Face Fix
N6	450	450	1 Face Fixing **AND** 1 Concealed Fixing Required
C1	450	450	Face Fix
C2	450	450	1 Face Fixing **AND** 1 Concealed Fixing Required
C3	450	300	1 Face Fixing **AND** 1 Concealed Fixing Required
C4	300	300	1 Face Fixing **AND** 1 Concealed Fixing Required

*Components not supplied by BGC

General

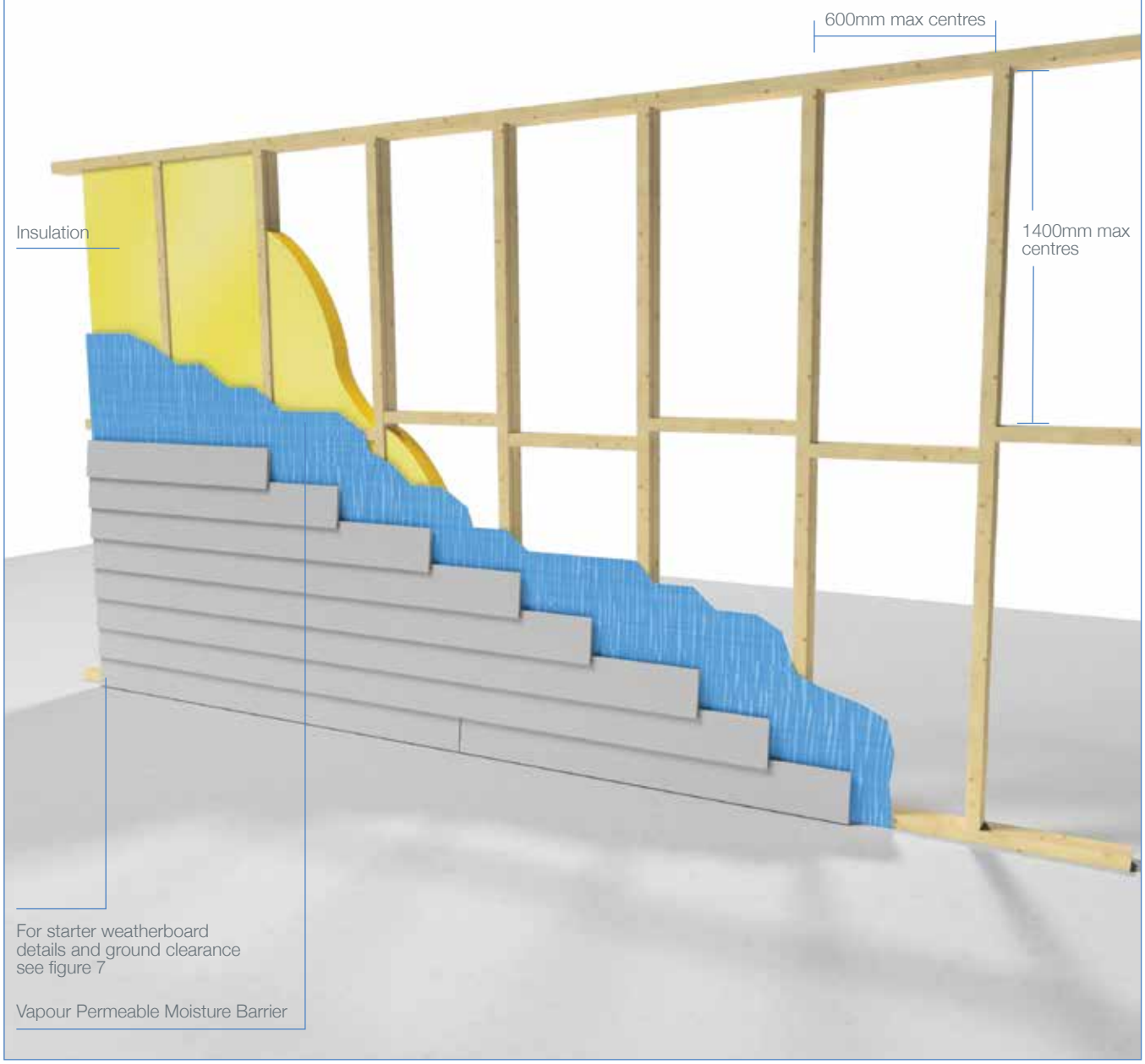
Figure 3 depicts the general framing requirements for Nuline™ Plus.

Vapour Permeable Moisture Barrier

The installation of a Vapour Permeable Moisture Barrier between Nuline™ Plus and the framing is recommended. The building's internal pressure will generally be less than the external air pressure under windy conditions, which will tend to draw weatherboards, flashing and seals if a Vapour Permeable Moisture Barrier is not used.

Use of a Vapour Permeable Moisture Barrier will enhance the insulation properties of the cladding system.

Figure 3
Framing and Fixing Layout



Installation Details

/ Calculate the number of Nuline™ Plus weatherboards required using the Ready Reckoner as detailed in Table 1, on page 9.

/ Fix all flashings to wall openings, external and internal corners. See figures 13 and 14 for corner details using BGC Aluminium Angles.

/ Fix a BGC Starter Strip (Metal) to the bottom plate to ensure the first row of Nuline™ Plus weatherboards are packed out to the correct angle. This starter strip is to be continuous around the perimeter of the building. See figure 10 for this detail.

/ Alternatively, fix a timber strip (timber strips cannot be used in BAL zones) or inverted Nuline™ Plus weatherboard to the bottom plate to ensure the first row of Nuline™ Plus weatherboards are packed out to the correct angle. This starter strip is to be continuous around the perimeter of the building. The first weatherboard is to overhang the slab edge by 50mm. See figure 7 for this detail.

/ 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 Nuline™ Plus weatherboards.

/ Commence fixing the bottom course of weatherboards from an external corner. Fasten the bottom edge of the weatherboard to each stud through the starter strip. Ensure that the weatherboard is level and flush with the corner. Do not nail home the corner fixing at this time.

/ The weatherboard must overlap a minimum of 30mm, and before fixing the second row of weatherboards calculate the overlap so a near full width of weatherboards will finish at the top of the building. Using a piece of timber or weatherboard, fabricate a lap gauge to ensure that the weatherboard coverage is uniform.

/ Fixings must not be driven closer than 50mm from the end of the weatherboard. For fixings between 20mm - 50mm from the end, the weatherboard must be predrilled with a 3mm hole.

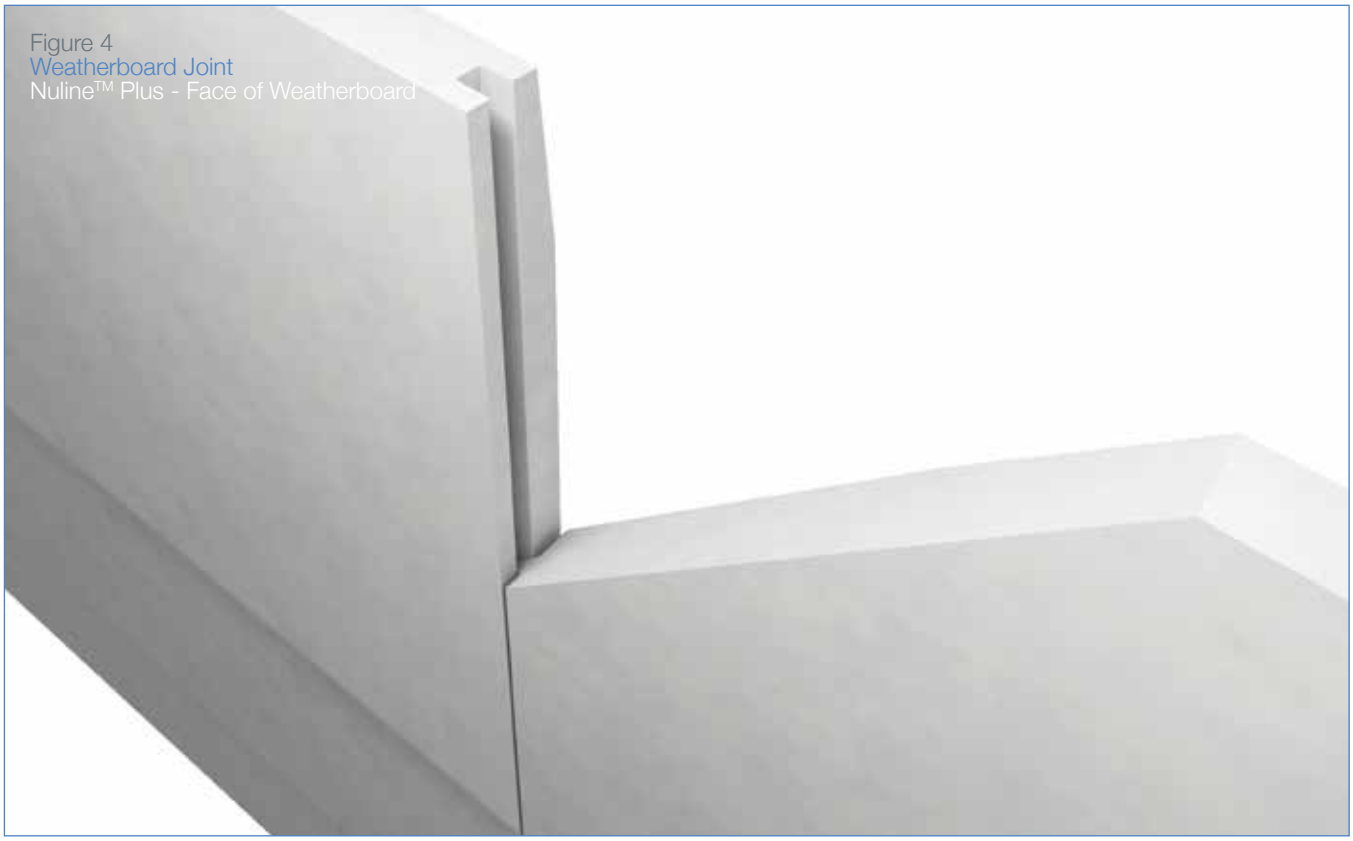


Figure 4
Weatherboard Joint
Nuline™ Plus - Face of Weatherboard

*Components not supplied by BGC

Installation Details

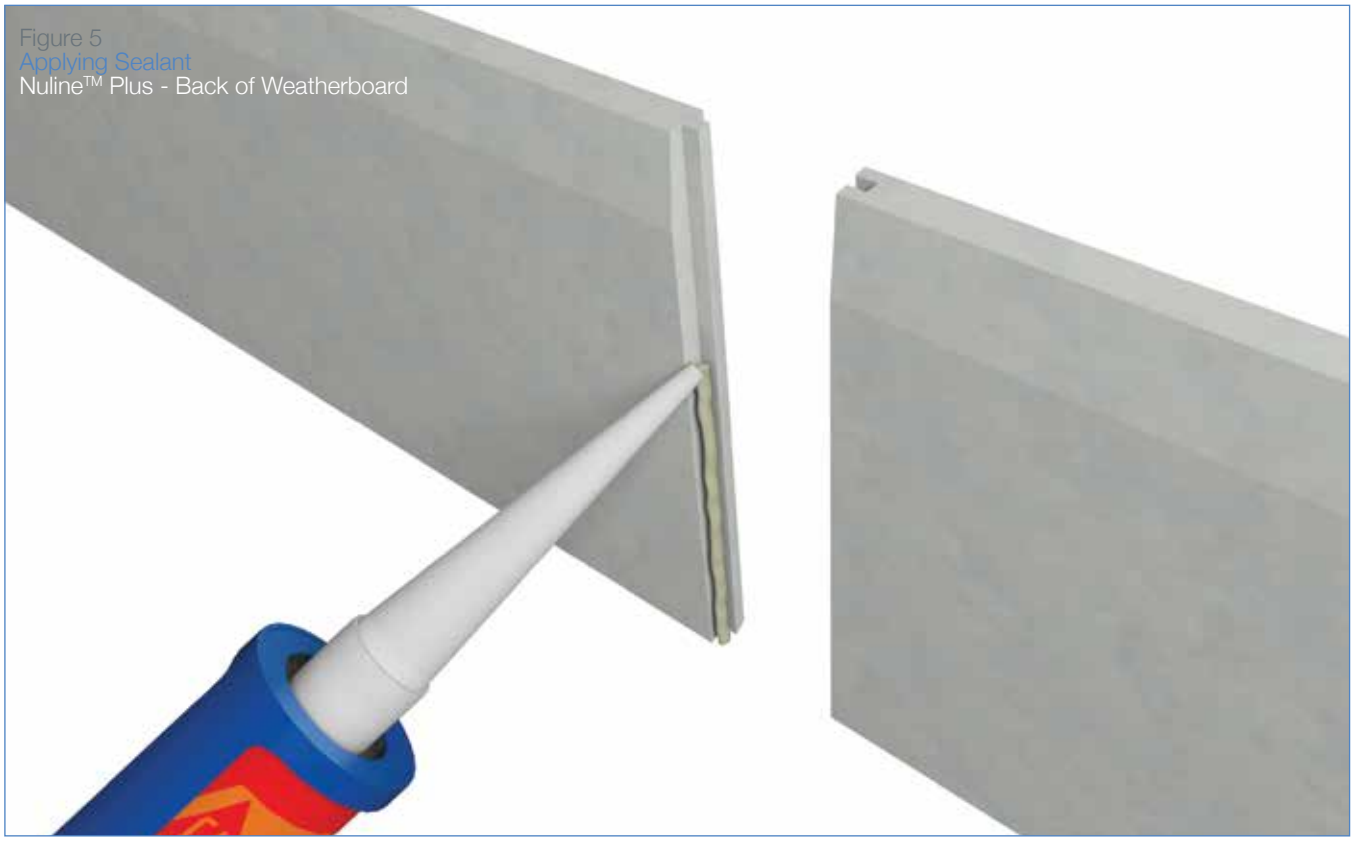


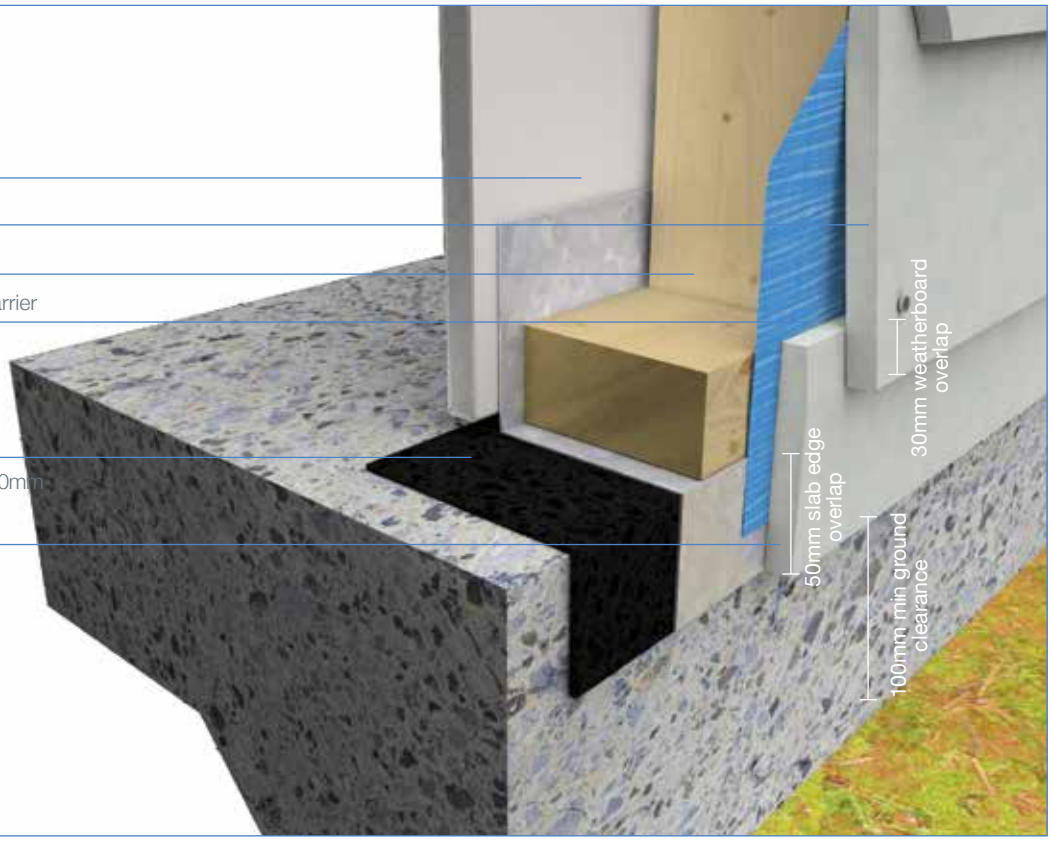
Figure 5
Applying Sealant
Nuline™ Plus - Back of Weatherboard

Figure 6
Joint Detail

*Components not supplied by BGC

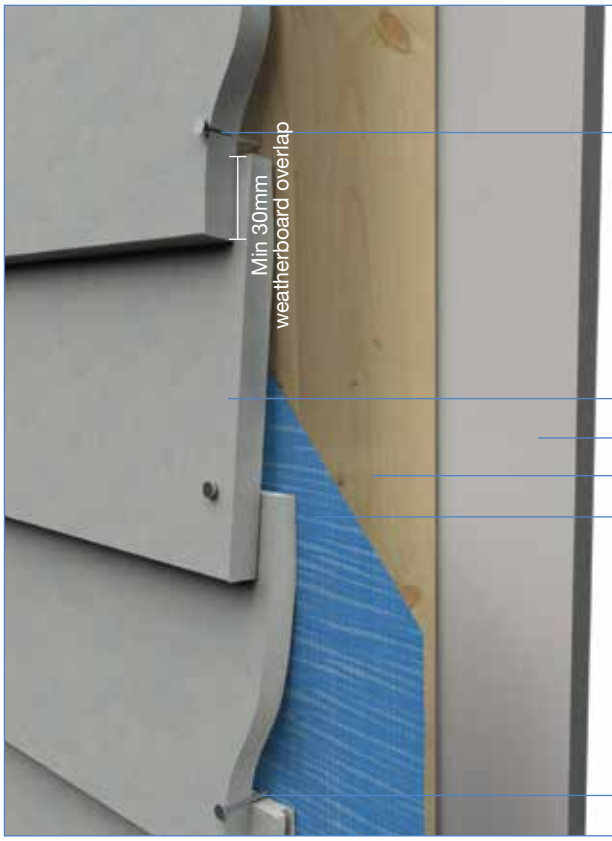
Installation Details

Figure 7
Starter Weatherboard



Suitable for N1-N5 Wind Zones only

Figure 8
Fastener Detail Timber Framing
Face Fixing System



Fasten 35mm from bottom edge of weatherboard

Nuline™ Plus

GTEK™ Plasterboard

Timber frame

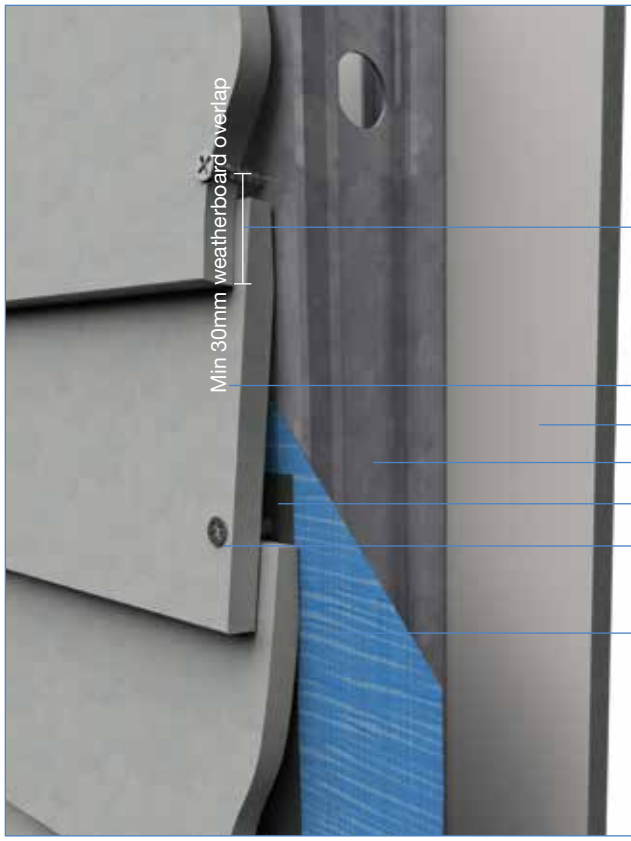
Vapour Permeable Moisture Barrier

60 x 2.8mm Galvanised flat head nail

Note Gun nailing not recommended for face fixing

*Components not supplied by BGC

Installation Details



Suitable for N1-N5 Wind Zones only

Figure 9
Fastener Detail Steel Framing
Face Fixing System

Fasten screws 35mm from bottom edge of weatherboard

Nuline™ Plus

GTEK™ Plasterboard

Steel frame

Thermal breaktape

50mm x No.8 self embedding head screw

Vapour Permeable Moisture Barrier

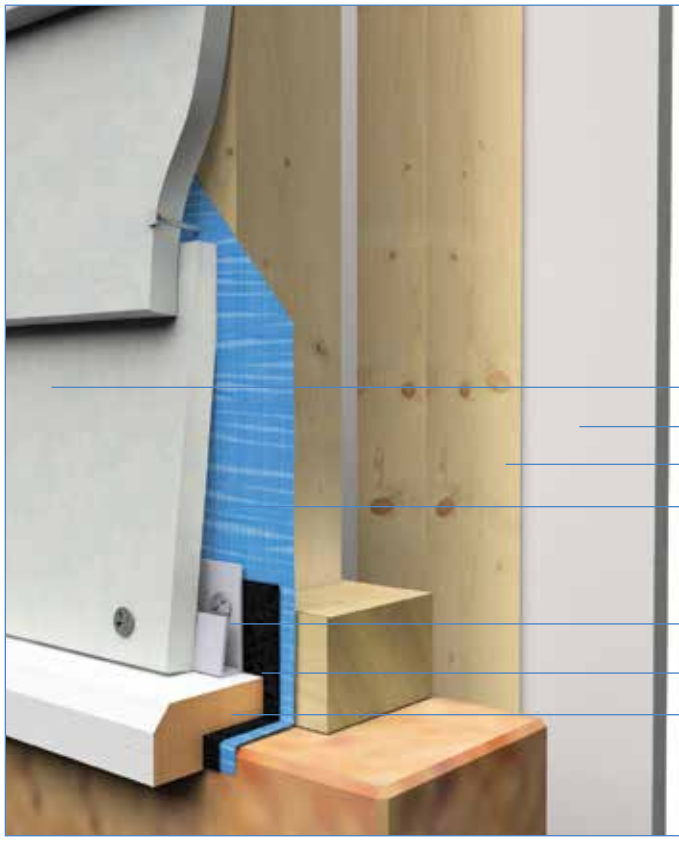


Figure 10
Half Height Timber Frame

Nuline™ Plus

GTEK™ Plasterboard

Selected timber frame

Vapour Permeable Moisture Barrier

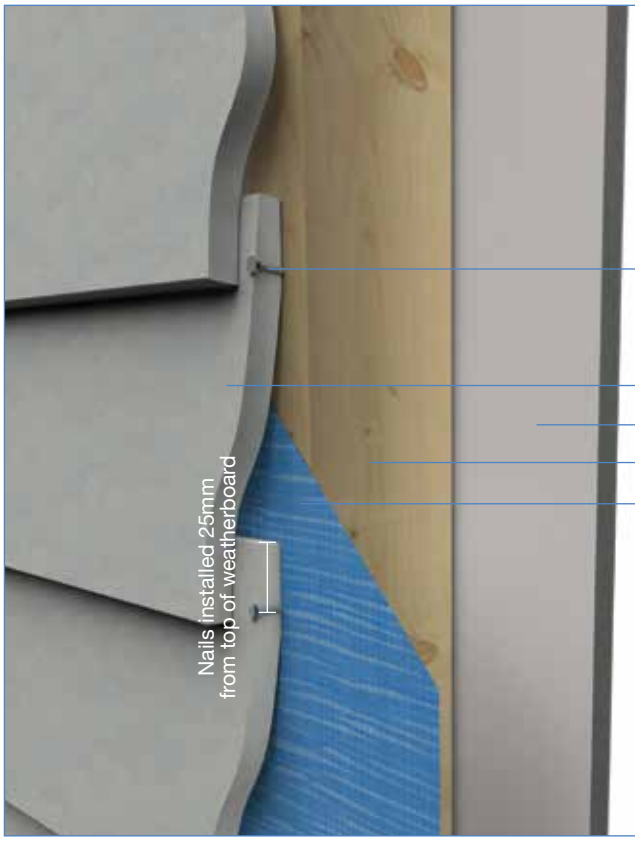
Starter Strip

Damp Course

Timber trim moulding (supplied by other)

*Components not supplied by BGC

Installation Details



Suitable for N1-N3 and C1 Wind Zones only

Figure 11
Concealed Fixing System Timber

50mm x 2.8mm Galvanised Flat Head Nail

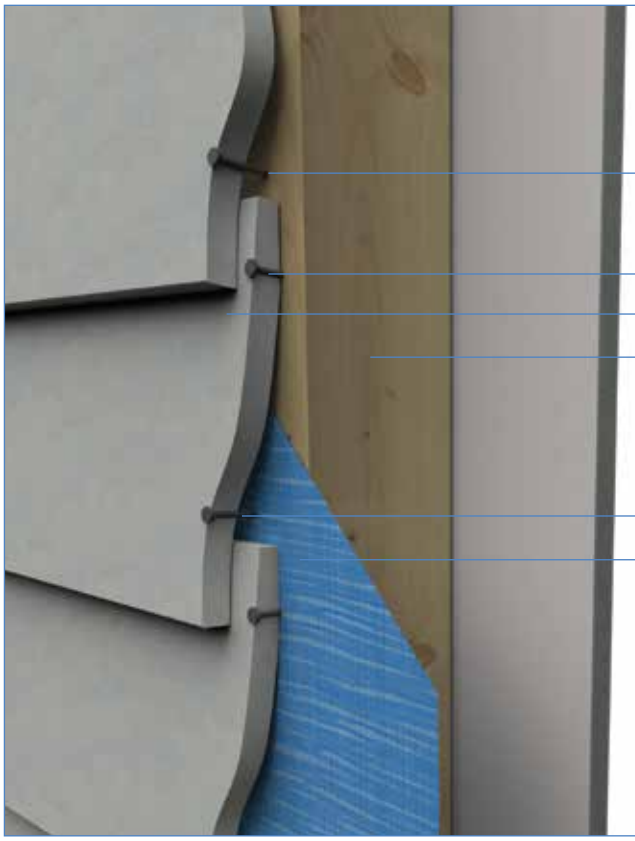
Nuline™ Plus

GTEK™ Plasterboard

Selected Timber Frame

Vapour Permeable Moisture Barrier

For concealed fixing in bushfire zones or coastal areas face fix min. class 3 bullet head nail at every 3rd or 4th stud



Suitable for N6, C2-C4 Wind Zones only

Figure 12
Concealed and Face Fixing System Timber

60mm x 2.8mm Galvanised Flat Head Nail

50mm x 2.8mm Galvanised Flat Head Nail

Nuline™ Plus

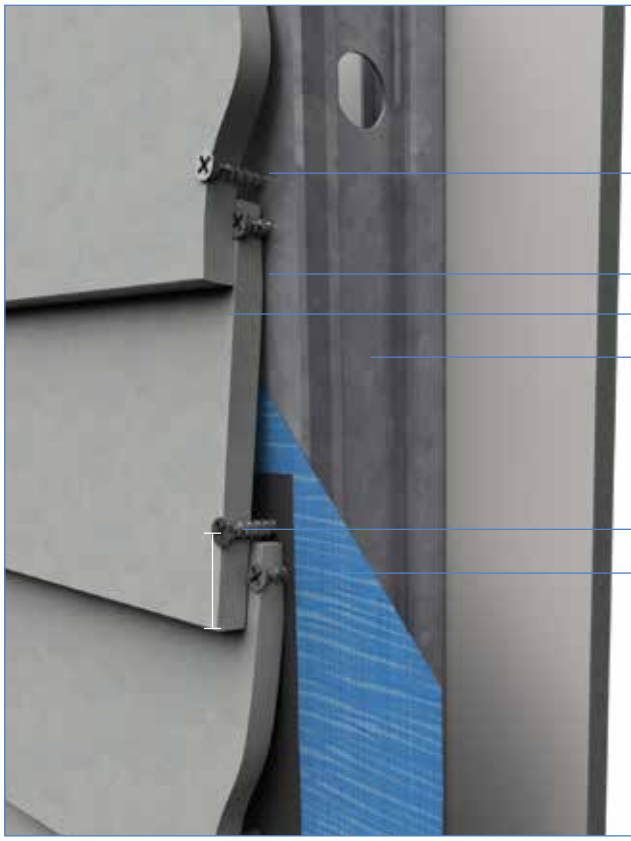
Timber Frame

Fasten 35mm from bottom edge of weatherboard

Vapour Permeable Moisture Barrier

*Components not supplied by BGC

Installation Details



Suitable for N6, C2-C4 Wind Zones only

Figure 13
Concealed and Face Fixing System Steel

Min. 8 x 50mm Self Embedding Head Screw

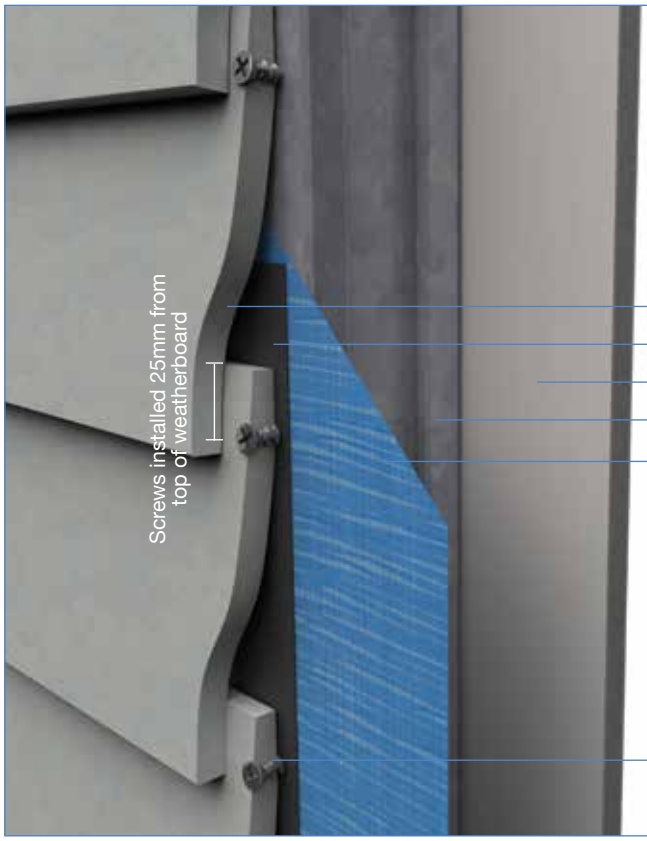
Min. 8 x 30mm Self Embedding Head Screw

Nuline™ Plus

Steel Frame

Fasten 35mm from bottom edge of weatherboard

Vapour Permeable Moisture Barrier



Suitable for N1-N3 and C1 Wind Zones only

Figure 14
Concealed Fixing System Steel

Nuline™ Plus

EPDM Foam Gasket

GTEK™ Plasterboard

Selected Steel Frame

Vapour Permeable Mositure Barrier

Min 8 x 30mm Self Embedding Screw

30mm - .55 > .99 BMT
40mm - 1 > 1.6 BMT

*Components not supplied by BGC

Installation Details

Figure 15
Concealed Fixing In Bushfire / Coastal Areas

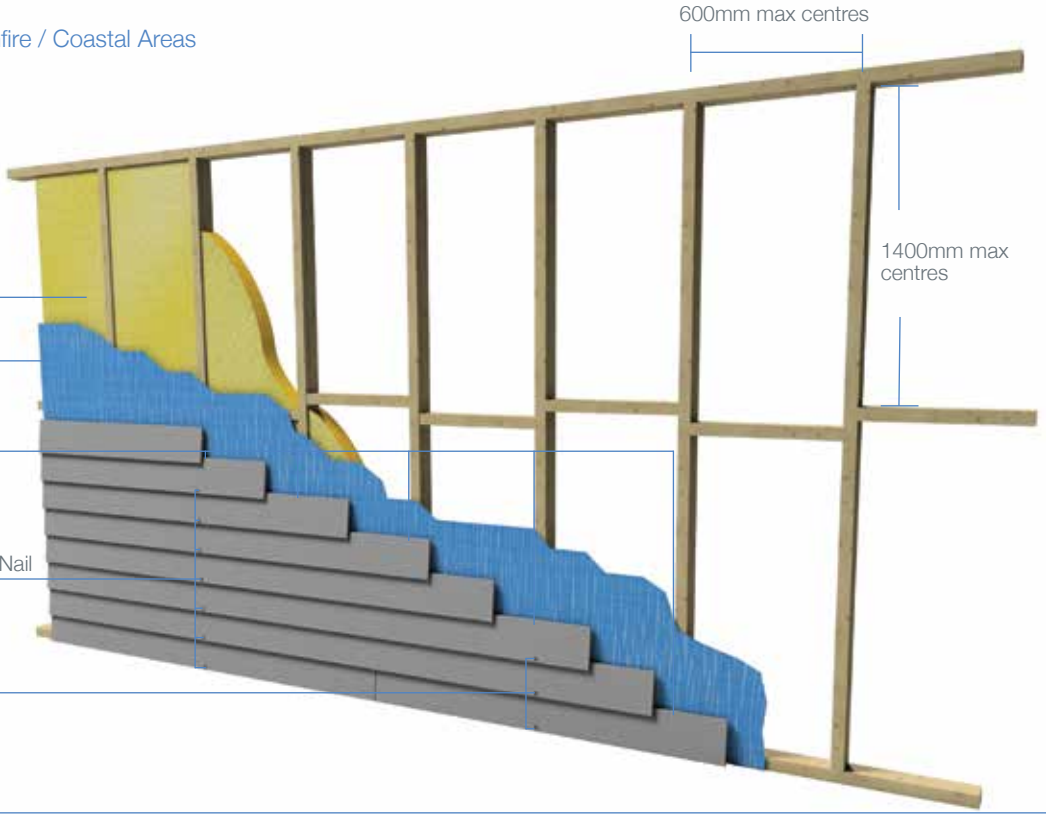


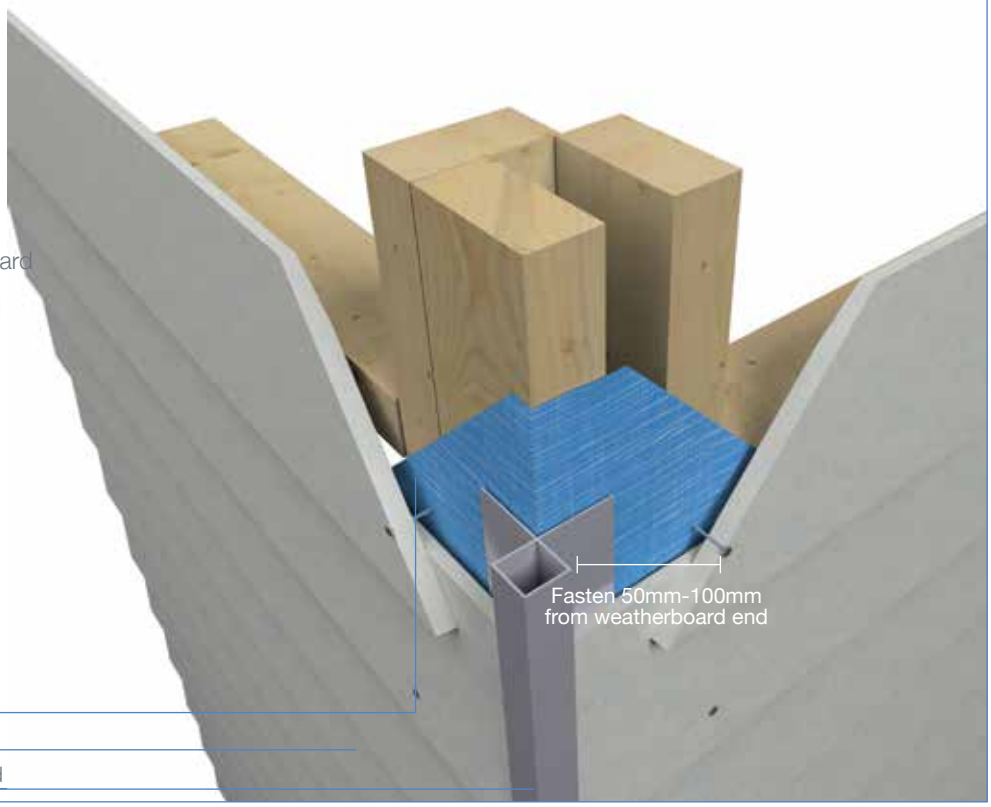
Figure 16
External Corner Detail

Notes:

/ Secure the pre-formed aluminium corner moulding to corner stud prior to installing Nuline™ Plus weatherboards.

/ Install Nuline™ Plus weatherboard snug into aluminium corner, ensure bottom edge is covered by the moulding.

/ Tongue will need to be removed to ensure complete cover at external and internal corners.



*Components not supplied by BGC

Installation Details

Figure 17
Internal Corner

Notes:

/ Tongue will need to be removed to ensure complete cover at external and internal corners.

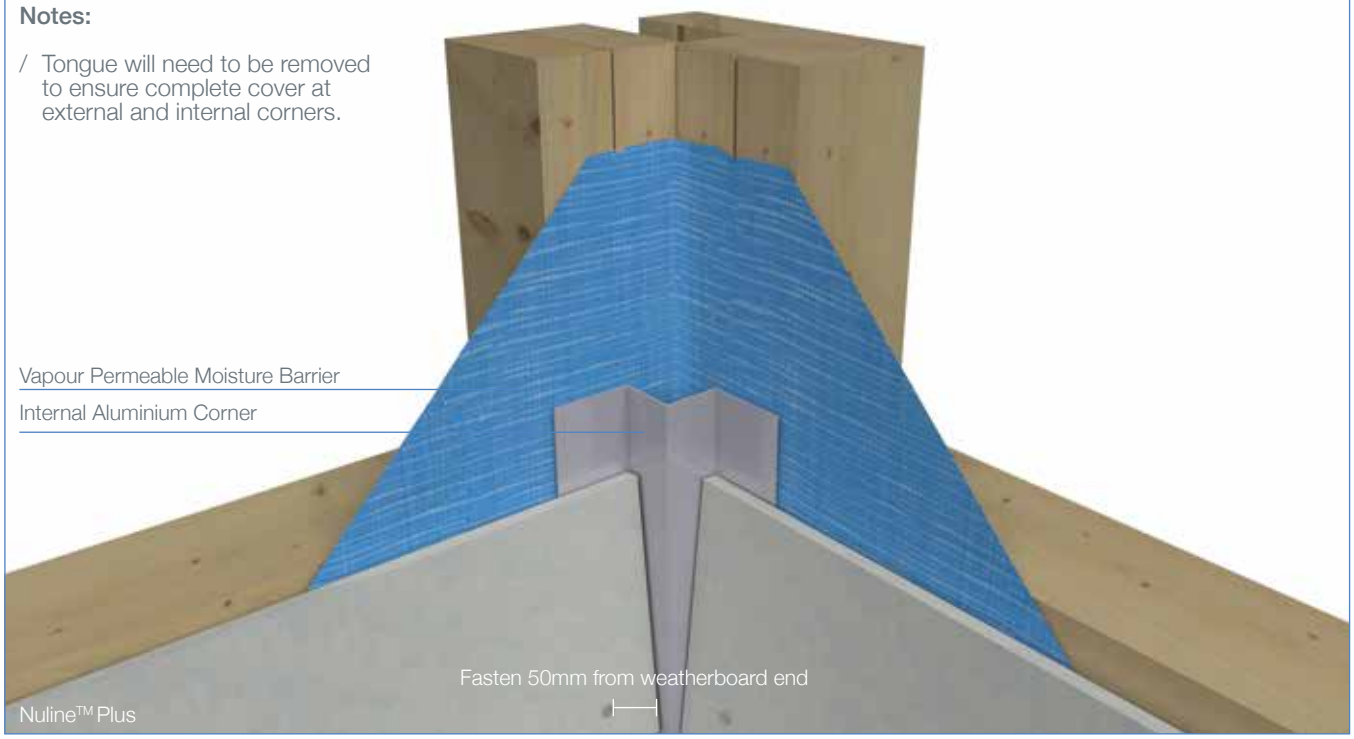
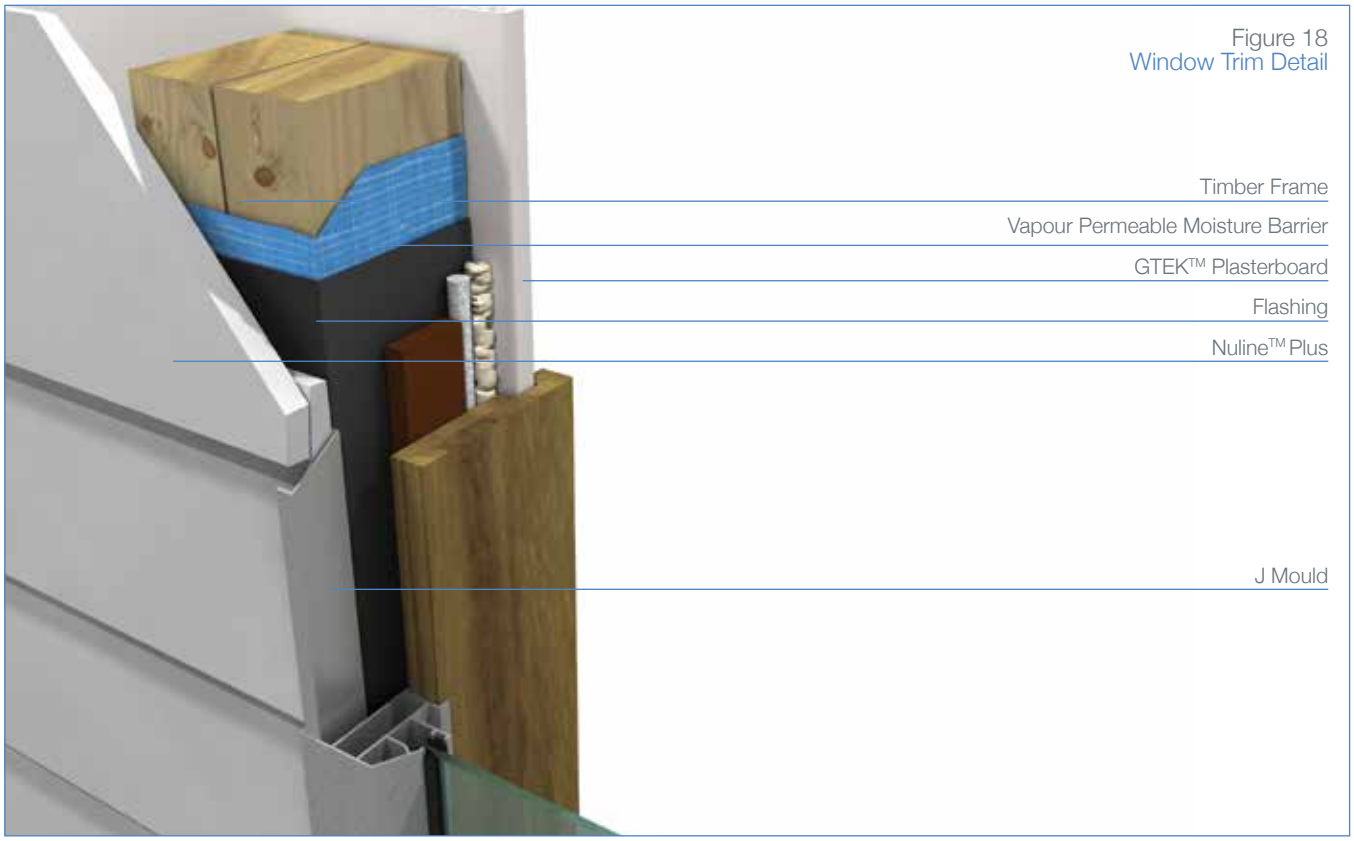


Figure 18
Window Trim Detail



*Components not supplied by BGC

Weatherboard Overlaps

Weatherboards must overlap the previous course by a minimum of 30mm. Higher overlaps may be used to improve weather proofing (particularly when a Vapour Permeable Moisture Barrier is not used) or to match the wall height to the weatherboard width. See table on page 6.

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.

*Components not supplied by BGC

Painting

To enhance both the appearance and performance of Nuline™ Plus, BGC recommends that at least two coats of 100% acrylic exterior grade paint be applied. The paint manufacturer's recommendation on application and maintenance of the paint system should be followed.

It is recommended that Nuline™ Plus is painted according to the paint manufacturer's instructions within three months following delivery to site.

Should Nuline™ Plus be exposed to the elements for a period beyond the initial three months to achieve an optimum finish an additional priming coat is recommended prior to the top finishing coats being applied.

Ensure that Nuline™ Plus is dry and clean prior to applying a quality exterior paint system.

Note: BGC recommends the use of a roller or brush application for best results.

Maintenance

Nuline™ Plus 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 sheets should be replaced as originally installed. Paintwork should be maintained in accordance with the manufacturer's instructions.

Insulation

Nuline™ Plus 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.

Freeze Thaw

Nuline™ Plus conforms to the Building Code of Australia (BCA) requirements for external wall applications. Nuline™ Plus weatherboards been tested to AS/NZS 4284 Testing of Building Facades.

Nuline™ Plus subject to freeze/thaw conditions must be painted. Nuline™ Plus 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 standards of the Building Code of Australia (BCA).

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 Fibre Cement Pty Ltd
121 Bannister Rd Canning Vale WA 6155
Phone 08 9334 4900 Fax 08 9334 4749

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);
- 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. The purchaser's terms and conditions, howsoever provided, do not form part of the Agreement.

*Components not supplied by BGC

Thermal Breaks

Thermal breaks are required for steel framed buildings, in walls enclosing habitable and or usable spaces. Careful consideration of thermal heat transfer and the position of thermal breaks need to be addressed by architects, engineers and building designers.

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

As part of the BGC Fibre Cement range EPDM Foam Gasket is required to prevent moisture ingress at sheet joins. EPDM Foam Gasket can also be used as a Thermal Break Tape and provides an R value of R 0.2 in accordance with the Building Code of Australia.

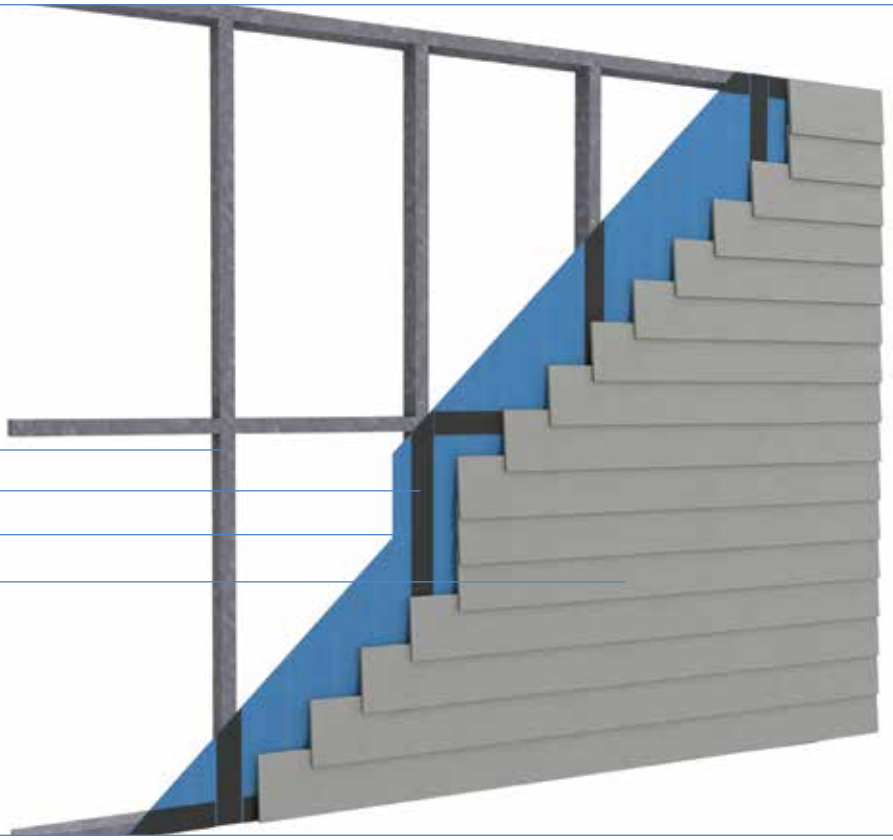
The EPDM Foam Gasket should be placed on all frame contact faces including noggins and top and bottom plates.

Thermal breaks are first installed to all vertical frame members (Studs) then applied horizontally to top and bottom plates and noggins.

NOTE // Thermal breaks (BGC EPDM Foam Gasket) is a self adhesive foam gasket/tape. It is installed over the building wrap (Vapour Permeable Moisture Barrier).

Leave a 3mm gap between the vertical gasket to allow any moisture to escape.

Figure 19
Thermal Breaks



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**

*Components not supplied by BGC

Bushfire & Boundary Walls

Nuline™ Plus is eminently suited for both bushfire and boundary wall applications in residential and multi residential buildings.

Nuline™ Plus can be used as a stand alone product to achieve up to BAL 40 when fixed direct to frame as per the fixing instructions in this manual.

Nuline™ Plus when used in conjunction with GTEK™ Fire and Wet Area 16mm will comply with the requirements of AS3959:2009 and AS1530.4 to achieve BAL FZ>10 as well as 60 minute and 90 minute boundary wall systems.

Bushfire AS3959:2009 Applications
AS3959:2009 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).

Nuline™ Plus may be used to achieve a BAL-40 on its own or BAL-FZ>10 when used in conjunction with GTEK™ Fire and Wet Area 16mm.

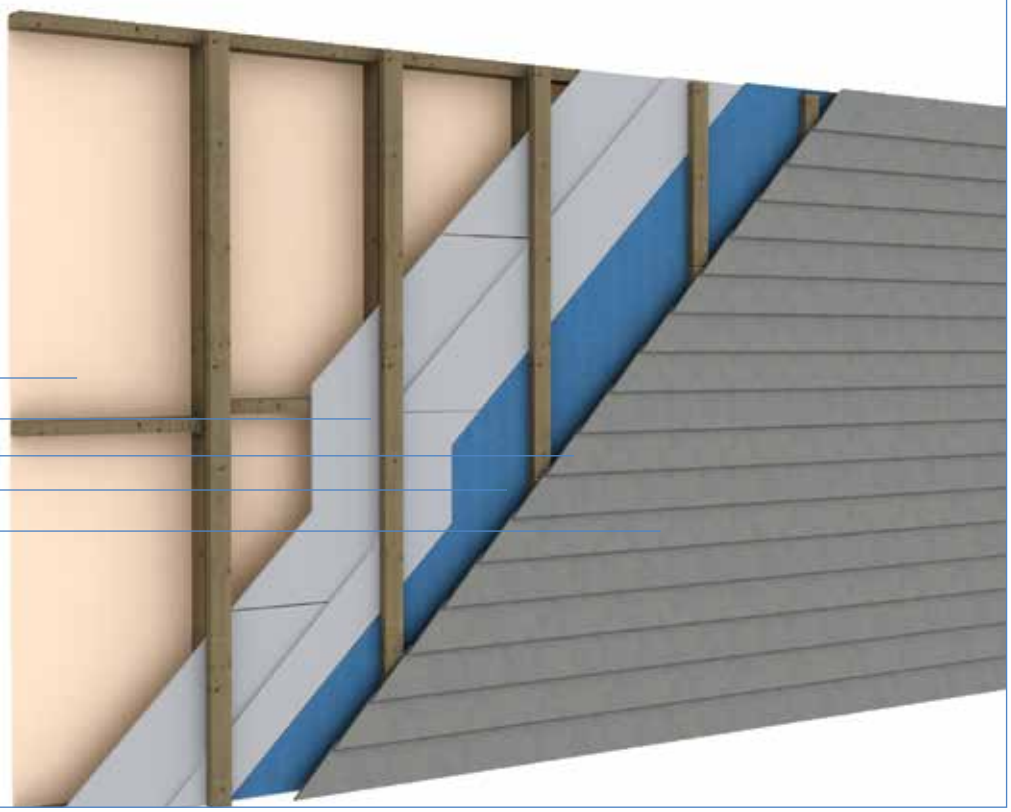
Boundary/Exterior Walls
Nuline™ Plus in conjunction with GTEK™ Fire and Wet Area 16mm can achieve both 60/60/60 and 90/90/90 FRL fire ratings from the outside as required by the BCA.

Where an exterior wall is required to achieve 60/60/60 FRL (Fire Resistance Level) from the outside, 1 layer of GTEK™ Fire and Wet Area 16mm installed with Nuline™ Plus over the GTEK™ Fire and Wet Area 16mm will meet minimum BCA requirements. Similarly 2 layers of 16mm GTEK™ Fire and Wet Area 16mm used in conjunction with Nuline™ Plus will achieve 90/90/90 from the outside.

NOTE // Refer to GTEK™ Fire and Acoustic Guide for Boundary Wall Installation.

For more information please contact your nearest BGC Fibre Cement office or download the BGC Fire and Acoustic Guide from **www.bgcinnovadesign.com.au.**

Figure 20
Boundary Wall System



*Components not supplied by BGC

Notes

Notes

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New Zealand
Telephone
0011 64 9273 1457

Technical help line
1300 652 242

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 lightweight 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.
STONESHEET™ / Purpose designed substrate for stone tile facade.
STRATUM™ / Is a range of weatherboard products, each of which can be used as stand-alone products or used together to create a striking exterior cladding solution.
STRATUM™ ERA / A traditional, yet contemporary weatherboard.

bgcinnovadesign.com.au

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, Woodgrain and Rusticated 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.
DURALINER™ PLUS / An exterior lining board that is the perfect substrate for tiles and is ideal for wet areas.
DURALATTICE™ / Square or diamond patterned lattice, suitable for screens, pergolas and fences.
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.

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.
CERAMIC TILE UNDERLAY / A substrate for ceramic and slate floor tiles.
VINYL CORK FLOOR COVERINGS / A substrate for vinyl floors.

Design by **The SHAPE Group** theshapegroup.com.au BGC1146

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