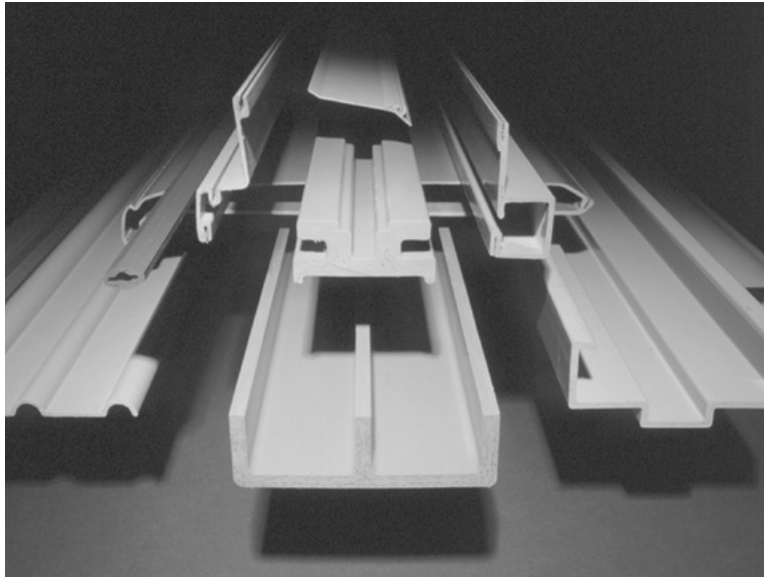


SECTION 18

CUSTOM PULTRUSIONS



Look for this blue line in the left margin of the Design Manual documents. This line shows you where the latest update has been made.

CUSTOM PULTRUSIONS

WHAT IS A CUSTOM PULTRUSION?

While this manual is for designing with **EXTREN**[®] standard structurals and other Strongwell branded products, it is important for the designer to be aware that virtually an infinite number of custom pultrusion possibilities exist. Pultrusions can be customized in one or more of the following ways:

Shape: Virtually any constant cross-section part can be pultruded. Strongwell produces custom shape dies in-house.

Resin Matrix: Standard resin systems can be modified or special resins used to address special needs such as elevated temperatures or special environments. Typical resins include polyesters, vinyl esters, epoxies, phenolics, polyurethanes, acrylics, and hybrids.

Reinforcements: The type, form, placement and quantity of reinforcements can be customized to maximize economy, oriented-strength, and/or other physical characteristics. The reinforcement type is either high modulus glass, carbon, or aramid fibers. The reinforcement form of any of these fibers can be rovings (multifilament strands), mat (long fibers held together in a mat form with a resinous binder), woven fabrics, or non-woven fabrics.

Composite Design: An **EXTREN**[®] shape could be made into a non-**EXTREN**[®] custom pultrusion by customizing the resin or reinforcement to achieve a particular customer need. A standard shape could be given custom physical properties, for example, by changing the amount, placement, or type or form of reinforcements.

Strongwell manufactures hundreds of different custom pultrusions for industries ranging from aeronautical and automotive to agriculture and sporting goods. Contact Strongwell for any custom pultrusion needs or questions.