

**INTRODUCTION**

This design data sheet is a guide to the fixing of Savanna Steel Shake Tile Roofing by Tasman Roofing Australia Pty. Ltd. in cyclonic regions.

Top fixing of first sheet to batten - 7-No.10x25 type 17 screws/sheet

**BASIC WIND DESIGN CRITERIA**

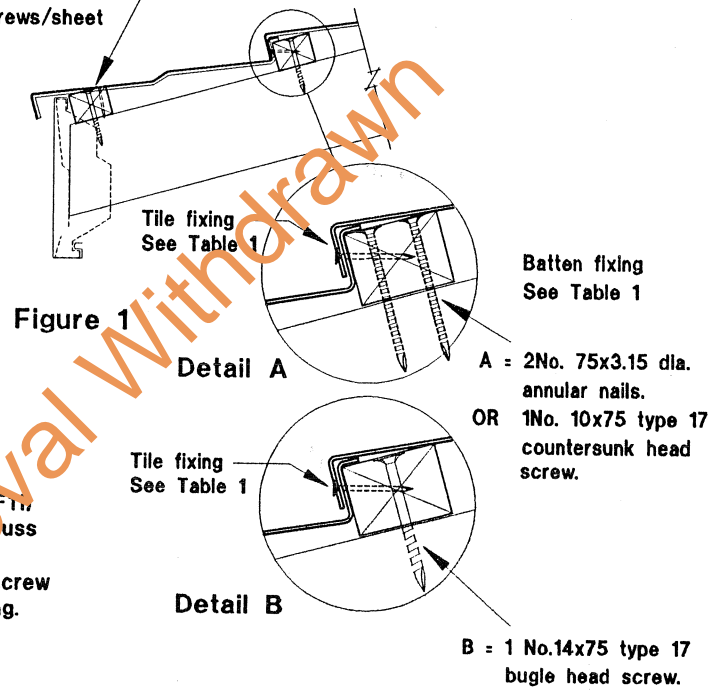
AS 1170, Part 2, Region C  
 Basic wind velocity Vu= 70 m/sec  
 Design wind velocity Vz= Mz(cat) x1.0x1.0x1.0x70 m/sec

**MATERIAL SPECIFICATION**

Savanna Steel Shake tiles are manufactured from the following materials: 0.39mm BMT (0.46mm TCT) G250 steel, zincalume coated. Proprietary oven baked acrylic coating after tile fabrication.

**BATTEN FIXING/SPACINGS**

Batten fixing as shown in Figure 1, Details A & B  
 Batten spacing is shown in Figure 2.  
 Truss or rafter spacings are given in Table 1. with a maximum spacing of 1200 adopted for 50 x 38 hard wood batten (Min. Fin. Min. 35mm penetration of nail and screw fixings into support truss or rafter  
 Butt splice batten centrally over support, fix with one nail or screw each side of splice, angle nail and/or pre-drill to avoid splitting. Stagger splice location.



**TILE POSITIONING**

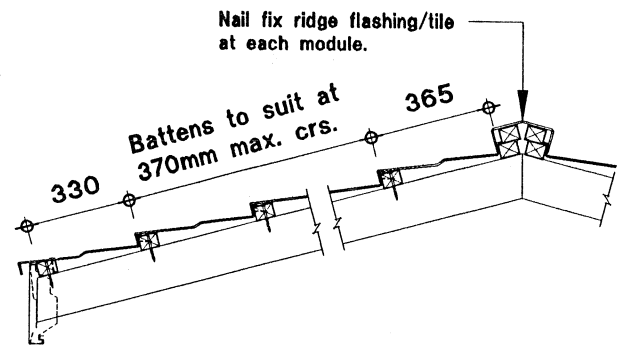
Tile sections should be laid on battens with laps staggered two or more modules apart. See Figure 4 (sheet 2)

Table 1: Tile Nailing / Maximum Truss or Rafter Spacing

Terrain Category	Roof area local pressure factor K <sub>L</sub> (ex. AS1170.2)	Ultimate design uplift wind pressure ( kPa. ) for building heights			Number of fixings per tile lip for building heights			Maximum truss or rafter spacing (mm) for building heights			Fixing of 50x38 hard wood battens See figure 1		
		0-5m	5-10m	10-15m	0-5m	5-10m	10-15m	0-5m	5-10m	10-15m	0-5m	5-10m	10-15m
2.0	1.0	4.5	5.0	5.7	7	7	7	1200	1200	1200	A	A	A
	1.5	5.7	6.0	7.2	7	7	7	1200	1200	1140	A	A	A
	2.0	6.9	6.6	8.8	7	●	X	1165	1110	1035	A	A	B
2.5	1.0	3.8	4.5	5.1	7	7	7	1200	1200	1200	A	A	A
	1.5	4.8	5.7	6.4	7	7	7	1200	1200	1200	A	A	A
	2.0	5.9	6.9	7.8	7	7	X	1200	1165	1095	A	A	B

Notes to table 1.

- Maximum design uplift wind pressure has been calculated on the basis of AS1170.2 with C<sub>pe</sub> = -0.9, C<sub>pi</sub> = +0.8
- Number of fixings indicated by "●", means that where C<sub>pi</sub> ≤ +0.7, a 7 nail fixing may be used.
- Number of fixings indicated by "X", means test data does not cover the ultimate design pressure.
- Information for design data related to batten fixing has been calculated with reference to the following standards:  
 Wind Loading code AS1170, Part 2. - 1997  
 Timber code AS1720 - 1988
- For general housing :-  
 A guide to roof area notation: Roof areas where K<sub>L</sub> = 1.5 or 2.0 are perimeter areas of roof consisting of the top four and bottom four courses of tiles and within one tile length from hips and barges. Roof area where K<sub>L</sub> = 1.0 covers the remainder of the roof. Refer to AS 1170.2 Figure 3.4.5. for extent of local pressure factor areas



Amendment B - Batten spacing to 370mm, Vu = 70m/sec.  
 Amendment A - Batten fixing details

Figure 2

Savanna Steel Shake Sheet 1 of 2

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**SAVANNA STEEL SHAKE ROOFING SYSTEM**  
 for fixing to timber battens  
 Tasman Roofing Australia Pty. Limited  
 ACN 081 835 092  
**DESIGN DATA SHEET**  
  
 APPROVED DATE DRAWING NUMBER. M/102/6 B