

**MATRIX**  
STEEL

# HiMat-Nailstrip™

ROOFING & WALLING SOLUTIONS

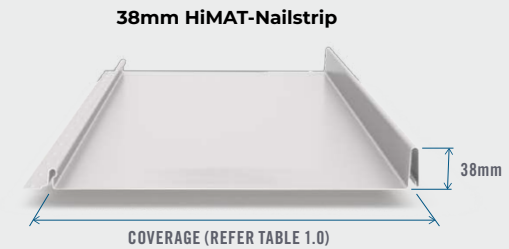
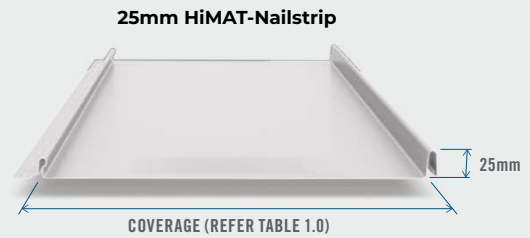


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## OVERVIEW

<b>BMT</b>	0.55mm and 0.60mm
<b>Minimum Roof Pitch</b>	2 Degrees
<b>Rib Height and Coverage</b>	25mm rib height, 292mm pan cover 38mm rib height, 264mm pan cover



## FORM & FUNCTION

HiMAT Nailstrip is a contemporary roofing and walling profile that features concealed fasteners giving your project a clean finish with smooth, uncluttered lines. This profile can be secured directly over plywood or may be used to span over timber or steel battens.

The choice of rib heights (25mm and 38mm) also gives you good options for pan width.

**TABLE 1.0 - NAILSTRIP PROFILE COVERAGE OPTIONS**

Rib Height (mm)	Sheet Cover (mm)	BMT (mm)
25	195	0.55
25	295	0.55
25	350	0.60
38	165	0.55
38	265	0.55
38	320	0.60

**TABLE 2.0 - MATERIAL SPECIFICATIONS**

Material Properties	0.55mm BMT				0.60mm BMT	
	Girth 300mm		Girth 400mm		Girth 455mm	
	ZnAl	Colour	ZnAl	Colour	ZnAl	Colour
Min. 'AZ' Coating Mass (g/m <sup>2</sup> )	150		150		150	
Mass (kg/linear metre)	1.35	1.36	1.80	1.82	2.22	2.25
Min. Yield Strength (MPa)	300		300		300	
Width Coverage (mm)	165/195	165/195	265/295	265/295	320/350	320/350
Sheet Tolerance (mm)	±7 ±4		±7 ±4		±7 ±4	
Min. Roof Pitch	2°		2°		2°	

## WATER CARRYING CAPACITY

The unique shape of the profile allows for greater water carrying, making it suitable for all regions.

**TABLE 3.0 - MAXIMUM ROOF RUN FOR DRAINAGE (M)**

Roof Pitch	PEAK RAINFALL INTENSITY (mm)					
	150	200	250	300	350	400
2°	52	39	31	26	22	20
5°	75	56	45	37	32	28
10°	101	76	61	51	43	38
15°	122	92	73	61	52	46

The peak rainfall intensities shown represent a 100 year average recurrence interval (ARI) for a five minute rainfall duration.

If roof penetrations exist, the actual roof run will typically be larger than the distance from ridge to eaves due to penetration/s interfering with the runoff. Contact Matrix Steel if further advice is required.

## SPANS

Pressures and spans are based on an eaves height not exceeding 6.0m, a roof pitch no greater than 35° and a total roof height of maximum 8.5m.

Roofing calculations are based on  $C_{pe} = -0.9$  and  $C_{pi} = 0.2$ , walling is based on  $C_{p,e} = -0.65$  and  $C_{p,i} = 0.2$ . A local pressure factor,  $K1 = 2.0$  has been used for all spans for both strength and serviceability limit states.

Additional engineering advice can be obtained from Matrix Steel if any design parameters vary from those indicated above.

HiMAT Nailstrip minimum lengths start from 1650mm; enquire with the sales team about maximum lengths.

Light gauge steel cladding with wide pans may exhibit oil canning which can affect the aesthetics of the building design. Oil canning will vary depending on the time of day and angle of viewing and will likely be more noticeable in darker colours. Oil canning will also be more prevalent in wider pans and longer sheet runs.

**TABLE 4.0 - SPANS (MM)**

Application	Span Type	Span (mm)
Roofing	End	600
	Internal	600
	Overhang	50
Walling	End	900
	Internal	900
	Overhang	100

*If fixing directly over plywood, secure at maximum 450mm centres.*

**FIXING RECOMMENDATIONS**

It is recommended pans are turned up at the ridge and down into gutters, particularly at low pitches. Roofing should have a 50mm overhang into gutters and be laid with the overlapping rib facing away from the prevailing wind.

It is recommended that Matrix Steel HiMAT-Nailstrip is secured atop plywood backing.

Runs of cladding will require Matrix Steel HiMAT-Nailstrip ‘Starter’ pieces to provide an underlapping detail for the initial lap.

At each supporting member, fix sheets through the centre of a slot of the underlap and remove all swarf. If securing directly over plywood secure screws through centre of slots at a spacing not exceeding 450mm.

To lap sheets, press down on the lap over a support until the sheets clip together, continue working along the length of the sheet until the full length is secured.

HiMAT-Nailstrip sheeting is not suitable for end lapping.

When fixing over insulation a roof spacer system is recommended. If not used, the screw length may need to be increased with a minimum of three screw threads protruding past steel supports or minimum 23mm embedment into timber supports required.

Oil canning of HiMAT-Nailstrip can be reduced by adding a product such as Proctor GEO HC9 laid over ProctorWrap Vapour Permeable Foil. This will help to allow any condensation to pass through and dry out.

**MAINTENANCE REQUIREMENTS**

The performance of HiMAT-Nailstrip roofing and walling over time depends on its correct application and maintenance. Maintenance should be performed as often as is required to remove any dirt, salt and pollutants.

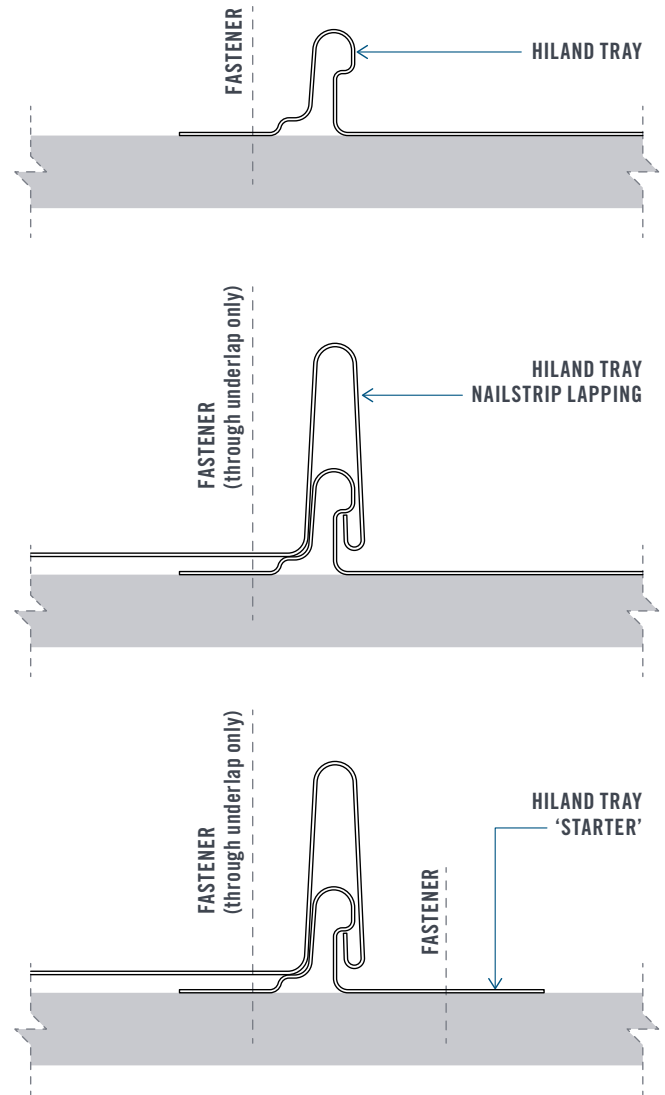
Where HiMAT-Nailstrip cladding is used in severely corrosive environments, cleaning should be performed more often. It is important that screws have the same life expectancy as the HiMAT-Nailstrip cladding you have specified. Packs of Hiland sheeting should always be kept dry and stored above ground level on site. If the sheets have become wet, they should be separated, wiped and placed in the open to dry.

Refer to the Matrix Steel ‘Selection, Use and Maintenance’ brochure for more detailed information about the correct use and maintenance of this product.

**TABLE 5.0 - FASTENER SELECTION**

SUPPORT	FASTENER
Min. 0.55mm BMT G550 steel batten	10g-15x16mm needle point flat head screw
Timber (minimum F7 softwood)	10g-12x25 type 17 wafer head screw
Min. 15mm CD grade plywood	10g-12x25 type 17 wafer head screw

**FIGURE 1.0: HIMAT-NAILSTRIP FIXING DETAILS**



**WALKING ON HIMAT-NAILSTRIP**

Matrix Steel recommend any foot traffic is kept to supports for safety and to avoid damage. Do not walk on sheet overhangs. Do not walk on HiMAT-Nailstrip roofing between battens. When walking on roofs wear flat, rubber soled shoes and walk flat footed spreading your weight evenly.

## COLOUR AND FINISH AVAILABILITY

Matrix Steel and COLORBOND® bring you the colour and finish you want, in the profile you need — for a high quality finish to your project or home.



HiMAT Nailstrip is available in the full standard range of COLORBOND® classic finishes and the 6 matt finish range.

### Colorbond® Classic Colours:



### Colorbond® Matt Colours:





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# MATRIX STEEL

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## SUNSHINE COAST

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Maroochydore

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