SILICONE PRESS PAD · WOOD DOOR LAMINATING · 3.0 MM GAUGE

High Tear-Resistant Silicone Sheet for Wood Door Laminating

A translucent silicone pad that sits between the press membrane and the door skin. It has to stay soft enough to follow a profile and tough enough to survive the sharp edges of a finished door, cycle after cycle.

1. What this sheet is

A translucent grey silicone sheet, 3.0 mm nominal, with both faces smooth. It is used as the press pad in door skin lamination: it spreads the membrane pressure evenly over the skin, keeps the decorative face from being marked, and carries the heat of the press cycle without sticking.

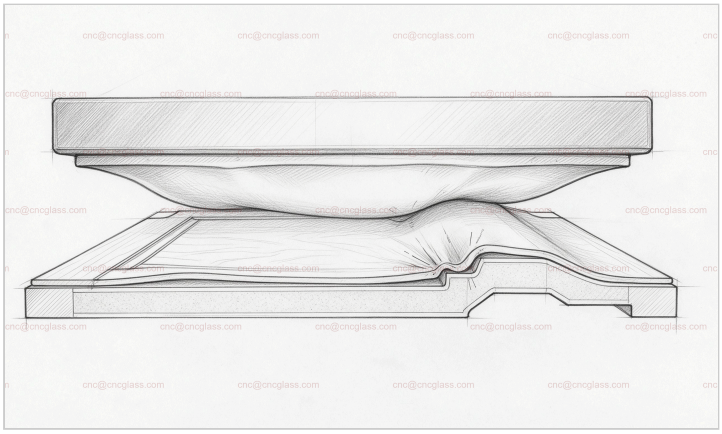
The grade is specified around tear resistance rather than maximum hardness. A door with sharp edges, cut-outs and deep relief punishes a pad at the tear line long before the face shows any sign of ageing, so the tear figure and the elongation behind it are the numbers that decide service life.

2. Declared technical data

TABLE 1 · PROPERTIES OF THE SHEET AS DECLARED

PROPERTY	VALUE	CONDITION / UNIT
Appearance	Translucent grey, both faces smooth	Visual
Thickness	3.0 ±0.3	mm
Hardness	40 ±3	Shore A
Tensile strength	≥ 8.5	MPa
Elongation at break	≥ 800	%
Tear strength	≥ 40	N/mm
Heat resistance	220 × 72	°C × h

Values are those declared for the grade; the tolerances on thickness and hardness are the ones a buyer should hold a supplier to, because both of them change how the pad reads through the press.



Press stack. Membrane over the silicone pad, pad over the veneer skin and the moulded door edge. The pad is stretched over the step in the profile; the tear starts at that corner, not in the flat.

3. Heat ageing after 72 hours at 220 °C

The sheet is held at 220 °C for 72 h, well above the temperature of a normal door press cycle, and the change in mechanical properties is measured afterwards. Retention is expressed against the unaged sheet.

TABLE 2 · PROPERTY CHANGE AFTER HEAT AGEING

PROPERTY	PERMITTED CHANGE	RETENTION
Tensile strength	≤ 15 %	≥ 85 % of original
Elongation at break	≤ 15 %	≥ 85 % of original

How to read the ageing figures. They are an accelerated check, not a cycle count. A pad that keeps 85 % of its tensile strength and elongation after three days at 220 °C has margin for a long run at press temperature, but the number does not predict how many doors a pad will press before the edge tears.

4. What each figure is for

- **Hardness 40 Shore A.** Soft enough to follow mouldings, veneer relief and slightly uneven skins, so the membrane pressure reaches the low spots instead of bridging over them.
- **Tear strength ≥ 40 N/mm.** The working number. It sets how much a sharp edge or a cut-out can bite before the pad starts to split, and it is the first property to fail in service.
- **Elongation ≥ 800 %.** The reserve behind the tear figure: the pad stretches over deep relief instead of cracking at the rim of it.
- **Thickness 3.0 ±0.3 mm.** Thick enough to absorb small height differences between skins; the tolerance matters because a pad that runs thin at one corner prints that corner.
- **Translucent grey.** Lets an operator see bubbles, trapped air and debris under the pad without lifting it away from the skin.

5. Scope of this note

These are declared properties of the sheet, not a performance guarantee for a particular press, membrane or door construction. Pad life depends on edge condition, press temperature, cycle time and how the pad is handled between cycles; a trial on your own press is the only way to fix a replacement interval.

STATUS OF THIS DOCUMENT

This document is a CNCGLASS technical note. It records declared properties of a high tear-resistant silicone sheet used as a press pad in door laminating; it is not a product warranty, and results depend on the press, the membrane and the door build-up.

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