STONESHEET™
STONE TILE SUBSTRATE

Applications

Stonesheet™ has been specifically designed for use as a substrate for both interior and exterior stone tile facades. Stonesheet™ is a perfect alternative for use where other non-specifically designed substrates have traditionally been used.

Stonesheet™ is manufactured in standard industry sized sheets and in a thickness of 9mm.

Advantages

/ Specifically designed to hold stone and tile facades
/ Highly durable
/ Can be used for interior and exterior applications

Weight Capacity

The installation guidelines in this brochure are detailed to a maximum stone tile weight of 40kg per m². Any stone tile facades above this weight should be certified by a structural engineer or refer to the stone tile facade manufacturer for further details.

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 thermal heat transfer needs to be addressed by the architects, engineers and building designers.

Product Information

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

Stonesheet™ fibre cement sheets are manufactured to conform to the requirements of AS2908.2 Cellulose-Cement Products and are classified as Type A Category 3 sheet for exterior use.

Fire Resistance

Stonesheet™ has been tested by the CSIRO – Building, Construction and Engineering Division, in accordance with Australian Standard AS1530.3 – 1989. See report numbers FNE 6966 and FNE 7529.

These reports deemed the following Early Fire Hazard Indices:

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

Quality Systems

BGC Fibre Cement manufactures Stonesheet™ under the rigorous Quality Management System of the International Standard ISO 9002:2000, and is the holder of Licence Agreement number QEC2955/13.

Sheet Sizes and Weight

THICKNESS mm	WEIGHT kg/m²	WIDTH mm	LENGTH mm
9	13	1200	3000

Sheet Tolerances

Stonesheet™ complies with the requirements of AS2908.2

Handling and Storage

Stonesheet™ must be stacked flat, up off the ground and supported on level bearers at 450mm centres.

Sheets must be kept dry. When stored outdoors, they must be protected from the weather. Sheets must be dry prior to fixing, jointing or finishing.

Care should be taken to avoid damage to the ends, edges and surfaces.

Sheets must be carried on edge.

Health and Safety

Stonesheet™ as manufactured 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, prolonged exposure (usually over several years) may cause bronchitis, silicosis or cancer.

Avoid Inhaling Dust

When cutting sheets, use the methods recommended in this literature to minimise dust generation. These precautions are not necessary when stacking, unloading or handling fibre cement products.

For further information or a Material Safety Data Sheet contact any BGC Sales Office or www.bgcinnovadesign.com.au

Freeze Thaw

Stonesheet™ should not be used in situations where it will be in direct contact with snow or ice for prolonged periods.

Cutting and Drilling

Stonesheet™ may be cut to size on site. If using power tools for cutting or drilling, they must be fitted with appropriate dust collection devices. 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.

/ 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.

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. (refer method above).

Fasteners

Lightweight Steel Framing
Stonesheet™ is fixed to lightweight steel framing using No.10 Self-Embedding Head Screws. Screws should be driven just flush with the sheet face. Do not overdrive screws.

No.10 x 30mm Countersunk Self Drilling Screw minimum class 3. BGC recommends to pre-drill & countersink the Stonesheet™ prior to fixing.

Timber Framing
Stonesheet™ is screw fixed to timber framing using a minimum Class 3, 10-12 x 40mm Countersunk Wood Screw suitable for timber.

BGC recommends to pre-drill & countersink the Stonesheet™ prior to fixing.

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

Sarking

In wall cladding applications, the installation of a vapour permeable sarking between Stonesheet™ and the framing is recommended.

Under windy conditions the building's interior pressure will generally be less than the exterior air pressure. This will tend to draw water through flashing and seals if sarking is not used.

Use of a reflective sarking will enhance the insulation properties of the cladding system.