Raw material feed: Silica sand, soda ash, dolomite, limestone, sodium sulphate and cullet are mixed together to form the raw material batch.

Float bath: A continuous ribbon of molten glass floats along the surface of molten tin. All irregularities are melted out of the ribbon, to give the glass a flat, parallel surface.

On-line cutting: The ribbon moves to the ‘cold end’ of the line where it is washed and automatically cut, as it travels along the rollers.

Annealing lehr: The glass is annealed and gradually cooled to around 200°C, to relieve stresses in the glass and prevent splitting and breaking in the cutting phase.

Stacking and offloading: Automatic stackers offload the glass sheets. The glass is then warehoused for distribution.

Furnace: The batch is fed into the furnace and melted at a temperature of around 1500°C.

Distribution: The glass is distributed throughout South Africa and exported into regional and overseas markets. PFG’s distribution hubs are in Springs, Durban and Cape Town.

Chemical Composition of Glass:

- Silica: 72%
- Iron oxide: 0.75%
- Alumina: 0.75%
- Magnesium oxide: 2.5%
- Sodium oxide: 14.5%
- Potassium oxide: 0.5%
- Sulphur trioxide: 0.25%
- Calcium oxide: 7.5%
- Other: 8%