

# Western Red Cedar Cladding and Panelling Guidelines

## Fixings.

All data reflects standard industry guidelines - type and number of fixings nominated refers to bullet head nails unless nominated otherwise.

The fixing specifications referred to below should be regarded as minimum. Greater fixing restraints may be required due to weather exposure and aspects of maintenance as covered in the Fixing Criteria and Fixing Options.

## Weather Protected Applications - Hand or Gun Nailing

### Internal Wall Panelling & Weather Protected External Cladding

Profile Size	Max Span	Fixing	Face Fixed	Concealed
86 x 9	600	30 x 1.6	1 fixing	1 fixing
137 x 9	600	30 x 1.6	* 1	1
78 x 15	600	40 x 1.6	1	1
127 x 15	600	40 x 1.6	* 1	1
78 x 18	900	50 x 1.8	1	1
127 x 18	900	50 x 1.8	* 1	1
176 x 18	900	50 x 1.8	* 1	1
Decor Sections	900	50 x 1.8	1	1

\* face fixed - 127, 137, & 176 wide profiles may look better with both primary & secondary fixings.  
see sketch below for more detail on primary and secondary fixing.

### Ceiling & Soffit Lining

Ceiling or Soffit fixed on top of Exposed Rafters or Purlins				
Profile Size	Max Span	Fixing	Face Fixed	Concealed
86 x 9	600	40 x 1.6	1 fixing	n/a
137 x 9	600	40 x 1.6	2	n/a
78 x 15	750	50 x 1.8	1	n/a
127 x 15	750	50 x 1.8	2	n/a
78 x 18	900	50 x 1.8	1	n/a
127 x 18	900	50 x 1.8	2	n/a
176 x 18	900	50 x 1.8	2	n/a

Ceiling or Soffit fixed to Underside of Rafters or Purlins				
Profile Size	Max Span	Fixing	Face Fixed	Concealed
86 x 9	450	30 x 1.6	1 fixing	1 fixing
137 x 9	450	30 x 1.6	* 1	1
78 x 15	600	40 x 1.8	1	1
127 x 15	600	40 x 1.8	* 1	1
78 x 18	600	50 x 1.8	1	1
127 x 18	600	50 x 1.8	* 1	1
176 x 18	600	50 x 1.8	* 1	1
Decor Sections	600	50 x 1.8	1	1

\* face fixed - 127, 137, & 176 wide profiles may look better with both primary & secondary fixings.

Fixing sizes quoted relate to softwood framing - heavier gauges may be necessary for more dense supports. For internal and weather protected external applications, bright steel bullet head nails are acceptable. For sea coast environments, specifiers should consider the additional protection provided by hot dip galvanising.

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## Fixings

### Weather Exposed Applications - Hand Nailing

#### Weather Exposed External Cladding

Profile Size	Max Span	Fixing	Face Fixed	Concealed
78 x 15	450	50 x 2.8	1 fixing	1 fixing
127 x 15	450	50 x 2.8	* 1	1
78 x 18	600	50 x 2.8	1	1
127 x 18	600	50 x 2.8	* 1	1
176 x 18	600	50 x 2.8	2	N/R
Decor Sections	600	50 x 2.8	1	1

face fixed - 127 wide profiles may look better with both primary & secondary fixings. Detail in the Table above reflects good building practice which has proven over time to provide a reliable fixing specification for the majority of 'hand fixed' timber cladding applications. Where a 'gun fixed' or engineered fixing specification is considered necessary (particularly in high wind applications), the Table below nominates alternate options which are engineer certified.

### Weather Exposed Applications - Gun Nailing

#### Weather Exposed External Cladding

Except where specifically noted otherwise, the following nail fixing data is applicable to all softwood (pine) framing with a joint rating of JD5 or better and all hardwood and cypress wall framing. The fixing references account for both nail withdrawal and head 'pull through'. The fixing references only apply where the cladding is fixed direct to wall frames forming an enclosed wall cavity sealed with internal lining. For other wall systems refer to a registered professional engineer. The nail sizes indicated in the Table below are commonly available hot dipped or mechanically galvanised coil gun nails, as follows:-

- A = one 45 x 2.5 galvanised flat head (plain or ring shank, head dia. approximately 5.5mm) - one per board for either Face Fixing OR Concealed Fixing.
- B = one 50 x 2.5 galvanised flat head (plain or ring shank, head dia. approximately 5.5mm) - one per board for either Face Fixing OR Concealed Fixing
- C = two 50 x 2.5 galvanised flat head (plain or ring shank, head dia. approximately 5.5mm) - two Face Fixed

Data is applicable to both 15mm and 18mm TIMBECK Western Red Cedar Cladding Profiles.

Non - Cyclonic Regions						
Wind Class'n	General Wall Area			Within 1200 mm of Corners		
	Studs at			Studs at		
	300	450	600	300	450	600
Cover Width 78 mm						
N1 / N2	A	A	A	A	A	A
N3	A	A	A	A	A	A
N4	A	A	A	A	A	A
Cover Width 127 mm						
N1 / N2	A	A	A	A	A	A
N3	A	A	A	A	A	A
N4	A	A	A	A	B	B (1)
Cover Width 176 mm						
N1 / N2	A	A	A	A	A	A
N3	A	A	A	A	B	B (1)
N4	A	A	B	B	B (1)	C

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Cyclonic Regions						
Wind Class'n	General Wall Area Studs at			Within 1200 mm of Corners Studs at		
	300	450	600	300	450	600
Cover Width 78 mm						
C1	A	A	A	A	A	A
C2	A	A	A	A	A	A
C3	A	A	A	A	A	B (1)
Cover Width 127 mm						
C1	A	A	A	A	A	A
C2	A	A	A	A	B	B (1)
C3	A	A	B	B	B (1)	C (1)
Cover Width 176 mm						
C1	A	A	A	A	B	B (1)
C2	A	A	B	B	B (1)	C (1)
C3	A	B	B (1)	B (1)	C (1)	C (1)

The diagrams below are included here specifically to illustrate the difference between a 'Primary Fixing' and a 'Secondary Fixing'.

