

SINTEF confirms that

Corotop LIGHT 100 wind barrier and tapes

has been found to be fit for use in Norway and to meet the provisions regarding product documentation given in the regulation relating to the marketing of products for construction works (DOK) and regulations on technical requirements for building works (TEK), with the properties, fields of application and conditions for use as stated in this document

1. Holder of the approval

GLOBAU Sp. Z o.o, CB SA
 Ul. Ozimska 2a
 46-053 Chrzastowice
 Poland

2. Product description

Corotop LIGHT 100 wind barrier is a three-layer membrane of thermally bonded non-woven polypropylene fabric, sandwiching a microporous film, to achieve a vapour open membrane. Measures and tolerances are given in table 1.

Corotop LIGHT 100 wind barrier is light grey and labelled with its name, and information in dark grey letters regarding mounting.

Additional products which can be used are the tapes Corotop Band and Corotop Mix. The tapes are single sided and double sided with acrylic adhesive. Further information about tape products are given in table 3.

Table 1
 Measures and tolerances for Corotop LIGHT 100 wind barrier

Property	Corotop LIGHT 100	Unit	Tolerance
Area weight	100	g/m ²	± 10%
Width	1,5 – 2,8 – 3,0	m	+1,5%/-0,5%
Length / Roll	50	m	+5%/-0%

Measured according EN 1848-2 and EN 1849-2.

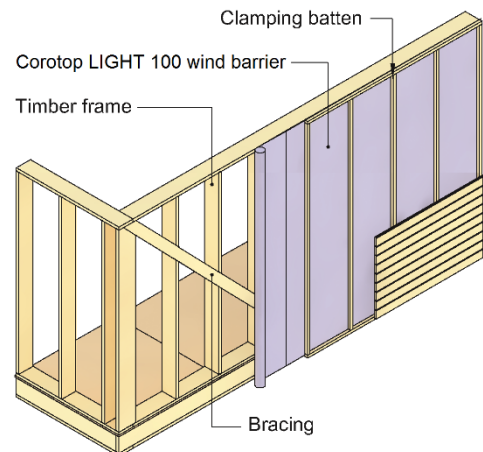


Fig. 1
 Corotop LIGHT 100 used as wind barrier in a timber frame wall

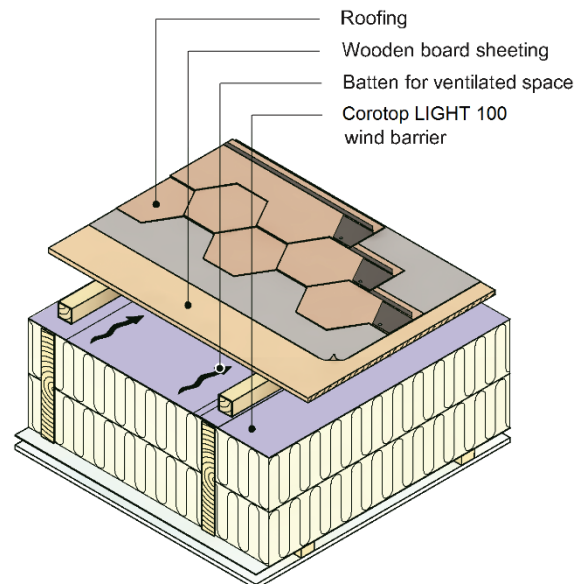


Fig. 2
 Corotop LIGHT 100 used as wind barrier in an insulated and ventilated roof construction with a rain tight layer above.

Table 2: Material- and construction properties for Corotop LIGHT 100 wind barrier

Property	Method	DoP ¹⁾	Control limit ²⁾	Unit
Dimensional stability, -Longitudinal -Transversal	EN 1107-2:2001	-	< 2 < 2	%
Water tightness	EN 1928:2000	W1	W1	Class
Air tightness material	EN 12114:2000	-	≤ 0.1	m ³ /(m ² h50Pa)
Air tightness construction	EN 12114:2000	-	0.9	m ³ /(m ² h50Pa)
Rain tightness of construction	NT Build 421	-	≥ 300 ³⁾	Pa
Tear resistance (nail shank) -Longitudinal -Transversal	EN 12310-1:1999	110 ± 38 145 ± 51	≥ 72 ≥ 94	N
Tensile strength -Longitudinal -Transversal	EN 12311-1:1999 EN 13859-2:2014	250 ± 75 150 ± 45	≥ 175 ≥ 105	N / 50 mm
Elongation -Longitudinal -Transversal	EN 12311-1:1999 EN 13859-2:2014	85 ± 26 110 ± 44	≥ 59 ≥ 66	%
Water vapour resistance	EN 12572:2016	0.03	≤ 0.03	(S _a) m equivalent air-layer thickness

¹⁾ Declared value given in the manufacturers DoP (Declaration of performance)

²⁾ Control limit shows values the product should satisfy during internal factory production control and audit testing

³⁾ Result from type testing

Table 3

Product specification for associated installation components for Corotop LIGHT 100 wind barrier

Component	Material type	Description	Measures
Corotop Band	single sided PP spun bonded tape with an acrylic dispersion as adhesive	Reparation of ruptures, holes or cuts in Corotop LIGHT 100 wind barrier.	Width: 50 mm / 75 mm / 100 mm Length: 25 m
Corotop Mix	double sided acrylic dispersion tape with a reinforcement of polyester fibres but no further backing	Overlap jointing of Corotop LIGHT 100	Width: 20 mm / 40 mm Length: 25 m

3. Fields of application

Corotop LIGHT 100 wind barrier is designed for be used as external wind barrier in thermal insulated wooden walls and wooden roof constructions. See also Fig. 1 and Fig. 2.

Corotop LIGHT 100 wind barrier can be used in fire class 1 in buildings, and in residential buildings up to three floors if each dwelling unit has direct access to the ground level (not via stairs or staircases). For other use, a fire safety analysis has to be performed.

Corotop Band tape is designed to be used for reparation of ruptures, holes or cuts in Corotop LIGHT 100 wind barrier.

Corotop Mix tape is designed to be used for joining of Corotop LIGHT 100 wind barrier.

4. Properties

Material properties

Material characteristics for Corotop LIGHT 100 wind barrier are shown in Table 2.

Safety in case of fire

The wind barrier has a reaction to fire class E according to EN 13501-1.

Durability

The durability for the products has been tested before and after exposure to artificial ageing according EN 13859-2 and are considered to have satisfactory durability during a construction period as long the products are not exposed to direct UV radiation in the finished construction.

Corotop Band and Corotop Mix have been tested before and after artificially ageing. Tapes are considered to have satisfying adhesive properties on Corotop LIGHT 100, Corotop CLASSIC 130 og Corotop STRONG 180.

5. Environmental aspects

Substances hazardous to health and environment

The product contains no hazardous substances with priority in quantities that pose any increased risk for human health and environment. Chemicals with priority include CMR, PBT or vPvB substances.

Waste treatment/recycling

The product shall be sorted as residual waste. The product shall be delivered to an authorized waste treatment plant for energy recovery.

Environmental declaration

No environmental declaration (EPD) has been worked out for the product.

6. Special conditions for use and installation*General*

Corotop LIGHT 100 wind barrier can be installed on the external side of insulated wall constructions. All joints shall have minimum 50 mm overlap.

All the joints, edges and connections to other components shall be clamped with screwed or nailed battens or counter battens against studs, sills, rafters etc. Maximum distance of nails is 150 mm.

The wind barrier shall be used according the principles given in the following SINTEF Building Design

Sheets:

- 523.255 Bindingsverk av tre. Varmeisolering og tetting
- 525.101 Isolerte skrå tretak med lufting mellom vindspærre og undertak.

Design considerations

The wall cladding or the roofing should be finished as soon as possible after the product has been installed. Thermal insulation, vapour barrier and the interior lining shall not be installed before the exterior cladding or roofing has been finished and the underlay is checked to be mounted properly.

Because of minimizing the pressure of battens at the overlaps due to shrinkage of the studs or the rafters, the moisture content of the timber should not exceed 20 % when installed.

Storage

Corotop LIGHT 100 wind barrier should be stored dry, with the rolls placed on pallets at the building site and protected by a covering.

7. Factory production control

The product is produced of GLOBAU Sp. Z o.o, Kolejowa 1, 46-040 Ozimek, Poland.

The holder of the approval is responsible for the factory production control in order to ensure that the product is produced in accordance with the preconditions applying to this approval.

The manufacturing of the product is subject to continuous surveillance of the factory production control in accordance with the contract regarding SINTEF Technical Approval.

8. Basis for the approval

The approval is based on properties documented in the following reports:

- SINTEF report 102010396-4, dated 18.11.2015, Air- and rain tightness / material properties
- SINTEF report 102009556-4-1, dated 02.09.2015, Type testing for Corotop Band and Corotop Mix
- SINTEF report 102009556-4-2, dated 08.04.2016, Driving rain testing
- SINTEF report 102009556-4-3, dated 23.06.2017, Air tightness testing
- SP report 5P01843-1, dated 24.02.2015, Determination of air permeability
- Technical University Berlin report AX 131001-2, dated 14.02.2014, Determination of driving rain resistance of breathable membranes
- TSUS, Test report no. 90-16-0162, dated 2016-09-09, Material properties for Corotop LIGHT 100

9. Marking

Each roll of Corotop LIGHT 100 wind barrier are marked with information about product name, name of the manufacturer and date of manufacturing. The product is CE marked in accordance with EN 13859-2. The approval mark for SINTEF Technical Approval No. 20647 may also be used.



Approval mark

10. Liability

The holder/manufacturer has sole product responsibility according to existing law. Claims resulting from the use of the product cannot be brought against SINTEF beyond the provisions of Norwegian Standard NS 8402

for SINTEF

Marius Kvalvik
Approval Manager