

LAGAN TILE



PRODUCT BROCHURE

ELITE TILES

FLAT TILES

DOUBLE ROLL TILES

SQUARE TOP TILES

RIDGE TILES

ACCESSORIES

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EXAMPLE SPECIFICATIONS

Tiles:

The roof is to be covered with 420x330mm Lagan Tile _____ (insert tile type) equal to sample approved and laid to a minimum headlap of _____mm and maximum gauge of _____mm. The roof pitch is to be _____° (see technical spec.). Tiles are to be fixed in accordance with B.S. 5534:2003 design.

Flat & Elite tiles should be laid broken bonded.

Underlay:

The underlay is to be reinforced bitumen felt type or other equally approved to BS 747:2000. This is to be laid over the rafters, lapped 150mm at horizontal joints and carried over to the next rafter at vertical joints, tensioned to reduce sag and tacked with large head galvanised nails. To drain all water the underlay is to extend over the fascia board into the eaves gutter. Water traps must not be allowed to form behind the fascia board and if necessary a continuous fillet to support the underlay is to be provided.

Battens:

Approved quality softwood tiling battens _____x_____mm* in section to be laid to a maximum gauge of _____mm** and secured to each of the rafters with _____mm*** nails. Battens should be not less than 1200mm lengths, and should be long enough to be supported at each end and intermediately by at least three rafters, trusses or walls. Battens must not be cantilevered or spliced between supports. Battens should be cut square and butt jointed halfway across the top of a rafter and nailed securely. Not more than one batten in four should be joined over any one rafter. *Battens are to comply with B.S. 5534:2003 design. **See technical data. ***Nails are to conform with B.S. 5534:2003 design and are recommended to be galvanised in coastal areas.

Eaves:

The eaves course is to be laid with standard Lagan Tile flat tiles projecting approximately 50mm over the edge of the fascia board. The top edge of the fascia board is to be set higher than the top of the rafter tail so that the gauge course is supported at the same slope as the main roof.

Verges:

The verge tile shall be bedded in mortar on an undercloak of fibre reinforced cement strip 150mm wide, projecting a maximum 50mm over the edge of the gable wall or barge-board. The right hand verge is to be laid with standard tiles and purpose made half tiles in alternate courses. The left hand verge is to be laid with purpose made full and half tiles in alternate courses. The bedded tiles should have a slight tilt away from the over hanging edge.

Ridge and Hip:

The ridges and hips are to be covered with Lagan Tile _____ (insert ridge type) ridge tile in mortar with solid bedding at butt joints. Units to be bedded should first be soaked in water. The ridge tiles must provide a minimum cover of 75mm over the top course of tiles. Galvanised hip irons are to be fitted at the foot of each hip. On mono pitch roofs Lagan Tile mono ridge tiles are to be used.

Valleys:

Open valleys are to be formed with lead lining at least 457mm wide and supported by boards. A tiling batten or tilting piece is to be fixed and run parallel to the upper edge of the valley board. The lead is to be welted and dressed over the tilting piece by at least 40mm then nailed. The adjacent tiling is to be neatly cut and bedded on a 115mm fibre reinforced cement sheet to form a channel not less than 100mm wide. (All lead provided by plumber.)

Abutment:

The roof tiles are to be cut to give a close fit against abutting walls or chimneys. Lead cover flashing is to be stepped and dressed over the nearest roll and into the pan beyond for a minimum 50mm. (Flashing provided by plumber.)

Bedding Mortar:

All mortar used for bedding shall consist of one part portland cement mixed with three parts clean sharp sand and enough pigment to lightly tint the mix. Units to be bedded (ridges, hips, valleys, verge tiles, etc.) should first be soaked in water. Bedding mortar should be squeezed down and struck off to give a clean face so that no further pointing is necessary. Wide gaps are to be partially filled with tile cuttings to reduce tile shrinkage. All excess mortar is to be cleaned from the tile surface as work proceeds.

Ventilation:

Ventilation of the roof space to be in accordance with the requirements of the building Regulations and B.S. 5250:2002.

Note:

This specification guide is based on the main requirements of B.S. 5534:2003 and will in general ensure a satisfactory roof. Unusual conditions or designs may require special considerations in which case reference should be made to B.S. 5534:2003 design or manufacturer for further guidance.

Under normal production conditions, colour variation can occur in Lagan Tile concrete roof tiles. Natural weathering may also cause changes in colour and appearance. In both cases this is acceptable under B.S. EN 490. Scratches and abrasions caused by packing, loading and transportation are also permissible provided that the overall tile quality is not affected. Efflorescence, which is a surface phenomenon associated with natural concrete products, may result in a temporary lightening of the surface colour of the roof tiles. This is mainly made up of calcium carbonate. Normally this will be removed by natural weathering. The calcite crusts either fall off by wind erosion or react progressively with moist atmospheric carbon dioxide to form calcium hydrogen carbonate, a very soluble material that is easily washed away by rain.



VERTICAL COVERAGE

Slope length covered at end laps of:

Horizontal lengths are based on a setting out gauge for three standard tiles, although the tolerance fit of the interlock will permit a small amount of play, this should not be relied on to accommodate inaccuracies in setting out the roof.

All figures are Nett. Wastage is to be added.

	75mm	100mm
1	0.420m	0.420m
2	0.765m	0.740m
3	1.110m	1.060m
4	1.455m	1.380m
5	1.800m	1.700m
6	2.145m	2.020m
7	2.490m	2.340m
8	2.835m	2.660m
9	3.180m	2.980m
10	3.525m	3.300m
11	3.870m	3.620m
12	4.215m	3.940m
13	4.560m	4.260m
14	4.905m	4.580m
15	5.250m	4.900m

	75mm	100mm
16	5.595m	5.220m
17	5.940m	5.540m
18	6.285m	5.860m
19	6.630m	6.180m
20	6.975m	6.500m
21	7.320m	6.820m
22	7.665m	7.140m
23	8.010m	7.460m
24	8.355m	7.780m
25	8.700m	8.100m
26	9.045m	8.420m
27	9.390m	8.740m
28	9.735m	9.060m
29	10.080m	9.380m
30	10.425m	9.700m

HORIZONTAL COVERAGE

Tiles in course	Flat Tiles & Elite Tiles	
	Length covered (m)	Length covered (m)
3	0.885	42
4	1.180	43
5	1.475	44
6	1.770	45
7	2.065	46
8	2.360	47
9	2.655	48
10	2.950	49
11	3.245	50
12	3.540	51
13	3.835	52
14	4.130	53
15	4.425	54
16	4.720	55
17	5.015	56
18	5.310	57
19	5.605	58
20	5.900	59
21	6.195	60
22	6.490	61
23	6.785	62
24	7.080	63
25	7.375	64
26	7.670	65
27	7.965	66
28	8.260	67
29	8.555	68
30	8.850	69
31	9.145	70
32	9.440	71
33	9.735	72
34	10.030	73
35	10.325	74
36	10.620	75
37	10.915	76
38	11.210	77
39	11.505	78
40	11.800	79
41	12.095	80

Tiles in course	Double Roll Tiles	
	Length covered (m)	Length covered (m)
3	0.9	37
4	1.2	38
5	1.5	39
6	1.8	40
7	2.1	41
8	2.4	42
9	2.7	43
10	3.0	44
11	3.3	45
12	3.6	46
13	3.9	47
14	4.2	48
15	4.5	49
16	4.8	50
17	5.1	51
18	5.4	52
19	5.7	53
20	6.0	54
21	6.3	55
22	6.6	56
23	6.9	57
24	7.2	58
25	7.5	59
26	7.8	60
27	8.1	61
28	8.4	62
29	8.7	63
30	9.0	64
31	9.3	65
32	9.6	66
33	9.9	67
34	10.2	68
35	10.5	69
36	10.8	70

Tiles in course	Square Top Tiles	
	Length covered (m)	Length covered (m)
3	0.891	37
4	1.188	38
5	1.485	39
6	1.782	40
7	2.079	41
8	2.376	42
9	2.673	43
10	2.97	44
11	3.267	45
12	3.564	46
13	3.861	47
14	4.158	48
15	4.455	49
16	4.752	50
17	5.049	51
18	5.346	52
19	5.643	53
20	5.94	54
21	6.237	55
22	6.534	56
23	6.831	57
24	7.128	58
25	7.425	59
26	7.722	60
27	8.019	61
28	8.316	62
29	8.613	63
30	8.91	64
31	9.207	65
32	9.504	66
33	9.801	67
34	10.098	68
35	10.395	69
36	10.692	70

Vertical lengths are the overall distance from the tail of the eaves course to the head of the ridge course for the head laps stated. Any intermediate length can be obtained by using the same length of courses as for the next higher listed length and reducing the batten gauge (increasing the lap) to suit.

LAGAN TILE COMPANY INFORMATION

In April 2004 Lagan Holdings Limited was restructured into five separate companies each following more closely its specific activities and in 2006 the Lagan companies reported a combined turnover of £333m.

Lagan Tile is part of the Lagan Cement Group that is one of these five companies.

Production at Lagan Tile began in early 1995 with two profiles, Flat and Double Roll. Since then two more profiles have been added, Elite, which are "thin leading edge" tiles, and most recently the Square Top profile.

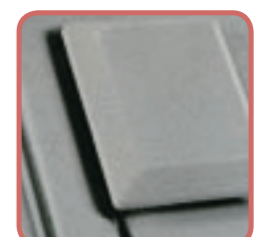
Over the years an extensive range of accessories have also become available to compliment the roof tiles. These include various dry fix and ventilation products, machine made ridge tiles and a comprehensive selection of quality handmade ornamental ridge tiles and finials.

Lagan Tile have a serious commitment to producing quality products and manufacture our roof tiles to comply with B.S.EN 490 2004 and test them on accordance with B.S.EN 491 2004.

In June 2002 the company received third party accreditation confirming that the Environmental Management Systems met the requirements of ISO 14001:2004.

Lagan Tile Health & Safety Management arrangements and operations meet with the British Standards set down in BS/OHSAS 18001. The company is independently audited by SGS Yarsley.

Lagan roof tiles are manufactured from Portland cement, aggregate, pigment and water under a high-pressure compaction process. They are smooth faced, have a coloured pigmented body and are surface coated with an acrylic finish.



Lagan Tile concrete roof tiles are guaranteed for 50 years. (subject to standard terms of guarantee.)

ROOF TILES

The roof tile dimensions given are nominal sizes, however all Lagan Tiles are manufactured within the dimensional tolerances permitted under B.S.EN 490 2004

FLAT TILE

A traditional concrete interlocking flat tile which is fixed on the roof in a broken band pattern.

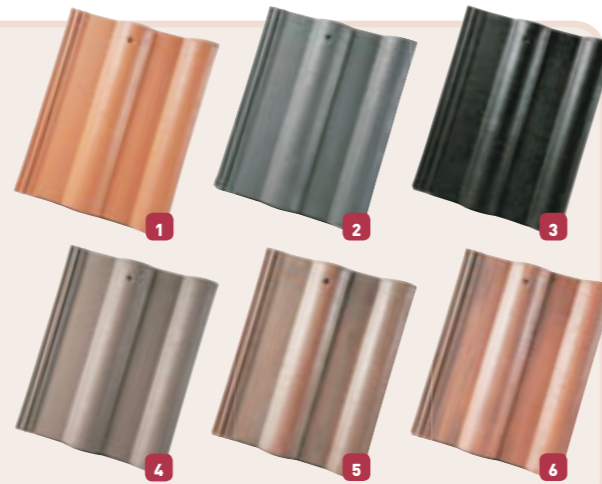
- 1 RED
- 2 GREY
- 3 BLACK
- 4 BROWN
- 5 ANTIQUE BROWN
- 6 ANTIQUE RED



DOUBLE ROLL TILE

A concrete interlocking tile in the timeless double roman profile.

- 1 RED
- 2 GREY
- 3 BLACK
- 4 BROWN
- 5 ANTIQUE BROWN
- 6 ANTIQUE RED



ELITE TILE

A smooth concrete interlocking slate tile with the latest thin leading edge design.

- 1 GREY
- 2 BLACK



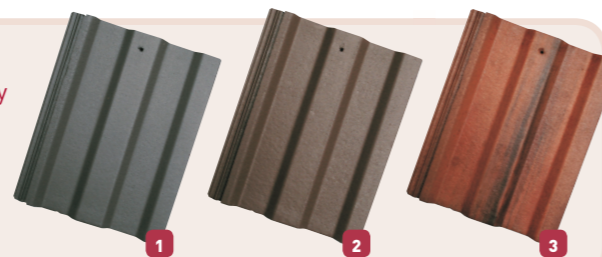
Thin Leading Edge Technology



SQUARE TOP TILE

A classic low profile tile that is proving increasingly popular on newbuild and refurbishment alike.

- 1 GREY
- 2 BROWN
- 3 ANTIQUE RED



IMPORTANT NOTICE:

Where the wind load calculated in accordance with B.S. 5534:2003 provides an uplift force which exceeds the dead load of the tile, mechanical fixings in addition to the minimum fixings will be necessary. Factors which must be considered:

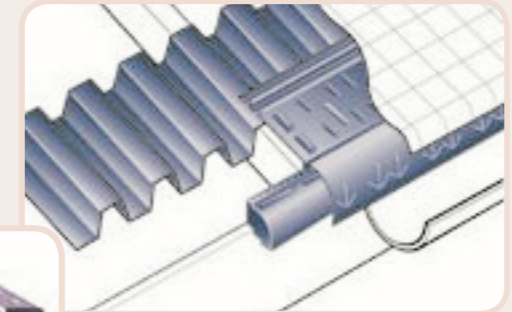
- 1) Exposure and location of the site
- 2) Roof pitch
- 3) Height of the roof
- 4) Wind speed

ACCESSORIES

EAVES VENT SYSTEM; 3in1 VENTILATOR PACK

A unique feature of this system is the Universal Over Facia Ventilator with two fixing positions, that adapt to 10mm and 25mm airflows. Each pack contains:

- 1 x 6 metre Roll Panel
- 10 x 600mm Underlay Support Trays
- 6 x 1 metre Over Facia Vent



AIRFLOWS
25mm fixing position = 25,000mm² per metre
10mm fixing position = 10,000mm² per metre



VENTILATED RIDGE TILE



FLEXIBLE CONNECTOR

100mm REDUCER

For Hooded Vent

100mm REDUCER

For Flush Fitting Vent

TILE FIXINGS



- 1 EAVES FILLER COMB
- 2 ALUMINIUM NAILS
- 3 VERGE & TILE CLIPS
- 4 HIP IRON

VENT TILES

FLUSH FITTING VENT

Airflow 15,000mm²

- 1 FLAT VENT
- 2 DOUBLE ROLL VENT

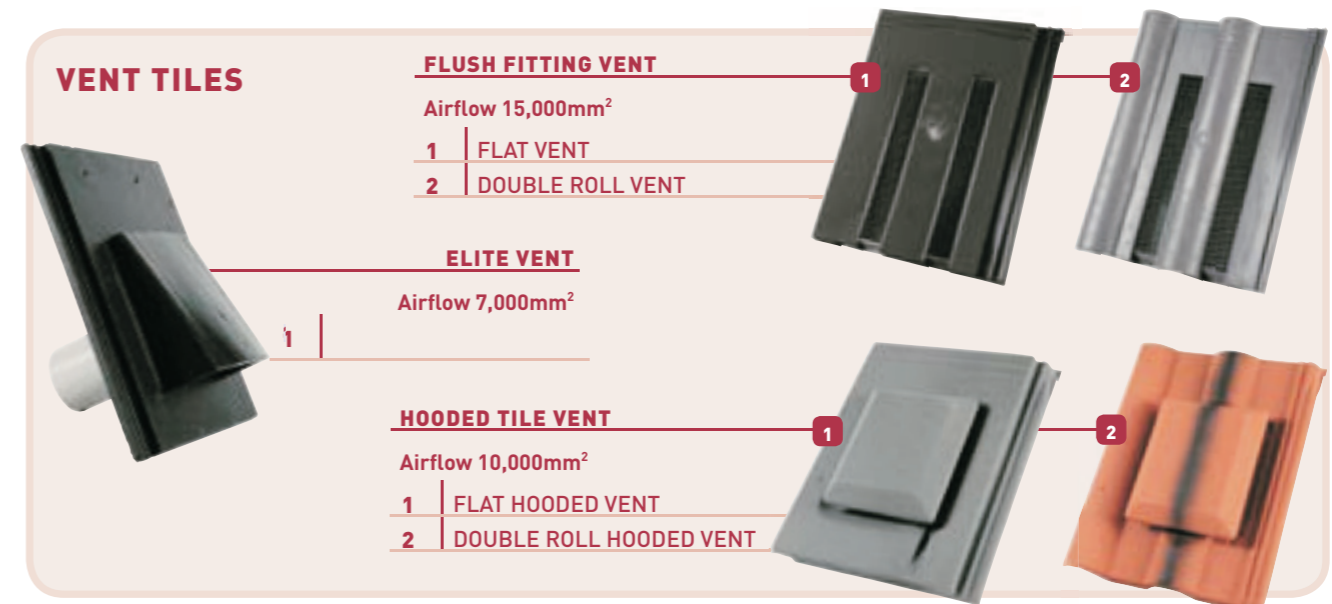
ELITE VENT

Airflow 7,000mm²

HOODED TILE VENT

Airflow 10,000mm²

- 1 FLAT HOODED VENT
- 2 DOUBLE ROLL HOODED VENT

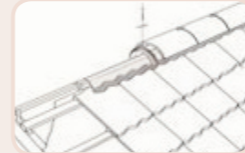
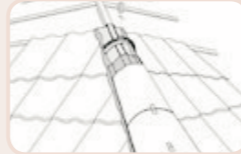


Vent Tiles are available in a range of colours to suit the main tile

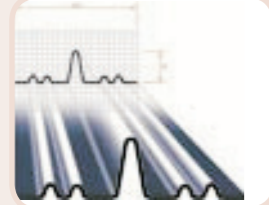
ROLLOUT; RIDGE AND HIP SYSTEM

COMPONENTS

- Ridge / Hip Roll
- Ridge / Hip Gasket
- Screw & clip for Gasket
- Hip tray 1650mm long
- Tile clip for small cuts



DRY VALLEY TROUGHS

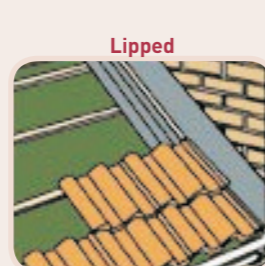


For high profile tiles



For plain and low profile tiles

CONTINUOUS SOAKERS



Lipped



Unipped

DRY VERGE



- L/H Dry Verge Unit
- R/H Dry Verge Unit
- Batten End Clip
- Eaves / Ridge Closer Unit
- Ridge end cap

Permo® forte

Permo® forte is a four-layer vapour-permeable roofing underlay that lets roofs breathe. Permo® forte is suitable for all pitched roofs.

Features

- Very strong, bitumen-free, vapour-permeable undelay
- Clean, safe and lightweight to handle
- Four layer material with grid
- Suitable for cold and warm roof applications
- Simple to install, using traditional methods
- No ventilation of the roof void required
- UV stable for four months
- Hydrophobically treated
- Allows roof structure to breathe, yet fully waterproof
- Limits air leakage in a sealed roof application



FLAT TILE

Size of Tile (overall)	420 X 330mm
Minimum Pitch	17 1/2° (for rafter length over 8 metre, please consult our technical department)
Maximum Pitch	90° (subject to fixing specification)
Headlap (minimum)	75mm above 25° // 100mm at 25° or below
Headlap (maximum)	100mm
Gauge (maximum)	345mm
Covering Width of one tile (nominal)	295mm
Covering Capacity (Headlap 75 mm)	9.8 tiles / m ²
Covering Capacity (Headlap 100 mm)	10.6 tiles / m ²
Hanging Length (nominal)	400mm
Weight per 1000 (approx.)	5.5 tonnes
Recommended Batten size (see BS5534)	50x25mm
• Rafter centres up to 600mm	
Recommended Nail size	50mm x 3.35mm

DOUBLE ROLL TILE

Size of Tile (overall)	420 x 330mm
Minimum Pitch	22 1/2°
Maximum Pitch	90° (subject to fixing specification)
Headlap (minimum)	75mm above 25° // 100mm at 25° or below
Headlap (maximum)	100mm
Gauge (maximum)	345mm
Covering Width of one tile (nominal)	300mm
Covering Capacity (Headlap 75 mm)	9.7/m ²
Covering Capacity (Headlap 100 mm)	10.4/m ²
Hanging Length (nominal)	400mm
Weight per 1000 (approx.)	5.0 tonnes
Recommended Batten size (see BS5534)	50x25mm
• Rafter centres up to 600mm	
Recommended Nail size	60mm x 3.35mm

ELITE TILE

Size of Tile (overall)	420 x 330mm
Minimum Pitch	22 1/2° (for rafter length over 8 metre, please consult our technical department)
Maximum Pitch	90° (subject to fixing specification)
Headlap (minimum)	75mm above 25° // 100mm at 25° or below
Headlap (maximum)	100mm
Gauge (maximum)	345mm
Covering Width of one tile (nominal)	295mm
Covering Capacity (Headlap 75 mm)	9.8/m ²
Covering Capacity (Headlap 100 mm)	10.6/m ²
Hanging Length (nominal)	400mm
Weight per 1000 (approx.)	5.0 tonnes
Recommended Batten size (see BS5534)	50x25mm
• Rafter centres up to 600mm	
Recommended Nail size	45mm x 3.35mm

LAGAN SQUARE TOP TILE

Size of Tile (overall)	420 x 330mm
Minimum Pitch	22 1/2°
Maximum Pitch	90° (subject to fixing specification)
Headlap (minimum)	75mm above 25° // 100mm at 25° or above
Headlap (maximum)	100mm
Gauge (maximum)	345mm
Covering Width of one tile (nominal)	297mm
Covering Capacity (Headlap 75 mm)	9.7/m ²
Covering Capacity (Headlap 100 mm)	10.4/m ²
Hanging Length (nominal)	400mm
Weight per 1000 (approx.)	5.0 tonnes
Recommended Batten size (see BS5534)	50x25mm
• Rafter centres up to 600mm	
Recommended Nail size	55mm x 3.35mm

RIDGE TILES

A range of ridge tiles and finials designed and created by Lagan tile craftsmen to enhance the appearance of your home.

ELITE MULTI RIDGE

Length 450mm



UNIVERSAL ANGLE RIDGE

Length 450mm



UNIVERSAL ANGLE HIP

Length 450mm



THIRD ROUND

Length 450mm



HALF ROUND

Length 450mm



BABY HALF ROUND

Length 300mm



BABY UNIVERSAL ANGLE

Length 300mm



ROLL TOP

90°/105°/120°/130° pitch

Length 450mm



MONO RIDGE

Length 450mm



SHORT BLOCK END

Length 450mm



LONG BLOCK END

Length 450mm



SCROLL FINIAL

Available with Roll-Top, Universal Angle, Half Round and all ornamentals.
Length 450mm



FLEUR-DE-LYS FINIAL

Available with Roll-Top, Universal Angle, Half Round and all ornamentals.
Length 450mm



BALL FINIAL

Available with Roll-Top, Universal Angle, Half Round and all ornamentals.
Length 450mm

CLUB CRESTED ORNAMENTAL
Length 450mm



FLEUR-DE-LYS ORNAMENTAL
Length 450mm



VICTORIA ORNAMENTAL
Length 450mm



CROWN ORNAMENTAL
Length 450mm



All Ridge Products are available in Red, Dark Brown, Black, and Slate Grey.

All handmade ornamental ridge tiles and finials are manufactured from glass fibre reinforced concrete.