

Nominal tile size: **420 x 332 mm**

Nominal hanging length: **390 mm**

Nominal tile mass: **5 kg**

Nominal cover width at lock mid-shuffle position: **301 mm**

The side interlock provides for a practical 2 mm play between the tiles ( $\pm 1$  mm either way of the nominal cover) which gives flexibility when setting out the roof and helps to achieve the correct perpendicular alignment of the courses.

Minimum roof pitch with 100 mm headlap **17,5°**  
with 75 mm headlap **26°**

Rafter/Trusses As per structural requirements

Rafter centres (maximum) **760 mm** with 38 x 38 mm batten  
**900 mm** with 38 x 50 mm batten fixed flat  
**1 000 mm** with 38 x 50 mm batten on edge  
Note: Above 760 mm the rafter spacing can be increased only with engineer-designed trusses and with 38 x 50 mm batten of the correct grade. All structural timber must comply with S.A National Standard ds.

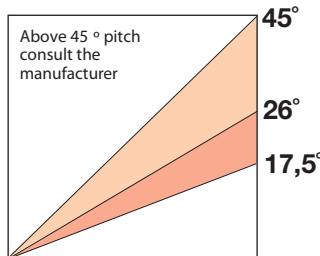
Undertile membrane **Marley high-quality Undertile Membrane is recommended in all cases.** Modern practice has demonstrated that the undertile membrane is a fundamental part of a tiled roof at pitches below 26° and for pitches above 45°, and at all pitches in exposed and coastal areas.

**Tiling data at pitches of 17,5° to 25°**

Minimum tile headlap **100 mm**  
Maximum batten centres **320 mm**  
Batten per m<sup>2</sup> (net length) **3,13 m**  
Tiles per m<sup>2</sup> (net) **10,48**  
Mass of tiles per m<sup>2</sup> ± **51,9 kg**

**Tiling data at pitches of 26° and above**

Minimum tile headlap **75 mm**  
Maximum batten centres **345 mm**  
Batten per m<sup>2</sup> (net length) **2,9 m**  
Tiles per m<sup>2</sup> (net) **9,63**  
Mass of tiles per m<sup>2</sup> ± **48,2 kg**



1. The minimum pitch and minimum headlap must not be reduced under any circumstance. It is always better to raise the safety factor of the roof by adding a full course of tiles and increasing the tile headlap evenly on the rafter length.
2. In exposed areas the tile headlap may be increased, but greater lap is not as effective as a steeper pitch.

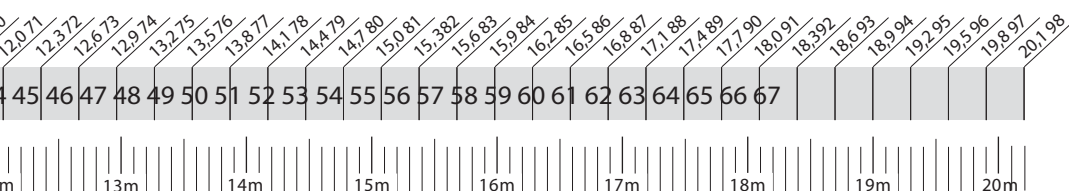
Distance from top edge of first batten to outside edge of fascia board **335 mm**

Distance from top edge of top batten to rafter apex **25 mm**

Estimating See Eaves and Rafter tables

All tiling and fixing to comply with SANS 10062 : 2003 Code of Practice and with Marley standard fixing specifications.

Cutting and drilling of tiles: See Health & Safety instruction



Number of tiles on the rafter length at minimum headlap

Roof pitches of:

17,5° to 25° 100 mm headlap		26° and more 75 mm headlap	
Rafter length		Rafter length	
1	0,360	1	0,360
2	0,680	2	0,705
3	1,000	3	1,050
4	1,320	4	1,395
5	1,640	5	1,740
6	1,960	6	2,085
7	2,280	7	2,430
8	2,600	8	2,775
9	2,920	9	3,120
10	3,240	10	3,465
11	3,560	11	3,810
12	3,880	12	4,155
13	4,200	13	4,500
14	4,520	14	4,845
15	4,840	15	5,190
16	5,160	16	5,535
17	5,480	17	5,880
18	5,800	18	6,225
19	6,120	19	6,570
20	6,440	20	6,915
21	6,760	21	7,260
22	7,080	22	7,605
23	7,400	23	7,950
24	7,720	24	8,295
25	8,040	25	8,640
26	8,360	26	8,985
27	8,680	27	9,330
28	9,000	28	9,675
29	9,320	29	10,020
30	9,640	30	10,365
31	9,960	31	10,710
32	10,280	32	11,055
33	10,600	33	11,400
34	10,920	34	11,745
35	11,240	35	12,090
36	11,560		
37	11,880		
38	12,200		

↑ Rafter Table

The Rafter Table indicates the number of courses to be allowed on the rafter length to ensure that the minimum tile headlap of 100 mm or 75 mm is obtained according to the roof pitch.

← Eaves Table

The Eaves Table shows the average linear coverage for Monarch tiles along the eaves length. Calculations are given at lock mid-shuffle position, subject to standard manufacturing tolerances.

All figures are net. Wastage must be added.