



STONESHEET™

STONE TILE SUBSTRATE

Technical Specification | July 2018

Update: This document replaces the BGC Stonesheet™ Technical Specification - April 2015.

This document is to be read in conjunction with BEAL Appraisal C807 BGC Stonesheet™ and Render Tape for use with manufactured or natural stone slip veneers.

For full installation details please refer to your Stone Supplier. We recommend the use of an Appraised or Code Mark Stone Cladding system.

Product Description

BGC Stonesheet™ is a purpose designed Fibre Cement sheet for external application. It is recommended as a backing board for stone slip substrates on timber framed buildings.

BGC Render tape is a single-faced self-adhesive tape comprising a non-woven polyester fabric adhered to a film of butyl-rubber.

BGC Render Tape comes in a 60mm x 20m roll.

Sheet Sizes & Mass

Stonesheet™ is available in the following tabulated sizes. The approximate weight of Stonesheet™ at equilibrium moisture content (7% moisture) is also as tabulated:

| Thickness (mm) | Length (mm) | Width (mm) | Approx. Weight (kg/m ²) |
|----------------|-------------|------------|-------------------------------------|
| 7.5 | 3000 | 1200 | 11.8 |
| 9.0 | 3000 | 1200 | 14.27 |

Framing

Please also refer to your stone supplier for any specific framing requirements and NZS3604.

For Steel framing installation information, contact BGC Fibre Cement.

Fixing Guide

| Slip Weight (kg/m ²) | Wall Height | Stonesheet™ Type (mm) |
|----------------------------------|--------------------|-----------------------|
| 20 – 50 | Up to and above 4m | 7.5 |
| 50 – 60 | Up to 4m | 7.5 |
| | Above 4m | 9.0 |

Fasteners:

- Cavity - 10g x 65mm Surefast Screws
- Direct Fixed -10g x 50mm Surefast Screws
- Washer - Direct and Cavity - M6 x 19mm x 1.6mm
- Interior Application - Zinc Chromate
- Exterior Application - Stainless Steel 304 or 316
- Or fasteners as per your stone suppliers installation details.

Screws and washers can be sourced from BGC, MSL Fortress Fasteners or your local Building Merchant, providing they are compliant with AS 3566 part 2.

For stone weights above 60 kg/m² please refer to your stone supplier for fasteners, mechanical fixings and adhesives for the Stonework.

Stonesheet™ is a non-structural substrate. BGC does not accept any responsibility for the selection and design of mechanical fixing and adhesives used. Installation instructions and recommended kg/m² are supplied as a guide only.

Installation

BGC Stonesheet™ can either be installed on a cavity or direct fixed. This is determined upon the calculated Risk Score as per the NZBC, Section 3 of E2/AS1.

The installation of BGC Stonesheet is the responsibility of the Licensed Building Practitioner (LBP). Acceptance of the BFC Stonesheet substrate must be checked by the Stone Supplier prior to installation of their product

General Fixing:

- Sheets are to be fixed vertically with a 2-3mm gap between sheets.
- Sheets are to be fixed with screws and washers, as per the fixing guide, at 200mm centres (edges and centre). Sheets must be fixed with the smooth side on the external face (i.e. rough surface on the framing side).
- Screws must be 12mm from the edge and 50mm from the corner of the sheets.
- Or sheets fixed as per your stone suppliers installation details which is outside of this Appraisal/Technical Specification.

Joints:

- Joints must be dry and free from dust and contaminants before applying the BGC Render Tape. BGC Render Tape is to be installed over the joint in the centre of the tape. The tape must be well adhered to the Stonesheet™ by pressing down on both sides of the adhesive tape.
- Where the BGC Render Tape has been applied to both the vertical and horizontal joint, the tape is to be installed so it overlaps the tape already applied. To join the tape – overlap the joint by at least 100mm. BGC Render tape can be used for both vertical and horizontal sheet joints except for Horizontal Control Joints (5400mm maximum centres or all floor joist locations).
- Horizontal Control Joints must be formed as per E2/AS1 fig 107 and/or fig 108 for up to 2 stories – BGC Render tape can be applied over the Horizontal joint to ensure the joint is kept free from Adhesives or Fig. 70 for over 2 stories in height.
- Vertical Non Flush finished joints are deemed to be control joints so no special vertical control joint is required.

Corners:

- Sheets are to be butt jointed (leave 2-3mm gap) with tape applied over the joint.

Handling and Storage

BGC Stonesheet must be stacked flat, up off the ground and supported on equally spaced (max 600mm) level gluts or on a pallet. Care should be taken to avoid damage to the ends, edges and surface. BGC Stonesheet should be kept dry. When stored outdoors it must be protected from the weather.

General:

- BGC Stonesheet™ should not be left exposed in external applications for longer than 90 days before the installation of the stone work.
- All cut sheet edges must be sealed with BGC Edge Sealer which can be ordered with BGC Stonesheet™ from your local Building Merchant.
- For information on BGC Render Tape contact BGC Fibre Cement Please also refer to E2/AS1 section 9.7 Fibre Cement.

Cutting:

BGC Stonesheet can 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.

Weather Tightness

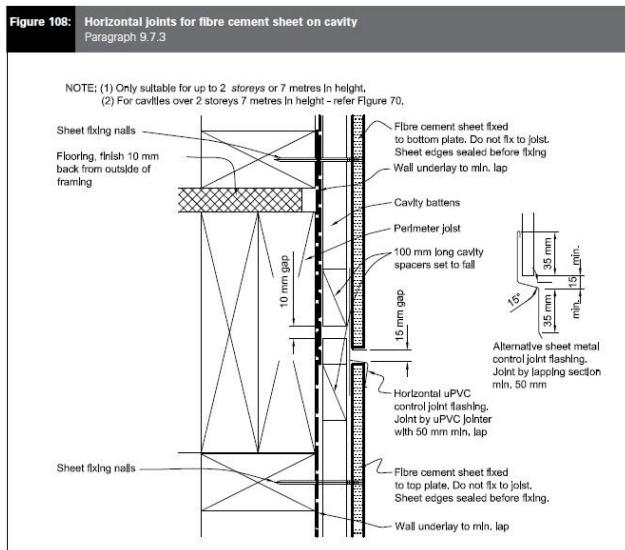
BGC Stonesheet™ and BGC Render tape are not the primary waterproofing in a Stone Slip veneer system.

A Frame Protection System should be in place prior to the installation of the BGC Stonesheet. It is the builder’s responsibility to ensure a Frame Protection System is installed as per the NZBC.

BGC recommend using a Stone system that has been suitably evaluated to comply with all relevant Building Codes and standards and is either Appraised or Code Marked.

Pictorial Figures

Following are pictorials taken from section 9.5 of the NZBC Acceptable Solutions E2/AS1 (Amendment 7 – 1 January 2017).

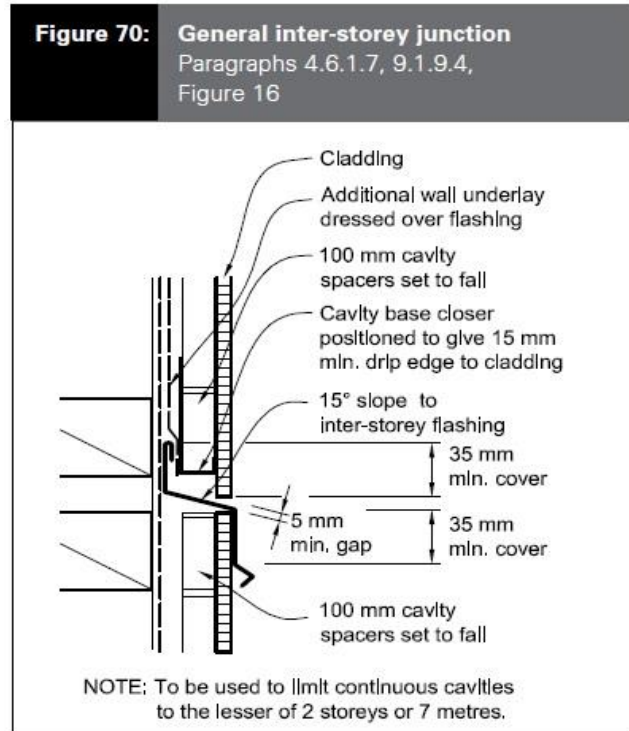


Note – BGC Render tape can also be used on horizontal joints up to 2 stories – confirm warrantability of joint solution with Stone Supplier

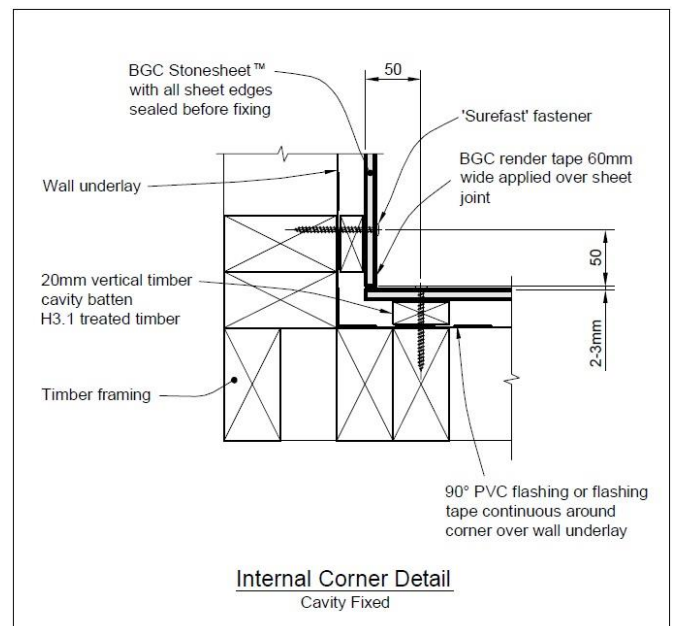
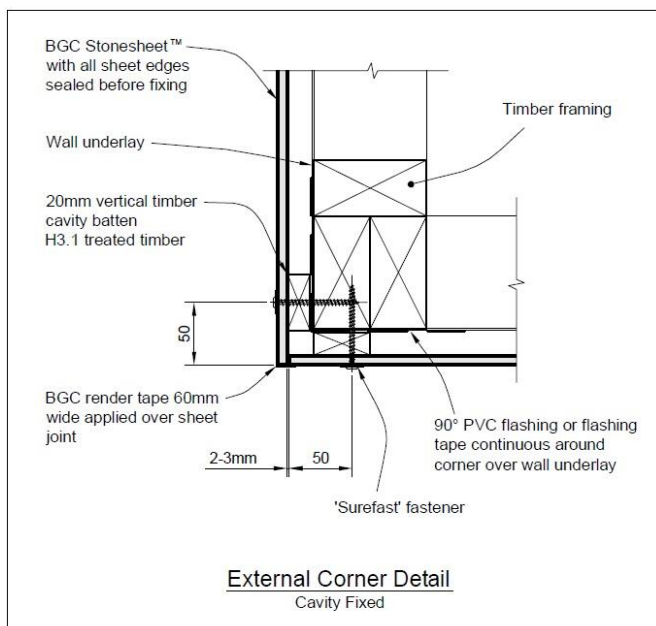
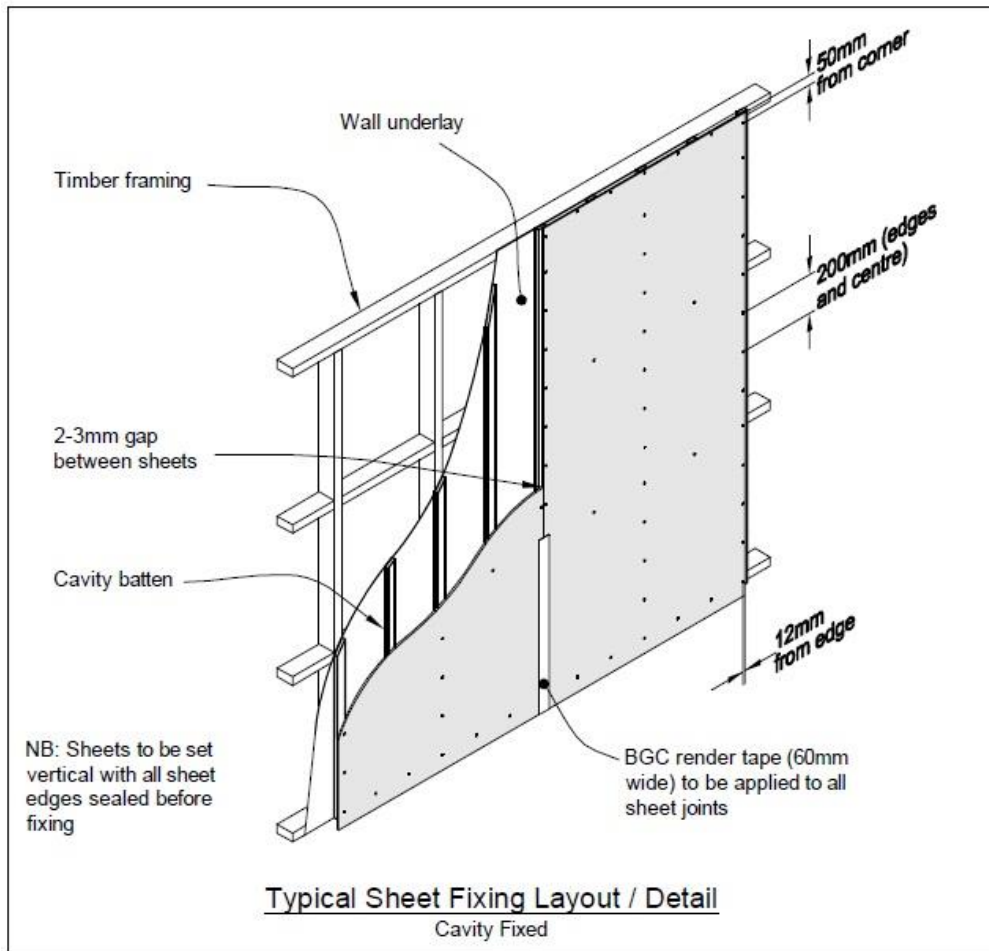
Warranty

BGC warrants Stonesheet™ to be free from defects caused by defective manufacture or materials for a period of 15 years from the date of purchase. Furthermore, BGC warrants its products to be resistant from rotting, fire and cracking so long as the installation is carried out in accordance with BGC literature available at the time of purchase.

This warranty is subject to conditions as set out in a separate document. For a copy of this information and/or a copy of the quality control measures, please contact BGC Fibre Cement (NZ).



Architectural Details



The above details are provided as a guide only - specific installation details should be obtained from your Stone Supplier.

Notes:

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: | |
| Duragrid™ Residential & Duragrid™ Light Commercial | A lightweight façade giving a modern and durable finish. |
| Duracom™ | A compressed fibre cement façade system. |
| Duragroove™ | A vertically grooved exterior façade panel. |
| Durascape™ | A lightweight exterior façade base sheet with a subtle vertical shadow line. |
| Nuline™ Plus | A traditional weatherboard style cladding system. |
| Stonesheet™ | A purpose designed substrate for stone tile facades. |
| Stratum™ | The Stratum™ series is trio of vibrant, contemporary style, shiplap weatherboard cladding systems. |
| Stratum™ Duo | |
| Stratum™ Contour | |
| EXTERIOR PRODUCTS AND APPLICATIONS | |
| BGC Fibre Cement Range of Products: | |
| Durasheet™ | Ideal for the cladding of gables and lining of eaves. |
| Duraplank™ | A weatherboard style cladding system, available in Smooth and Woodgrain finishes. |

| EXTERIOR PRODUCTS AND APPLICATIONS | |
|--|---|
| BGC Fibre Cement Range of Products (Continued): | |
| Compressed | Domestic or 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 eaves and soffits where it will be sheltered from direct weather. |
| Durafloor™ | Superb solution for interior wet areas such as bathrooms and laundries. |
| INTERIOR PRODUCTS AND APPLICATIONS | |
| BGC Fibre Cement Range of Products: | |
| Duralux™ Plus | A square edge interior lining board. This is a perfect substrate for tiles and is ideal for wet areas. |
| Duraliner™ Plus | A rebated interior lining board. This is a perfect substrate for tiles and is ideal for wet areas. |
| Ceramic Tile Floor Underlay | A substrate for ceramic and slate floor tiles. |
| Durafloor™ | An ideal solution for exterior balconies and verandas. |