

Marley Modern

***The modern concrete roof tile
in the classic slate tradition***



Tile range, Fittings & Accessories

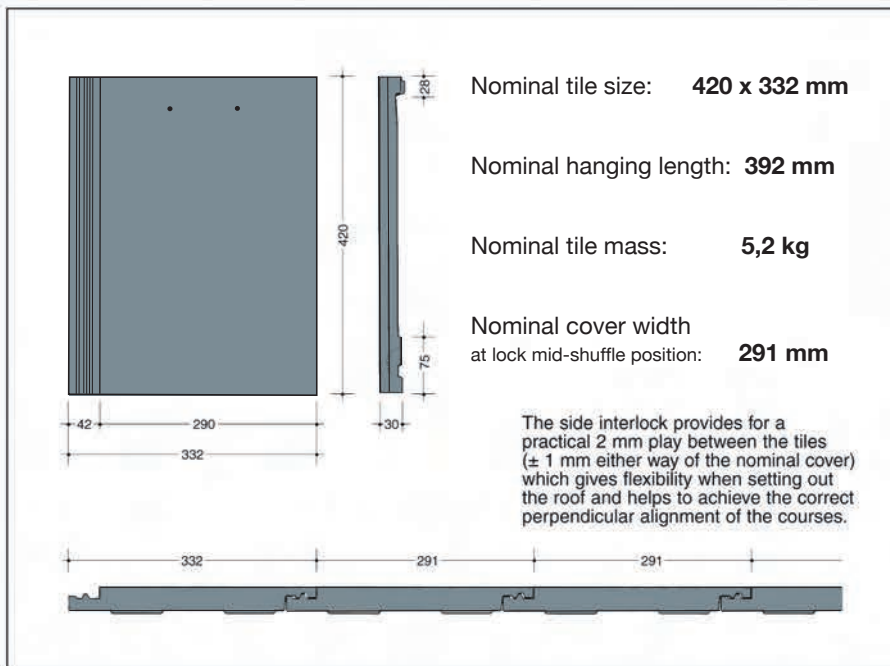
Inland

KwaZulu-Natal

Western Cape

Description & Technical data 7 pages



**Minimum roof pitch****26°**

Rafters/Trusses As per structural requirements

Rafters 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 batten on edge

Note: Above 760 mm the rafter spacing can be increased only with engineer-designed trusses and with 38 mm x 50 mm batten of the correct grade. All structural timber to comply with S.A. National Standards.

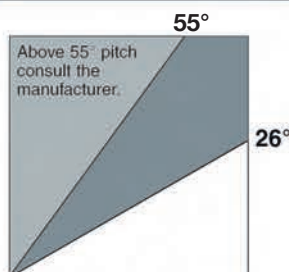
Underlay **Marley high-quality Undertile Membrane is recommended at all pitches.** Modern practice has demonstrated that the underlay is a fundamental part of a tiled roof.

Tiling data at pitches of 26° and above

Minimum tile headlap	100 mm
Maximum batten centres	320 mm
Batten per m ² (net length)	3,13 m
Tiles per m ² (net)	10,8
Mass of tiles per m ² ±	56 kg
Mass per 1 000 tiles ±	5,2 t
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

Use broken-bond tiling practice only.

At gable ends, parapet walls and abutments, half-tiles are needed at every second course and must be cut on site to requirement.



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. On exposed sites the tile headlap may be increased, but greater lap is not as effective as a steeper pitch.

Estimating See Eaves and Rafter tables

A comprehensive range of matching fittings and accessories is available



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****26° and more**
100mm headlap

	Rafter length	
1	0,360	
2	0,680	
3	1,000	1m
4	1,320	
5	1,640	
6	1,960	2m
7	2,280	
8	2,600	
9	2,920	3m
10	3,240	
11	3,560	
12	3,880	
13	4,200	4m
14	4,520	
15	4,840	
16	5,160	5m
17	5,480	
18	5,800	
19	6,120	6m
20	6,440	
21	6,760	
22	7,080	7m
23	7,400	
24	7,720	
25	8,040	8m
26	8,360	
27	8,680	
28	9,000	9m
29	9,320	
30	9,640	
31	9,960	10m
32	10,280	
33	10,600	
34	10,920	
35	11,240	11m
36	11,560	
37	11,880	
38	12,200	12m

↑ 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 is obtained.

← Eaves Table

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

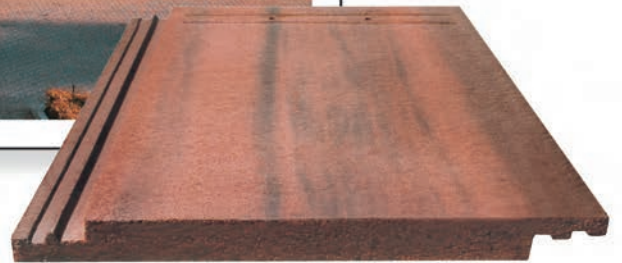
All figures are net. Wastage must be added.

Modern Antique

Modern page 5



The Modern Antique tile features two complementary colours mixed at random to give each tile its distinctive antique appearance.



Modern Designer Range



The Modern Designer Range enables architects and developers to create strikingly beautiful roofs in the classic multicolour tradition.



TILING AND FIXING SPECIFICATIONS

Introduction

Modern single lap concrete roof tiles are of a flat interlocking design. The clean and precise slate-like appearance of the tiles is enhanced by the necessary broken-bond tiling technique on the roof. Marley Modern tiles are designed for roof pitches of 26° and above and are supplied standard with two nail holes.

General

The Modern tile is a flat interlocking tile which by its nature will highlight any imperfection in the roof structure. It is therefore imperative to take great care during the erection of the roof trusses and tiling battens to ensure that a level roof plane is achieved.

The following recommendations on installation should be regarded as normal practice. Under certain circumstances material specifications may vary to suit conditions of use and reference should be made to SANS 10062 - 2003 or Marley Good Roof Tiling Practice.

Preparatory Site Work

Before tiling commences the following preparatory work must be completed:

1. Alignment and bracing of trusses as per specification
2. Parapet walls and chimneys
3. Gable brickwork and beam filling
4. Valley and abutment flashings
5. Fascia boards, tilting battens and gutters

Where some of the above cannot be completed in advance or where purpose-made products are to be utilised, the outstanding preparatory work should be carried out in conjunction with the tiler.

Undertile membrane

Prior to battening Marley undertile membrane should be installed in accordance with SANS 10062. In coastal areas and semi-exposed and exposed roof situations the undertile membrane is mandatory in all cases.

Below pitch boarding and waterproofing

Where a particular roof design dictates in some areas pitches below 26° special precautions must be taken. The headlap of the tile must be increased to 120 mm and a fully supported approved waterproofing membrane must be installed over boarding or rigid sarking. Consult Marley Roofing for special recommendations.

Battens

SANS-approved softwood battens 38 x 38 mm for 760 mm rafter centres are to be fixed on engineer-designed trusses at maximum 320 mm batten centres with SANS-approved cut or wire nails.

Eaves Course

The eaves course should overhang the fascia board by an amount sufficient to ensure that water will discharge freely into the centre of the gutter. The eaves course must be supported by a continuous tilting batten or fascia board to ensure that the eaves course is in the same plane as the rest of the roof.

Top Course

The distance between the top tiling batten and the rafter apex must not exceed 25 mm to ensure that the ridge tiles will overlap the top courses of tiles on both sides with a minimum cover of 75 mm.

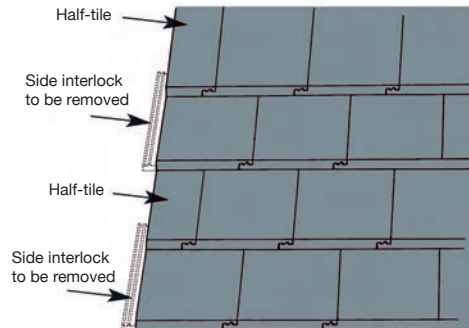
Main Roof

Modern roof tiles are recommended for roof pitches of 26° and above and must be tiled broken-bond with a minimum headlap of 100 mm. Half-tiles are needed at every second course at verges, parapet walls and abutments and must be cut on site to requirement.

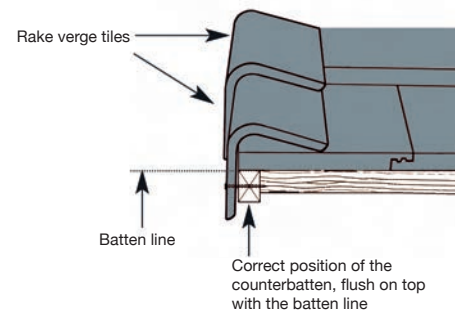
A useful feature on all Modern tiles is the half-tile marker provided in the tile headlap. The half-tile marker helps achieving the correct broken-bond alignment and the accurate cutting of half-tiles.

Verges

Verges are tiled broken-bond with full tiles and half-tiles in alternate courses. All full tiles at left-hand verges must have the side interlock removed to achieve a straight line finish. The half-tile module eliminates the cutting of tiles at verges if the roof is set out correctly.



Marley Rake Verge Tiles are strongly recommended for a maintenance-free quality finish at gable ends. The 38 x 50 mm counterbatten installed at verges to the ends of the tiling battens must be fixed flush with the top line of the battens.



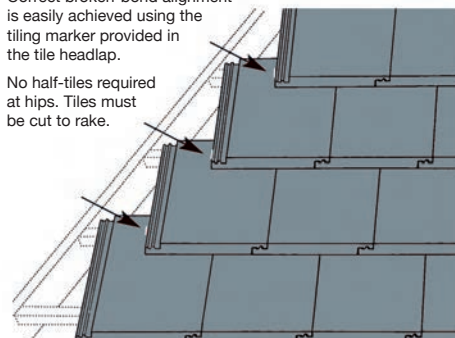
Ridges and Hips

Marley's range of Ridge tiles and fittings are strongly recommended for an efficient and maintenance-free finish at ridges, hips and mono-ridges. Due to their flat profile Modern tiles are ideally suited for hip roofs as very little bedding mortar is required,

Hips:

Correct broken-bond alignment is easily achieved using the tiling marker provided in the tile headlap.

No half-tiles required at hips. Tiles must be cut to rake.

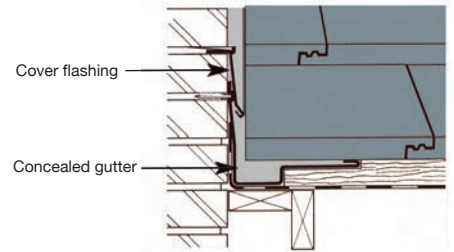


Valleys

A non-corrodible valley liner at least 450 mm wide, preferably with a preformed centre gutter, must be installed before tiling commences. In the case of a closed valley the tiles on each side must be cut to obtain a straight butt-joint over the centre of the valley flashing. For an open valley the adjacent tiles on both sides must be cut to form an open channel at least 100 mm wide. Tiles must be neatly cut to rake using a carborundum disc-cutter and securely fixed to the battens.

Abutments

The tiling must be cut closely at abutments. Concealed gutters with cover flashings are recommended for Modern tiles and must be installed before tiling commences.



Fixing

Modern tiles must be mechanically fixed with corrosion resistant 50 mm long nails in accordance with SANS 10062. Above 55° roof pitch each tile must be nailed twice. All fixing nails must comply with the relevant requirements of SANS 820.

Where clips are used they must be nailed to the tiling batten of the immediate course beneath with the clip firmly located over the side lock of the tile being clipped.

Unexposed roof situations:

We strongly recommend that in all instances the full roof overhang at eaves, verges and two rows of tiles under the ridge and near abutments, hips and valleys, are being nailed or clipped.

Semi-exposed and exposed roof situations and coastal areas:

Refer to SANS 10062 or to Marley Minimum Fixing Specifications.

For roof pitches above 55° and vertical tiling consult Marley Roofing for further advice.

Mortar bedding

All bedding mortar used for hips and ridges should consist of 3 parts clean sharp plaster sand to 1 part Portland cement or masonry cement suitably tinted to the colour of the tiles. The bedding mortar should be struck off and pointed in one operation to obtain a smooth finish.

Maintenance

Correctly installed and maintained Modern tiles should perform satisfactorily for the lifetime of the building.

Due to their flat design Modern tiles do not have the inherent strength of profiled tiles. Modern tiles may be damaged, cracked or broken if walked upon after installation. Essential maintenance should be performed by qualified personnel, walking on the lower third of the tiles only to avoid damage.

Marley Roofing cannot be held responsible for any damage or breakages on the roof caused by after-trades, bad fixing practice, negligence or mishandling of the product.

Technical advice

Marley's Technical Advisory Service provides free advice on all technical roofing matters.

Availability

Marley Modern tiles are distributed nationally and can be delivered in palletised form. For further information contact Marley Roofing.

The manufacturer reserves the right to change or discontinue any of the specifications or products without notification. All goods are subject to availability and the company's conditions of sale which are available on request.



Cutting and drilling of tiles
See Health & Safety

MODERN INLAND — FITTINGS and ACCESSORIES

Overlapping fittings



Taper ridge tile
2,7 per m



Ventilated ridge tile



Rake verge tile
3,2 per m



Taper hip starter



120° capped
ridge tile 2,3 per m



Monoridge tile
2,7 per m



Marley
Universal
Ridge Tile
System



Marley
Universal
Rake
Verge Tile
System

Butt joint fittings



120° ridge tile 2,2 per m

Undertile membrane



2 ply 400 micron polypropylene laminate
Agrément Certificate 2008/341
Colour: White traditional
Net coverage per roll 45 m²
Printed 150 mm headlap dotted line

Marley 'Radiant Barrier'



97% heat
reflective

2 ply 400 micron polypropylene laminate
with insulation foil
Printed 150 mm headlap dotted line

- **RESIDENTIAL — One sided foil**
Agrément Certificate 2007/333
Net coverage per roll 45 m²
- **RESIDENTIAL/COMMERCIAL — Two sided foil**
Agrément Certificate 2009/353
Net coverage per roll 45 m²
- **HEAVY INDUSTRIAL — Reinforced two sided foil**
Agrément Certificate 2009/353
Net coverage per roll 50 m²

Tile nails



Modern tile minimum length 50 mm

Serrated nails for rake verge tiles 75 mm



'SOLO-FIX' stormclips

Quality corrosion-resistant
integrated stormclips
manufactured from ZIAL[®]

Modern tile: Code **65-48 S**

Packaging: 500 clips per box

**It is important to use
the correct clip for the tile
profile.**



M22 touch-up coating

for mortarbedding, flashings, fascia boards
etc. per 1, 2 and 5 litre



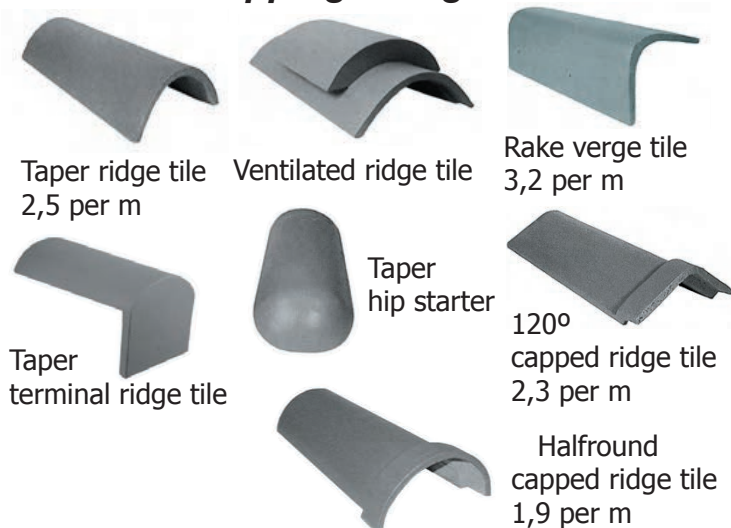
Mortar pigment in all colours per kg

**All tile accessories, undertile membrane,
tiling nails, stormclips, pigment,
M22 touch up coating etc.
are available ex-factory.**

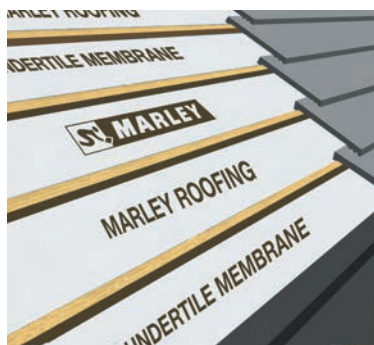
Next... KwaZulu-Natal Range

MODERN KWAZULU-NATAL FITTINGS and ACCESSORIES

Overlapping fittings

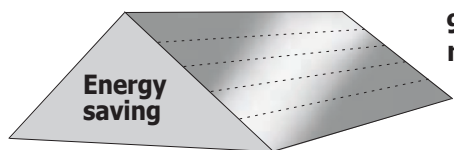


Undertile membrane



2 ply 400 micron polypropylene laminate
Agrément Certificate 2008/341
Colour: White traditional
Net coverage per roll 45 m²
Printed 150 mm headlap dotted line

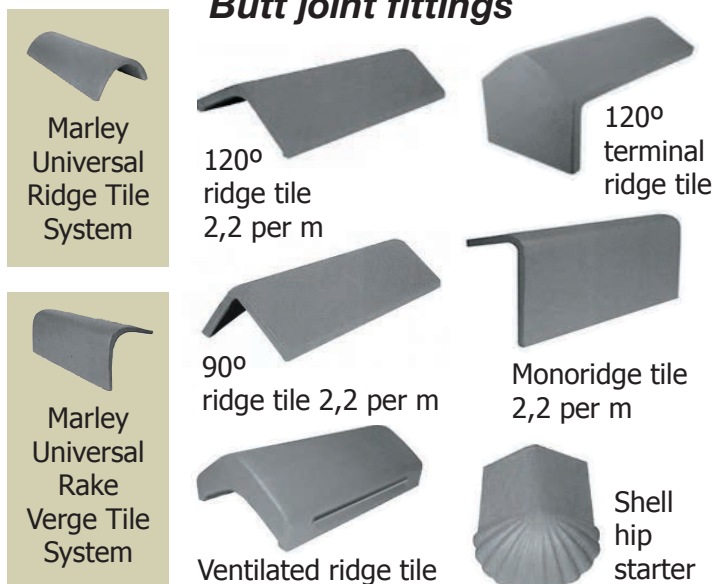
Marley 'Radiant Barrier'



2 ply 400 micron polypropylene laminate
with insulation foil
Printed 150 mm headlap dotted line

- **RESIDENTIAL — One sided foil**
Agrément Certificate 2007/333
Net coverage per roll 45 m²
- **RESIDENTIAL/COMMERCIAL — Two sided foil**
Agrément Certificate 2009/353
Net coverage per roll 45 m²
- **HEAVY INDUSTRIAL — Reinforced two sided foil**
Agrément Certificate 2009/353
Net coverage per roll 50 m²

Butt joint fittings



Tile nails

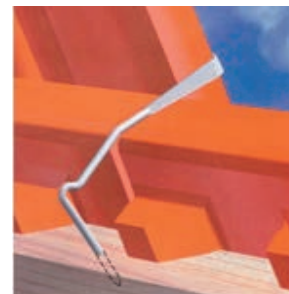


Serrated nails for rake verge tiles 75 mm



'SOLO-FIX' stormclips

Quality corrosion-resistant integrated stormclips manufactured from ZIAL[®]
Modern tile: Code **65-48 S**
Packaging: 500 clips per box



It is important to use the correct clip for the tile profile.

M22 touch-up coating

for mortarbedding, flashings, fascia boards etc. per 1, 2 and 5 litre



Mortar pigment in all colours per kg

All tile accessories, undertile membrane, tiling nails, stormclips, pigment, M22 touch up coating etc. are available ex-factory.

Next... Western Cape Range

MODERN WESTERN CAPE – FITTINGS and ACCESSORIES

Overlapping fittings



Taper ridge tile
2,7 per m



Rake verge tile
3,2 per m



Taper hip starter



Monoridge tile
2,7 per m

Undertile membrane



2 ply 400 micron polypropylene laminate
Agrément Certificate 2008/341
Colour: White traditional
Net coverage per roll 45 m²
Printed 150 mm headlap dotted line

Marley 'Radiant Barrier'



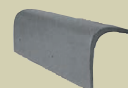
97% heat
reflective

2 ply 400 micron polypropylene laminate
with insulation foil
Printed 150 mm headlap dotted line

- **RESIDENTIAL — One sided foil**
Agrément Certificate 2007/333
Net coverage per roll 45 m²
- **RESIDENTIAL/COMMERCIAL — Two sided foil**
Agrément Certificate 2009/353
Net coverage per roll 45 m²
- **HEAVY INDUSTRIAL — Reinforced two sided foil**
Agrément Certificate 2009/353
Net coverage per roll 50 m²



Marley
Universal
Ridge Tile
System

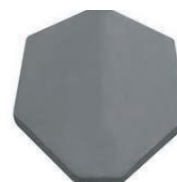


Marley
Universal
Rake
Verge Tile
System

Butt joint fittings



120° ridge tile 2,2 per m



Butt joint hip starter

**Use only serrated nails
in the Cape coastal region**

Tile nails

Modern tile



minimum length 50 mm

Serrated nails for rake verge tiles 75 mm



'SOLO-FIX' stormclips

Quality corrosion-resistant
integrated stormclips
manufactured from ZIAL[®]
Modern tile: Code **65-48 S**
Packaging: 500 clips per box



**It is important to use
the correct clip for the tile
profile.**

M22 touch-up coating

for mortarbedding, flashings, fascia boards
etc. per 1, 2 and 5 litre

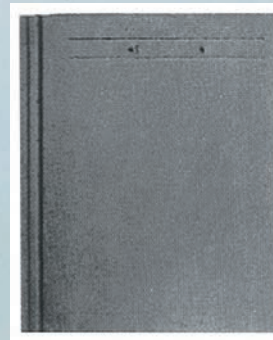


Mortar pigment in all colours per kg

**All tile accessories, undertile membrane,
tiling nails, stormclips, pigment,
M22 touch up coating, DPC,
birdcomb etc. are available ex-factory.**

Back to Quickfinder

*Please note:
Photographs are given as an indication only.
Due to environmental factors such as light and weather
and the limitations of colour reproduction actual
samples should always be seen before ordering.*



Modern Standard Slate
MDSTSL





Modern Rustic Slate
MDANRS

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MODERN DESIGNER RANGE

