

What is it made from?

PVC is a man-made product created by carefully mixing resins, stabilizers, fortifiers, pigments, impact modifiers and ultraviolet inhibitors in an extrusion process. A blowing agent is added to the virgin PVC, along with some reclaimed PVC, to create PVC foam. Cellular PVC foam is a thermoplastic material, which means there is a definite melting range normally associated with the base resin in the matrix.

How is it made?

PVC foam is made by adding a blowing agent to the Polyvinyl Chloride to create a closed cell structure. The combining process differences are what make the PVC competitive materials differ. Unlike other extruders, Fypon blends their own formulation of resin, stabilizers, impact modifiers, and ultraviolet radiation inhibitors. This ensures Fypon has the highest quality of PVC foam.

What are its best uses for the building industry?

It's the perfect material for exterior or interior trim. PVC is a lightweight material that is easy to work with. Its closed cell structure prohibits water absorption. This prevents the material from splitting, flaking, chipping, or bloating. PVC's even consistency and quality piece to piece make it easy to work with and allow screws to be driven extremely close to the edge without splitting. These same quality allow the product to be used on the building grade or directly in contact with masonry.

Free foam PVC has a solid, consistent structure throughout the piece. This characteristic makes it perfect for fabrication and field cuts. Sealing the cut edge is not necessary to protect the product. In addition, this process also prohibits mushrooming of the product when secured with screws, unlike the celuka process. The free foam process also cuts smooth where the celuka PVC can chip when cut.

Unlike wood, when glued with PVC cement, the seal is chemical and causes the bond to be on a molecular level to literally create one piece.

How does it compare to urethane?

PVC and urethane compliment each other and can be easily used together. They both have similar performance benefits in that they won't split, chip, or flake. They both have consistent quality from piece to piece and use standard woodworking tools for installation.

Urethane, due to the moulding process is better suited for detailed, decorative trim and for complicated shapes. PVC is suited for straight lengths of trim, milling, and using close to the building grade.

Both materials can be painted. Due to PVC being a thermoplastic polymer, it must be painted with a paint that has a Light Reflectance Value (LVR) of 55% or higher, otherwise the material will warp due to the heat gain caused by the dark paint. There is a special formulated paint system that will allow dark paint colors to be applied to PVC with low heat absorption. Contact www.aquasurtech.com for more information.

How does it compare to Polypropylene?

Free foam PVC has an authentic wood appearance that is available in both smooth and wood grain. Applying a coat of paint adds brushstrokes that give the trim an authentic wood appearance. Polypropylene has a finish that gives it a slight shine. Polypropylene needs to be specially prepared to accept paint. Often the trim piece needs to be order for this specific purpose. In moulded polypropylene

Cellular PVC Trim

millwork, the piece can not be field trimmed or fabricated. It doesn't offer the flexibility of PVC.

How does it compare to composite trim and condensed fiber trim?

Both material types have similar expansion and contraction considerations and both may be painted. However, composite and condensed fiber trim manufacturers recommend only butt joints. This prevents the concealing of gaps to accommodate material expansion.

Composite and Condensed Fiber Trim will lose their water resistance when trimmed in the field and the product will swell or bloat, even if installed correctly. Any routed details must be primed and painted.

Even though the cost may be less for composite trims, the performance is less than desirable and can cost more in the long run.