

DUCO Ventilation & Sun Control

DucoSun Cubic InsertFit 200×48 / 300×48

External Sun Shading System

Description

External aluminium Sun Shading system with fixed rectangular blades and invisible fixing.

Arranged vertically or horizontally with a 0° inclination, the Cubic InsertFit 200×48 and Cubic InsertFit 300×48 blades can be installed directly onto pre-installed brackets of a load-bearing structure or by means of dedicated fixing brackets.

The blade pitch is defined according to project requirements and the required solar protection performance (thermal and visual comfort).

The Cubic InsertFit sun shading system's invisible fixing ensures seamless façade integration without visible screws. It consists of the following elements:

- Blade profile
- Clip-on finishing profile
- Side cap type I
- Fixing brackets (optional)

Model

Blade

- Blade type: Cubic InsertFit
- Blade shape: rectangular
- Blade height:
 - 200 mm (Cubic InsertFit 200×48)
 - 300 mm (Cubic InsertFit 300×48)
- Blade width: 48 mm

Clip-on finishing profile

InsertFit clip-on profile ensuring invisible fixing (without visible screws).

Side cap (Type I)

End caps adapted to the blade profile (200×48 or 300×48), ensuring closure of blade ends and aesthetic finishing.

Option: Fixing brackets

Load-bearing supports fixed to the façade or load-bearing structure

Available widths:

- 40 mm
- 80 mm
- 120 mm

Material and Surface Treatment

Blade and clip-on finishing profile

Aluminium EN AW-6063 T66 (EN 573-3)

Side cap (Type I)

Aluminium

Fixings

Stainless steel (AISI 304)

Finish

- Natural anodising 15–20 µm, “Qualanod”
- Polyester powder coating 60–80 µm, “Qualicoat Seaside type A” (RAL colour chart or specific paint on request)

Option: Fixing brackets

Material depending on project environment:

- Aluminium (AlMg3)
- Stainless steel (AISI 304)

Fire Reaction

A2-s1,d0 according to EN 13501-1

Classified as a non-combustible product with very limited contribution to fire, very low smoke production and no flaming droplets.

Maximum Spans

Spans indicated for vertical blade and reference load 800 Pa, with stainless steel support:

Cubic InsertFit 200×48

- Support 40: 4875 mm
- Support 80: 4875 mm
- Support 120: 5070 mm

Cubic InsertFit 300×48

- Support 40: 4515 mm
- Support 80: 5235 mm
- Support 120: 5435 mm

The complete Cubic InsertFit system must be dimensioned according to site wind loads and effective spans in accordance with the applicable Eurocodes.

Installation

With fixing brackets

1. Insert the threaded plates into the blade profile using the mounting clip and lock them in the desired position.
2. Screw the fixing bracket onto the blade profile.
3. Prepare the finishing profile and clip it onto the blade profile to conceal visible fixings.
4. Screw the side caps (Type I) into the blade's honeycomb channels.
5. Screw the blades equipped with fixing brackets onto the pre-installed brackets of the load-bearing structure.

Without fixing brackets

6. Insert the threaded plates into the blade profile using the mounting clip and lock them in the desired position.
7. Screw the blades onto the pre-installed brackets of the load-bearing structure.
8. Prepare the finishing profile and clip it onto the blade profile to conceal visible fixings.
9. Screw the side caps (Type I) into the blade's honeycomb channel.

Summary – Compliance with the following standards

- Qualicoat Seaside type A
- Qualanod
- EN 573 – EN AW-6063 T66 en EN AW-6060 T66
- EN 1990, EN 1991, EN 1999
- EN 13501-1