i-SOL8® is a Thermally Broken Brise Soleil Curtain Wall Bracket designed to fit all major curtain wall systems with an economical modular construction. (Pat. Pending GB1701210.5)

“*The most significant bracket in years...*” — TWC

- Unparalleled thermal bridging resistance (Chi value χ of 0.0673)*
- Zero Interstitial Condensation*
- Infinite flexibility with modular build design and bespoke bracket profiles
- Highest loadbearing capacity available
- Vibration (acoustic) isolation

* Based on a heavy duty cantilever aluminium bracket with four i-SOL8® bracket blocks.
Thermal advantages

The i-SOL8® Bracket has a significantly improved Chi value compared to any other alternative currently available on the market.

Internal Conditions 20°C, 40% RH
External Temperature -5°C
Interstitial condensation risk Zero
Chi $\chi$ value of 0.0673 W/K

Note - with no Thermal break present, a bracket of this size and material will inherently mean a condensation risk internally within the mullion.
**Loading advantages**

**Ultimate Load**

**Mullion (Generic) Nose Fix**

Drilled and tapped to nosing without any additional internal reinforcement

**Projection (cm)**

**Load (kN)**

---

**Important information**

Tests have been performed by a third party UKAS accredited test laboratory upon a generic curtain wall mullion. It is the responsibility of the user to test the bracket for each application the design may be used upon together with the appropriate structural calculations performed by a qualified structural engineer.

The **i-SOL8®** bracket is modular, it has an infinite number of assembly variations, it is therefore impractical to test all build combinations/curtain wall supplier systems.

Testing for a specific requirement or application may be undertaken by ourselves - please enquire for further information.
Design

Designed with CAD Finite Element Analysis (FEA) to maximise the thermal properties and strength capacity. The bracket is designed in modular form to allow the greatest possible flexibility.

Several i-SOL8® blocks may be combined into one bracket which also allows both lateral and perpendicular loading being shared over the mullion transoms.

The design allows for a bespoke bracket to be profiled out of aluminium sheet in 6082 or 5083 grade alloy.

The design is made possible by using advanced material technology, the i-SOL8® modular blocks are manufactured from a carbon fibre composite material, Zerton 6, allowing a strength that equals metal whilst providing the high thermal and vibration isolation necessary.

Tested in a UKAS registered laboratory the load capacity of the bracket is limited by only the mullion strength - to which it is fitted.

References

- BS EN ISO 10211:2007
- BS EN ISO 6946:2007
- EN ISO 10077-2:2012
- BS EN 12524:2000
- BS 5250:2002
- BS EN ISO 13788:2012
- BS EN 12631:2012
- Other BRE and CWCT standard references were used as necessary

Warranty

A free of charge replacement part warranty is guaranteed for five years should any product prove to be defective from supply. The i-SOL8® carbon fibre blocks are manufactured by specialist producers who conform to UKAS accredited management systems, ISO9001, ISO 14001 and hold FDA and MOD approval.

Any guarantee is conditional on the correct system parameters and the fixing instructions being followed for use.

Contact

Blue Sky Concept Design Ltd
01452 500384
07584 038651
sales@i-sol8.com
www.i-sol8.com
www.blueskyconcept.com