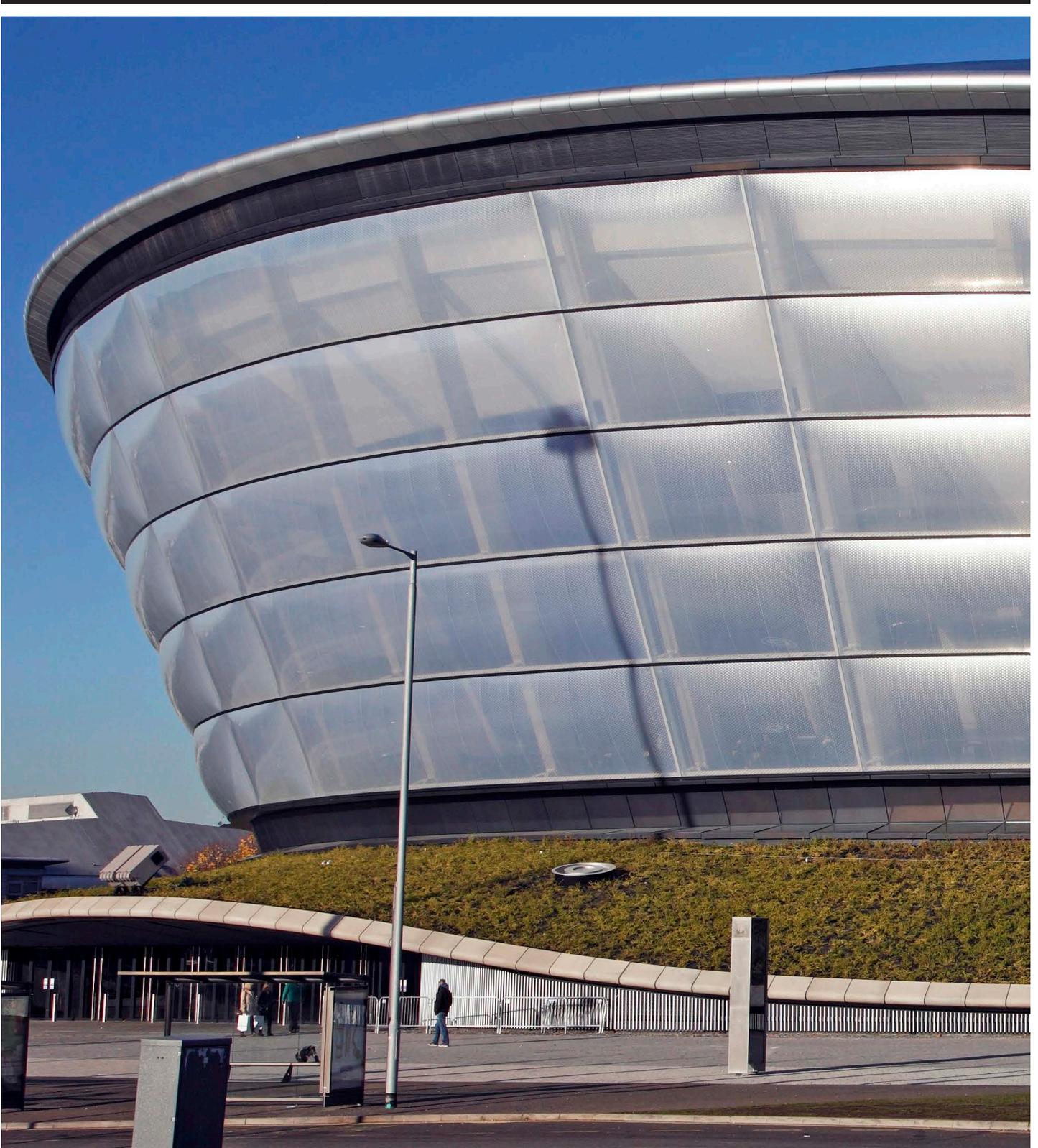


AFP-System

Air Filled Pillow

Membrane System

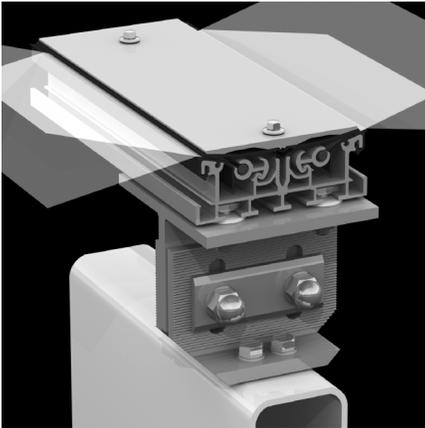
NOVUM



## AFP-System

### Air Filled Pillow

## Membrane System



### System Components

01. Pillows comprise of extruded ETFE films which are form cut and welded into pillows with 2, 3 or 4 layers
02. Fully integrated aluminum perimeter clamping and water channeling system
03. Translucent flexible pipes at the pillow nozzle connect to the air feed system which is ABS, UV stable PVC pipe or galvanized spiral pipe
04. Waterproof and acoustic baffled air supply units with dehumidifier and twin air blowers for redundancy and industry leading performance

### Applications

01. Excellent for sports arenas, aquatic facilities, canopies, atriums, planted areas, corrosive environments and special effect lighting
02. Translucent or transparent designs requiring large panel areas with span widths up to 13' (4m) and beyond and impressive lengths of over 200' (60m)
03. Ideal for freeform surfaces, triangles and nonplanar trapezoidal panels

### System Attributes

01. Ultra lightweight cladding with a self weight typically below 0.2 psf (1 kg/m<sup>2</sup>)
02. The ETFE (ethylene tetrafluoroethylene) material is resistant to many chemicals, diverse climates and is UV resistant
03. Membrane thickness and air pressure can be optimized to accommodate most panel sizes, high winds, snow and other environmental factors
04. Insulation: Double Layer Pillows U=2.3 W/m<sup>2</sup>K (Summer Value), Triple Layer Pillows U=1.4 W/m<sup>2</sup>K (Summer Value)
05. 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
06. Enhanced shading coefficients can be provided by screen printing and material opacities. Special lighting effects are achieved with screen prints
07. Long life and cleanable with water due to very low surface dirt adhesion properties
08. The ETFE and aluminum components are environmentally friendly and recyclable
09. ETFE can be cut or punctured, but does not tear. Discreet patching is possible
10. In fires and bomb blasts, the material breaks without shattering and the panels open up without debris
11. Fire rating BS476 6&7 class 0, UL 94 V-0, EN13501 Bs1d0, EN 13 823, ASTM E84 Index 5, ASTM E662, NFPA 701 Test Method 1&2
12. Project specific form finding by Novum's in-house engineers

### Options/Materials/Finishes

01. Membrane printing is available in standard colors and patterns, dots, reverse dots, rain effect or customized for full screen and logo requirements
02. Custom full color printing is available. ETFE raw material can be pigmented before extruding in multiple colors and opacities. Aluminum profiles are available in multiple colors
03. Air supply system can be enhanced with master control systems, wireless access points, SMS alerts and other BMS needs
04. Bird deterrent systems, color coated air feeds and operable vents
05. Mid and long term Maintenance Agreements