

NOVEMBER 2013



DURACOM™

FACADE SYSTEMS

BGC | Fibre Cement

AUSTRALIAN OWNED & MANUFACTURED
WWW.BGCINNOVADESIGN.COM.AU

INTRODUCING INNOVA™

BGC'S STUNNING NEW RANGE OF FACADE, LINING AND FLOORING PRODUCTS, INNOVA™ WILL MOVE YOU TO REASSESS YOUR CONCEPT OF EXCELLENCE IN FACADES AND FLOORING SYSTEMS. DURABLE AND DYNAMIC, FRESH AND CONTEMPORARY, INNOVA™ IS ALREADY TURNING INDUSTRY HEADS. NOW LET THE INNOVA™ RANGE OF CLADDING AND FLOORING PRODUCTS BREATHE NEW LIFE INTO YOUR CREATIVITY AND PROJECT SPECIFICATION.



WITH ITS SMOOTH, FLAT SURFACE AND SQUARE-EDGE FINISH, BGC'S DURACOM™ FAÇADE SYSTEM IS IDEAL FOR THE EXTERIOR CLADDING OF LOW TO MEDIUM-RISE BUILDINGS. UTILISING BGC'S TRUSTED FIBRE CEMENT-COATED COMPRESSED SHEETING, DURACOM™ DELIVERS A STRIKINGLY MODERN, DURABLE FINISH.

LIGHTWEIGHT YET EXCEPTIONALLY RESILIENT, DURACOM™ FAÇADE SYSTEM IS PERFECT FOR EXPRESSED JOINTING AND A VARIETY OF FINISHES – FROM PAINTED TO TEXTURED COATINGS.

THE DURACOM™ FAÇADE SYSTEM:

- / IS LIGHTWEIGHT AND HIGHLY DURABLE
- / IS WEATHER RESISTANT AND IS IMMUNE TO WATER DAMAGE – RATED FOR WEATHERABILITY BY CSIRO
- / WEATHER-RESISTANT – SIMPLY SHRUGS OFF WATER DAMAGE. RATED FOR WEATHERABILITY BY CSIRO
- / FULLY-SEALED, BALANCED PANELS WON'T ROT, BURN OR CORRODE
- / ALLOWS EASY DECORATION IN A RANGE OF DESIGN FINISHES
- / RAPID INSTALLATION
- / COMPLIES WITH BAL40 AS REQUIRED IN AS3959:2009 – CONSTRUCTION OF BUILDINGS IN BUSHFIRE-PRONE AREAS



CONTENTS

APPLICATIONS	/ 5
ADVANTAGES	/ 5
ENERGY EFFICIENCY CONSIDERATIONS	/ 5
PRODUCT INFORMATION	/ 5
FIRE RESISTANCE	/ 6
DURABILITY	/ 6
THERMAL CONDUCTIVITY	/ 6
WEATHER RESISTANCE	/ 6
PANEL SIZES & MASS	/ 6
SHEET TOLERANCES	/ 6
HANDLING AND STORAGE	/ 7
COASTAL AREAS	/ 7
BGC DURACOM™ ACCESSORIES	/ 7
FASTENERS	/ 7
DESIGN CONSIDERATIONS	/ 8
CONTROL JOINTS	/ 8
PANEL PREPARATION	/ 8
TOP HAT SPANS FOR WIND LOAD / PRESSURE LOAD	/ 8
INSTALLATION	/ 8-11
INSTALLATION DETAILS	/ 12-15
PENETRATIONS, OPENINGS, WINDOWS AND DOORS	/ 16-17
CONTROL JOINT DETAILS	/ 17-19
THERMAL BREAK DETAILS	/ 20-21
MOISTURE MANAGEMENT	/ 21
PAINTING AND DECORATION	/ 21
BUSHFIRE & BOUNDARY WALL AREAS	/ 22-23
WARRANTY	/ 23

APPLICATIONS

Duracom™ Facade System, utilizing BGC Fibre Cement Compressed Panels and Cold Formed Section (CFS) steel support framing, to form a strong and durable facade cladding system.

Duracom™ panels fixed to the CFS steel support framing, are ideally suited for versatile architectural facades and parapet applications in industrial, institutional, commercial and multi-storey residential buildings.

Duracom™ panels are designed for installation in a variety of patterns, including vertical, horizontal, brick-bond or diamond inclined.

Duracom™ panels are available in 9mm and 12mm thicknesses and are finished with site applied acrylic paint systems.

ADVANTAGES

- / Lightweight cladding system.
- / Readily accepts many forms of decorative finish.
- / Highly durable product.
- / Dynamic architectural style.
- / Fully sealed and balanced panels.

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 affect the running cost of the building and careful consideration of the thermal heat transfer needs to be addressed by the 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. Thermal breaks should have a minimum R-Value of 0.2.

PRODUCT INFORMATION

Duracom™ panels are a compressed, autoclaved, cellulose fibre reinforced silica/cement panel, specially formulated and prepared to meet the requirements for use in exterior applications.

Duracom™ panels have a smooth flat surface and a neat square edged finish, for enhanced expressed joint facades.

BGC Fibre Cement products are manufactured to the Australian / New Zealand Standard AS/NZS 2908.2-2000 Cellulose-Cement Products, Part 2: Flat sheets and Duracom™ is classified as Type A-Category 3.





FIRE RESISTANCE

Duracom™ has been tested for and passed the Early Fire Hazard Property criteria in compliance with AS/NZS 1530.3 and AS/NZS 3837 and is deemed a Group 1 Material in accordance with the Building Code of Australia (BCA), Volume 1, Specification A2.4; Fire Hazard Properties. AS/NZS 1530.3; Early Fire Hazard Properties.

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

DURABILITY

Duracom™ physical properties make it a very durable product.

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

THERMAL CONDUCTIVITY

Duracom™ panels have relatively low thermal conductivity: R-value. At Equilibrium Moisture content the approximate R-Value of Duracom™ is; - 0.55 W/m°C.

WEATHER RESISTANCE

- / Duracom™ Facade System conforms to the Building Code of Australia (BCA) requirements for exterior wall applications.
- / Duracom™ Facade System has been tested to AS/NZS 4284 Testing of Building Facades.

PANEL SIZES AND MASS

Duracom™ panels are available in the following sizes.

THICKNESS mm	MASS kg/m ²	WIDTH mm	LENGTH mm			
			1800	2400	2700	3000
9	15	900	✓	✓		✓
		1200	✓	✓	✓	✓
12	20	1200		✓		✓

SHEET TOLERANCES

- / Width +0/-2mm
- / Length +0/-2mm
- / Thickness +10%/-0%
- / Diagonals difference (max) 2mm
- / Edge straightness deviation (max) 1mm

HANDLING AND STORAGE

Duracom™ must be stacked flat, up off the ground and supported on equally spaced (max 400mm) level gluts.

Sheeting 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.

Sheets must be dry prior to fixing, jointing or finishing.

COASTAL AREAS

The durability of galvanised fasteners 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.

DURACOM™ ACCESSORIES AVAILABLE FROM BGC

PRIMARY TOP HAT GALVANISED STEEL	120 x 35 x 1.15mm BMT - 6000mm	CODE 831	
	120 x 35 x 1.15mm BMT - 7200mm	CODE 833	
INTERMEDIATE TOP HAT GALVANISED STEEL	50 x 35 x 1.15mm BMT - 6000mm	CODE 835	
	50 x 35 x 1.15mm BMT - 7200mm	CODE 837	
HORIZONTAL BACKING STRIP BMT 0.42	1190mm	CODE 839	
	2390mm	CODE 841	
	2990mm	CODE 843	
EPDM FOAM GASKET STRIP	25m	CODE 845	

FASTENERS

DURACOM™ TO TOP HATS

DURACOM™ TO TOP HATS (CONCEALED FIXING)
NO.10 X 30MM COUNTERSUNK SELF DRILLING SCREW



DURACOM™ TO TOP HATS (EXPOSED FIXING)
NO.10 X 25MM PAN HEAD SELF DRILLING SCREW



NO.10 X 25MM WAFER HEAD SELF DRILLING SCREW



TOP HATS TO FRAME

CLASS 3 HEX HEAD SCREW, 12-14 X 20MM



/ Fasteners must comply with AS 3566, with a minimum Class 3 coating.

FILLING/FINISHING OF FASTENERS

/ All screw holes must be filled with an epoxy sealer such as Megapoxy PI, Hilti CA125 or Hilti CA273, and sand flush to provide a flat surface for the finish coating.

DESIGN CONSIDERATIONS

It is recommended that project specific facade designs be undertaken by a consultant experienced in such detailing.

The design engineer should determine the wind pressure for the project and specify the layout, spacing and fixing of the top hats to the structure.

The deflection of the supporting structure should be limited span/250 for Serviceability Wind Load, or as limited by AS/NZS1170.

In areas where there is a probability of wind loading, care should be taken in the design detailing, especially around all openings, corners and other junctions, to ensure the weather resistance of the total system.

Before the Duracom™ panels and the supporting substructure are installed and fixed, particular care should be taken that all flashing and waterproofing work is complete, including all vapour permeable building wraps and damp proof coursing.

CONTROL JOINTS

In many cases, control joints will not be required as typical expressed joints permit some differential movement of the Duracom™ panels and the sub-framing.

It is recommended that the designer consider the need for control joints in the following cases:

- / Where the facade crosses a building control joint.
- / Where there is likelihood of movement in the sub-framing.
- / Continuous facades greater than eight (8) metres in length.
- / At a change in the structural substrate; eg. masonry to steel framing.
- / Refer to drawings on P17-19.

PANEL PREPARATION

For insitu paint finish applications, Duracom™ panels are supplied sealed with a proprietary sealer applied during manufacture for durability.

Where it is necessary to cut sheets, cutting tools should have a dust extraction system.

Cut edges must be sealed with BGC Edge Sealer or an acrylic coating to eliminate moisture absorption.

A saw blade such as BGC Durablade with a poly crystalline diamond tip specifically designed to cut fibre cement sheets is recommended.

Ensure work area is well ventilated and wear an approved dust mask (AS/NZS1715 and AS/NZS1716) and safety glasses (AS/NZS1337).

It is recommended to cut the sheets face down in order to get the best end results.



TOP HAT SPANS FOR WIND LOAD / PRESSURE LOAD

Structural sub-frame spacing must be installed in accordance with BGC fixing specifications. Table 4 provides guidance on the maximum span of Top Hat profile.

The design capacities of the Duracom™ Facade System are in limit state format and are based on AS/NZS1170.2:2002 Wind Actions.

The Top Hat capacities have been calculated in accordance with AS/NZS4600 – cold form steel structures.

The deflection of the Top Hats is based on serviceability factor of 0.6 x ultimate wind loads and is limited to span/250.

The Top Hat sections can be used for Cyclonic wind areas – region C & D based on wind pressures.

It is the responsibility of the Project Engineer to specify the connection of Top Hats to the support structure. Minimum 12g screw on each leg of Top Hat i.e. two 12g screws at each crossing of Top Hat & Purlin.

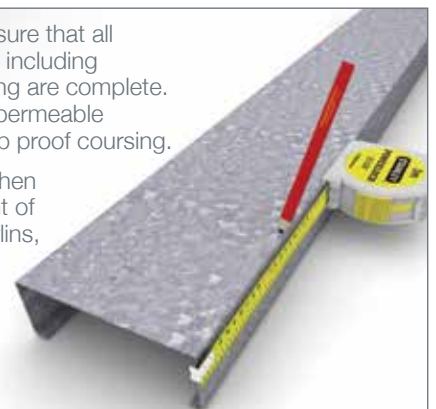
TABLE 4

DESIGN WIND PRESSURE kPA	SINGLE SPAN		DOUBLE SPAN		THREE SPANS	
	Top Hat Spacing mm		Top Hat Spacing mm		Top Hat Spacing mm	
	450	600	450	600	450	600
Up to	MAXIMUM SPAN OF TOP HAT PROFILE					
0.75	1950	1750	2450	2150	2400	2200
1.0	1750	1600	2150	1850	2200	2000
1.5	1550	1400	1750	1500	1900	1700
2.0	1400	1250	1500	1300	1900	1700
2.5	1300	1200	1350	1200	1500	1300
3.0	1200	*	1250	*	1400	*
4.0	1050	*	1050	*	1200	*

INSTALLATION

Before commencing, ensure that all proceeding trade works, including flashing and waterproofing are complete. This includes all vapour permeable building wraps and damp proof coursing.

Determine panel layout then mark out the centre point of each Top Hat on the Purlins, framing or masonry structure.



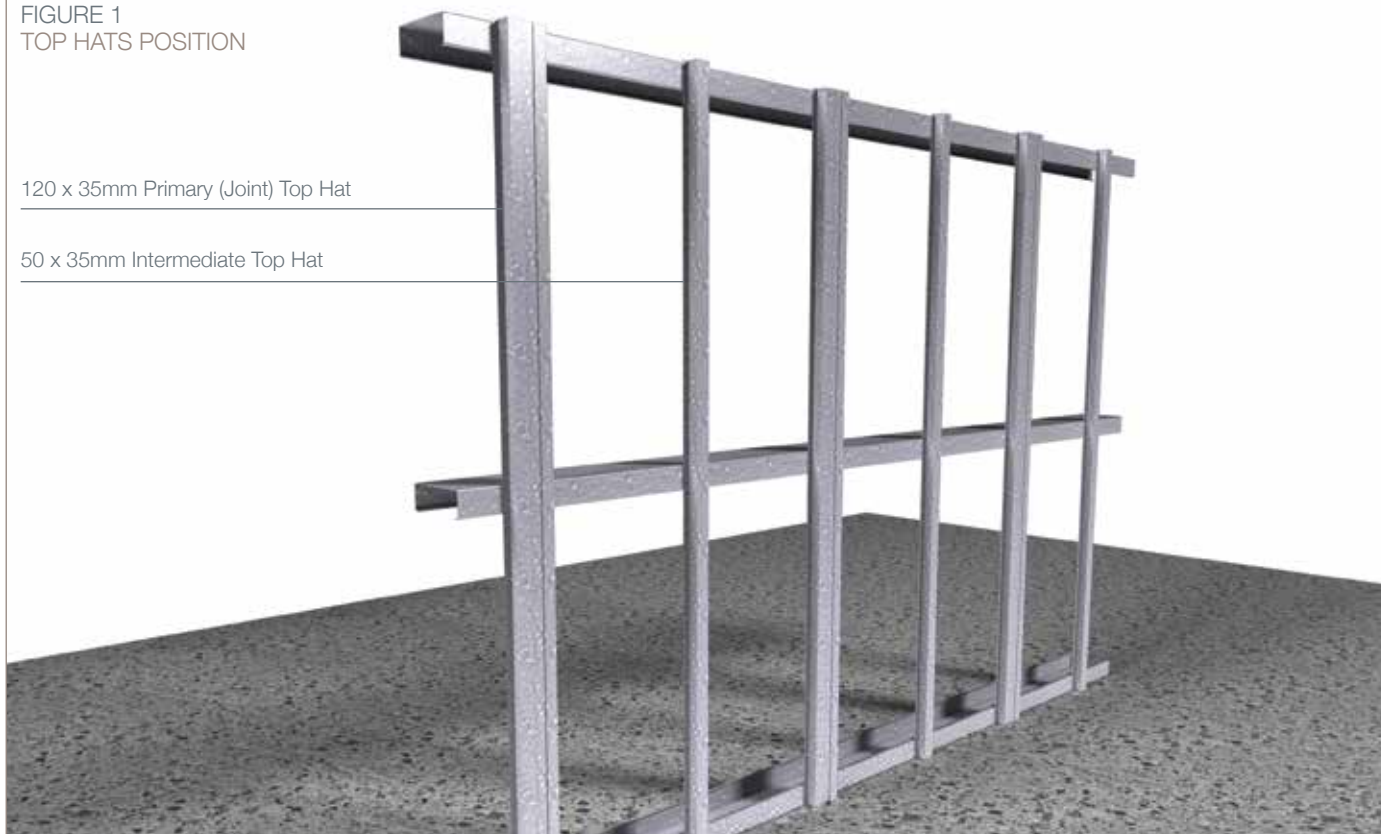
MARKING OUT PURLINS

Position the Top Hats according to predetermined and marked spacings and ensure that they are vertical (check with a spirit level).

FIGURE 1
TOP HATS POSITION

120 x 35mm Primary (Joint) Top Hat

50 x 35mm Intermediate Top Hat



Fix the Top Hats to the Purlins using self-drilling Hex Head Wafer Screw fasteners ensuring that both legs of the Top Hats are fixed to the structural Purlins or framing.

Also, ensure that the Top Hats are mounted vertical using a spirit level to check.

For inclined or diamond patterns, check that the inclined angle of the Top Hats are correct.

The Top Hats must be fixed on both legs to minimise flexing of the Top Hats.

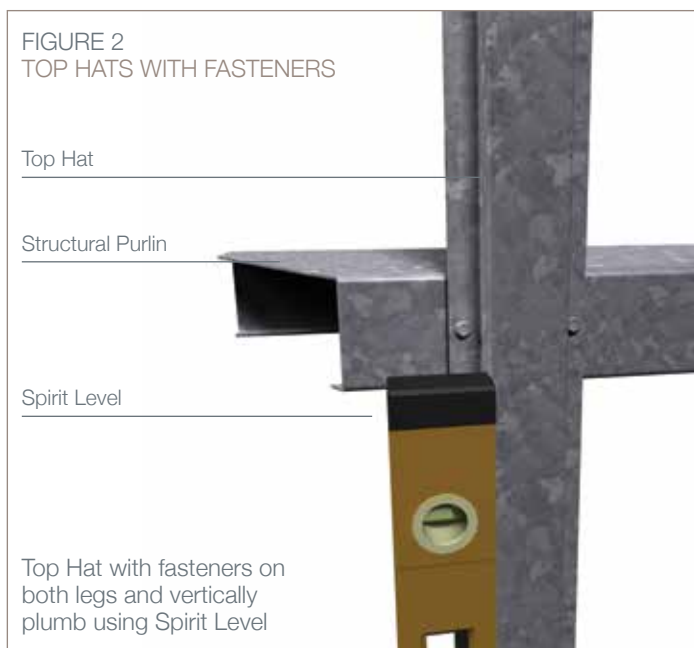
FIGURE 2
TOP HATS WITH FASTENERS

Top Hat

Structural Purlin

Spirit Level

Top Hat with fasteners on both legs and vertically plumb using Spirit Level



Apply the EPDM Foam Gasket Strip to the primary 120mm Top Hat. The seal can be applied to the mounted Top Hat insitu or it can be applied to the Top Hat, before it is fixed to the Purlins.

Ensure that the EPDM Foam Gasket Strip is applied to the centre of the purpose designed Primary 120mm Top Hat.

FIGURE 3
FIXING SEAL TO TOP HAT

EPDM Foam Gasket Strip

120 x 35mm Primary Top Hat

Set out, **pre-drill** and countersink the holes in the panels to be mounted, as set out in the table hereunder.

Screw holes must be pre-drilled, allowing 1mm clearance over diameter of screw.

Holes must be drilled using a masonry drill bit.

Do not use an impact drill.

Where screws are to be countersunk, depth must be controlled by gauge to restrict head depth to 3mm maximum.

Refer to Table 5 for Maximum Spacing of Panel Fasteners.

FIGURE 4
PRE MARKED AND PRE DRILLED PANELS

40mm
80mm

80mm
40mm

Fasteners should be placed at a minimum of 40mm from any edge and 80mm minimum from any corner.

40mm

TABLE 5, FASTENER SPACING FOR 9MM AND 12MM DURACOM™ PANELS

DESIGN WIND PRESSURE. kPa	MAX. TOP HAT SPACING. mm	MAX. FASTENER SPACING AT PANEL EDGE SUPPORTS. mm	MAX. FASTENER SPACING AT INTERMEDIATE SUPPORTS.
Up to 1.0	600	300	600
1.5	600	300	400
2.0	600	250	400
3.0	450	400	400
4.0	450	300	250
5.0	450	300	250
6.0	450	300	200

Fix the bottom row of boards allowing a 15mm overlap over the EPDM seal. Leave the top row of screws in the board loose to facilitate the insertion of the backing strip to the board.

FIGURE 5
FIXING DETAILS

120 x 35mm Primary Top Hat

EPDM Foam Gasket Strip

15mm Overlap

Fixing details bottom layer of panels

Use the backing strip to space the vertical joint of successive boards ensuring a uniform 10mm space between successive boards.

FIGURE 6
VERTICAL SPACING

120 x 35mm Primary Top Hat

EPDM Foam Gasket

Horizontal Backing Strip reversed & used as a spacer

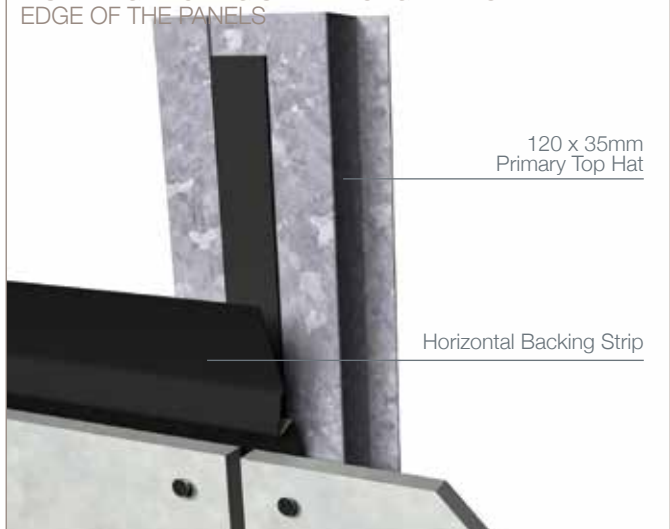
Prepare the backing strip for installation by applying an appropriate sealer to the bottom (9mm) edge of the backing strip or by applying the sealer to the top edge of the panel.

FIGURE 7
APPLYING SEALANT



Insert the backing strip behind the top of the board. Leave fasteners loose, along the top edge of the panels to facilitate insertion of backing strip.

FIGURE 8
INSERTING BACKING STRIP ALONG THE TOP
EDGE OF THE PANELS



Backing strip joint details – the backing strip has been designed to overlap whilst retaining a flush fit behind the board. Backing strip joints must overlap over a Top Hat and be sealed with two (2) beads of sealant to ensure a weather resistant joint.

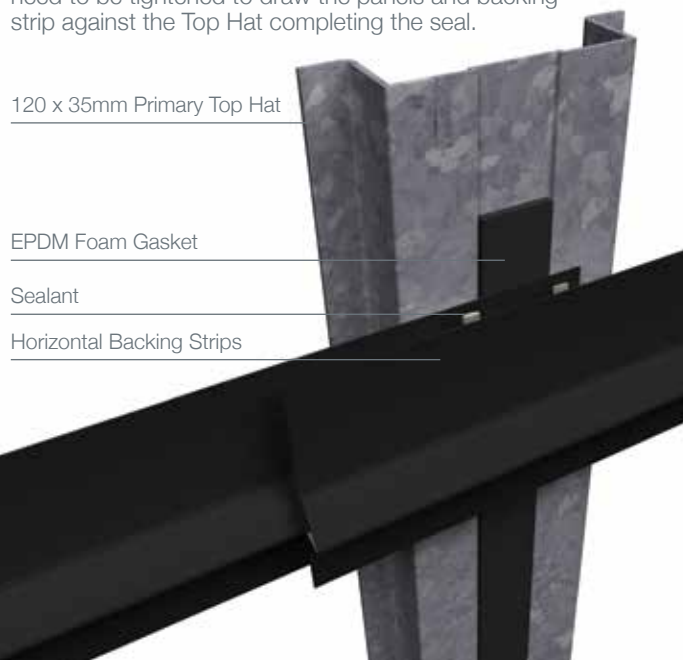
FIGURE 9
Apply two (2) beads of appropriate
sealant minimum 50mm apart
for weather resistant backing strip
overlapping joint.



Overlapping backing strip joint with two (2) beads of appropriate sealant, in position over the Top Hat section.

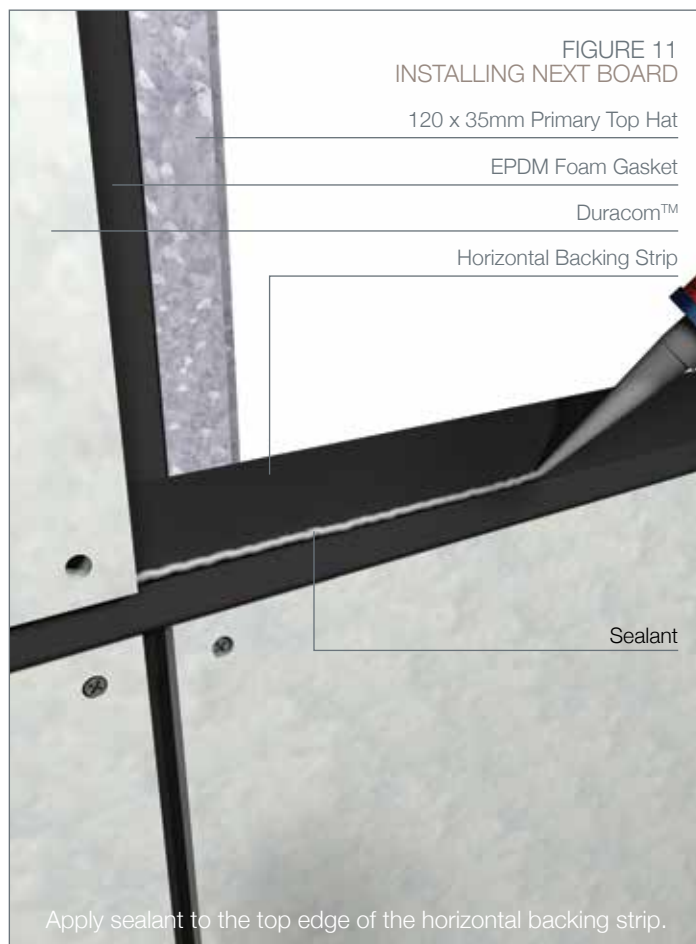
FIGURE 10
OVERLAPPING OF BACKING STRIP

After the backing strip is in position the top row of screws need to be tightened to draw the panels and backing strip against the Top Hat completing the seal.



Installation of the next layer of board – Apply a bead of the appropriate sealant to the top of the backing strip and then rest a pre-drilled panel on the top of the horizontal backing strip.

FIGURE 11
INSTALLING NEXT BOARD



INSTALLATION DETAILS

The architectural intent and details of buildings vary from one designer to the next, and the variety of facade details would be impossible to catalogue.

The designer should not digress from the specification set out in this manual.

The detail diagrams following are intended to assist the designer in achieving a high quality weather resistant Duracom™ Facade.

FIGURE 12
SLAB EDGE DETAIL

Vapour Permeable Sarking*

Top Hat

Duracom™

Purlin / Girt*

Flashing*

Ground Clearance

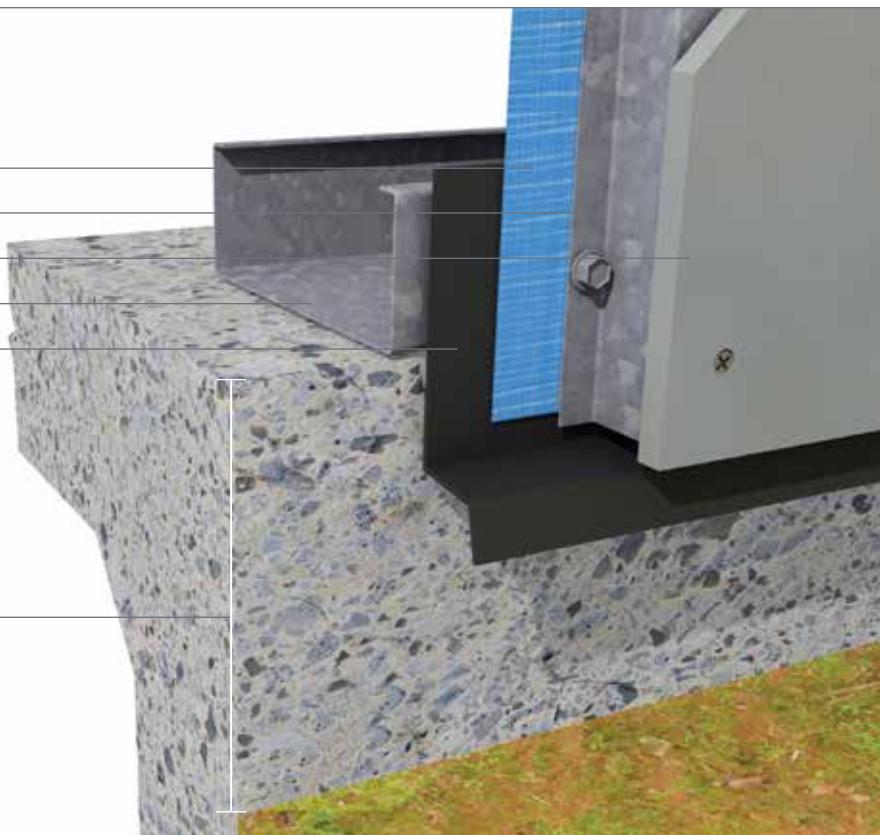


FIGURE 13
SLAB EDGE DETAIL

Vapour Permeable Sarking*

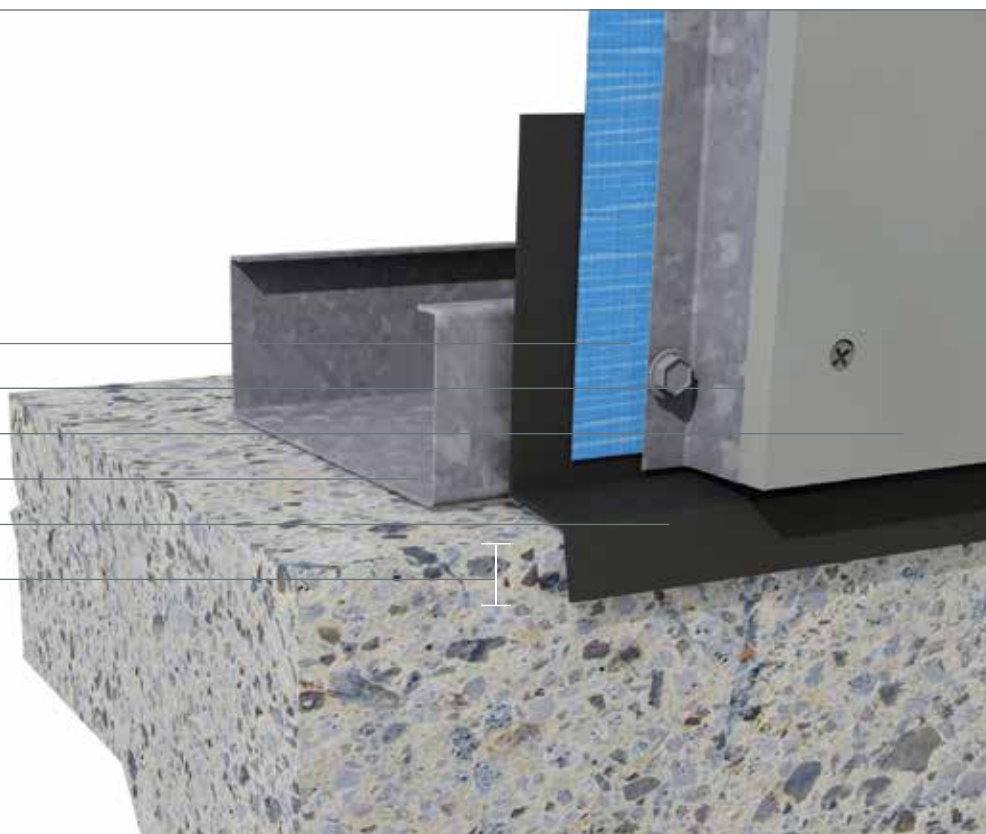
Top Hat

Duracom™

Purlin / Girt*

Flashing*

50mm Overlap



*Components not supplied by BGC

FIGURE 14
SOFFIT DETAIL

Purlin*

Vapour Permeable Sarking*

Top Hat

Duracom™

Purlin / Girt*

Flashing*

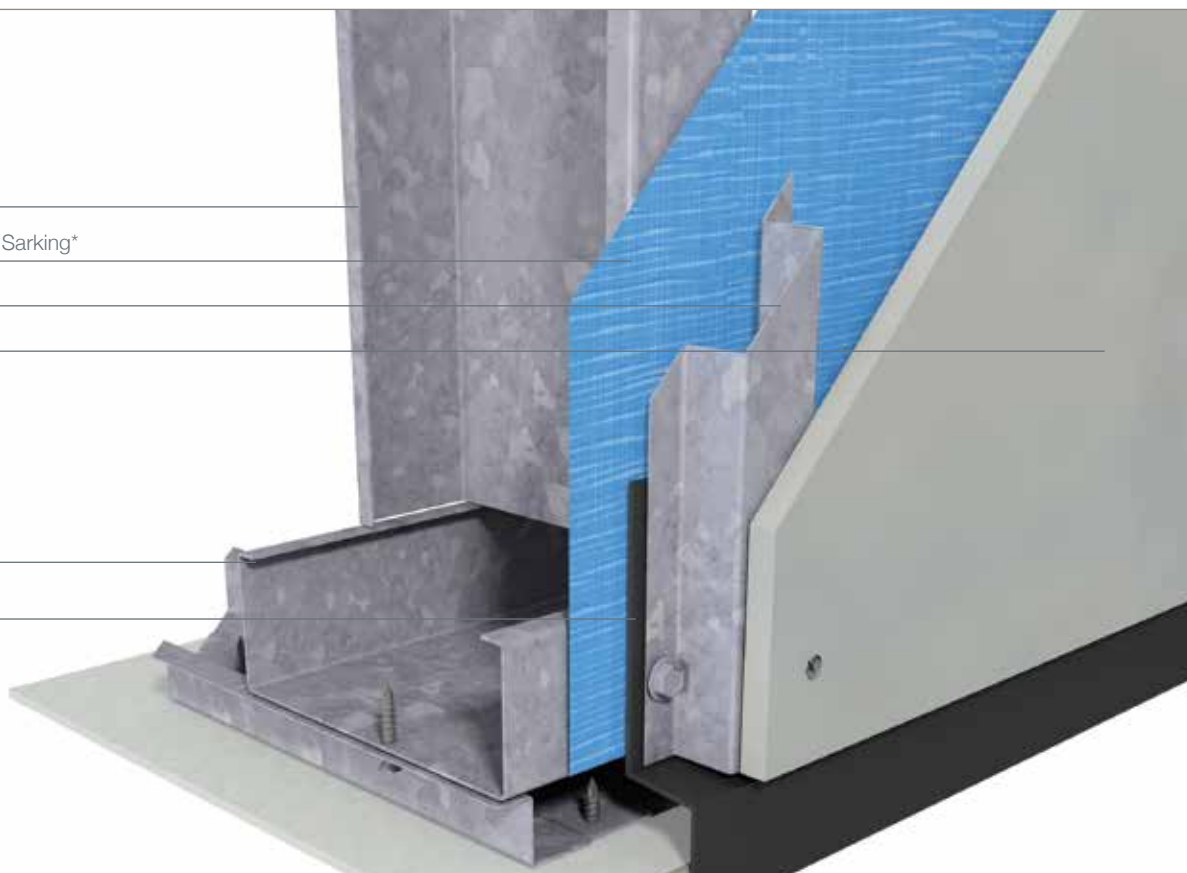


FIGURE 15
FACADE DEFLECTION HEAD DETAIL

Concrete Floor Slab

Support Angle*

Closure Angle*

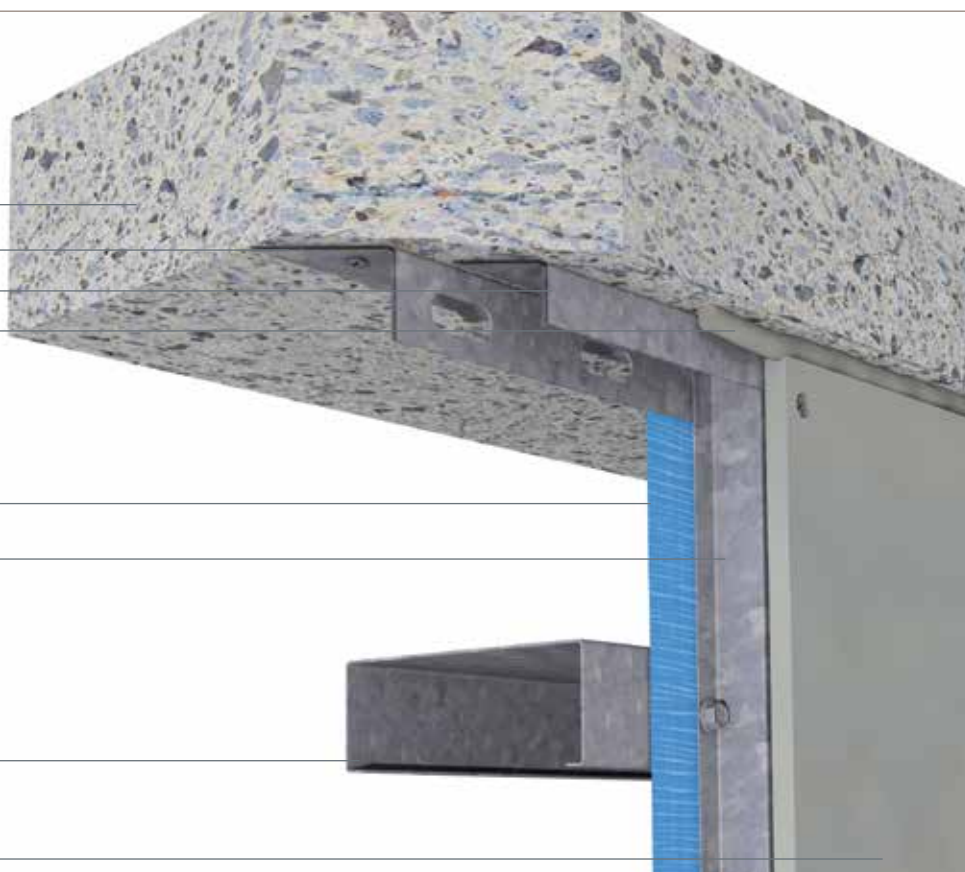
Sealant*

Vapour Permeable Sarking*

Top Hat

Purlin / Girt*

Duracom™



*Components not supplied by BGC

FIGURE 16
SQUARE EXTERNAL CORNER DETAIL

10mm Gap

Support Angle 60 x 60 x 1mm*

Duracom™

50 x 35mm Intermediate Top Hat

Vapour Permeable Sarking*

Purlin / Girt*

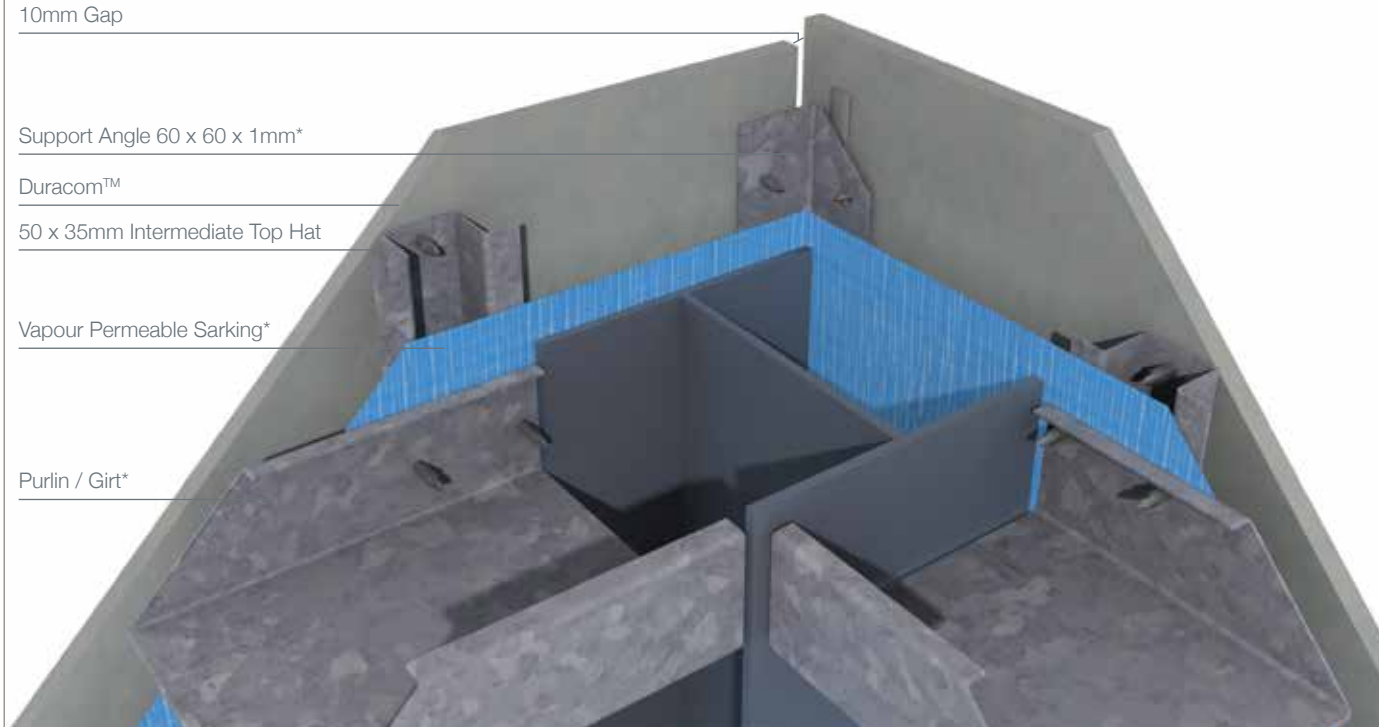


FIGURE 17
SQUARE INTERNAL CORNER DETAIL

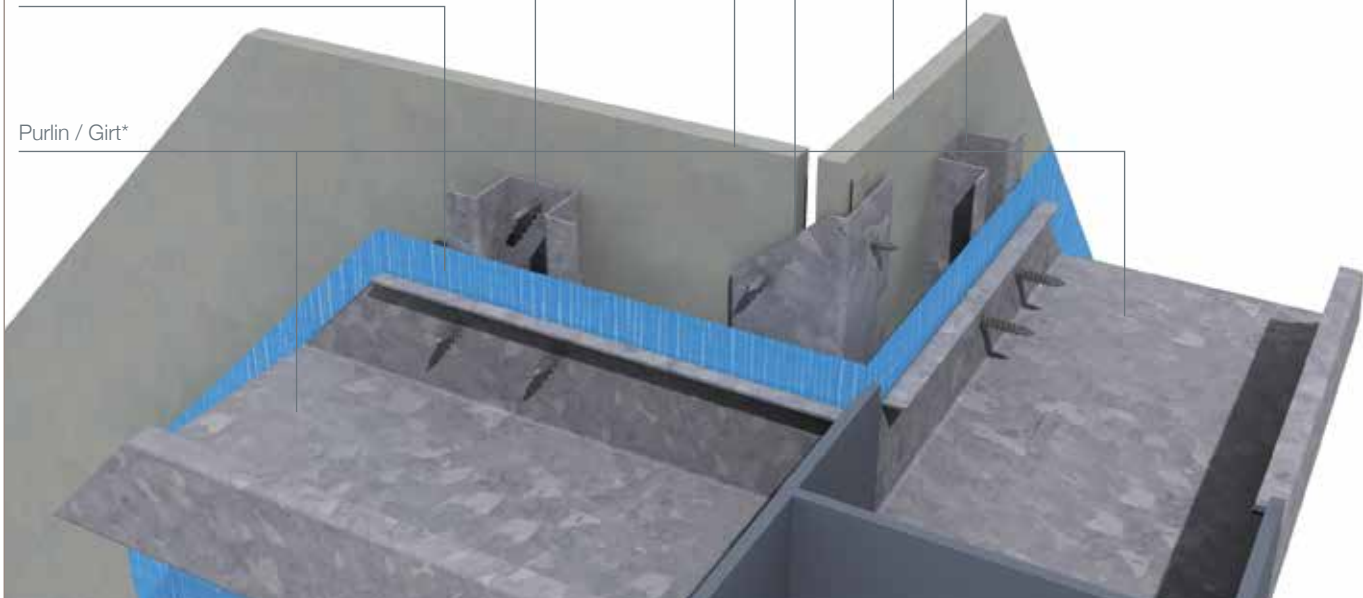
Duracom™

50 x 35mm Intermediate Top Hat

Support Angle 60 x 60 x 1mm*

Vapour Permeable Sarking*

Purlin / Girt*



*Components not supplied by BGC

FIGURE 18
ANGLED EXTERNAL CORNER DETAIL

Support Angle 60 x 60 x 1mm*

Continuous Sealant Bead

Vapour Permeable Sarking*

50 x 35mm Intermediate Top Hat

Duracom™

Purlin / Girt*

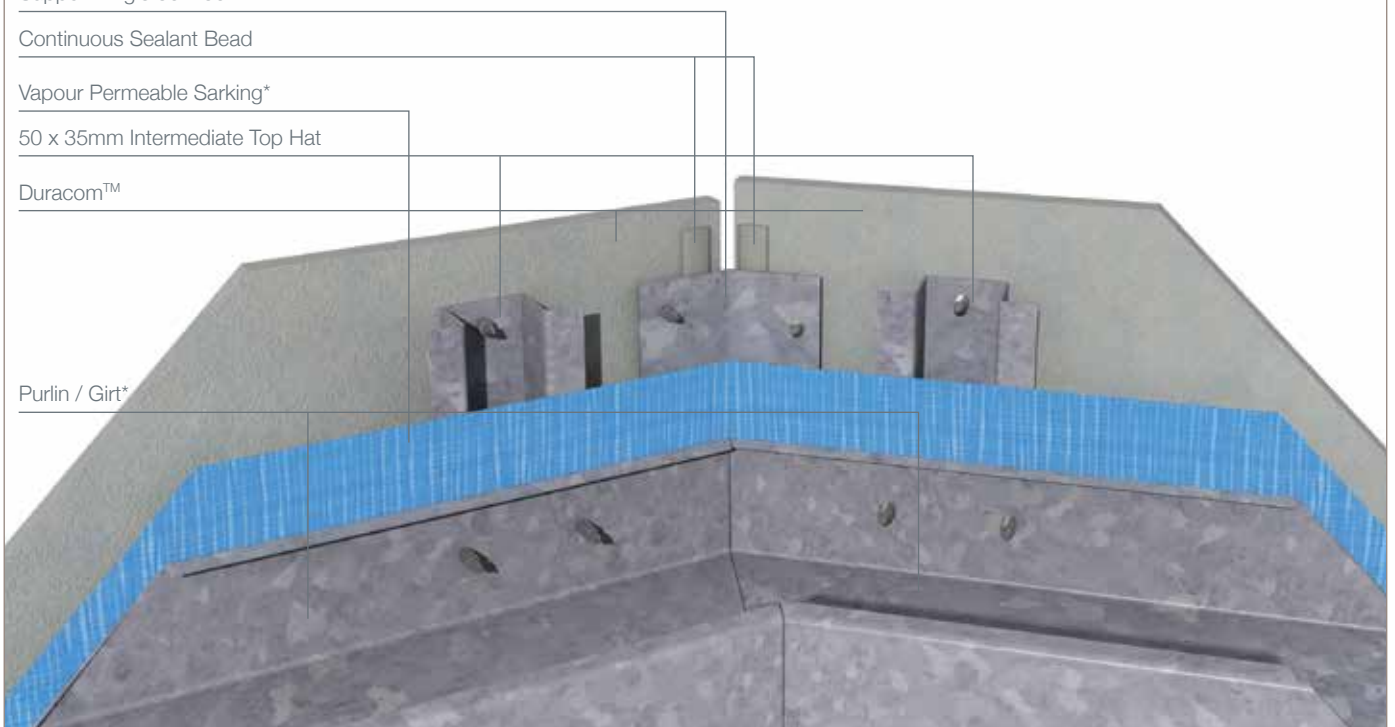


FIGURE 19
ANGLED INTERNAL CORNER DETAIL

Support Angle 60 x 60 x 1mm*

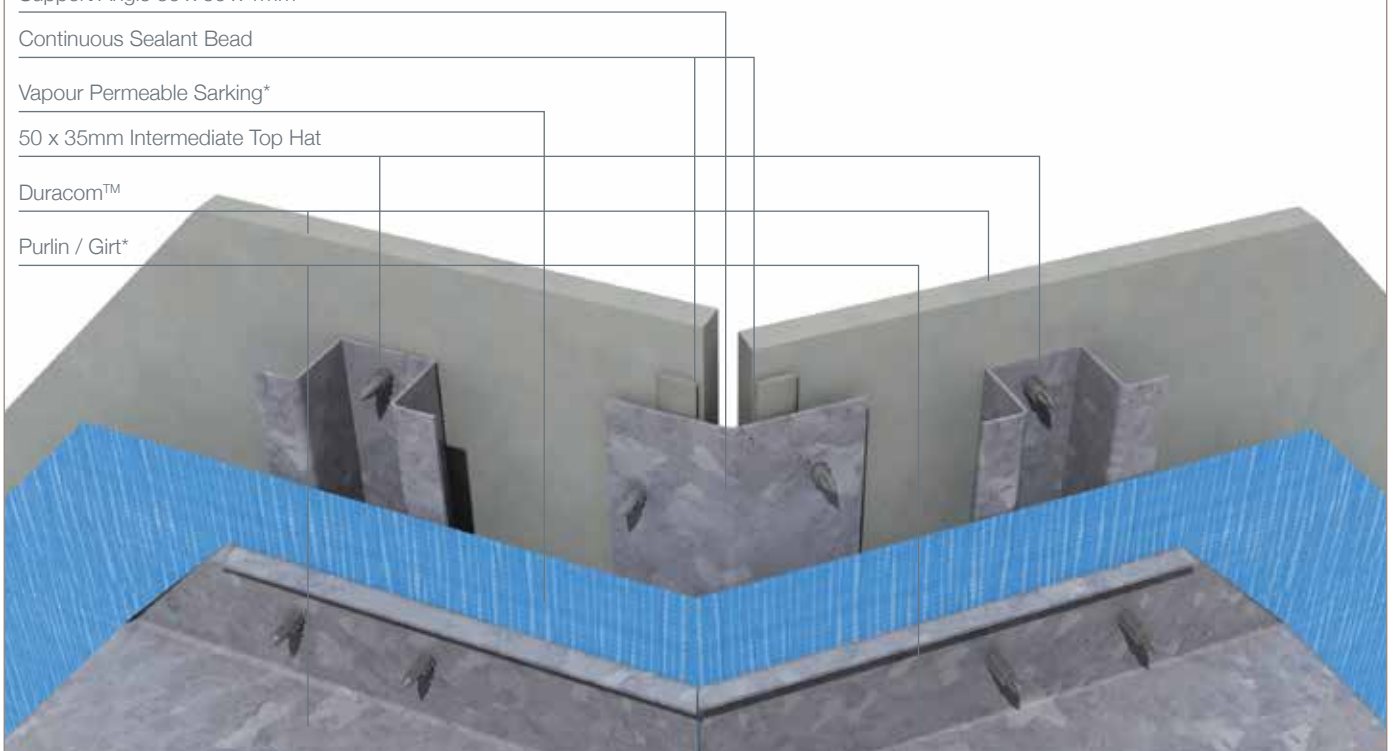
Continuous Sealant Bead

Vapour Permeable Sarking*

50 x 35mm Intermediate Top Hat

Duracom™

Purlin / Girt*



*Components not supplied by BGC

PENETRATIONS, OPENINGS, WINDOWS AND DOORS

There are numerous varieties of penetrations, openings, and windows and door treatments available, and each weather proofing detail will be dependent on the material, style and manufacturer's specifications.

Adequate weather proofing of the opening application

must be considered by the building designer, in conjunction with the penetration, window and door manufacturer. The diagrams below are a guide only and the designer should consult with the appropriate manufacturers for the detail design to ensure adequate weather proofing.

FIGURE 20
WINDOW HEAD DETAIL

Top Hat

Duracom™

Vapour Permeable Sarking*

Purlin / Girt*

Air Seal*

Flashing*

Window Head*

Sealant

Glass Window*

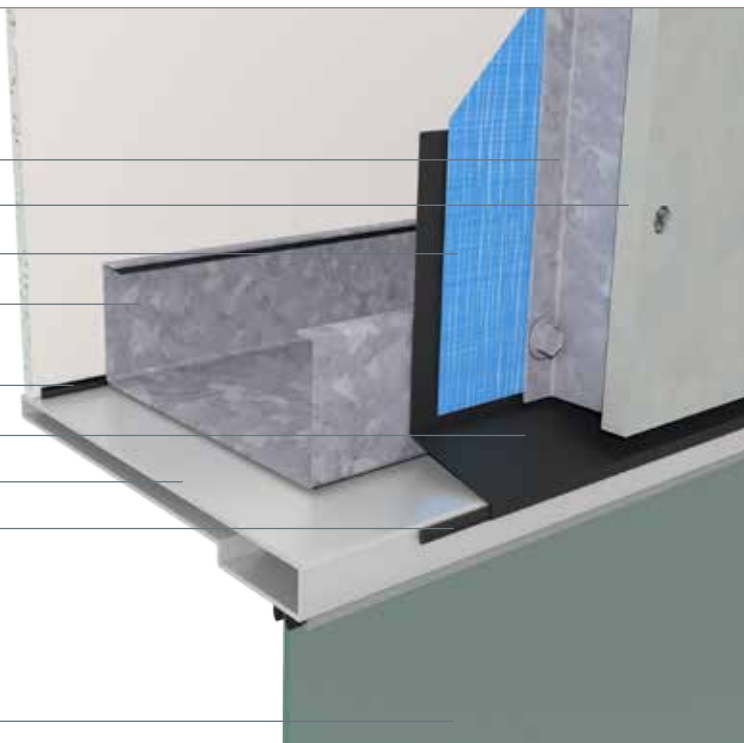


FIGURE 21
WINDOW SILL DETAIL

Glass Window*

Window Sill*

Sealant

Vapour Permeable Sarking*

Purlin / Girt*

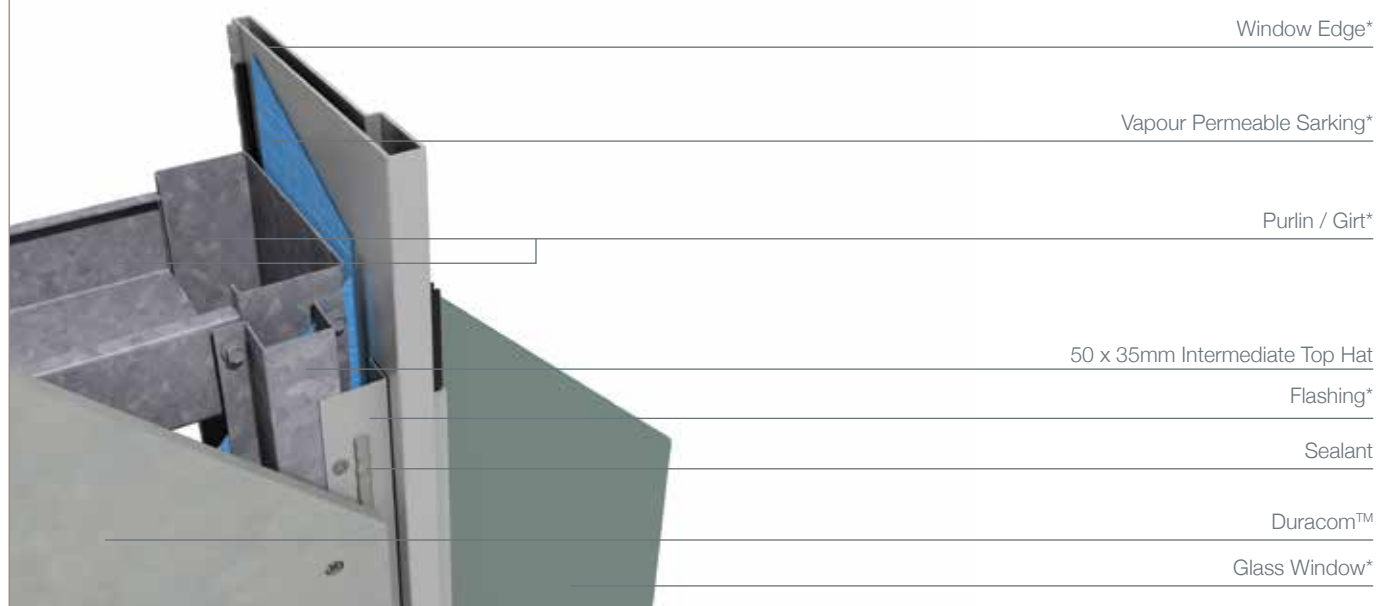
Top Hat

Duracom™



*Components not supplied by BGC

FIGURE 22
WINDOW JAMB DETAIL



CONTROL JOINT DETAILS

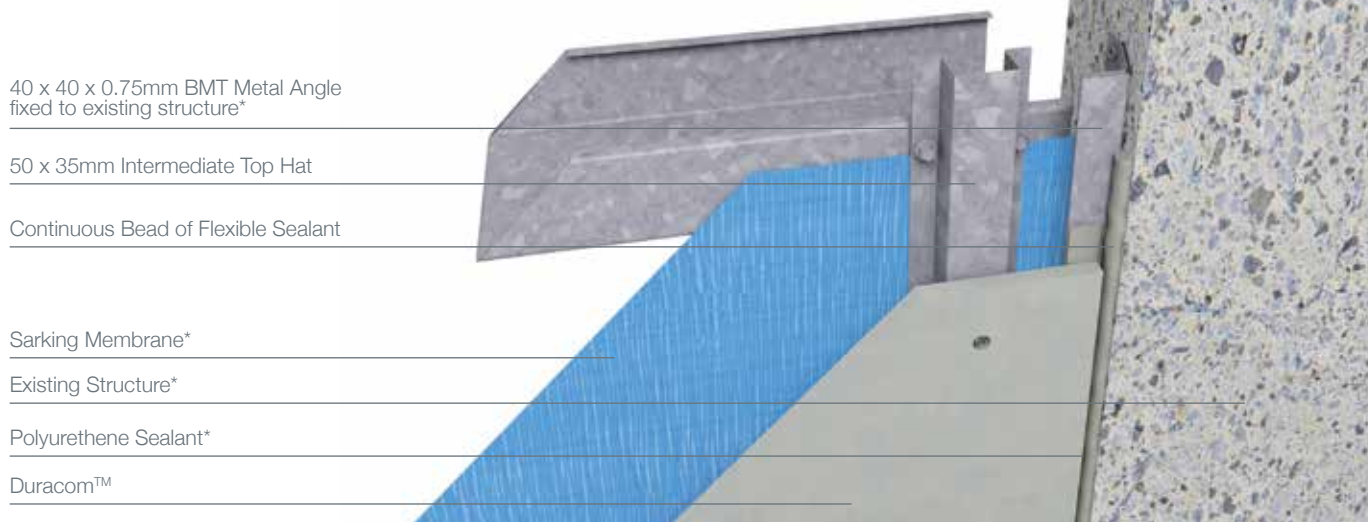
Structural movement vertical and horizontal control joints are required to match existing structural control joints and should pass through the facade.

The Duracom™ system utilises a flat galvanised 0.75mm BMT steel strip.

This strip bridges the Top Hats on each side of the control joint and is riveted to one side only.

Sealant is applied between the strip and the Duracom™ panel creating a floating weather resistant seal that allows for joint expansion and contraction.

FIGURE 23
VERTICAL CONSTRUCTION CONTROL JOINT AT DISSIMILAR MATERIALS



*Components not supplied by BGC

FIGURE 24
VERTICAL CONSTRUCTION CONTROL JOINT

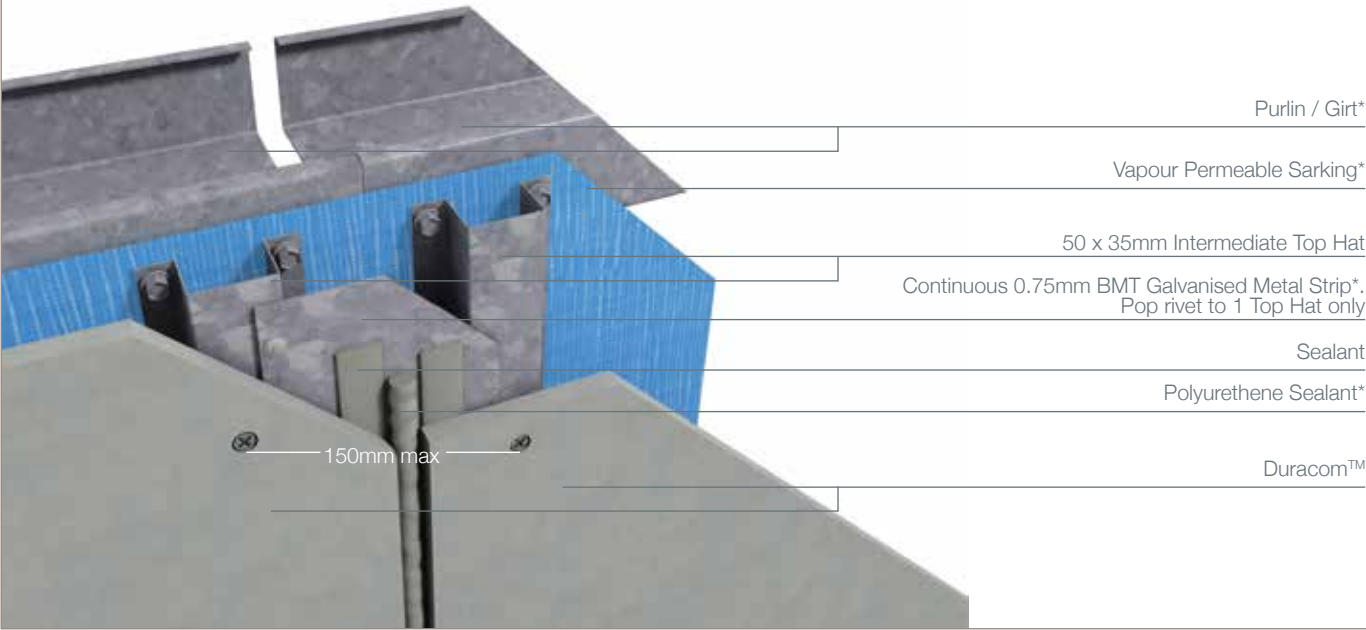


FIGURE 25
VERTICAL CONTROL JOINT

120 x 35mm Primary Top Hat

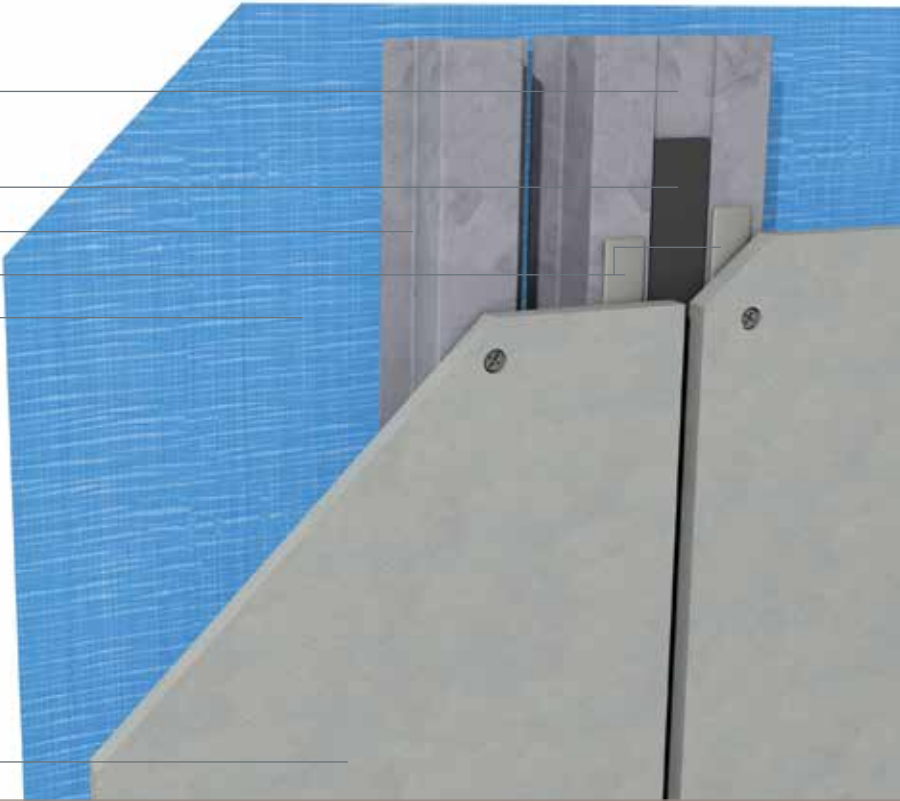
EPDM Foam Gasket*

50 x 35mm Intermediate Top Hat

Sealant*

Vapour Permeable Sarking*

Duracom™



*Components not supplied by BGC

FIGURE 26
HORIZONTAL CONSTRUCTION CONTROL JOINT

Duracom™

Vapour Permeable Sarking*

50 x 35mm Intermediate Top Hat

75mm Top Hat

Sealant*

Polyurethane Sealant*



*Components not supplied by BGC

THERMAL BREAK DETAILS

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

Thermal breaks should be installed between the Top Hat sections and the Duracom™.

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.

FIGURE 27
THERMAL BREAK DETAIL

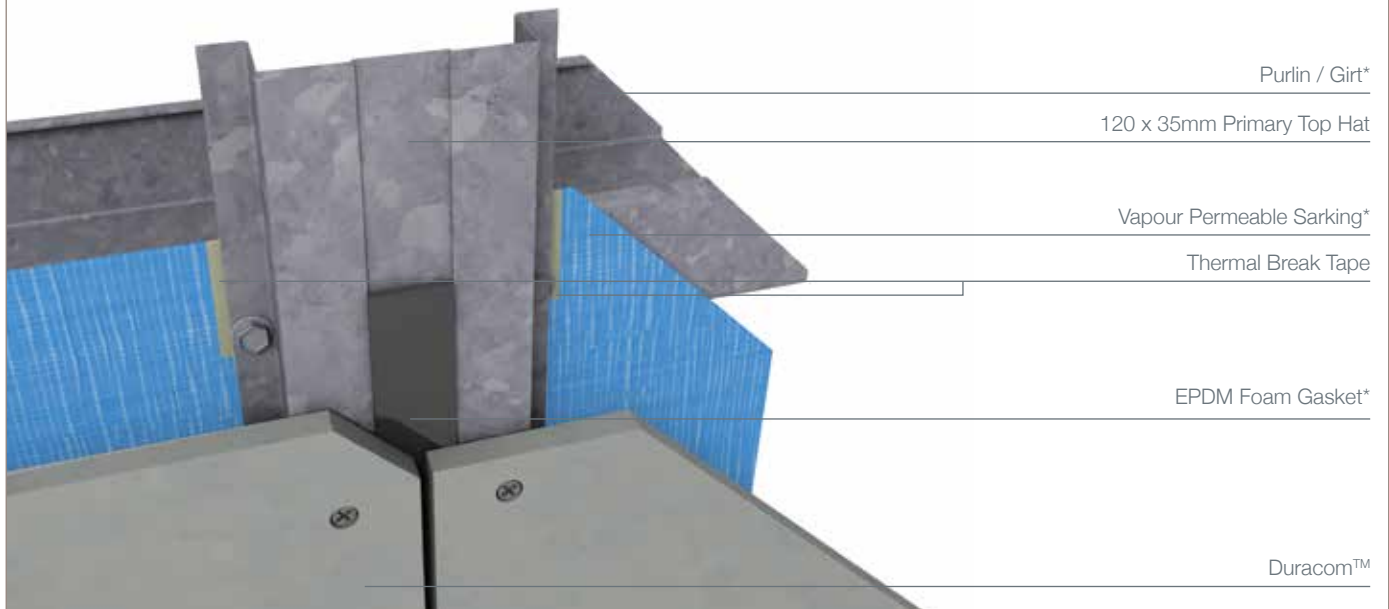
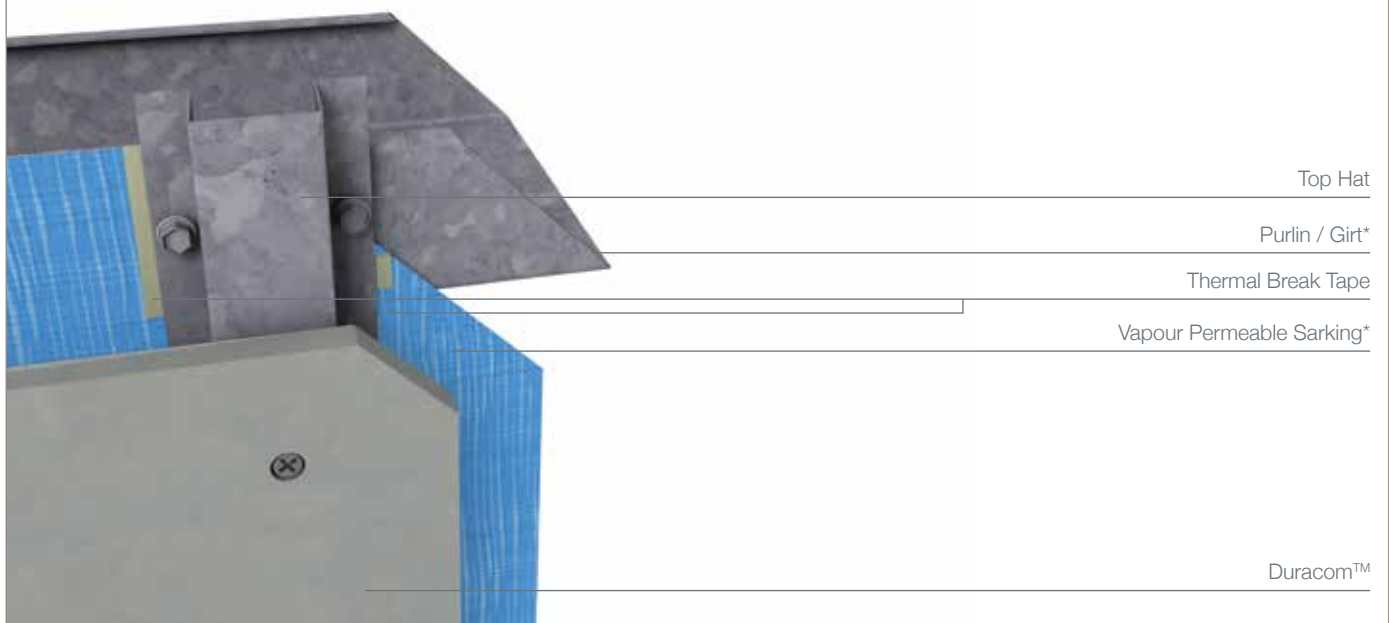
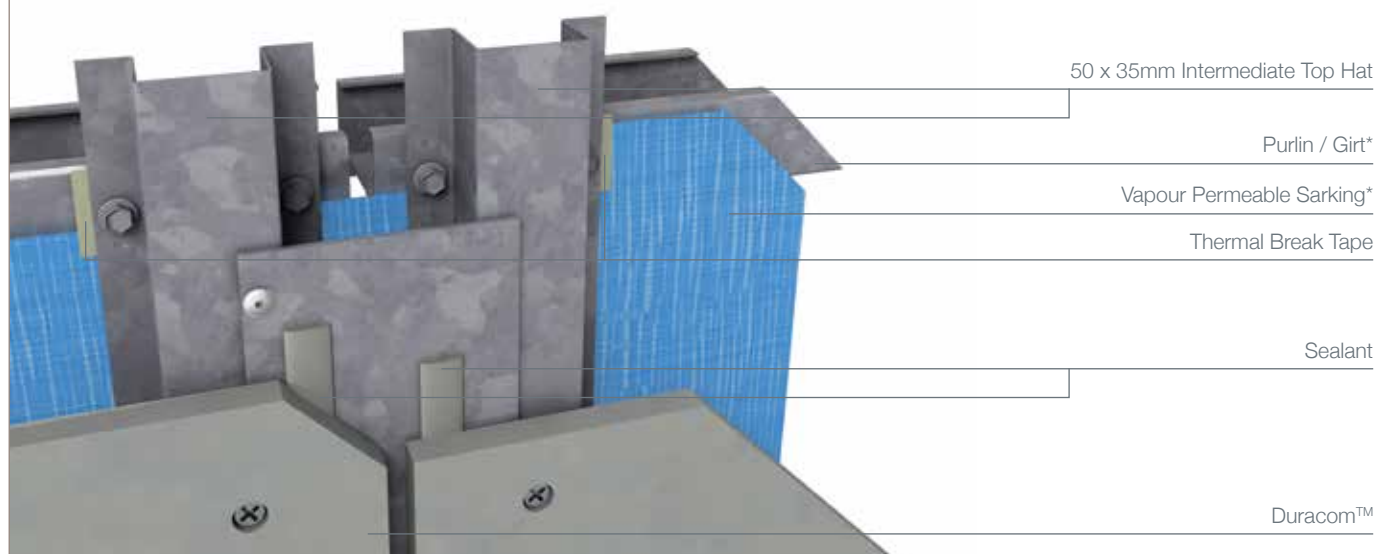


FIGURE 28
THERMAL BREAK DETAIL



*Components not supplied by BGC

FIGURE 29
THERMAL BREAK DETAIL



*Components not supplied by BGC

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).

PAINTING AND DECORATION

Duracom™ is factory sealed on both faces and all edges. Sealing in this manner increases the durability and stability of the panels. The exterior surface of Duracom™ must be coated with an appropriate finish. The sealed back face is not suitable for exposure to ultra violet light and therefore should not be exposed other than for short periods ie during installation. The sealed front face should be painted within three (3) months of initial exposure to ultra violet light.

The exterior/front face of Duracom™ can be finished with any of a wide variety of coatings, provided they are compatible with the Duracom™ seal coat, fasteners and with the epoxy used to cover the countersunk heads. High build, exterior grade 100% acrylic paint or aggregate finishes provide the best results.

Duracom™ may be painted off-site when exposed head screws are to be used. Refer to appropriate painting contractors for details and colours.

A minimum dry film thickness of 250 microns is recommended to ensure adequate cover for the concealed fasteners. High gloss and low build finishes will require additional surface preparation to minimise fastener show-through. In all cases the coating manufacturer's application instructions must be followed. The interior/back face of Duracom™ is finished clear and is not suitable for painting.

Before applying finishes in coastal areas, Duracom™ panels must be thoroughly washed with fresh water to remove any salt residue. Refer to coating manufacturer for additional requirements.

Duracom™ is not suitable for tiling.

BUSHFIRE AND BOUNDARY WALL AREAS

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

Duracom™ 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.

Duracom™ when used in conjunction with BGC 16mm Wet Area Fireboard 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).

Duracom™ may be used to achieve a BAL-40 or BAL-FZ>10 when used in conjunction with 16mm BGC Wet Area Fireboard.

BOUNDARY / EXTERIOR WALLS / TIMBER FRAME

Duracom™ in conjunction with BGC 16mm Wet Area Fireboard 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, one (1) layer of 16mm BGC Wet Area Fireboard installed with Duracom™ over the Wet Area Fireboard will meet minimum BCA requirements. Similarly two (2) layers of 16mm BGC Wet Area Fireboard used in conjunction with Duracom™ will achieve 90/90/90 from the outside.

Note: All external walls must have sarking beneath the Duracom™. No adhesives are to be used when installing Wet Area Fireboard and the Duracom™. Nails or screws must be used.

For fixing details of the BGC Wet Area Fireboard refer to the BGC Fire and Acoustic Guide.

For more information please contact your nearest BGC Fibre Cement office.

FIGURE 30
BOUNDARY / EXTERIOR WALLS / TIMBER FRAME

Duracom™ Top Hat

10mm BGC Plasterboard

Insulation as Required

16mm BGC Wet Area Fireboard

Vapour Permeable Sarking

Duracom™

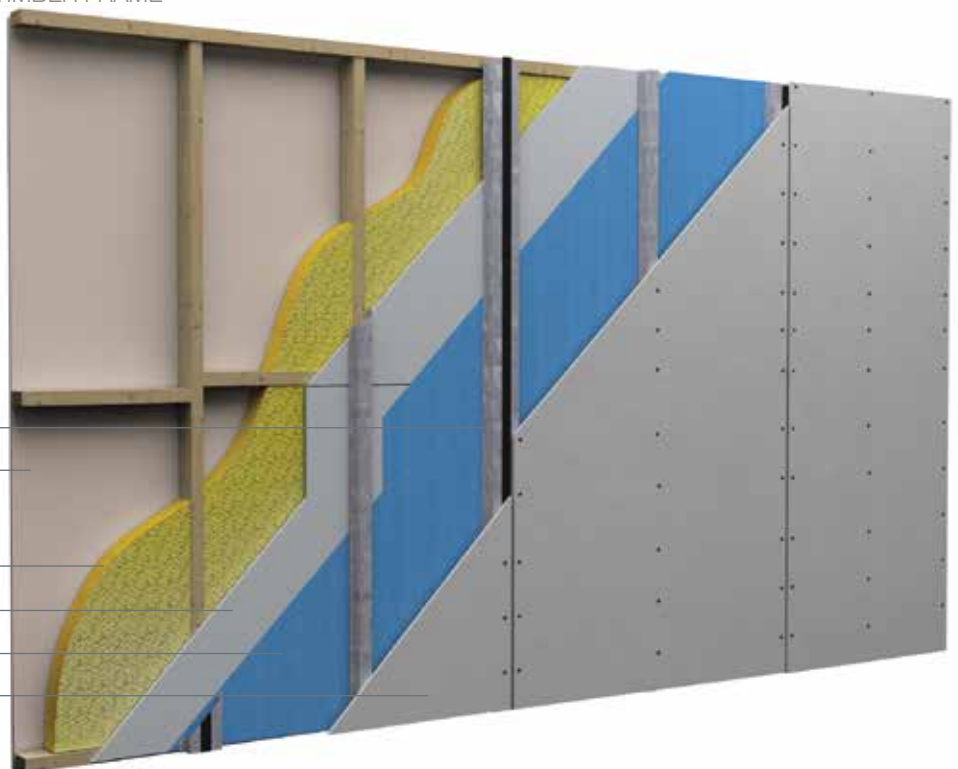


FIGURE 31
BOUNDARY / EXTERIOR WALLS / STEEL FRAME

16mm BGC Fireboard

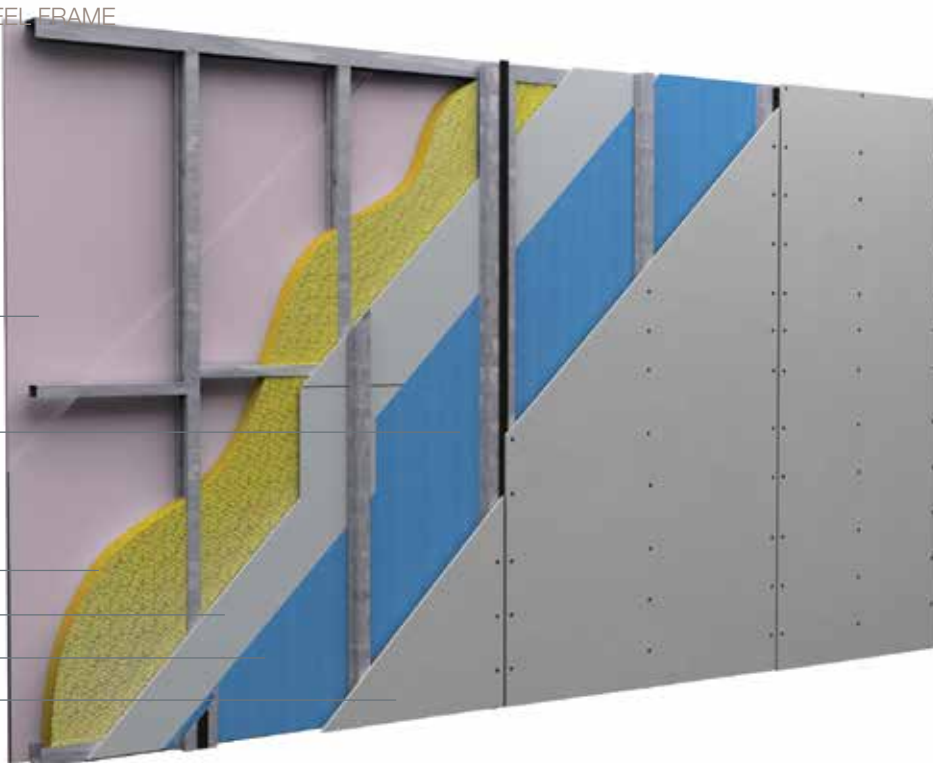
Duracom™ Top Hat

Insulation as Required

16mm BGC Wet Area Fireboard

Vapour Permeable Sarking

Duracom™



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 Canningvale 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 bgc.com.au/FibreCement);
- 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.

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.

CONTACT

TO CONTACT
YOUR NEAREST
BGC STOCKIST,
PLEASE CALL:

ADELAIDE
TELEPHONE
08 8250 4962

BRISBANE
TELEPHONE
07 3271 1711

MELBOURNE
TELEPHONE
03 9392 9444

PERTH
TELEPHONE
08 9334 4900

SYDNEY
TELEPHONE
02 9771 9660

NEW ZEALAND
TELEPHONE
0011 64 9264 1457

TECHNICAL HELP LINE
1300 652 242



Fibre Cement



Quality
ISO 9001
SAI GLOBAL

BGC FIBRE CEMENT IS A
PROUD AUSTRALIAN OWNED
MANUFACTURER OF FIBRE
CEMENT PRODUCTS.

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.

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.

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.

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

INTERIOR PRODUCTS AND APPLICATIONS BGC FIBRE CEMENT RANGE OF PRODUCTS

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

DURALINER™ / 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.