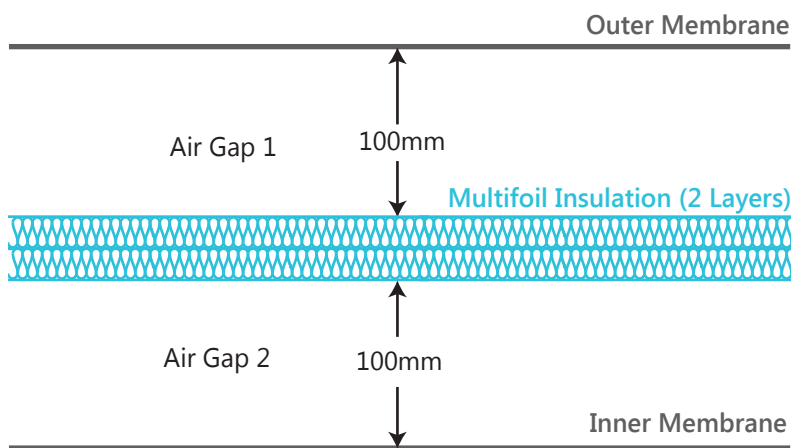




Serpentine Sackler Gallery

Technical Details

U Value Calculation



Outer/Inner Membranes = $5.6 \text{ w/m}^2\text{k}$
 Air = $2.5 \text{ w/m}^2\text{k}$
 Multifoil Insulation = $0.45 \text{ w/m}^2\text{k}$

Overall U Value = $0.18 \text{ w/m}^2\text{k}$

PVC Coated Polyester

Thickness 0.6mm
 Weight 850g/m^2
 Fire Rating B1/DIN 4102-1
 BS 7837

Multifoil Insulation

Thickness 40mm (x2)
 Weight 700g/m^2 (x2)
 Fire Rating Class E
 EN 13501-1

Lightweight PVC Polyester

Thickness 0.6mm
 Weight 750g/m^2
 Fire Rating B1/DIN 4102-1
 BS 7837

Long gone are the days when fabric structures were only used in large unheated spaces. Architen Thermal is a high performance system capable of meeting the strict thermal values of an insulated conventional roof, while retaining the virtues of sculptural form and clear span spaces.

The technology behind Architen Thermal is the use of multi-layers, 'sandwiched' together forming the external envelope for virtually any building. The layers include: an outer membrane identical to a normal tensile roof; an insulated multi-foil membrane suspended beneath the outer layer; and a lightweight inner lining giving the underside of the system a smooth elegant appearance.

By overcoming the thermal limitations usually associated with fabric, Architen Thermal becomes viable as a building material in areas previously 'off-limits' to membrane construction.