



THERMTEK FL V2 ENTRANCE DOORS

THE REVOLUTIONARY ALUMINIUM DOOR FOR ANY HOME

WHAT IS PULTRUSION, THE NEW MATERIAL USED IN FL V2 DOORS?

Pultrusion is an advanced composite material created by continuously extruding a combination of high-performance polymers and glass fibres. This innovative material offers remarkable strength and thermal efficiency, making it the ideal choice for the V2 Thermtek FL doors.



The process of making pultrusion involves pulling these fibres through a special resin, then curing them in a mold to form a solid, continuous piece. The result is a material that has the best of both worlds: the strength and resistance of glass, combined with the flexibility and insulating power of polymers.

In our V2 Thermtek Doors, pultrusion provides a powerful solution to both structural integrity and energy performance. Unlike traditional thermal breaks, the pultrusion's glass fibre reinforcement allows for a significantly wider thermal break, reducing heat transfer and enhancing the door's overall energy efficiency. This results in superior insulation, helping to maintain a stable indoor temperature and reduce energy consumption.

What sets the pultrusion apart is its ability to be formed as a profile, which plays a crucial role in our **advanced anti-bowing technology**. The pultrusion is designed to integrate seamlessly with the door's aluminium cappings, allowing them to slide independently. This sliding feature is essential for preventing the door from bowing when exposed to heat fluctuations, a common issue in traditional doors. As temperatures rise, the aluminium cappings naturally expand or contract, but the pultrusion profile remains rigid, keeping the door's shape intact and maintaining its aesthetic and functional integrity. This combination of thermal efficiency, structural strength, and anti-bowing capability makes the V2 Thermtek FL door an innovative solution for both residential and commercial applications, where durability and performance are non-negotiable.

Confidence in Hinge Installation with Pultrusion

Parkwood has engineered the V2 Thermttek FL doors with pultrusion in mind to ensure that there's no compromise in performance—especially when it comes to hinge installation. Our testing has proven that by using smaller screw holes in the pultrusion profile, hinges are secured with confidence.

DRILL BIT SIZES FOR HINGE SCREWS

SCREW	ALUMINIUM	PULTRUSION
8 GAUGE	3.5	2.0
10 GAUGE	4.0	2.5

Important Note for Installing Screws in Pultrusion

When you're installing hinges or other fittings, the screw hole size for pultrusion is different from what you might be used to with aluminium. Pultrusion is a composite material, and it requires a **smaller screw hole** to ensure the screws hold securely.

This adjustment is important because pultrusion has different properties than aluminium. If you use the same screw hole size as you would with aluminium, the screws won't hold as tightly in the pultrusion.

Additionally, where possible, make sure to set the impact driver torque settings as low as possible. Using a **lower torque setting** will prevent over-tightening and ensure the screws don't damage the pultrusion, allowing for a secure fit without compromising the material.



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