



Technical Data Sheet

Naturalspan Polycarbonate Technical

The Naturalspan is rugged yet lightweight design, which out performs virtually all other traditional roof glazing systems.

Advantages over other systems include

Made to measure units

Rapid installation

Health & Safety friendly

Rapid Delivery from order

Thermally efficient Design

Impact resistance

Factory sealed Cassette Units
(on double skinned units)

Versatility for Varied
roof/Canopy/walkway projects

Environmentally Friendly (all components recyclable)

Each Naturalspan glazing is designed to suit specific requirements, therefore no on site modifications.

The Naturalspan glazing system was developed by NaturaLights own design team that called on their own experience in the industry and the very best of other systems to create a versatile, highly effective system, that can be priced competitively without compromising quality.

System Reference : NaturalSpan NLS 280

Profiles : Low rise 30 degree, standard 43.6 degree or semi circular.

Size : NaturalSpan can span from 1 metre to 8 metres at any length.

Glazing : Solid sheet polycarbonate up to 10mm or double skin factory assembled cassettes, 10mm, 16mm or 25mm structural polycarbonate. Only UV protected Lexan XLD or Makrolon long life material is used by Naturalight.

Frames : Factory assembled glazing frames are made up for easy installation.

Naturalspan (glass & polycarbonate)

Frame

The system has an extruded structural framework, complete with internal water management system to the top surfaces of main rafters/transoms and condensation channels to the lower edges of glazing bars.

The system is to be welded at the cills onto fabricated condensation trays.

The structure will be designed in accordance with BS 8118: part 1: 1991, with stainless steel fixings, grade A2 to BS 6105 (grade 304).

All gaskets to be black flexible TPE to BS 7412 (these gaskets are fully recyclable).

Finish

Polyester powder coated to BS 6469.

Colour

Chosen from the standard RAL colour range.

Other requirements

The system is engineered in accordance with:-

BS 5399: Part 2: 1995 Code of practice for Wind Loads.

BS 6399: Part 3: 1988 Code of practice for Imposed Roof Loading.

Design Span : 1 m to 8 m spans, are standard however, large spans can be achieved, please consult our technical department for assistance should you require larger sizes.

Finish : Mill finish or polyester powder coated to BS 6496 (all standard RAL colours are available, please check when ordering).

Polycarbonate Solid Sheet :

Light Transmission :

Clear - 82%

Opal - 60%

Bronze - 45%

U Value

Double Skin 3 x 3 with 20 mm air gap 2.27W/m²K

Triple Skin 3 x 3 x 3 with 2 x 20mm air gap 2.1W/m²K

Fire :BS 476 part 7 - class 1Y

Building regulations : (1991) class O - Tp(a)

Extruded Aluminium BS 1474.

Protective Packaging : Each unit will be despatched with a protective wrapping in addition to the surface protection already applied to the glazing. This protective wrapping should be removed either before or directly after site installation.

Storage : NaturalSpan unit should be stored in a clear, dry and dust free environment away from potential risk of damage. The units should not be laid flat or positioned in a location susceptible to direct sunlight. If stored outside, protect the units with non-light transmitting substance.

Polycarbonate (Structured Sheets)

16mm triplewall uv protected polycarbonate***

25mm multiwall uv protected polycarbonate

U' values:

16mm 2.4W/m²K

25mm 1.7W/m²K

Light Transmissions:

Clear 75%*** Opal 51%***

Bronze 49%***

Acoustics 21db***

Serviceable temperature

120 deg C***

Fire BS 476 pt 7 Class 1 ***

Weight*** 2.7kg

Polyester Powder Coating.

All kerbs and glazing bars are supplied in a white matt finish to BS 6496. Other RAL colours are available upon request.

Naturalspan glazing bars.

are designed to the following design criteria.

BS 5516 1991 design and Installation of Patent Glazing.

BS 8118 pt 1 1991 Structural use of aluminium.

BS 6399 pt 2 1995 Wind loads.

BS5368 pt 1-4 1994 Method of Testing windows.

BS 6375 pt 1 1989 Performance of Windows, classification for Weather tightness.

CP3 chap V pt 2 1972 Wind Loads.

BS 6399 pt 3 1988 imposed roof loadings.

