SPECIFICATION

**Specification: Solar shading system Ducosun F**

**Manufacturer:** Duco 'Ventilation & Sun Control'

**Type:** Ducosun F

**Materials:** a) Aluminium : EN AW – 6063 T66
Surface treatment :
Aerofoils:
Standard natural anodised (15-20 µm) (VB6/A20/VOM1)
Enamelled polyester powder coating (60-80 µm)

**Construction:**

Ducosun F is a permanent, external solar shading system with fixed aluminium blades fitted to coverplates, mounted to obtain the required shading angle.

The maximum span (for a standard F of 40 mm) should be calculated considering the applicable dynamic loadings caused by wind and other elements. When snowloads may be excluded, the table below provides max. span:

| Blade | Blade angle | Dimension Ymin*. (mm) (cc. Fixation) | Windload 600Pa (± 115km/h) | Windload 800Pa (± 130km/h) | Windload 1250Pa (± 165km/h) |
|---|---|---|---|---|---|
| **150F** | 45° | 80 | 4000 mm | 4000 mm | 3400 mm |
| | 0° | 60 | 4000 mm | 4000 mm | 3400 mm |
| **200F** | 45° | 100 | 4100 mm | 4100 mm | 3700 mm |
| | 0° | 70 | 4100 mm | 4100 mm | 3700 mm |
| **300F** | 45° | 140 | 4700 mm | 4700 mm | 4500 mm |
| | 0° | 100 | 4700 mm | 4700 mm | 4500 mm |
| **400F** | 45° | 150 | 5300 mm | 5200 mm | 4800 mm |
| | 0° | 110 | 5300 mm | 5000 mm | 4000 mm |

* Ymin: the minimal cc-distance of the bolts with which the coverplate is fixed to the rafter of the construction.

**IMPORTANT:**
*The above values are CONDITIONAL to:*
Aerofoils are "bolted" by means of 2 Duco supplied side-plates against a solid
structure or construction (e.g. Steelstructure).
Assembly as per Duco instructions.

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The max. deflection of the Aerofoil is 15mm, as per European Directive
ENV 1999-1.
The values as per above table will vary, when one of the above conditions is not met.
In that case, strength calculation will need to be performed again.

**Basic components:**

- *Elliptical blades*:

| | |
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| Types: | Blade 150 F, 200 F, 300 F, 400 F |
| Form : | Elliptical |
| Materials : | Aluminium extrusions Al Mg Si 0.5 |
| Blade Thickness : | 35 mm (150 F), 37 mm (200 F), 50 mm (300 F), 63 mm (400 F) |
| Wall Thickness : | Min. 1,4 mm (150 F) 1,6 mm (200 F), min. 1,7 mm (300 F), min. 2 mm (400 F) |
| Surface treatment : | Standard natural anodised (15-20 µm) (VB6/A20/VOM1) Enamelled polyester powder coating (60-80 µm) |
| Assembly instruction : | Fixation to existing structures by means of bolts M 8 or T-Bolts or nutplates M8 to the rafter. |

- *Endplates*: Standard or bespoke endplates are available.

| | |
|---|---|
| Materials : | Aluminium plate Al Mg 3 G22, lasercut, thickness 5 mm. |
| Surface treatment : | Standard natural anodised (15-20 µm) (VB6/A20/VOM1). Enamelled polyester powder coating (60-80 µm) |
| Assembly instruction : | Fix in accordance with the instructions of the manufacturer. The plates can be provided with screw holes and modify as the project. |

**General :**

Supplier: Bridge Solar Ltd, Units 1-2 Northend Road, Stalybridge, Cheshire. SK15 3AZ sales@louvre.co.uk
Specifications and drawings can be downloaded from www.bridgesolar.co.uk, or www.duco.be
Assemble in accordance with the instructions and the estimation programs of the Manufacturer.
Construction must fully meet the requirements of the Building Regulations and other legal requirements.

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