

TD Elektronik A.Ş., which has been supplying components and semi-finished products to the LED lighting sector for more than 10 years, is now at your service with **SCLERA** brand to meet your high-quality luminaire glass needs!

With technical team and strong partners who are experienced in Cutting, Grinding, Hole, Serigraphy and Temper processes, we are reducing your burden on glass supply!

CUTTING

Cutting process, which is the primary process of glass operation process, is made in order to obtain the products in desired sizes and shapes.

Glass with thicknesses of 3 mm to 19 mm can be cut flat or shaped forms without touching hands.

GRINDING

The glasses cut to the desired dimensions are subjected to the edge processing process in order to increase safety and to provide a visual richness. Optionally, grooving and radius of the corners can be made during the grinding process.

After the grinding process, the glasses are washed and dried in the washing machines with a belt system. Once this is complete, each of the glasses are checked to see if the desired result is achieved and transferred to the next operation.

HOLE

After the grinding process, hole drilling is performed upon request.

At this stage, the glasses are drilled to the required diameter with drill bits or with or without countersink. After then, the glasses which are taken to the washing and drying stage are checked and prepared for transfer to the next process.

SERIGRAPHY

At this stage, optional logo and/or pattern printing is done by the color code determined by the customer. The sandy/frosted glass effect is not by acid impregnation; It is applied by silk printing technique.

The maximum screen printing surface is 1200mm * 2000mm.

TEMPER

Tempering process; It is the process of heating the glass to the melting point (650-730°C) and cooling it rapidly with high pressure in order to make the glass resistant to heat and shock.

Tempered glass is 4 to 5 times more resistant than untreated normal glasses, and it is much less risky for injuries as it breaks into very small and less sharp parts when broken.

CAM MATERIAL SELECTION

1. Clear Float Glass:

It is transparent and colourless when viewed from the top surface. However, the green colour appears when viewed from the edge surface. This green toning is due to the presence of naturally occurring iron oxide in the raw materials used to produce the glass. The thicker the glass, the more pronounced the green tone becomes.

2. Low Iron Glass:

Low iron glass is ultra clear and a transparent surface appears in place of green tone when looking at the edge surface. It provides a higher degree of transparency compared to the clear float glass. This optimum clarity is achieved by removing most of the iron oxide content used to produce the glass.

Low Iron Glass gives a higher permeability value than Clear Float Glass. The average Light Transmission percentages are given in the table below.

Glass Thickness	Light Transmission %	
	Clear Float Glass	Low Iron Glass
3mm	89	91.7
4mm	89	91.6
5mm	88	91.5
6mm	87	91.4
8mm	86	91.2
10mm	85	90.0
12mm	84	90.0
15mm	82	90.3