

Calderdale and Dual Calderdale



Calderdale Light Grey

Calderdale is a cost effective flat concrete tile, which gives a slate like appearance with all the benefits of modern interlocking tile design.

Technical data – Calderdale & Dual Calderdale

Minimum roof pitch*	17.5° at 100 mm headlap 22.5° at 75 mm headlap
Headlap (minimum)	75 mm
Headlap (maximum)	120 mm
Batten spacing at max. gauge	345 mm
Batten spacing at min. gauge	300 mm
Size of tile	420 x 334 mm
Covering capacity at max. gauge	10.6 tiles per m ² (at 100 mm headlap) 9.9 tiles per m ² (at 75 mm headlap)
Cover width	294 mm
Profile depth	28 mm
Hanging length	399 mm
Weight as laid	56.2 kg per m ² (at 100 mm headlap) 52.5 kg per m ² (at 75 mm headlap)
Weight per 1000	5.3 tonnes
Weight per tile	5.3 kg
Weight per pallet (including pallet/packaging)	1.1 tonnes
Quantity per pallet	204
Battens per m ²	3.1 m (at 100 mm headlap) 2.9 m (at 75 mm headlap)
Batten size	
Up to 450 mm rafter centres	38 x 25 mm
Up to 600 mm rafter centres	50 x 25 mm
Nail size/type for tiles	50 x 3.35 mm aluminium clout head
Nail size/type for tile clips	50 x 3.35 mm aluminium clout head

Note: Unless otherwise stated, data is based on tiles laid at minimum headlap.

* Rafter length restrictions apply at minimum roof pitch.
Concealed Calderdale and Dual Calderdale ventilators must not be used on roof pitches below 22.5°. Please contact Technical Support for further information.

Fittings and accessories

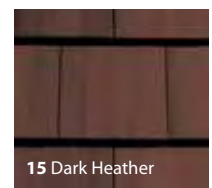
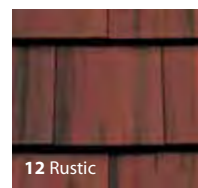
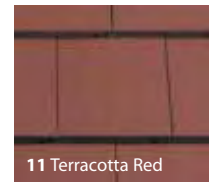
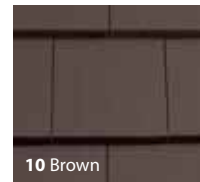
Tile fittings:	- LH verge tile - Half tiles (LH & RH verge)
Ridges:	- Angle - Legged angle
Mono ridges:	- Angle - Legged angle
Hips:	- Angle - Legged angle
Valleys:	- Lead - Fibreglass
Clips:	- Tile, Eaves, Verge

Roofing systems

Dry roof systems:	- Ridge, Hip - Verge
Ventilation systems:	- Ridge - Eaves - Top abutment - Tile vent - Gas terminals

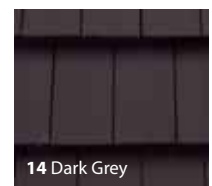
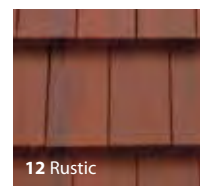
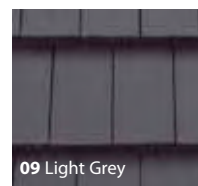
Tile fixing: tiles must be securely fixed to resist wind uplift. Contact Technical Support for guidance on 0870 145 2021.

Calderdale colours



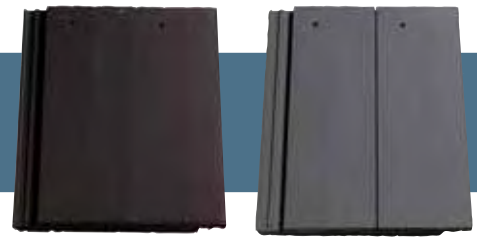
Enquiries: Contact Customer Support on 0870 145 2020 or visit our website at www.sandtoft.com

Dual Calderdale colours



• Made to order

Sandtoft



Dual Calderdale Dark Grey

Dual Calderdale is an interlocking flat concrete tile with an engineered central groove designed to give the appearance of smaller format slates.

Dual Calderdale should be laid quarter bond. The correct pattern is obtained by starting/finishing at verges using half and three-quarter width tiles, cut on-site.

See installation guide for further information at www.sandtoft.com or call Customer Support on 0870 145 2020.

Tile fixing: tiles must be securely fixed to resist wind uplift. Contact Technical Support for guidance on 0870 145 2021.

Enquiries: Contact Customer Support on 0870 145 2020 or visit our website at www.sandtoft.com

Sandtoft Solar Roof

Sandtoft offers an advanced solar solution including high output, solar electric and solar thermal tiles. The C21e and C21t represent a major breakthrough in solar panel design, since each product integrates into the roof in exactly the same way as interlocking tiles without the need to alter roof lines, colour or pitch.

Both systems can be installed without the need for any specialist skills, all roofing work may be carried out by the roofing contractor. Each solar tile interlocks perfectly with Sandtoft Calderdale and Dual Calderdale slates and is laid just like a conventional roof tile without the need to cut or re-position battens. Secure fixing is achieved by simply screwing into the tile batten through holes positioned similarly to the nail holes in the roof tiles and, in addition, standard tile clips can be used to secure the tails of the solar panels if required.

Sandtoft's renewable technology partner is solarcentury, the UK's leading solar solutions provider.

C21e Solar Electric Roof Tile

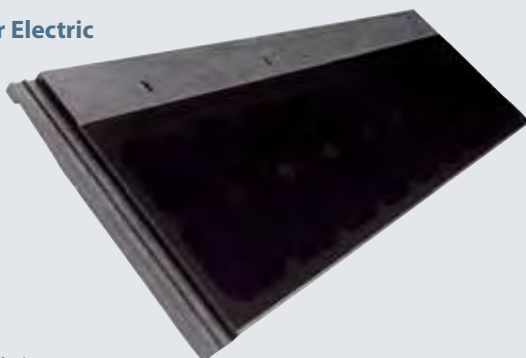


photo courtesy of solarcentury

Technical data – C21e and C21t

Tile size	1220mm x 420mm (replaces four tiles) 1180mm x 330mm exposed (recommended)
Minimum pitch	22.5° (90mm headlap)
Headlap	75mm (minimum), 90mm (maximum)
Gauge:	330mm(minimum), 345mm (maximum)

C21e Solar Electric Roof Tile

Weight	8kg (19.9kg/m ² at 90mm headlap)
Power per tile	*52Wp
Output/m ²	*0.134 kWp/m ² (at 90mm headlap)
Max. power voltage	*9.8V
Max. power current	*5.3A
Open circuit voltage	*12.0V
Short circuit current	*5.6A

C21t Solar Thermal Roof Tile

Weight	8kg (19.9kg/m ² at 90mm headlap)
Tile aperture area	0.343 m ²
Absorber area	0.224 m ²
Solar absorption (AM1.5)	94%
Covering	Toughened solar glass

Based on a south facing system at 30 degree pitch.

* Measured under Standard Test Conditions of 1000W/m² irradiance, AM1.5 spectrum, 25°C cell temperature. Values of current, voltage and power ±10%.

For more information visit www.sandtoft.com