

## INSOFAST ISF 35 SOFFIT INSULATION BOARD FIXINGS

Insofast ISF-35 Soffit insulation board fixings are used to anchor insulation boards to concrete ceilings in fire-resistant applications. Greater performance and less cold bridging than 8mm tubular insulation support anchors. Supplied in a choice of stainless Steel or zinc plated steel versions.

Thor Helical manufactures soffit insulation board fixings for securing insulation boards to concrete ceilings and soffits. The fireproof Insofast ISF-35 is a one-piece helical fastener having a 7mm spiral shaft and a 35mm dome reinforced head with a perforated rim. These insulation support anchors are suitable for fixing mineral wool and foam insulation to concrete soffit boards in all applications where fire-resistance is required.

A small 6mm pilot hole is needed to fix soffit insulation boards to structural concrete. The hole is drilled to a depth that is at least 5mm longer than the required embedment depth of the anchor. This small hole reduces the invasive effects of using larger drill bits and ensures maximum integrity of the insulation. The fasteners are hammer-driven into undersized pilot holes. They corkscrew through the insulation board and into the underside of the concrete ceiling to deliver a superior anchorage with twice the holding power of tubular-spring insulation supports.

Cold bridging is minimised thanks to a thermally efficient 7mm spiral shaft that has a cross sectional area just 10mm<sup>2</sup>. The small cross section, coupled with the fact that the ISF-35 has minimal contact with the concrete, reduces cold bridging significantly when compared to 8mm tubular insulation supports. The Insofast soffit insulation board fixings are available in both zinc-plated carbon steel and stainless steel. For improved thermal performance, and additional protection against corrosion, stainless steel is often the preferred option.



### PRODUCT SPECIFICATION

Soffit insulation fixings are available in a choice of zinc plated 8.8 high tensile steel or AISI304 stainless steel

Insofast ISF-35 fixings are available in standard lengths of:

110mm, 145mm, 170mm, 200mm, 225mm – Stainless steel only, 250mm – Stainless steel only

### PERFORMANCE LOADS at 1mm deflection

BASE MATERIAL	EMBEDMENT	LOAD
Concrete	40mm	581N

### TYPICAL MECHANICAL PROPERTIES OF THOR HELICAL SOFFIT FIXINGS

STAINLESS STEEL	VALUE
Ultimate Tensile Strength	=> 11.0kN
Load at 0.2% Proof Stress	=> 8.8kN

ZINC PLATED CARBON STEEL	VALUE
Ultimate Tensile Strength	=> 5.5kN
Load at 0.2% Proof Stress	=> 4.9kN



## INSOFAST ISF 18 FLAT ROOF INSULATION FIXINGS

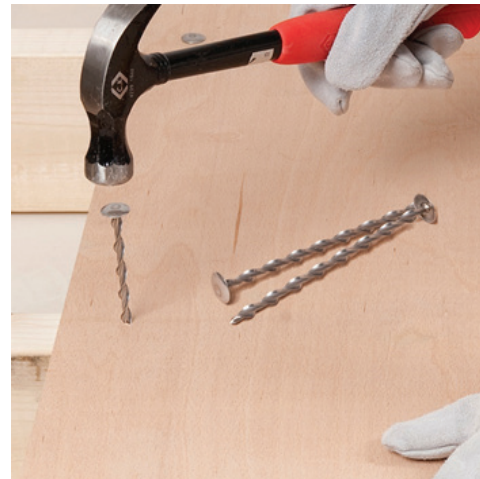
Quick, easy to use and reliable fixings for composite insulation panels. These flat roof insulation fixings nail 6mm plywood-faced insulation boards to rafters in warm deck applications. They are supplied in stainless steel or zinc plated steel versions.

Thor Helical flat roof insulation fixings are generally used to fix 6mm plywood-faced composite insulation boards to rafters in warm roof deck applications. Unlike traditional screws, the Insofast ISF-18 spiral fixings rotate as they are hammered in, inducing a self-tapping corkscrew action.

The quick, easy to use and reliable spiral nails have a large button head mounted on a precision engineered helical shank, the cross sectional area of the profiled 7mm shank is just 10mm<sup>2</sup>. This small cross section reduces cold bridging by 75% when compared to a standard fixings of the same diameter.

Flat roof insulation fixings are available in zinc-plated carbon steel. For improved thermal performance, and additional protection against the corrosion, Thor Helical also supplies a stainless steel version. Stainless steel is 4 times less conductive than carbon steel.

Thor Helical Insofast ISF-18 flat roof nails are available in a choice of zinc plated 8.8 high tensile steel or AISI304 stainless steel.



### CHARACTERISTIC PERFORMANCE LOAD (Tested at Ceram)

TENSION TEST	LOAD
35mm Penetration in Softwood Joist	1.2kN

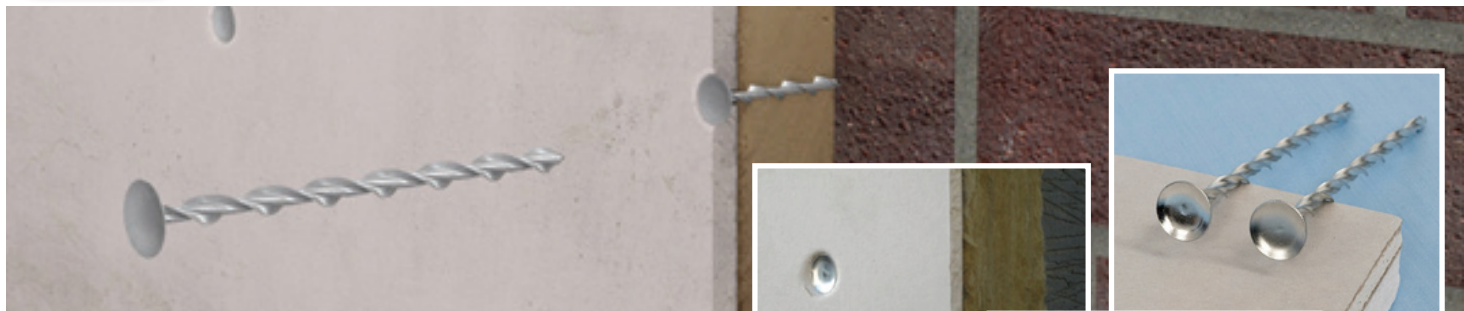
### TYPICAL MECHANICAL PROPERTIES OF THOR HELICAL SOFFIT FIXINGS

STAINLESS STEEL	VALUE
Ultimate Tensile Strength	=> 11.0kN
Load at 0.2% Proof Stress	=> 8.8kN

ZINC PLATED CARBON STEEL	VALUE
Ultimate Tensile Strength	=> 5.5kN
Load at 0.2% Proof Stress	=> 4.9kN

PRODUCT SPECIFICATION
Thor Helical flat roof insulation fixings are available in standard lengths of:
<ul style="list-style-type: none"> <li>• 120mm – for 80mm panels</li> <li>• 145mm – for 85-110mm panels</li> <li>• 170mm – for 115-135mm panels</li> <li>• 195mm – for 140-160mm panels</li> <li>• 220mm – for 165-185mm panels</li> <li>• 245mm – for 190-210mm panels (stainless steel only)</li> </ul>





## ISF 18A Mechanical Fixings for Insulated Plasterboard

Fire resistant mechanical fixings for insulated plasterboard, which ensure stability of boards in a fire. Can be used to compliment or replace plasterboard adhesives. Supplied in stainless steel or plated carbon steel.

Thor Helical manufacture a range of fire resistant mechanical fixings for insulated plasterboard systems. They are suitable for fixing plasterboard backed with foam, polystyrene or mineral wool in solid internal wall insulation applications. The Insofast ISF-18A is a one piece fixing that has a large dish-profiled head mounted on a precision engineered helical shank.

The plasterboard fixings are suitable for use with all types of drywall boards. They can be used in conjunction with drywall adhesive (3 per board) or in place of it (12 to 18 per board). In both cases they ensure stability of the boards in the event of a fire and prevent plasterboard from falling on persons escaping a blazing building, or on persons entering a burning building for rescue purposes.

A 4mm to 5mm pilot hole is needed when fixing insulated panels to brick or block; the diameter dependent upon on the strength of the masonry. The fastener drives through plasterboard/insulation laminate and corkscrews directly into aerated gas concrete blocks or softwood without the need for a pilot hole. The concave dished head compresses the gyprock layer without tearing the paper surface, leaving a deep recess ready for accepting and retaining filler material.

Cold bridging is minimised thanks to a thermally efficient 7mm spiral shaft that has a cross sectional area just 10mm<sup>2</sup>. This small cross section reduces cold bridging by 75% when compared to a standard fixings of the same diameter. Mechanical fixings for insulated plasterboard are available in zinc-plated carbon steel. For improved thermal performance, and additional protection against corrosion, Thor Helical also supplies a stainless steel version. Stainless steel is 4 times less conductive than zinc plated carbon steel.

### PRODUCT SPECIFICATION

Mechanical fixings for insulated plasterboard are available in a choice of zinc plated 8.8 high tensile steel or AISI304 stainless steel

Insofast ISF-18A plasterboard fixings are available in standard lengths of:

- 65mm, 85mm, 105mm, 125mm, 145mm, 170mm

### PERFORMANCE LOADS

MATERIAL/EMBEDMENT	PULL OUT	PULL THROUGH
Aircrete / 60mm	649N	N/A
Brick / 50mm	622N	N/A
Softwood / 35mm	681N	N/A
Plasterboard / 9.5mm	N/A	255N
Plasterboard / 12.5mm	N/A	340N

### TYPICAL MECHANICAL PROPERTIES OF THOR HELICAL DRYWALL FASTENERS

STAINLESS STEEL	VALUE
Ultimate Tensile Strength	=> 11.0kN
Load at 0.2% Proof Stress	=> 8.8kN

ZINC PLATED CARBON STEEL	VALUE
Ultimate Tensile Strength	=> 5.5kN
Load at 0.2% Proof Stress	=> 4.9kN