



## THE HISTORICAL TWIN TROUGH INTERLOCKING TILE FOR A STYLISH ROOF – LAUMANS MULDEN VARIABEL



The historical tile model LAUMANS MULDEN VARIABEL dates back to a development by Wilhelm Ludowici in 1881. In addition to the geometric arrangement of the two troughs, it particularly impresses with its delicately structured pattern on the roof. Stylish and balanced, the twin trough interlocking tile convinces not least by two ways of laying: parallel or broken-bonded.



#### NATURAL & SUSTAINABLE

With roof tiles from Randers Tegl Laumans, you are choosing the natural building material clay, which we shape, fire and refine into roof tiles in an ecologically optimised manufacturing process. The environmentally friendly premium-quality tiles are also a sustainable choice of material due to their long service life and natural ageing process, they are also a sustainable choice of material. Find out more about our climate protection activities.



### LAUMANS MULDEN VARIABEL

THE HISTORICAL, STYLISH TWIN TROUGH INTERLOCKING TILE

Design: geometrical design with a rustic look

Surface effect: filigree structured with dynamic play of light and shadow

**Technology:** double interlocking joint for increased rain protection, even at the lowest roof pitches; variable covering length for quick and easy mounting; offers two layout options: parallel or broken-bonded

**Application:** ideal for the restoration of historic buildings and monument preservation. The No. 1 tile for rustic country homes





## UNIQUE SURFACES AND EXCLUSIVE COLOURS FROM MATT TO HIGH GLOSS.

#### **IINDIVIDUAL AND CREATIVE ROOF DESIGN**

**NATURAL FIRED** – Naturally matt surface The most original form of colouring which solid colours the entire roof tile body.

**NATURAL ENGOBE** – Matt surface Clay suspension of natural minerals which is poured over the roof tile before firing.

**BRILLIANT GLAZE** – Glossy surface Ceramic coating that fuse with the roof tile during firing.

## 30 YEARS WARRANTY ON ALL ROOF TILE PRODUCTS

First-class natural raw materials, groundbreaking production processes and comprehensive external and internal quality control ensure the consistently high quality of our roof tiles.





## 40% MORE COLOUR – 100% MORE ENTHUSIASM

UNRIVALED LAUMANS COLOUR APPLICATION TECHNOLOGY.

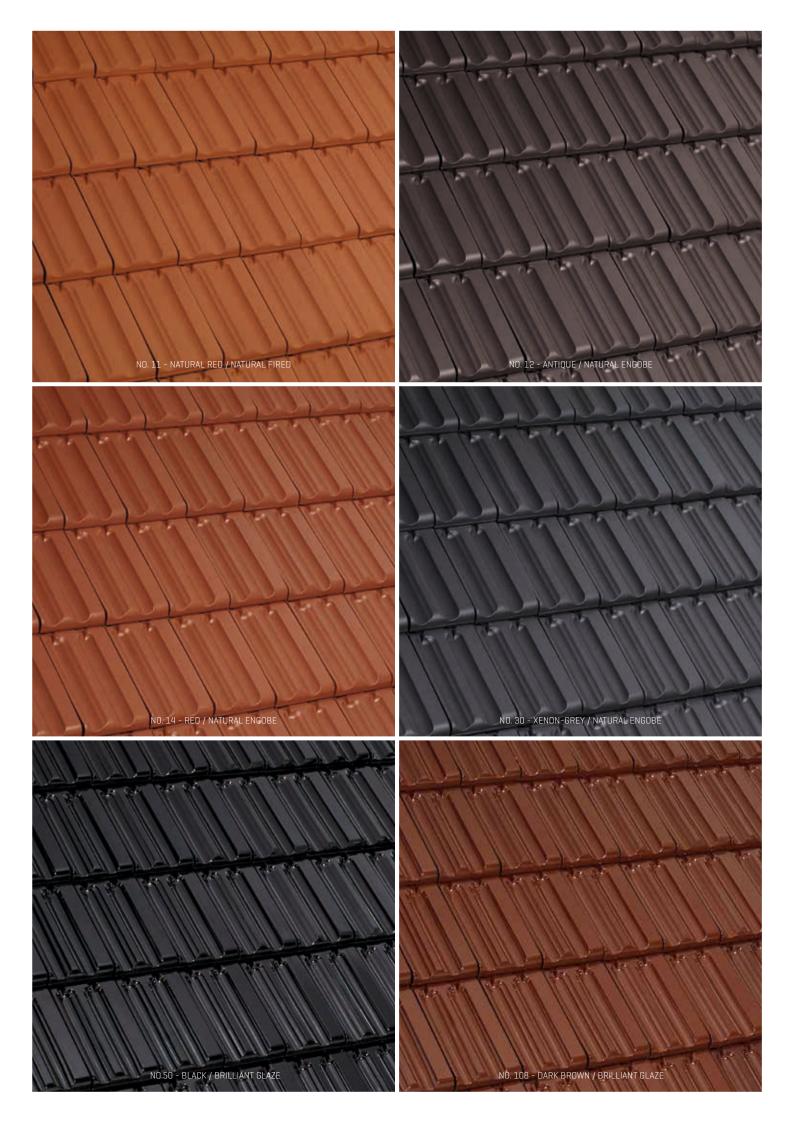
Overpour instead of spraying or spinning

Up to 40 % higher thicknesses of coloured clay sludges for intense and consistent colours

Uniquely defined, lively colours for an exclusive and inimitable naturalness

Noticeably smoother roof tile surfaces for a perfect look and dirt-repellent effect

Extremely hard surfaces for protection against mechanical and environmental influences









# FOR OPTIMIZED WORKFLOWS. ONCE LAID – FOREVER LOVED.

The clay roof tile has been accompanying the human being for more than 4,000 years and has been providing protection, safety and enjoyment for just as long. It is part of our history and the basis for a secure future. Roof tiles were constantly evolving. Therefore, today's Laumans Premium roof tile models are, apart from all their beauty, one thing above all else: easy to handle and process. As the original roof tile shapes have been continuously perfected.

#### INNOVATION FROM TRADITION

Since the founding of the traditional company Laumans in 1896, it has always been understood that the needs of builders and converters are translated into perfect, high-quality ceramic products. Through the consistent development of the tile models and the many improvements in detail, roof tiles from Laumans today define the high standard for technically mature roofs.

#### **FAST AND EASY LAYING**

Original Laumans Premium tiles from Tegelener clay have a low weight, because during firing the material forms a capillary system. This can account for up to a quarter of the total volume and is a prerequisite for the moisture exchange of the tile. A possible moss or algae growth on the tile surface is thereby reduced. In addition, carefully pressed out molds and dimensional and fitting

accuracy, enable uncomplicated, economical laying with the greatest possible flexibility. Bundling in small packages simplifies handling on the roof.

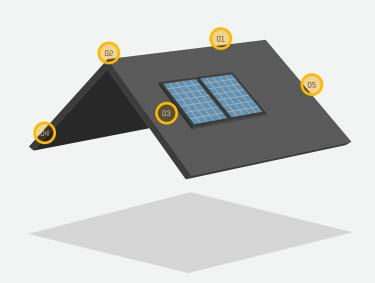
#### **MAIN THING: VARIABLE**

With the exception of the deliberately traditional hollow pantile, all Laumans roof tiles are variable in covering length. As a result, they adapt optimally to the conditions of the roof division on site. The enormous displaceability of the tiles lengthwise while maintaining a high level of rain protection makes them particularly interesting for roof restoration.

#### ADVANTAGE: INSTALLATION EASE

- Consistent development of the roof tile models for optimized workflows
- Variable covering lengths for quick laying work, especially for roof renovation
- Technically optimized side joints for secure overlap in the four-tile corner
- Extremely high dimensional and fitting accuracy for a clean surface impression
- Easy handling due to low tile weight
- Simple tile clips for fast as lightning mounting
- Precisely tuned clay accessories for high safety in all functional areas

## ACCESSORIES MADE OF CLAY. FOR PERFECT ROOFS.



Only the all-ceramic roof, from the eaves to the ridge, guarantees the unmistakable overall performance of a Laumans clay tile roof. One in shape and function unbeatable unit that defies all environmental influences and does not show material fatigue even after decades. Available in all available colours and finishes.

#### **OTHER ACCESSORIES**

We supply various roof accessories, such as snow chains, runners, and safety step pans for static or safety reasons, in a material combination of metal and / or plastic. These products are available upon request in the chosen roof tile colour.

#### **ORNAMENTS MADE OF CLAY**

Make your roof even more individual with ornaments made of clay. Whether rooster, sleepwalker or cat, your ideas have no limits. Talk to your specialist about the many possibilities.



#### RIDGE TILE

Perfect finishing tile for secure coverage of opposite roof surfaces on the ridge and hip.



#### ROOF RIDGE ENDER

Elegant ridge formation as a starting or ending tile.



#### 3 SOLAR CONNECTION

Indispensable accessory tile for solar systems for penetration of the connection cable and pipework



#### VERGE TILE

INTERIOR BAULK

Visually compact finish to the side roof plane and protection for the roof connection against driving rain.

Available for left and right sides.

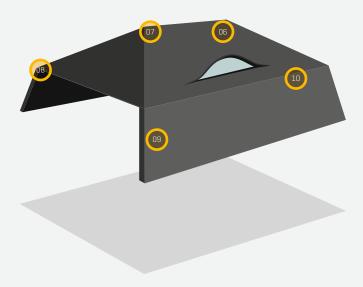


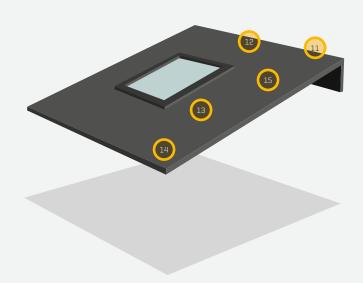
#### **VERGE TILE**

EXTERIOR BAULK

Visually compact finish to the side roof plane and protection for the roof connection against driving rain. Available for left and right sides.







#### ANTENNA TILE

For the safe implementation of satellite dish and antenna masts.



#### SHED ROOF TILE

Finishing tile for all monopitch roofs. With 90° angle as a standard-shaped part. Other shapes at the roofer's request.



#### 07 HIP CAP

All-ceramic covering of the transition between the ridge and hip. Suitable for roof pitches of 18 – 50°.



#### 12) UNIVERSAL SHED ROOF TILE

Universal cover with finishing tiles.



#### HIP STARTING TILE

Shapely and functional design for the start of the hip.



#### DOUBLE BRIM TILE

Left-hand finish for ascending masonry or roof windows.



#### Half Tile

Width compensation for existing roofs or for precise laying work on roof structures and roof windows.



#### 14 VENTILATION TILE

Additional surface ventilation in the eaves and ridge area. Ensures air circulation above the insulation and avoids condensation.



#### MANSARD TILE

The accessory for creating mansard roofs or other creative roof shapes according to the requirements of the roofer.



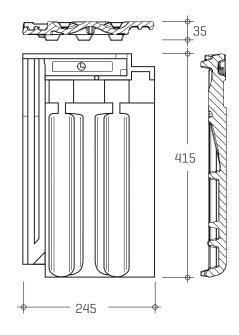
#### 5 VENTILATION PIPE

For the driving rain-resistant ventilation of sanitary pipes and exhaust ducts over the roof.



## TECHNOLOGY WITH SYSTEM

In addition to all visual aspects, the protective function and safety of your roof takes first place. Thanks to the wide contact surface and the pronounced suspension, the LAUMANS MULDEN VARIABEL is firmly and securely on the roof batten. The four-way covering and intensive locking in the four-tile corner gives the tile surface additional stability and makes it extremely safe against wind suction. The double interlocking joint defies driving rain and snow. And this already for roof pitches from 17 ° with corresponding additional measures.¹

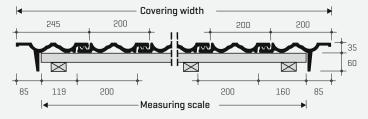


#### **LAUMANS MULDEN VARIABEL**

DIMENSIONS	COVERING LENGTH	COVERING WIDTH	REQUIRED	WEIGHT	MINIMUM ROOF PITCH1	STANDARD ROOF PITCH	PACKAGE Contents
approx. 415 x 245 mm	approx. 330 – 350 mm	approx. 200 mm	from approx. 14,3 pro m²	per pc.: approx. 3,7 kg per m²: 52,9–56,2 kg	17° with under-roof	25°	300 pcs. on europallet

#### **EVALUATION/SIZING OF THE COVERING WIDTH**

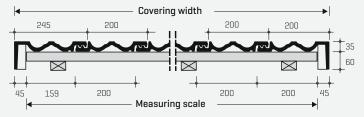
#### A: Verge tile with interior baulk



#### B: Double brim tile



#### A: Verge tile with exterior baulk



Tile clips for storm protectionq

Nr. 409-214 Clipholster® to batter in ZIAL

Nr. 456-203 Clipholster® to hang onto batten size 30 x 50 ZIAL

Nr. 456-211 Clipholster® to hang onto batten size 40 x 60 ZIAL

Storm clip assignment

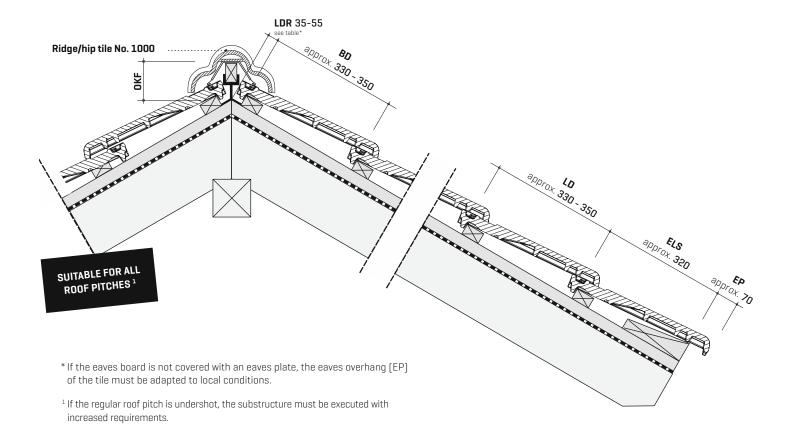
Also use our free online tool for wind suction calculator and storm clip assignment.

http://www.laumans.de/en/windsog/

#### Average covering width in rows without or with roof tile in mm construction width = respective measuring scale

ROWS			01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
Roof tile (RT)			200	400	600	800	1.000	1.200	1.400	1.600	1.800	2.000	2.200	2.400	2.600	2.800	3.000
Double brim tile + RT	200	245	-	-	645	845	1.045	1.245	1.445	1.645	1.845	2.045	2.245	2.445	2.645	2.845	3.045
Verge tile I./r. (interior baulk) + RT	119	160	-	-	479	679	879	1.079	1.279	1.479	1.679	1.879	2.079	2.279	2.479	2.679	2.879
Verge tile I./r. (exterior baulk) + RT	159	200	-	-	559	759	959	1.159	1.359	1.559	1.759	1.959	2.159	2.359	2.559	2.759	2.959

ROWS		16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Roof tile (RT)		3.200	3.400	3.600	3.800	4.000	4.200	4.400	4.600	4.800	5.000	5.200	5.400	5.600	5.800	6.000
Double brim tile + RT		3.245	3.445	3.645	3.845	4.045	4.245	4.445	4.645	4.845	5.045	5.245	5.445	5.645	5.845	6.045
Verge tile I./r. (interior baulk) + RT		3.079	3.279	3.479	3.679	3.879	4.079	4.279	4.479	4.679	4.879	5.079	5.279	5.479	5.679	5.879
Verge tile I./r. (exterior baulk) + RT		3.159	3.359	3.559	3.759	3.959	4.159	4.359	4.559	4.759	4.959	5.159	5.359	5.559	5.759	5.959



#### **EVALUATION/SIZING OF THE RAFTER LENGTH**

Eaves overhang (EP) 60 mm: number of rows (according to chart) + lath distance eaves (ELS) + lath distance ridge (LDR)

#### **Covering length**

ROWS		02	03	04		06	07	08	09	10
COVER-	330	660	990	1.320	1.650	1.980	2.310	2.640	2.970	3.300
ING LENGTH	340	680	1.020	1.360	1.700	2.040	2.380	2.720	3.060	3.400
in mm	350	700	1.050	1.400	1.750	2.100	2.450	2.800	3.150	3.500
ROWS	11	12	13	14		16	17	18	19	20
COVER-	3.630	3.960	4.290	4.620	4.950	5.280	5.610	5.940	6.270	6.600
ING LENGTH	3.740	4.080	4.420	4.760	5.100	5.440	5.780	6.120	6.460	6.800
in mm	3.850	4.200	4.550	4.900	5.250	5.600	5.950	6.300	6.650	7.000
ROWS	21	22	23	24		26	27	28	29	30
COVER-	6.930	7.260	7.590	7.920	8.250	8.580	8.910	9.240	9.570	9.900
ING LENGTH	7.140	7.480	7.820	8.160	8.500	8.840	9.180	9.520	9.860	10.200
in mm	7.350	7.700	8.050	8.400	8.750	9.100	9.450	9.800	10.150	10.500

All values are determined with a 30 x 50 mm lathing.If other slat cross sections are used, than these must be checked at the construction site beforehand!

The accurate lath spacing has to be determined at the building site with the delivered tiles.

#### Lath distance ridge (LDR)

Using roof tiles										
Roof pitch	20°	30°	40°	50°						
Ridge No. 1000	55 mm	35 mm	35 mm	35 mm						
Ridge No. 300	40 mm	35 mm	40 mm	35 mm						

#### Further fitting tiles available

Term	Covering width/Measuring scale
Half tile	100 mm
Ventilation tile, ventilation approx. 15 cm²	200 mm
Vent pipe/antenna opening tile	200 mm
Solar connection tile, admission max. 65 mm Ø	200 mm
Shed roof tile 90°, side length 220/100 mm	200 mm
Shed roof verge tile left, interior baulk	245 mm / 119 mm
Shed roof verge tile right, interior baulk	200 mm / 160 mm

### Distance from ridge vertex / Top of ridge lath (OKF):

Using roof tiles				
Roof pitch	20°	30°	40°	50°
Ridge No. 1000	130 mm	110 mm	90 mm	80 mm
Ridge No. 300	120 mm	105 mm	95 mm	80 mm

Shed roof tiles with different slopes and dimensions, mansard tiles etc. on request.

## ORDER ONLINE ROOF TILE SAMPLES!

#### **EXPERIENCE THE DIFFERENCE**

Order your favourite roof tile free of charge and be inspired by the uncompromising quality of our high-quality products made from Tegelen clay. Exclusive colours, unique surfaces and roof tile models with a strong character.





#### laumans.de/en/order-samples/

Use our sample tile service free of charge and without obligation. Please note that sample tiles are always to be regarded as average samples in terms of colour.



#### UNIQUE FACADES WITH DANISH WATERSTRUCK BRICKS

Be inspired and expand your creative possibilities. With Ultima - the extraordinary waterstruck bricks in an exclusive long format. For façades with a strong character for individual detached houses and other ambitious architectural projects.

We ship worldwide - Feel free to contact us for international orders.



randerstegl.com/en/ultima/rt-153



Tell us your opinion! survey@laumans.de

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