

## TITLE

SGG PLANIDUR

## SUBTITLE

Heat- strengthened glass

## DESCRIPTION

SGG PLANIDUR is a glass which has undergone a special heat treatment process. This treatment provides a significantly increased resistance to mechanical and thermal stresses than conventional annealed glass. When broken, it shatters into large fragments. This glass is also referred to as heat- strengthened glass.

## RANGE

**Base products (substrates)** : Identical to those used for SGG SECURIT. For applications using POINT, SGG PLANIDUR can be combined with SGG SECURIPPOINT glazing in a laminated unit.

**Thicknesses**: except for restrictions specific to certain products, SGG PLANIDUR is available in the following thicknesses: 4 - 5 - 6 - 8 and 10 mm.

**Maximum sizes**: identical to those for SGG SECURIT.

## PERFORMANCE

**Tensile strength**: SGG PLANIDUR has a flexural strength of at least 70 MPa (BS EN 1863). This strength lies between that for annealed glass and that for SGG SECURIT toughened glass.

**Resistance to thermal stress**: SGG PLANIDUR resists extreme variations in temperature as well as temperature differences within the glass of up to approximately 100°C.

**Full spectrophotometric and thermal performance**: these are the same as those for SGG SECURIT.

## PROCESSING CAPABILITIES

See SGG SECURIT

## STANDARDS AND REGULATION

SGG PLANIDUR glass meets the requirements of standard BS EN 1863. Each piece of glass is permanently marked with the name SGG PLANIDUR, the processor's name and the reference BS EN 1863. The marking certifies the origin of the product and that it conforms to standard BS EN 1863 and to the specifications for manufacturing. SGG PLANIDUR glass carries the relevant CE mark as required.

## PRODUCT APPLICATION

**Guarding**: SGG PLANIDUR laminated glass with SGG SECURIT improves stability in the event of breakage, when installed appropriately.

**Spandrel areas**: the glazed opaque spandrel areas of façades are strengthened (or toughened) to prevent any risk of breakage due to thermal stresses.

**Exterior bolted glass assemblies (VEA)**: SGG PLANIDUR is used in façade systems such as SGG POINT for laminated configurations with SGG SECURIPPOINT- S.

## ADVANTAGE

• **Mechanical strength**: the tensile strength of SGG PLANIDUR is greater than that of conventional annealed glass. It is however less than that of SGG SECURIT.

• **Fragmentation** : in the event of breakage, SGG PLANIDUR glass fragments into large pieces. With this property, combined with the mechanical characteristics of SGG PLANIDUR, it improves stability in certain installations (e.g. spandrel panels) and assemblies (e.g. laminated units with toughened glass) in the event of breakage and thus contributes to safety.

• **Low risk of breakage due to thermal stresses**: the manufacturing process of SGG PLANIDUR increases its resistance to thermal stress so it is greater than that of conventional annealed glass.

• **Less sensitive to spontaneous fracture due to inclusion of NiS**: SGG PLANIDUR is less sensitive than SGG SECURIT to the risk of spontaneous fracture due to the critical inclusion of Nickel Sulphide (NiS). Heat- Soak testing is not necessary for SGG PLANIDUR.

## GUIDELINE

SGG PLANIDUR glass must always be installed in accordance with current national standards and regulations.