

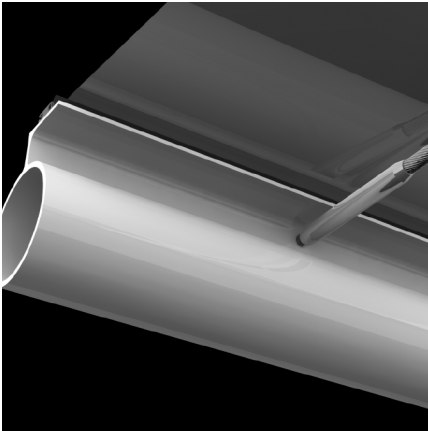
SSM-System

Stressed Skin Membrane

Membrane System

NOVUM





System Components

01. Single skin ETFE (ethylene tetrafluoroethylene) welded membrane
02. Fully integrated anodized aluminum perimeter clamping system
03. Stainless steel or galvanized cables
04. Integrated support structure as required

Applications

01. Ideal for rain shelters, canopies, ceilings, facades, stadium roofs, glass skylight replacements and areas requiring lightweight transparent covering, nominal thermal performance and minimal maintenance
02. Designs feature cable tensioning in one direction and require adequate pitch
03. Freeform surfaces and nonplanar trapezoidal panels
04. For designs requiring large lightweight panel areas
05. Small panels tensioned in individual frames without cables are possible
06. Explosion and bomb blast applications

System Attributes

01. The ETFE material provides many aesthetic and functional benefits
02. No mechanical elements or power requirements and low maintenance costs
03. Typical system self weight of under 0.4 psf (2 kg/m²)
04. ETFE material is resistant to UV, many chemicals and aggressive climates
05. The membrane thickness can be structurally optimized
06. Clear ETFE transmits over 90% of visible light and large portions of the UV range, making it ideal for growing plants and indoor sun tanning
07. Enhanced shading coefficients can be provided by screen printing
08. Special lighting effects can be achieved with screen print
09. Long life, low maintenance and very low surface dirt adhesion properties and readily cleanable with water
10. The ETFE and aluminum components are environmentally friendly, recyclable and easily dismantlable
11. ETFE can cut or punctured, but does not tear. Discreet site patching is possible
12. In fires and bomb blasts, the material breaks without shattering and the panels open up without debris
13. Fire rating BS476 6&7 class 0, UL 94 V-0 and EN13501 Bs1d0, EN 13 823, ASTM E84 Index 5, ASTM E662, NFPA 701 Test Method 1&2
14. Project specific calculations and form finding by Novum's in-house engineers according to structural and architectural requirements

Options/Materials/Finishes

01. PVC and PTFE options are available and combine with different Novum substructures and clamping systems
02. ETFE raw material can be pigmented before extruding in multiple colors and opacities
03. Clear anodized aluminum is standard or can be coated as required
04. Bird deterrent systems can be offered as required
05. Mid and long term Maintenance Agreements