70.07 - Safety glass, consisting of toughened (tempered) or laminated glass.

- Toughened (tempered) safety glass :

7007.11 - - Of size and shape suitable for incorporation in vehicles, aircraft, spacecraft or vessels

7007.19 - - Other

- Laminated safety glass :

7007.21 - - Of size and shape suitable for incorporation in vehicles, aircraft, spacecraft or vessels

7007.29 - - Other

The term " safety glass " covers **only** the types of glass described below and does **not** refer to protective glass such as ordinary wired glass and selective absorption glasses (e.g., anti-glare glass, X-ray protective glass).

(A) **Toughened (tempered) glass**.

This is :

(1) Glass obtained by reheating pieces of glass until they are soft but not soft enough to lose their shape. The glass is then cooled rapidly by appropriate processes (thermal-toughened glass).

(2) Glass whose strength, durability and flexibility have been substantially increased by a complex physical-chemical treatment (e.g., ion-exchange) which may include a modification of the surface structure (commonly known as " chemically toughened glass ").

This glass cannot be worked after manufacture because of the internal stresses set up by the processing and is therefore always produced in the shapes and sizes required before tempering.

(B) **Laminated glass**.

Safety glass of this type, commonly known as laminated glass, sandwich glass, etc., is made in sandwich form, with one or more interlayers of plastics between two or more sheets of glass. The plastics core usually consists of sheets of cellulose acetate, vinyl or acrylic products. Complete adhesion is obtained by applying considerable heat and pressure, sometimes after spraying the inside surfaces of the glass sheets with a special type of adhesive. Another method is to produce a plastics film directly on the glass sheets; the glass sheets are then sealed together by applying heat and pressure.

A characteristic of toughened safety glass is that under the effect of shock it breaks into small pieces without sharp edges or even disintegrates, thus reducing the danger of injury from flying fragments. Laminated safety glass normally cracks without shattering, but, should the impact be great enough to fracture it, any flying pieces would not usually be sufficiently large to cause severe cuts. For special purposes, wire mesh may be incorporated in the laminated glass, or the plastics interlayers may be coloured.

Because of these qualities these types of glass are used in motor car windscreens and windows, in doors, in ships' portholes, in protective goggles for industrial workers or drivers, and for eyepieces for gas masks or divers' helmets. Bullet proof glass is a special type of laminated glass.

This heading makes no distinction between unshaped and shaped (e.g., bent or curved) glass.

However, curved safety glass having the character of clock or watch glasses or of a kind used for sun-glasses is classified in **heading 70.15**. Safety glass incorporated in other articles and thus in the form of parts of machines, appliances or vehicles is classified with those machines, appliances or vehicles; similarly goggles containing lenses of safety glass fall in **heading 90.04**.

Multiple-walled insulating glass, for example, that composed of a sandwich of two sheets of glass with an interlayer of glass fibre, falls in **heading 70.08**.

Articles of toughened (tempered) glass and glass-ceramics, other than those of a kind used for the purposes mentioned above, are classified according to their individual character (e.g., toughened tumblers, borosilicate baking dishes and glass-ceramic plates in **heading 70.13**).

Plastics used as a substitute for safety glass are classified according to the constituent material (**Chapter 39**).