

## THE ICB - SOLAFIX FIXING SYSTEM

#### ICB - SOLAFIX tested up to 200 KM/HR

The development of the ICB - SOLAFIX fixing system involved testing in a variety of conditions, including wind tunnels.

To fully understand the conditions that would be experienced on any given roof, a series of wind-tunnel tests with wind speeds up to 200 KM/HR were carried out. The ICB - SOLAFIX system passed the laboratory tests without failure. Test reports are available upon request.

- Maximum Peeling Strength of Solafix 1300N/50mm
- Maximum Fixing strength of 6mm dia stainless steel screw 3000N



Picture 1: Wind-tunnel test VKI

#### The advantages of the ICB - SOLAFIX system:

- Lightweight: Depending on the choice of the solar panels and the aluminium construction, minimal extra weight.
- No penetration of the roofing membrane
- Fast, simple and safe installation
- Maintenance and repair of solar panels made simple
- Solar panels or amorphous solar cells on continuous supports can be fastened directly onto the ICB -SOLAFIX system
- The ICB SOLAFIX system can be used on existing or new EVA roofing membranes. (Please check with ICB's technical department to confirm if the existing roof satisfies the criteria for installing the ICB -SOLAFIX system)

### The parts of the ICB - SOLAFIX fixing system

#### **EVA** profile

Length: 2 m Base of the profile: 80 mm Thickness of the EVA: 3 mm Height: 30 mm Width: 30 mm

#### **Aluminium insert**

Length: 2 m

Thickness: 2 mm Height: 25 mm Width: 20 mm Aluminium quality: EN6060 T6- AIMgSi 0,5 F22

# Self tapping stainless steel/inox screw with a seal ring

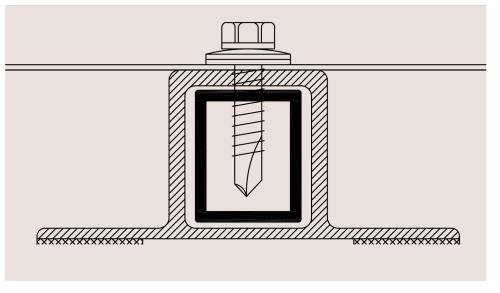
Diameter: 6 mm Length: 25 mm Stainless steel: A2 SW8

## Aluminium support structure

The ICB - SOLAFIX aluminium solar panel support structure is produced in house and can be colour powder coated if required, in our own powder coating plant.



To guarantee the soundness of the system, only components bought at ICB can be used in the ICB - SOLAFIX system.



### THE ICB - SOLAFIX FIXING SYSTEM

The ultralight ICB - SOLAFIX fixing system makes it possible to attach solar panels onto the roof without the need for extra ballast or perforation of the roofing membrane. The development of the system has taken into account the abilities of EVA roofing membranes to have compatible elements welded directly to them. The method will allow a variety of different solar panels to be installed quickly and cost-effectively.

# ICB - SOLAFIX as a base for photovoltaic panels

The ICB - SOLAFIX system functions here as a base for the attachment of an aluminium sub-structure. The aluminium framework provides the most efficient angle relative to the sun for the PV-panel. The only additional weight that needs to be taken into account is that of the aluminium support structure and the solar panels.





Picture 2: ICB - SOLAFIX as a base for photovoltaic panels









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