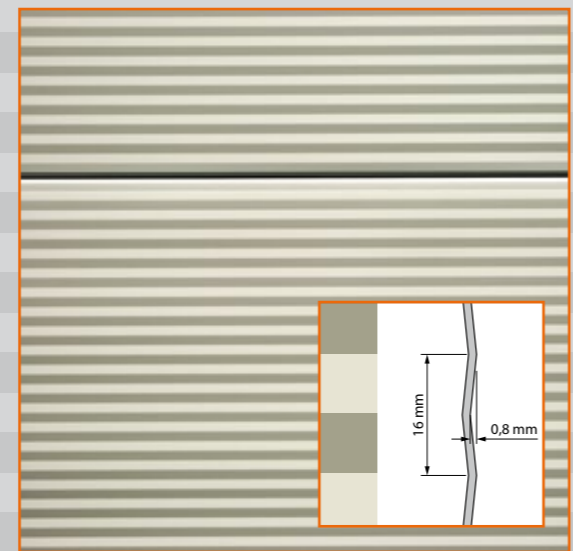




ISO 80 mm

Double-skinned sectional doors with thermally broken steel panels

Commercial buildings need to satisfy increasingly higher levels of insulation performance. Standards are being made more demanding and this trend will continue. All areas of the building need to be brought in line with these requirements, including the entrances. Like the ISO 40 and ISO 60 sectional doors, the panel cavity is filled with dense polyurethane foam, with a thermal break between the inner and outer skins. The ISO 80 sectional door uses the same design principle but offers even greater thermal insulation.

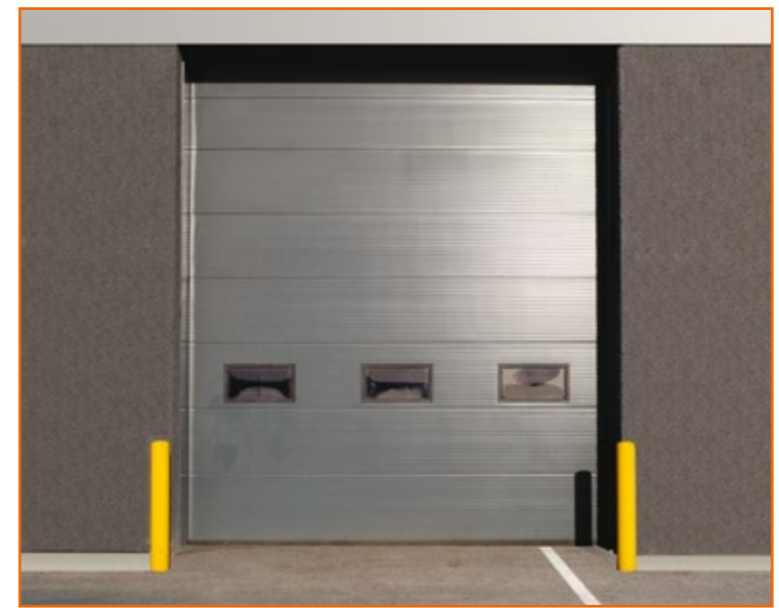


Mikroprofilierung standardmäßig 3 Farben ohne Mehrpreis!

Floor seal



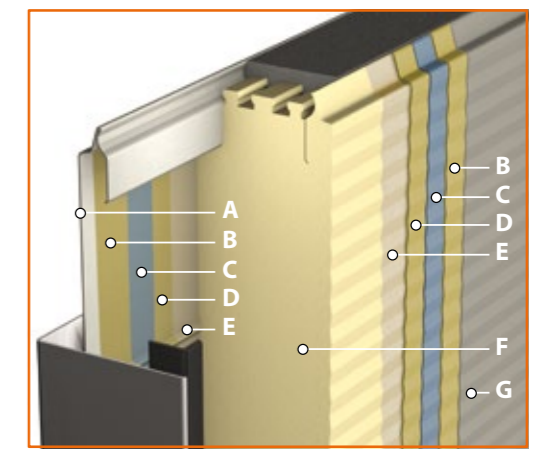
For enhanced energy retention Alpha uses a double rubber profile on the ISO 80 Door with an inward curved sealing lip for optimum sealing. The rubber profiles are accommodated by a special plastic profile with a low heat conduction, furthermore the sealing lip of the rubber profile forms a tight connection with the vertical lateral seals.



Sandwich-construction ISO 80 mm panel

Panel thickness: 80 mm
 Insulation value: $U=0,25 \text{ W/m}^2\text{K}$
 Density PU foam: 40 kg/m^3

Panel: Outside microprofiled Inside stucco design



A Paint layer: RAL 7016, 9002 and 9006 (outside)
 B Zinc coating: 275 g/m^2
 C Steel sheet: $0,5 \text{ mm}$
 D Zinc coating: 275 g/m^2
 E Primer coating
 F PU high density foam: $g=40 \text{ kg/m}^3$, CFK and H-CFK -free
 G Paint layer: RAL 9002 (inside)

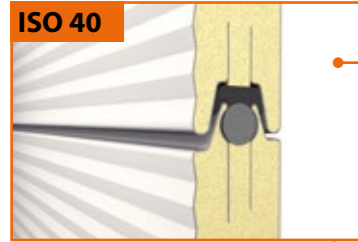
Optimum insulation

By offering optimum insulation performance coupled with a U value of $0.25 \text{ W/m}^2\text{K}$, the ISO 80 satisfies the requirements of customers who want to construct buildings (or have them constructed) in accordance with today's standards. As a result, this door is ideal for cold stores and refrigerated warehouses, industrial buildings, warehouses and distribution centres where heat loss is a major risk and/or where the temperature of the goods must be guaranteed.



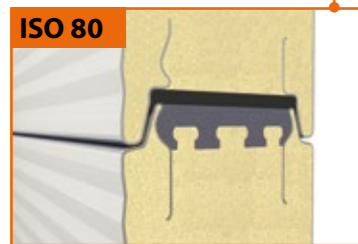
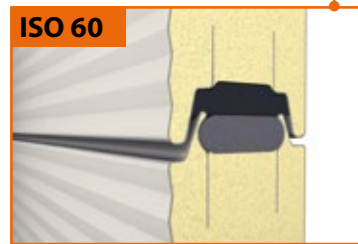
U-value ISO 80 mm sectional door: 5,000 x 5,000 mm: $0.49 \text{ W/m}^2\text{K}$

Interior view ISO 40 / 60 mm



Panel seal

The panels of the ISO 40/60/80 door are specially sealed to make them completely wind and waterproof using Compriband, a polyurethane sealing strip that is attached between the panels. Additionally, the ISO 40/60 doors are fully insulated, because the inner and outer door panels are not attached to each other.



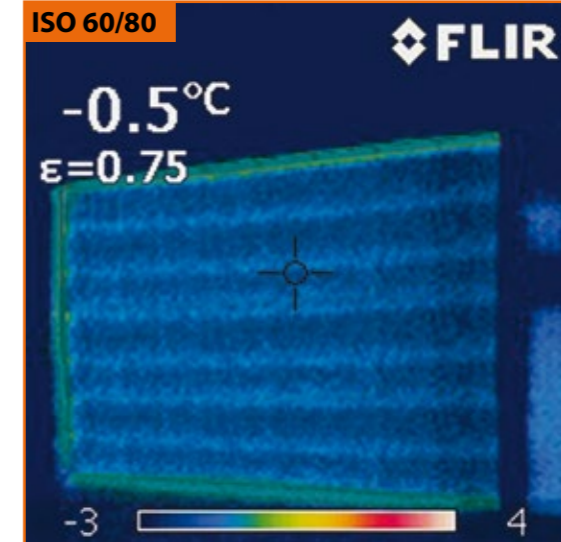
Standard frame

The standard frame between the door and the vertical railing ensures that the sides of the door seal properly.



Heavy-duty frame

We use this type of frame for doors with a dark colour. Due to the heat of the sun, the door may expand in the middle against the upper lintel. The heavy-duty frame prevents this from happening.



Infrared imaging

The ISO 60 mm and ISO 80 mm sectional door insulates even more effectively than the ISO 40 mm door. We check this feature by taking infrared images of the assembled doors. Any light spots indicate where energy loss occurs, while the dark regions are well-insulated.



Wind load

Depending on the width of the door, Alpha will install reinforcing profiles on the door. Thanks to these, the door is able to withstand a heavy wind load, in accordance with the applicable rules and standards. At a door width from 4200 mm (ALU 40) / 5000 mm (ALU 60) each second panel has a profile. With a door width from 5000 mm (ALU 40) / 5800 mm (ALU 60), each section has a reinforcement profile.



The interior

The interior of the ISO 40 mm and ISO 60 mm sectional door is horizontally profiled, the ISO 80 sectional door is stucco profiled and is coated in RAL 9002 as a standard. Other colours are available on request at an additional cost.