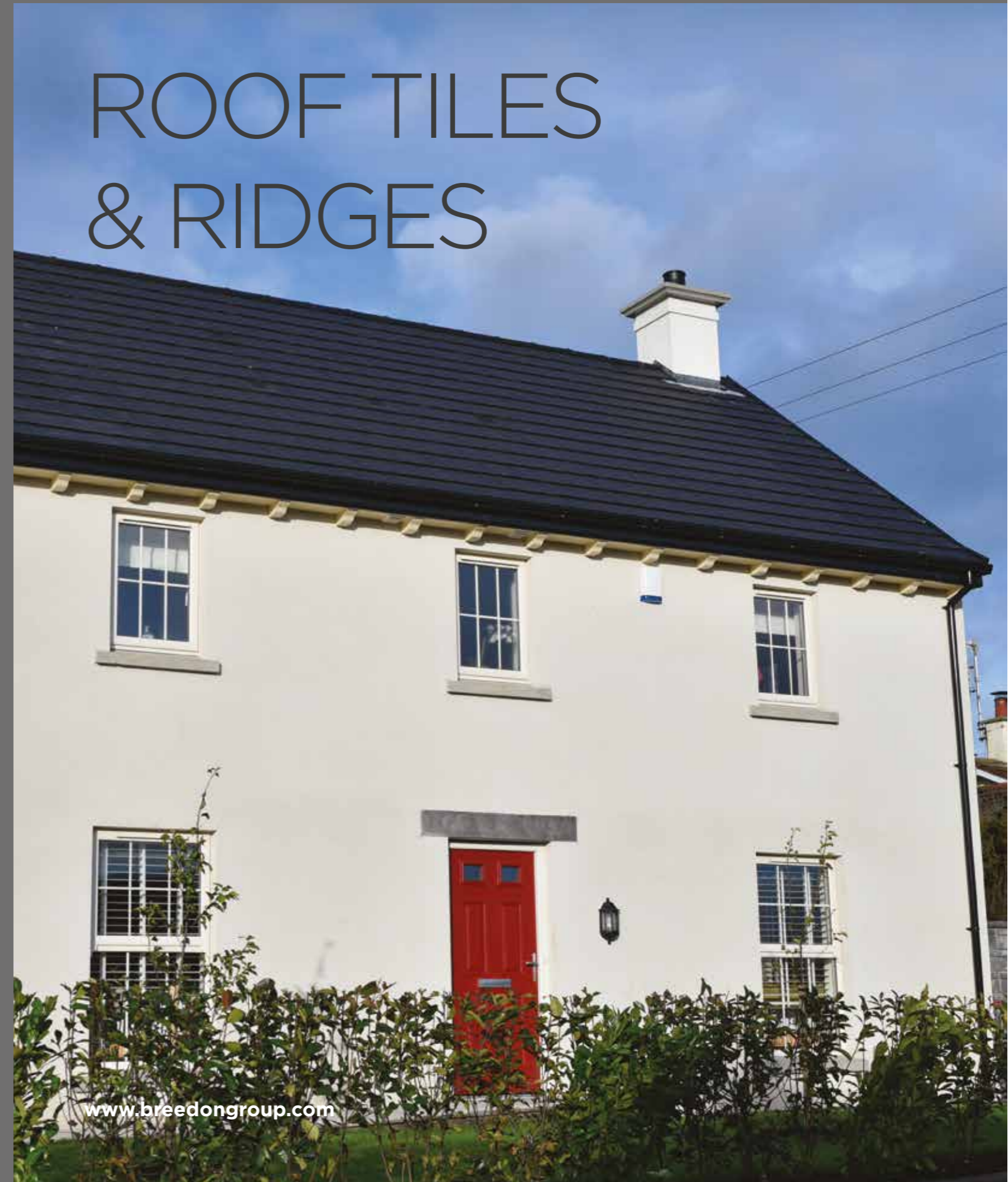




ROOF TILES & RIDGES



**TO DISCUSS YOUR INDIVIDUAL
REQUIREMENTS PLEASE CONTACT:**

44 (0)28 9264 7100

productsales@breedongroup.com
www.breedongroup.com

Breedon Roof Tile Works
11B Sheepwalk Road, Lisburn,
Co. Antrim BT28 3RD

DISCLAIMER: All of the details contained in this brochure are believed correct at the time of going to press. Nevertheless, Breedon Group Ltd. reserves the right to alter specifications at any time without notice whether as part of its continuous policy of improvement or as may be necessitated by circumstances outside its control. This brochure is to be used as a guide only. Any illustrations/photographs indicate general style only and precise appearances may vary.

1784/GB

www.breedongroup.com



OUR PRODUCTS

Our product range is designed to meet your needs - we manufacture the most popular ranges of roof tiles to an exceptional standard.



TILE RANGE

Our range of concrete roof tiles have been developed with our customers in mind. They are durable, strong and made to last. The colours we use are vibrant and consistent to ensure your roof looks fantastic.



RIDGE TILES

No building would be complete without high quality Ridge Tiles to provide the finishing touch. Our craftsmen produce a wide range of ridges to suit your project including block ends and mono ridge.

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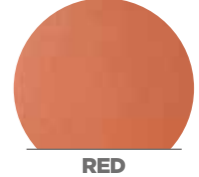
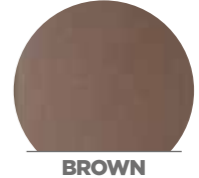
FLAT TILE

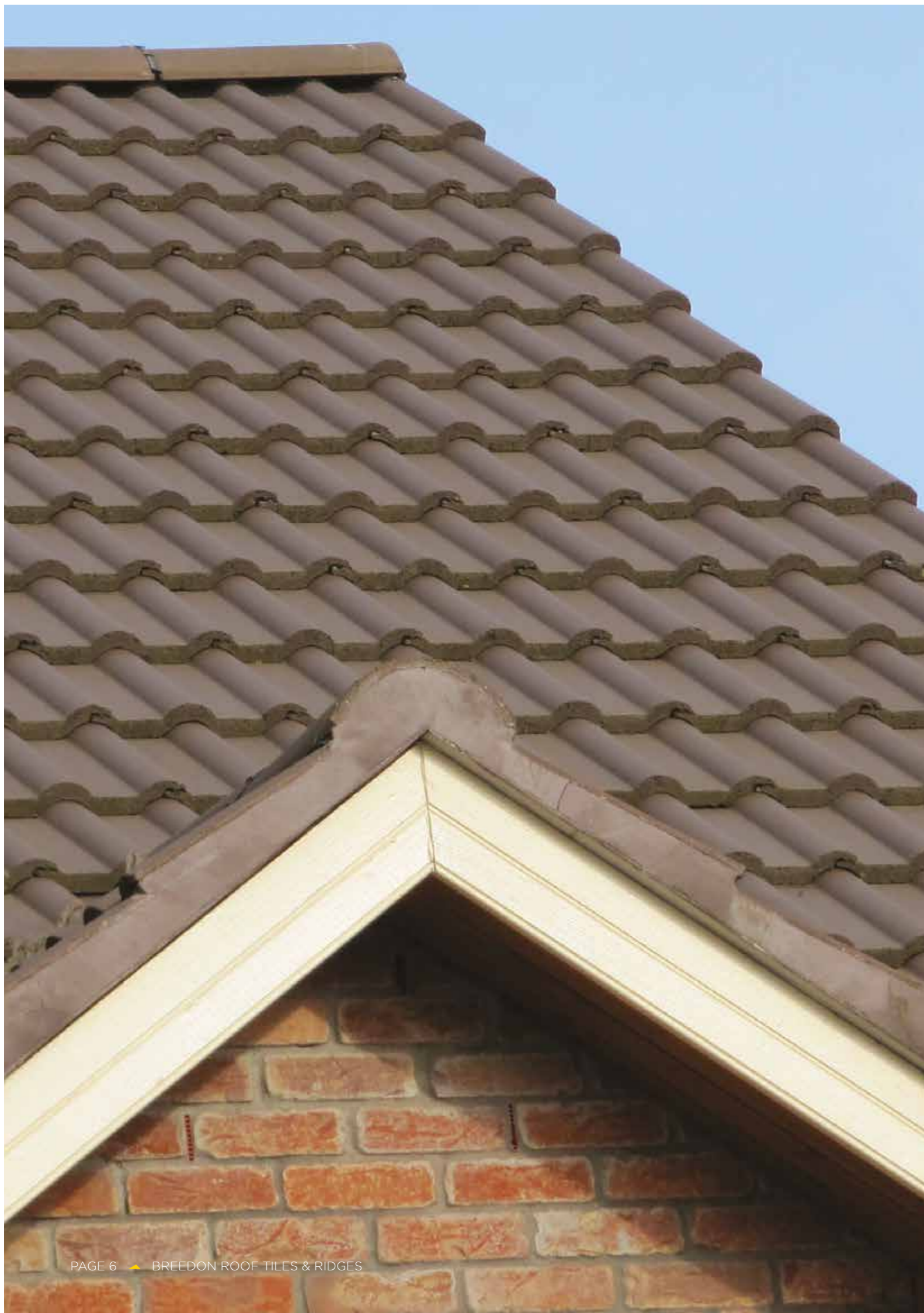
Our traditional concrete interlocking flat style tile is fixed on the roof in a broken bond pattern. This tile gives a clean and modern look to any home.

TILE SPECIFICATION

Size of Tile Overall	420 x 330mm
Minimum Pitch	17.5 degrees (for rafter length over 8 metres or sites with a high level of exposure please consult our technical department)
Maximum Pitch	90 Degrees (subject to fixing specifications)
Headlap (minimum) Headlap (maximum)	75mm above 25 degrees / 100mm at 25 degrees or below
Gauge (maximum)	345mm
Cover width of one tile (nominal)	297mm
Covering Capacity (Headlap 75mm)	9.8 tiles / sq metre
Covering Capacity (Headlap 100mm)	10.5 tiles / sq metre
Hanging Length (nominal)	400mm
Weight per 1000 (approx)	5.45 tonnes
Recommended Batten size (see BS5534). Rafter centres up to 600mm	50 x 25mm
Recommended Nail size	50mm x 3.35mm

COLOUR RANGE





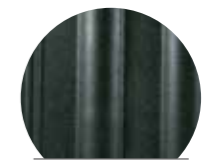
DOUBLE ROLL TILE

The Double Roll tile has the timeless double roman profile in a large format roof tile adding character to any building.

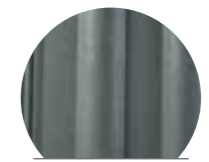
TILE SPECIFICATION

Size of Tile Overall	420 x 330mm
Minimum Pitch	22.5 degrees
Maximum Pitch	90 degrees (subject to fixing specification)
Headlap (minimum)	75mm above 25 degrees / 100mm at 25 degrees or below
Headlap (maximum)	100mm
Gauge (maximum)	345mm
Cover width of one tile (nominal)	300mm
Covering Capacity (Headlap 75mm)	9.7 tiles / sq metre
Covering Capacity (Headlap 100mm)	10.4 tiles / sq metre
Hanging Length (nominal)	400mm
Weight per 1000 (approx)	4.95 tonnes
Recommended Batten size (see BS5534). Rafter centres up to 600mm	50 x 25mm
Recommended Nail size	60mm x 3.35mm

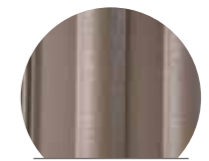
COLOUR RANGE



BLACK



ANTHRACITE



BROWN



RED



ANTIQUE RED



SQUARE TOP TILE

The Square Top tile is a classic low profile tile which proves very popular in new build and refurbishment projects alike. The single lap, square profile of the square top tile is extremely functional. The simple design gives the tiles inherent strength.

TILE SPECIFICATION

Size of Tile Overall	420 x 330mm
Minimum Pitch	22.5 degrees
Maximum Pitch	90 degrees (subject to fixing specification)
Headlap (minimum)	75mm above 25 degrees / 100mm at 25 degrees or below
Headlap (maximum)	100mm
Gauge (maximum)	345mm
Cover width of one tile (nominal)	297mm
Covering Capacity (Headlap 75mm)	9.8 tiles / sq metre
Covering Capacity (Headlap 100mm)	10.4 tiles / sq metre
Hanging Length (nominal)	400mm
Weight per 1000 (approx)	4.95 tonnes
Recommended Batten size (see BS5534). Rafter centres up to 600mm	50 x 25mm
Recommended Nail size	55 x 3.35mm

COLOUR RANGE



ANTHRACITE



BROWN



RED



ANTIQUE RED



ELITE TILE

The Elite Tile is a modern design for those wanting a slate-like appearance. The leading edge of the Elite is thinner than standard tiles whilst maintaining the functional interlocking overlap.

TILE SPECIFICATION

Size of Tile Overall	420 x 330mm
Minimum Pitch	22.5 degrees (for rafter lengths over 8 metres, please consult our technical department)
Maximum Pitch	90 degrees (subject to fixing specification)
Headlap (minimum)	75mm above 25 degrees / 100mm at 25 degrees or below
Headlap (maximum)	100mm
Gauge (maximum)	345mm
Cover width of one tile (nominal)	297mm
Covering Capacity (Headlap 75mm)	9.8 tiles / sq metre
Covering Capacity (Headlap 100mm)	10.5 tiles / sq metre
Hanging Length (nominal)	400mm
Weight per 1000 (approx)	5.0 tonnes
Recommended Batten size (see BS5534). Rafter centres up to 600mm	50 x 25mm
Recommended Nail size	45 x 3.35mm

COLOUR RANGE



BLACK



ANTHRACITE



RIDGE TILES

A wide range of ridge tiles have been designed and created by our craftsmen to enhance the appearance of your home. All ridge products are available in red, dark brown, black, grey and anthracite grey.



ELITE RIDGE
Length 455mm



UNIVERSAL ANGLE RIDGE
Length 455mm



UNIVERSAL ANGLE HIP
Length 455mm



UNIVERSAL ANGLE VENT RIDGE
Length 455mm



HALF ROUND RIDGE
Length 455mm



THIRD ROUND HIP
Length 455mm



BABY UNIVERSAL ANGLE
Length 300mm



BABY HALF ROUND
Length 300mm



MONO RIDGE
Length 455mm



SHORT BLOCK END
Length 455mm



LONG BLOCK END
Length 455mm



UNIVERSAL ANGLE HIP BLOCK END
Length 455mm
Also available to suit Third Round and Elite



ROOFING ACCESSORIES

VENTILATION



FLASH VENT

Flash Vent is a simple one piece roll-out, easy fit sheet that provides ventilation for abutment roof details, providing a weather-tight solution to the need for a continuous 5mm² of airflow.

As it is made from just one component it is economical and easy to install. The roll-out system makes fitting a breeze as it is supplied in a handy box dispenser with no need for specialist fixing tools. A series of nodules are incorporated into the design on both sides of the flexible vent roll. This not only provides the required airflow but includes an integral fly screen and maximises support of the lead.

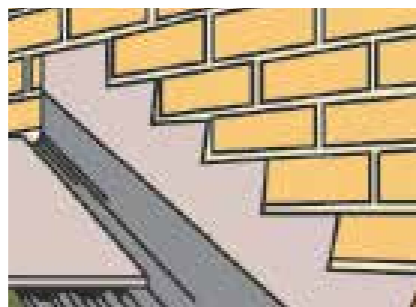
The product has been independently wind tunnel tested for weather tightness and can be used over all Lagan roof tile profiles without compromising its effectiveness. Two widths can also be joined together to fit any length of lap between the lead and the tiles.



INDIVIDUAL DRY SOAKERS

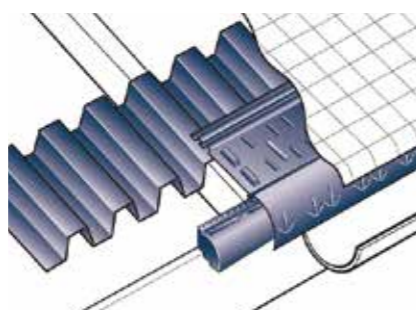
Lightweight high density polypropylene dry soakers suitable for use Lagan Flat or Lagan Elite concrete interlocking roof tiles and Left (/L) or Right (/R) handed options are available.

Dimensions: H75 x W185 x L430m



CONTINUOUS SOAKER

An economic replacement for lead this GRP continuous abutment soaker is used with a separate lead or GRP cover flashing and is available in standard Lead Grey colour in 3 meter lengths. This product has BBA certification, number 87/1915 its recycled content is 12% to 30%.



3 IN 1 EAVES VENTILATION PACK

A convenient pack with the basic components required to ventilate at the eaves of new build or refurbishment projects. Comprising 1 x 6m roll panel ventilator, 10 x 600mm underlay support trays and 6 x 1m lengths of over fascia ventilator. Airflow at 25mm position: 25,000mm² per panel, Airflow at 10mm position 10,000mm² per panel.ng.

UNIVERSAL ROLL PANEL VENTILATOR

Universal roll panel ventilator made from PVC in 6 meter lengths with variable rafter centre capability.

Conforms to 10mm and 25mm openings for airflow requirements. Airflow: 25,000mm² per panel.



FLUSH FITTING TILE VENT

Flush Fitting Tile Ventilator made from high density polypropylene with up to 50% recycled content and available to fit Lagan Flat and Lagan Double Roll profiles and colours. An adaptor is available separately for connecting to domestic extract fans or soil vent pipes. Actual ventilation area without adaptor is 15000 mm².

OVER FACIA VENTILATOR

For refurbishment and new build details - unique universal design to suit openings for both 10mm and 25mm regulation requirements. Reinforced nailing guides ensure accurate fixing to fascia and for eaves comb if required. The rounded front section prevents blockage from over lapping underlay and the standard fly screen conforms to regulation requirements. Airflow at 10mm fixing position: 10,000mm², Airflow at 25mm fixing position: 25,000mm², Length: 1000mm, Height: 36mm, Width: 48mm.

CONCRETE VENT TILE

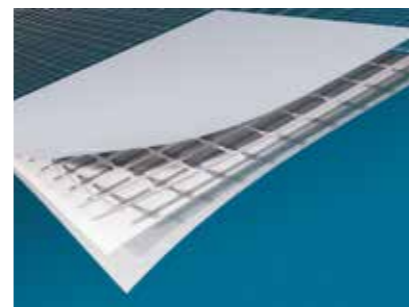
Lagan Tile manufacture concrete vent tiles to suit all our roof tile profiles and colours. Actual ventilation area is 8500 mm².

FLEXIBLE CONNECTOR

Suitable for connecting a soil vent pipe to a vent tile. The jubilee clip at each end of the pipe ensures an airtight seal.



UNDERLAY



PERMO® FORTE UNDERLAY

Permo® forte is an extremely strong four layer vapour permeable pitched roofing underlay with a built-in re-enforcement grid.

BBA and IAB approved for non-ventilated cold and warm roofs. Classified as an LR underlay and available in 50m long by 1.5 metre wide rolls.



PERMO® ECOVENT UNDERLAY

Permo® ecovent is a lightweight vapour permeable, three layer pitched roofing underlay suitable for warm and cold roofs. UV stable for four months Permo® ecovent NG is BBA approved for non-ventilated cold and warm roofs and is classified as an LR underlay. Available in 50m long by 1.5m wide rolls.

PIGMENT

Convenient one kilogramme bags of iron oxide pigment for colouring mortar used for pointing. Available in three colours: Red, Brown and Black.

MISCELLANEOUS



EAVES COMB FILLER

The Eaves Comb Filler provides a physical barrier to stop birds and large insects from entering the void between the felt and tiles.

The product runs continuously along the top of the fascia board above the felt and is nailed into position with the fixing holes provided.



HIP IRON

A retaining bracket with decorative scroll design made of galvanised mild steel. Used with traditional hipped roofs, it has nail holes for fixing to rafters.



UNIVERSAL FLASHING

Easy-Form® plus is the environmentally friendly universal flashing for connections on pitched roofs - either for penetrations through the roof or other areas. The material is fl exible, up to 30% due to its creped aluminium structure.

Use at all abutments at walls, chimneys, rising parts of structures such as dormers, fire walls and other abutments in the roof area, and for creating saddles where GRP Valley Troughs meet at the top of the valley. The combination of aluminium surface and additional metal grid leads to a strong product, which stays perfectly in shape after shaping. The metallic surface allows a similar lifetime as lead and zinc. Fix onto dry, dust-free surfaces via adhesive butyl lamination.

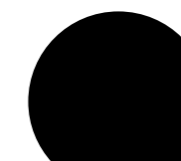


RIGID FELT SUPPORT TRAY

Felt Support Trays are designed to bridge the rafters and provide support for the roofing felt. It eliminates the problem of rotting felt caused by the sagging and retaining of water by the felt at low-level eaves. Available in 1.5 meter lengths



RED



BLACK



BROWN

ROOF TILE CALCULATION TABLES

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	75mm	100mm
1	0.420m	0.420m	16	5.595m
2	0.765m	0.740m	17	5.940m
3	1.110m	1.060m	18	6.285m
4	1.455m	1.380m	19	6.630m
5	1.800m	1.700m	20	6.975m
6	2.145m	2.020m	21	7.320m
7	2.490m	2.340m	22	7.665m
8	2.835m	2.660m	23	8.010m
9	3.180m	2.980m	24	8.355m
10	3.525m	3.300m	25	8.700m
11	3.870m	3.620m	26	9.045m
12	4.215m	3.940m	27	9.390m
13	4.560m	4.260m	28	9.735m
14	4.905m	4.580m	29	10.080m
15	5.250m	4.900m	30	10.425m

Courses Up Roof Slope

IMPORTANT NOTICE

The designer and fixer should ensure that the tiles are installed in accordance with BS 5534 : 2014 The British Standard Code of Practice for Slating and Tiling. All work on site should be carried out in accordance with B.S. 8000 : Part 6 1990 The Code of Practice for Workmanship on Building Sites.

HORIZONTAL COVERAGE

Flat Tiles & Elite Tiles				Double Roll Tiles				Square Top Tiles			
Tiles in Course	Length Covered (m)		Length Covered (m)	Tiles in Course	Length Covered (m)		Length Covered (m)	Tiles in Course	Length Covered (m)		Length Covered (m)
3	0.891	42	12.474	3	0.900	37	11.100	3	0.891	37	10.989
4	1.188	43	12.771	4	1.200	38	11.400	4	1.188	38	11.286
5	1.485	44	13.068	5	1.500	39	11.700	5	1.485	39	11.583
6	1.782	45	13.365	6	1.800	40	12.000	6	1.782	40	11.880
7	2.079	46	13.662	7	2.100	41	12.300	7	2.079	41	12.177
8	2.376	47	13.959	8	2.400	42	12.600	8	2.376	42	12.474
9	2.673	48	14.256	9	2.700	43	12.900	9	2.673	43	12.771
10	2.970	49	14.553	10	3.000	44	13.200	10	2.970	44	13.068
11	3.267	50	14.850	11	3.300	45	13.500	11	3.267	45	13.365
12	3.564	51	15.147	12	3.600	46	13.800	12	3.564	46	13.662
13	3.861	52	15.444	13	3.900	47	14.100	13	3.861	47	13.959
14	4.158	53	15.741	14	4.200	48	14.400	14	4.158	48	14.256
15	4.455	54	16.038	15	4.500	49	14.700	15	4.455	49	14.553
16	4.752	55	16.335	16	4.800	50	15.000	16	4.752	50	14.850
17	5.049	56	16.632	17	5.100	51	15.300	17	5.049	51	15.147
18	5.346	57	16.929	18	5.400	52	15.600	18	5.346	52	15.444
19	5.643	58	17.226	19	5.700	53	15.900	19	5.643	53	15.741
20	5.940	59	17.523	20	6.000	54	16.200	20	5.940	54	16.038
21	6.237	60	17.820	21	6.300	55	16.500	21	6.237	55	16.335
22	6.534	61	18.117	22	6.600	56	16.800	22	6.534	56	16.632
23	6.831	62	18.414	23	6.900	57	17.100	23	6.831	57	16.929
24	7.128	63	18.711	24	7.200	58	17.400	24	7.128	58	17.226
25	7.425	64	19.008	25	7.500	59	17.700	25	7.425	59	17.523
26	7.722	65	19.305	26	7.800	60	18.000	26	7.722	60	18.117
27	8.019	66	19.602	27	8.100	61	18.300	27	8.316	61	18.414
28	8.316	67	19.899	28	8.400	62	18.600	28	8.613	62	18.711
29	8.613	68	20.196	29	8.700	63	18.900	29	8.613	63	18.711
30	8.910	69	20.493	30	9.000	64	19.200	30	8.910	64	19.008
31	9.207	70	20.790	31	9.300	65	19.500	31	9.207	65	19.305
32	9.504	71	21.087	32	9.600	66	19.800	32	9.504	66	19.602
33	9.801	72	21.384	33	9.900	67	20.400	33	9.801	67	19.899
34	10.098	73	21.681	34	10.200	68	20.400	34	10.098	68	20.196
35	10.395	74	21.978	35	10.500	69	20.700	35	10.395	69	20.493
36	10.692	75	22.275	36	10.800	70	21.000	36	10.692	70	20.790
37	10.989	76	22.572								
38	11.286	77	22.869								
39	11.583	78	23.166								
40	11.880	79	23.463								
41	12.177	80	23.760								



TILE DATA

Roof Tiles	Pallet, Bag or Carton Qty
Flat	192
Elite	240
Double Roll	216
Square Top	216
Ridge Tiles	Pallet, Bag or Carton Qty
Universal Angle	60
Half Round	81
Elite	114
Baby Universal Angle	200
Baby Half Round	200
Hip Tiles	Pallet, Bag or Carton Qty
Universal Angle	78
Third Round	81

Ventilation	Pack Qty	Pallet, Bag or Carton Qty
Concrete Tile Vent	1	N/A
Flush fitting Tile vent	1	N/A
Flush fitting Tile vent Adaptor	1	N/A
Flexible Connector	1	N/A
Over Facia Ventilator 1m length	1	N/A
Universal roll Panel	12 metres	N/A
3 in 1 Eaves Ventilation Pack	6 metres	N/A
Underlay	Pack Qty	Pallet, Bag or Carton Qty
Permo forte 75m2 Roll	1	20
Permo ecovent 75m2 Roll	1	20

Fixings	Pack Qty
Aluminium Nails	1Kg
Tile Clips	250
Eaves Clips	100
Verge Clips	50
Miscellaneous	Pack Qty
Universal Flashing Roll	5 metres
Eaves comb 1 m length	1
Rigid Felt Support Tray 1.5m length	1
Pigment	1Kg
Hip Irons	1

BS5534 CODE OF PRACTICE FOR SLATING AND TILING

BS5534 Code of Practice for Slating and Tiling was revised in 2014 and fully implemented at the end of February 2015. The main areas affected are Underlays, Battens, Fixing Specifications and Mortar. Below is an outline of the main revisions and we recommend that you consult the BS5534 document for full information.

- There is a new test for underlay which will result in a labelling system telling the designer/installer where it can be used and at what batten gauge. Underlay should be laid with a nominal 10mm drap and fixed with clout nails (not staples). Underlay can be laid taught providing a counter batten is installed over the underlay. Laps should be secured by naturally occurring batten course (additional battens are not recommended) or manufacturer approved glue strips or tapes.
- Battens should conform to BS5534 including stamps and documentation.
- Wind load calculations for the Euro-Codes now need to be applied in the UK, and partly because there is some evidence that wind speeds have increased, the fixings for many roofs need to be increased. Under the new standard the fixings on all single lap tiled roofs increases significantly, with the absolute minimum specification being all tiles mechanically fixed (e.g. a clip or a nail) with two fixings at the verge (e.g. a nail and a dry verge system). Depending on the location of the roof additional fixings may be required to counter the effect of wind uplift.
- Mortar is now deemed to have no tensile strength when it comes to roof design, which means all hip and ridge tiles must have mechanical fixings.

