Technical data sheet

VIRTUM® ventilation chimney

Ø160 mm and Ø125 mm · manufacturer mdm®NT, Poland

The VIRTUM® Ø160 mm ventilation chimney (also available in a Ø125 mm version) has an increased ventilation diameter: 160 mm, ventilation section 200 cm². Thanks to its special design it uses wind energy, improves the draught and provides a much better air flow than traditional chimneys with a smaller diameter. It can also be used to ventilate non-residential rooms, as a roof outlet for mechanical ventilation and to vent sanitary installations.

> The VIRTUM® Ø160 chimney won the MTP Gold Medal at the BUDMA 2015 fair (Poznań).

Main data

Diameter: Ø160 mm (and Ø125 mm)

Ventilation section: 200 cm² (Ø160)

Resistance: UV radiation, weather, temperature changes, ageing

Colours: 9 standard colours (see below); other colours to order, with a minimum quantity and longer lead time

UNI base: aluminium tape flange with butyl adhesive; lead or EPDM flange to order

Marking: CE



Design

1. **Spirit level** in the cap: makes it easier to install the chimney straight on the roof.
2. **Chimney cap**: proper ventilation in summer and winter, using pressure difference and wind energy; its shape keeps rain out of the ventilated room.
3. **Ventilation rings**: use wind energy efficiently.
4. **Additional ventilation rings** at the bottom: condensate drains freely.
5. **Base system**: the chimney fits different roof coverings (see the table).

Bases: which roof covering they fit

	Base / roof covering	Base, mm (width × length)	Per pallet: packs Ø160 / Ø125	Colours (RAL)
	**UNI** any kind of roof tile (universal base with flexible flange)	440 × 660 (+40)	27 / 32 pallet 80×120 cm	●8004 ●8017 ●9005 ●7016
	**Shingle** bitumen shingles and bitumen roofing felt	390 × 470	16 / 24 pallet 100×120 cm	●8004 ●8017 ●8019 ●9005 ●7016 ●7046 ●6020
	**Flat sheet** flat and trapezoidal sheet metal (flat part between trapezoids at least 25 cm)	390 × 470	20 / 36 pallet 80×120 cm	●8004 ●8017 ●8019 ●9005 ●7016 ●7046 ●3009

	**Metal tile N** low profile, ± 25 mm	250 × 320	20 / 36 pallet 80×120 cm	●8004 ●8017 ●8019 ●9005 ●7016 ●7046 ●3009 ●3011 ●6020
	**Metal tile W** high profile, ± 32 mm	250 × 320	20 / 36 pallet 80×120 cm	●8004 ●8017 ●8019 ●9005 ●7016 ●7046 ●3009
	**Metal tile BW** very high profile, ± 43 mm	250 × 320	20 / 36 pallet 80×120 cm	●8017 ●9005 ●7016
	**Metal tile BM** modular	250 × 320	20 / 36 pallet 80×120 cm	●8004 ●8017 ●8019 ●9005 ●7016 ●7046 ●3009 ●3011
	**Metal tile BG** modular	250 × 320	20 / 36 pallet 80×120 cm	●8004 ●8017 ●9005 ●7016
	**Type 1** Braas Celtycka tile	330 × 417	16 / 24 pallet 80×120 cm	●8004 ●8017 ●9005 ●7016 ●3011
	**Type 2** Braas Bałtycka, Nelskamp Esówka S, Prodach double S, IBF double S	332 × 420	16 / 24 pallet 80×120 cm	●8004 ●8017 ●9005 ●7016
	**Type 3** Braas Romańska, Benders Mecklenburger, Prodach double Roman	329 × 420	16 / 24 pallet 80×120 cm	●8004 ●8017 ●9005 ●7016
	**Type 4** Euronit Profil S	333 × 420	16 / 24 pallet 80×120 cm	●8004 ●8017 ●8019 ●9005 ●7016 ●3009
	**Type 5** Euronit Extra, IBF double Roman	333 × 420	16 / 24 pallet 80×120 cm	●8004 ●7016
	**Type 6** Nelskamp Finkenberger	340 × 420	16 / 24 pallet 80×120 cm	●8004 ●8019 ●7016
	**Type 7** beaver-tail tile 380 × 180 mm, double or scale laying	—	16 / 24 pallet 80×120 cm	●8004 ●3009

	**Type 8** Mediterran Danubia	330 × 420	16 / 24 pallet 80×120 cm	●8004 ●8019 ●9005
	**Type 9** Röben Piemont	292 × 420	16 / 24 pallet 80×120 cm	●8004 ●8019 ●9005 ●7016

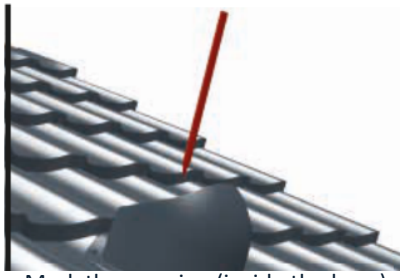
Dimensions and colours: the manufacturer page “Dane techniczne” (2019).

Colours

brick red RAL 8004	brown RAL 8017	dark brown RAL 8019	black RAL 9005	graphite RAL 7016	grey RAL 7046	red 3009 RAL 3009	red 3011 RAL 3011	green RAL 6020

Installation

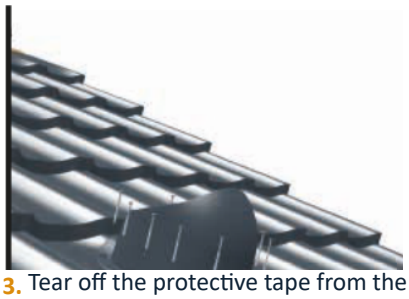
On metal tiles



1. Mark the opening (inside the base).



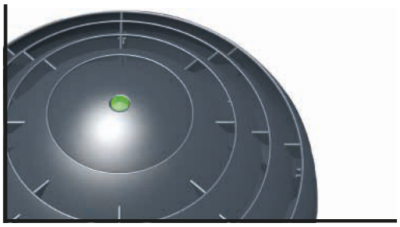
2. Cut out the opening and clean it.



3. Tear off the protective tape from the butyl adhesive of the base and fix the chimney.



4. Install the ventilation duct.

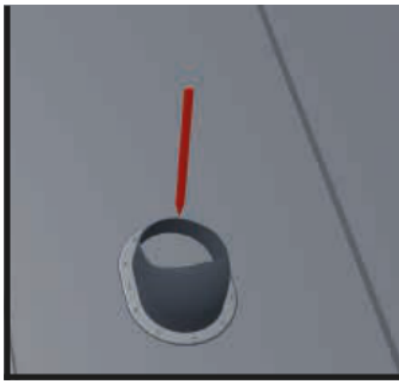


5. Level the chimney with the spirit level.



6. Fix the chimney with self-drilling screws.

On flat sheet metal



1. Mark the opening (inside the base).



2. Cut out the opening and clean it.



3. Tear off the protective tape from the butyl adhesive of the base and fix the chimney.



4. Install the ventilation duct.

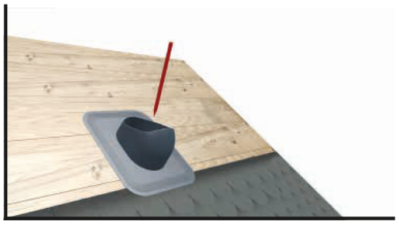


5. Level the chimney with the spirit level.



6. Fix the chimney with self-drilling screws.

On shingles and bitumen felt



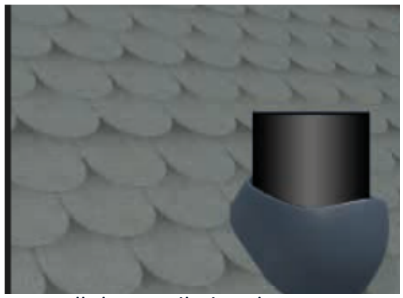
1. Mark the opening (inside the base), then cut it out and clean it.



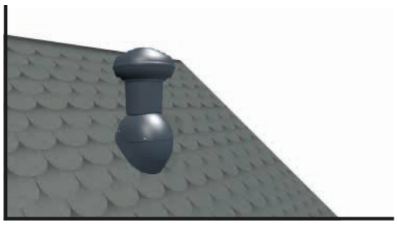
2. Fix the chimney.



3. Cover the roof with shingles.

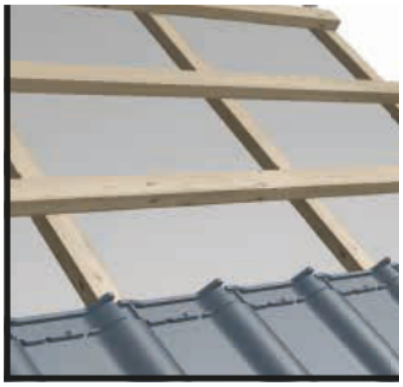


4. Install the ventilation duct.

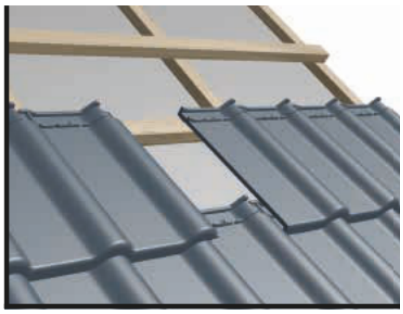


5. Level the chimney with the spirit level and fix it with screws.

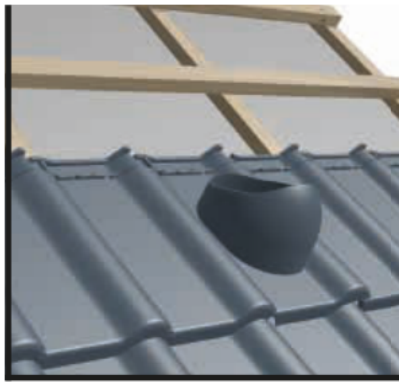
On roof tiles (types 1–9)



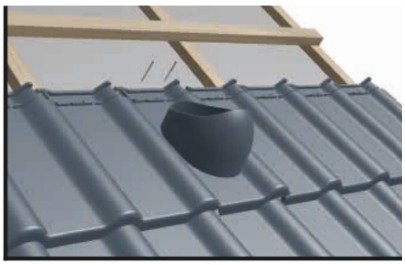
1. Lay a row of tiles below the chimney location.



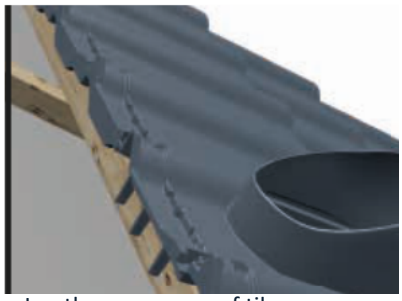
2. Lay at least three tiles on the left and three on the right of the chimney location.



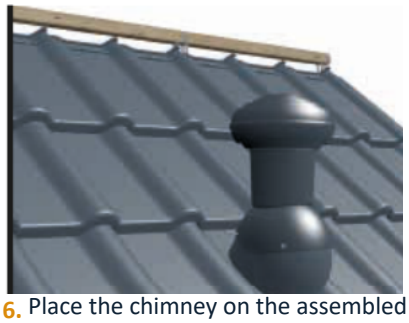
3. Place the base.



4. Fix the base to the batten with two screws.



5. Lay the upper row of tiles.



6. Place the chimney on the assembled base.

Connect the chimney to the ventilation duct, e.g. with the mdm® flexible connector; after levelling it (with the spirit level in its upper part), fix it to the upper base with four short screws. All tiles around the chimney are fixed with tile clips.

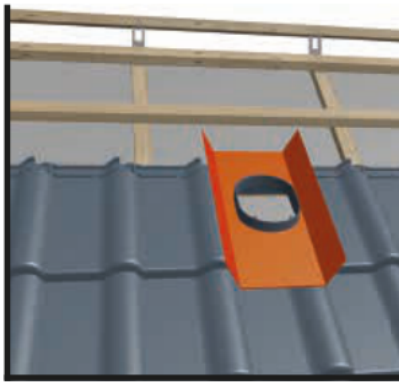
On roof tiles, UNI base



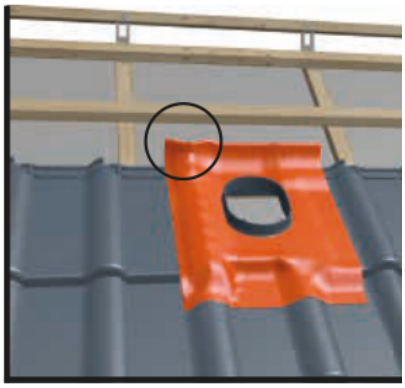
1. Lay a row of tiles below the chimney location and at least three tiles on each side. Cutting off the side lock of the tile to the right of the support is recommended.



2. Screw the lower part of the base (support) to the batten with three long screws (two from above, one from the front). If needed, also tie it to the batten with stainless steel wire.



3. Without removing the film from the butyl adhesive, fit the UNI flange to the roof covering and shorten it if needed. Remove the film and stick the flange tightly to the support (not yet to the roof covering).



4. Shape the sides and bottom of the flange and glue it carefully to the roof covering, from the support outwards; press the edges with a roller. Bend the top of the flange upwards (on ceramic tiles, cut off the excess).



5. Put on the upper part of the base (the “knee”), press it to the flange and fix it with four short screws. Lay the upper row of tiles; the raised flange must adhere tightly to the underside of the roof covering.



6. Place the chimney on the base, connected to the ventilation duct; level it with the spirit level and fix it with four short screws.