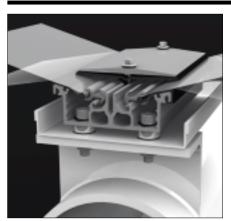
AFP-System

Air Filled Pillow

Membrane System







System Components

- 01. ETFE welded seam pillows with individual air valves
- 02. Fully integrated aluminum perimeter clamping and water channeling system
- 03. UPVC air feed system with PVC flexible pipe at the pillow as standard
- 04. Waterproof and acoustic baffled air pump housing containing 2 air blowers and a dehumidifier

Applications

- 01. For designs requiring large panel areas with width spans up to 13' (4m) wide and extremely impressive lengths
- 02. Free form surfaces and none planar trapezoidal panels
- 03. Ideal for sports arenas, swimming facilities, canopies, atria, and areas requiring diffused lighting
- 04. Explosion, bomb blast effective applications requiring translucency

System Attributes

- 01. The ETFE material (ethylene tetra fluoro ethylene) provides multiple aesthetic and functional benefits
- 02. Ultimate light weight cladding with a typical pillow self weight of under 0.2 psf (1 kg/m2)
- 03. ETFE material is resistant to most chemicals, climates, and is UV resistant
- 04. The membrane thickness can be structurally optimized
- 05. Insulation. Double Layer Pillows U=3.2, Triple Layer Pillows U=2.0 W/m²K
- 06. ETFE transmits over 90% of visible light, yet blocks harmful UV making it ideal for growing plants and even indoor sun tanning
- 07. Enhanced shading coefficients can be provided by screen printing
- 08. Special lighting effects are achieved with custom frit and back lighting
- 09. A long life, low maintenance, "self cleaning" pillow surface due to its extreme smoothness
- 10. The ETFE and aluminum components are environmentally friendly, recyclable, and easily disassembled
- 11. ETFE can be cut or punctured, but does not tear. Discreet patching is possible
- 12. Dual chamber pumps provide back-up system for safe operation and cycle alternately to control pressure
- 13. In fires and bomb blasts the material evaporates, no debris or molten material
- 14. Fire rating BS476 6&7 class 0, UL 94 V-0 and Euro Class Bs1d0 $\,$

Options/Materials/Finishes

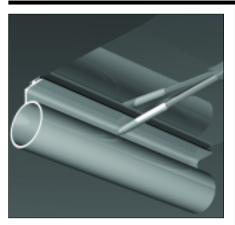
- 01. Membrane printing is available in standard colors and patterns, dots, reverse dots, rain effect, or can be customized for full screen or logo requirements
- 02. Clear anodized aluminum is standard or can be coated as required
- 03. Bird deterrent systems and operable vents can be offered as required
- 04. Air feeds can be galvanized steel and custom color coated

SSM-System

Stressed Skin Membrane

Membrane System









System Components

- 01. Single skin ETFE welded membrane
- 02. Fully integrated aluminum perimeter clamping and water sealant system
- 03. Stainless steel or galvanized cables

Applications

- 01. For designs requiring large panel areas with spans of up to 65' (20m) and equally impressive widths
- 02. Free form surfaces and none planar trapezoidal panels with adequate pitch
- 03. Ideal for canopies, stadium roofs, and areas requiring light weight transparent covering with minimal maintenance
- 04. Explosion, bomb blast applications requiring translucency

System Attributes

- 01. The ETFE material (ethylene tetra fluoro ethylene) provides multiple aesthetic and functional benefits
- 02. No mechanical elements or power requirements and low maintenance costs
- 03. Ultimate light weight roofing element with a typical system self weight of under 0.2 psf (1 kg/m2)
- 04. ETFE material is resistant to most chemicals, climates, and is UV resistant
- 05. The membrane thickness can be structurally optimized
- 06. ETFE transmits over 90% of visible light, yet blocks harmful UV making it ideal for growing plants and even indoor sun tanning
- 07. Enhanced shading coefficients can be provided by screen printing
- 08. Special lighting effects are achieved with custom frit and back lighting
- 09. A long life, low maintenance, "self cleaning" surface due to its extreme smoothness
- 10. The ETFE and aluminum components are environmentally friendly, recyclable, and easily dismountable
- 11. ETFE can be cut or punctured, but does not tear. Discreet patching is possible
- In fires and bomb blasts the material evaporates leaving no debris or molten material
- 13. Fire rating BS476 6&7 class 0, UL 94 V-0 and Euro Class Bs1d0

Options/Materials/Finishes

- 01. Membrane printing is available in standard colors and patterns, dots, reverse dots, rain effect, or can be customized for full screen or logo requirements
- 02. Clear anodized aluminum is standard or can be coated as required
- 03. Bird deterrent systems can be offered as required

Front: The Eden Project, Biomelink Canopy Architect: Grimshaw Architects