

Ancon[®] Helical Nails for Warm Roof Construction



Warm Roof Construction

Pitched Roofs



Helical nails fix counterbattens to rafters, without compressing the layer of insulation in-between.

Flat Roofs



Headed helical nails fix plywood/insulation composite roof panels to joists.

Product Range

Helical nails are a guick and reliable fixing for use in warm roof applications. Unlike traditional nails, they rotate as they are driven in, inducing a self-tapping action and consequently do not split or bounce timbers.



for Pitched Roofs

Stocked Lengths: 140, 150, 160, 165, 175, 185mm

Note: Other lengths are available in increments of 5mm. Ancon recommends a minimum counter batten thickness of 38mm.

See pages 4-5 for more details

Super-8 Headed Helical Nail for Flat Roofs

Standard Lengths: 145, 170, 195mm Note: Other lengths are available on request (min. 135mm)

See pages 6-7 for more details.



Helical Nails for Pitched Roofs



Super-7" Thor-Helical Nails

Super-7[™] nails install flush to the counterbatten. They are manufactured from stainless steel and are engineered with the precise Thor-Helical patented helix, and so provide maximum corrosion resistance and excellent holding power. They are stocked in six standard lengths.



Nail Lengths

Stocked Lengths (mm)	
140, 150, 160, 165, 175, 185	

Note: Other lengths are available in increments of 5mm. Ancon recommends a minimum counter batten thickness of 38mm.

Pack Sizes

Nail Length	Quantity per Box
160mm and under	400
165mm and above	200

Recommended Nail Length and Fixing Centres

This information should be calculated using HeliCalc, a free web-based program available at www.helicalc.co.uk. Users simply input details of their site location and roof construction, and HeliCalc calculates the length, density and quantity of Super-7[™] nails required for the project. Alternatively, contact Ancon with your project details.

Note: HeliCalc results are specific to Super-7" Thor-Helical nails. The data is calculated using a design method, formulated by Ancon Ltd and independently approved by the Building Research Establishment, which is applied to the results of a comprehensive and independent test programme carried out by Lucideon. Wind load calculations are to BS6399: Part 2: 1997. Snow load calculations are to BS6399: Part 3: 1988. Partial safety factors are from National Annexes to Eurocodes 0 and 5 and are applied in respect of timber connections, dead loads, wind loads and snow loads.

Test Results

Test data is available on request.

Super-7" Alignment Tool

This innovative Alignment Tool vertically aligns and centres a nail on the counterbatten to rafter arrangement, improving build quality.

The tool features a levelling indicator to identify a vertical plane.



Super-7s can be hammered in or power-driven. SDS drill attachments are available.

Helical Nails for Flat Roofs



Super-8 Headed Helical Nails

Headed helical nails are designed to secure plywood/insulation composite roof decks to timber joists. They are manufactured from zinc coated steel in three standard lengths which suit panel depths from 85mm to 160mm. Other lengths and stainless steel versions are available on request.

Super-8s should be installed at a rate of 6.9 per square metre, using a hammer. The 18mm diameter head simplifies installation.

Nail Lengths and Pack Sizes

Standard Lengths (mm)	Quantity per Bag	Quantity per Box
145	20	400
170	20	400
195	20	400

Note: Other lengths are available on request (min. 135mm)

Recommended Lengths

Composite Panel Depth	Recommended Nail Length
85-110mm	145mm
115-135mm	170mm
140-160mm	195mm

Super-8 nails should achieve a minimum embedment of 35mm in the joist.

Recommended Axial Spacings

Joist Centres	400mm	600mm
Axial Spacings	400mm x 600mm	600mm x 400mm



Test Results

Test data is available on request.



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