



# Fibre Cement

## The fibre cement production process

Fibre cement is commonly used in the construction of houses and commercial buildings, for internal and external wall cladding, soffit lining and floor underlays.

Fibre cement is produced from four main raw ingredients – silica (sand), cement, cellulose paper and water. These materials are mixed together to create a slurry. This is then filtered and fed into a press roller where it produces a layer of fibre cement ranging from 4mm to 15mm in thickness. The cement-based product requires 24 hours to sit. It then enters an industrial-size pressure cooker known as an autoclave and steam is added to the autoclave until the right temperature is reached (180 degrees Celsius). It then “cooks” for eight hours.

At the end of “cooking”, steam is either transferred into another autoclave to release the pressure, or transferred to two tanks, where it is released through water, capturing much of the smell. The remainder of the steam is blown out of the top of the tanks. This is what is known as “blow down”. Blow downs occur several times a day for a duration of about one hour.

As a result of the mixture of materials, the “blow down” steam contains an odour which can be unpleasant to some people. Although not in any way harmful, it is easily detected in very weak concentrations by the human nose.

As part of its commitment to reduce odour emissions, BGC Fibre Cement has implemented changes to the processes on site, reducing the heating temperature of the autoclaves and installing a dilution fan to reduce odour concentration, thereby minimising potential emissions.