FLOAT GLASS

When we say "float glass", we actually mean ordinary flat, usually completely transparent glass. This type of glass is named after the so-called Float process: liquid glass spills and floats (float = float) on molten tin and, like any liquid, spills and becomes ideally flat, producing a continuous strip of high quality glass. Such glass is the most widespread today and is increasingly used in architecture, whether it is interiors or exteriors or facades, canopies, windows, doors or partition walls, fences and the like.

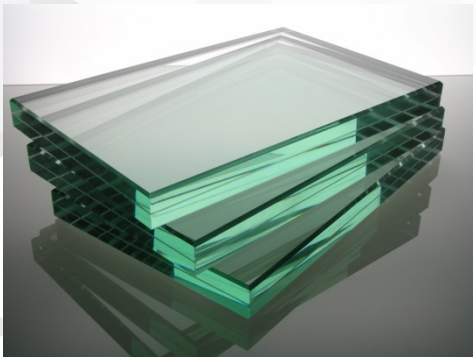
INSULATED GLASS

izo 1Single glass used to be installed in windows and doors. Today, all windows and doors (except room) are made of insulating glass. This glass is composed of two or more glass surfaces, which are separated from each other by one or more hermetically sealed interspaces. The gap between the glass surfaces can be filled with air or some of the inert gases if we want to achieve better thermal insulation.

One of the most important factors in the manufacture and installation of carpentry should be glass. Namely, it makes up 70% of the surface of the opening and this is exactly the area where the greatest energy losses occur.

The most significant improvement in terms of reducing heat emissions is obtained by using low-emission glasses - LOW-E in the composition of insulated glass. Low-emission glass is characterized by a particularly selective layer of oxide molecules placed on the glass surface that reflects only thermal radiation. Less heat is lost through low-emission glass because energy is returned to the space from which it originates.

By combining low-emission (LOW-E) glasses and using inert gases in the iso-glass composition, we get top performance. Such glass not only reduces heating costs but is also indirectly involved in protecting the environment by reducing the total amount of energy required and thus reducing the emission of harmful gases into the atmosphere



SAFETY GLASS

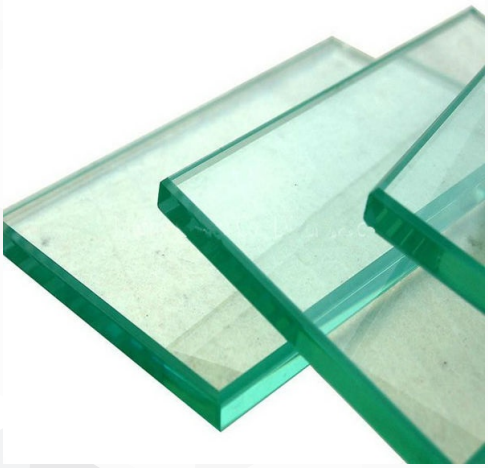
Safety glass can be tempered glass and laminated glass, lamistal. It is called safety glass because when broken it does not create sharp edges that could be injured, but is scattered into many small pieces that are not dangerous if not high height (tempered glass), or when broken pieces remain attached to the central foil (lamistal glass).).

Laminated glass (lamistal)

Safety laminated glass (VSG) is an excellent choice for safety glazing. This glass is composed of two or more plates of glass interconnected by one or more PVB (polyvinylbutyral) films of high tear strength. This foil can be colorless or colored, with improved sound protection and has a high degree of UV protection.

Compared to safety tempered glass, safety laminated glass does not break into small parts in the event of breakage, which allows for further protection after breakage.

This glass is used for glass positions with large spans, and for glazing windows and doors of rooms where there is a danger of breaking with sharp objects, burglary and firearms.



TEMPERED GLASS

Tempered Safety tempered glass is obtained by heating the glass up to the plastic limit to approximately 600˚C, after which it is rapidly cooled by air. This process gives the glass high mechanical and thermal resistance. When broken, it disintegrates into small grains with blunt edges and thus protects against injuries. Glass treated in this way can no longer be modified (eg drilled, ground or cut).

The application of this glass is in the glazing of external and internal walls of buildings (facades), protective fences, doors, terraces, balconies, conservatories, telephone booths, showers, ships as well as in the manufacture of insulating glass.

In addition to safety tempered glass, there is also safety, but partially tempered glass (TVG), which according to mechanical and thermal properties is between float and safety-tempered glass. Also, with this safety glass, in case of breakage, a net is created, but larger pieces of glass with rounded edges, so it cannot be further processed.

Safety partially tempered glass is used in ceiling glazing, glazing of glass facades, and in cases of large thermal and mechanical changes where safety is not required.

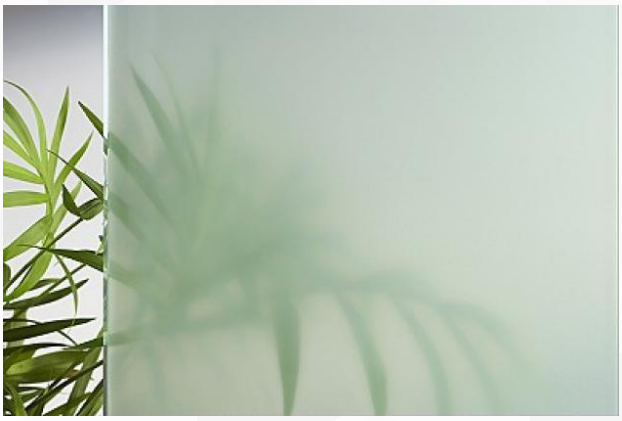
STOPSOL - TRANSPARENT REFLECTIVE GLASS

This type of glass reflects up to 75% of solar radiation (infrared), without significantly reducing the passage of light. Stopsol is a metallic glass that has a metallizing coating on it and uses it to distribute solar energy in three ways: one part reflects, the other part absorbs, and the third part passes through the glass.

This glass has been meeting the highest requirements for thermal insulation, transparency and homogeneity for many years. They are available in several colors, due to the low solar coefficient they provide a fresh and comfortable interior where the need for air conditioners is reduced, it is resistant to pollution and due to the mirror effect it provides an additional feeling of privacy. Reflective glass is most often used in the manufacture of glass facades.

PARSOL (ABSORPTION) GLASS

Parsol is colored glass in the mass through which it is seen as well as through transparent float glass. It is produced in various thicknesses and colors: blue, bronze, green, grayish…. The characteristic of these glasses is that their appearance and color are the same on both sides. Parsol glass perfectly absorbs light and heat energy and thus creates a very pleasant ambience and a special atmosphere of the room. It is most often used in the furniture industry and interior decoration, but they are also used in exterior glazing in combination with other glass.



SANDBLASTED GLASS

The sandblasted glass is milky white and transmits light. Any float glass can be sandblasted. By sandblasting, the desired motif can be drawn, which remains permanently closed in the interspace of the insulating glass. Sandblasting of glass is a type of processing where the application of appropriate sand makes physical changes to the surface of the glass after which the glass acquires a milky white color and becomes opaque.

This type of glass transmits light in a certain percentage but it is impossible to see through it. It gives the glass a decorative look, so these are the features that make this glass very popular in the furniture industry and in interior decoration.