

AFP-System

Air Filled Pillow

Membrane System

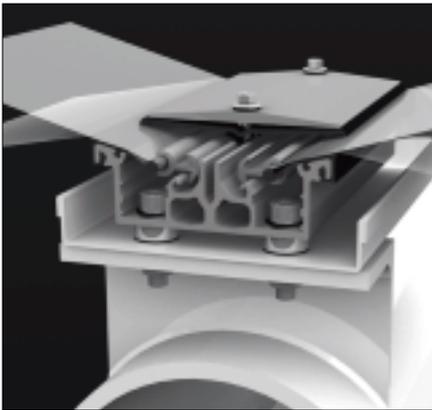
NOVUM



**AFP-System**

**Air Filled Pillow**

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**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/m<sup>2</sup>)
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/m<sup>2</sup>K
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

Front: Nuffield Hospital Oxford (The Manor)  
Architect: Kendall Kingscott Ltd