

Our Materials Outside

Our **low iron silica sands** are specially used to produce extra and ultra clear float glass to improve light transmittance and reduce the green tint inherent to standard glass.

Sibelco uses **secondary raw materials (sand and clay)** to form lightweight and fire-proof bricks that are used in the door that separates the cock-pit from the people in the cabin.

Sibelco **calibrated sands and gravels** are used in tertiary wastewater polishing to produce environmentally safe waste that is suitable for discharge as well as reuse.

Our **silica flour** optimises the melting rate of the glass batch to produce E-glass used in the windmill blades.

Silica sand is a key material of concrete, contributing to its mass, consistency and strength.

Our **high purity quartz (HPQ)** is used in the production of solar cells, and our low iron sands and dolomite are used to make the solar panel's glass cover. The low iron properties help to increase light transmission which maximises the level of electricity generation.

Mineral additives are used in agriculture and soil health, including magnesium, bentonite, calcium and other mineral mixes.

Chromite is the pigment of choice when producing green container glass.

Nepheline syenite is added to the wood coating of this bench to make it UV curable.

Sibelco minerals are added to animal feed help to ensure that livestock get the necessary nutrition for healthy growth.

Sibelco **calibrated sands** are used to retain suspended particles and generate clean swimming pool water.

The boarding of the swimming pool, which is made out of a plastic wood composite, is abrasion and weather resistant thanks to our **nepheline syenite**.

The paint used to mark roads and zebra crossings is wear resistant and retains brightness thanks to our **crystalobalite**.

Sibelco provides fillers including recycled materials to provide high quality road surfaces that are durable and safe.

The world's best pitches rely on carefully selected **sands** for their construction (e.g. rootzones) and maintenance (top dressing).

Equestrian terrains rely on our **silica sand** to create the perfect surface for the horse and rider to perform at their best.

Car coating contains **nepheline syenite and barytes** for abrasion and chemical resistance.

Our **silica flour** is also used in the car manufacturing industry to produce E-glass which goes into several body-parts of the car to improve strength and resistance to impact.

Our Materials in the Home

Sibelco low iron sands are specially used in solar applications when high light transmission is required.

Sibelco clay provides different colour options for roof tiles and engobes (roof bricks).

Regardless of whether the roof is bitumen, EPDM, PVC or polyolefin based, it's flame retardant thanks to our **Alumina Trihydrate** (commonly referred to as **ATH**) which is incorporated into the materials.

Silica, cristobalite, huntite, feldspar, nepheline syenite or wollastonite are likely present in house paint. These materials give paint a coarse texture, prevent cracks, make them more stain resistant or easier to clean, and provide better coverage, so only one layer needs to be applied.

Float glass producers rely on our **iron glass colorant** (Portafer) which is used in applications such as house windows.

Sibelco manganese dioxide is the pigment of choice to produce black perfume bottles.

Sibelco ball clay is used to create large (3.2m x 1.6m) tiles, as well as smaller tiles, making them wider, whiter and stronger. Our **kaolin** is used to make ultra white tiles and our Feldspar is used as part of the formulation, together with low iron, to produce whiter tiles.

Some electronic parts in a TV, laptop or printer, as well as many electricity cables in a house, are likely flame retarded thanks to our **ATH** (Portflame).

Sibelco ball clay, is best for slip casting, which is used to make ceramic toilets, sinks and pedestals. Cornwood **kaolin** is also used as part of the recipe, (typically 25% ball clay, 25% kaolin)

Sibelco feldspar is an excellent alumina bearer used in a variety of lighting. The low iron content delivers high brightness and the right granulometry reduces energy consumption.

Sibelco cristobalite provides superior polish ability, mechanical strength and whiteness to bathroom counters.

Sibelco glass grade dolomite is used in shower glass. Some of its benefits include controlled and low decrepitation levels, as well as low iron content, which is ideal for producing extra clear glass.

'Silent' drainage pipes are made of polymers filled with **Sibelco barytes**. This means the downstairs neighbour doesn't hear the toilet flush from upstairs!

Spherical alumina is a thermal conductive filler for Thermal Interface Materials (TIM) which releases heat in consumer electronic items such as smartphones, tablets and laptops. **Spherical silica** improves the speed and functionality of these applications.

Sibelco's silica sand is supplied to display glass manufacturers to meet the complex needs in this market. These needs include increased size and strength, decreased weight, and a higher transmittance level.

The carpet or laminate flooring in a living room might be flame retardant thanks to the **ATH** added.

Sibelco produces **cristobalite** which is used in the manufacturing of engineered stone for quartz kitchen countertops, giving them superior whiteness and strength.

Sibelco cullet is used to significantly reduce the environmental footprint of making bottles. Chromite is the pigment of choice when producing green container glass.

Our **nepheline syenite** is a high alumina containing, alkali-rich alumina silicate. These materials provide excellent glass batch melting properties and increased control of viscosity for applications like glassware and tableware.

Sibelco calibrated sands and gravels are KIWA and ACS certified and used for water filtration to allow for high quality water suitable for human consumption

Our **petalite** is used in stove tops and is most valuable for its shock and heat resistance.

Facing brick colours are formed from **Sibelco oxides** (Manganese, Iron Oxides). Our **clays** provide the red colours for brick manufacturers.

This household can sleep peacefully at night knowing the plastic electrical switchboard cabinet is flame retarded thanks to **Sibelco ATH** that is added to the polymers.

Our **low iron dolomite** makes the car windscreen stronger and lighter