

# SINTEF Technical Approval

## TG 20647

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 Valid until 01.02.2029  
 Provided listed on  
[www.sintefcertification.no](http://www.sintefcertification.no)

SINTEF confirms that

### Corotop LIGHT 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

COROTOP S.A.  
 Ul. Ozimska 2a  
 46-053 Chrzastowice  
 Poland  
[corotop.com.pl](http://corotop.com.pl)

#### 2. Product description

Corotop LIGHT wind barrier consist of two layers of non-woven polypropylene fabric which are thermally bonded to kernel of a vapour open microporous film. Corotop LIGHT wind barrier is light grey with its name printed on the upper side, and information in dark grey letters regarding mounting. Measures and tolerances are given in Table 1.

Additional products are the tapes Corotop Band and Corotop Mix.

Corotop Band is a single sided PP spun bonded tape with an acrylic dispersion as adhesive. It is delivered on rolls of 50 mm, 75 mm or 100 mm width, and 25 m length.

Corotop Mix is a double-sided acrylic dispersion tape with a reinforcement of polyester fibres. It is delivered on rolls of 20 mm or 40 mm width, and 25 m length.

Table 1  
 Measures and tolerances for Corotop LIGHT wind barrier according to EN 1848-2 and EN 1849-2

Property	Corotop LIGHT	Unit	Tolerance
Area weight	100	g/m <sup>2</sup>	±10%
Width	1.5 / 2.8 / 3.0	m	+1.5 %/ -0.5 %
Roll length	50	m	+5 / -0 %

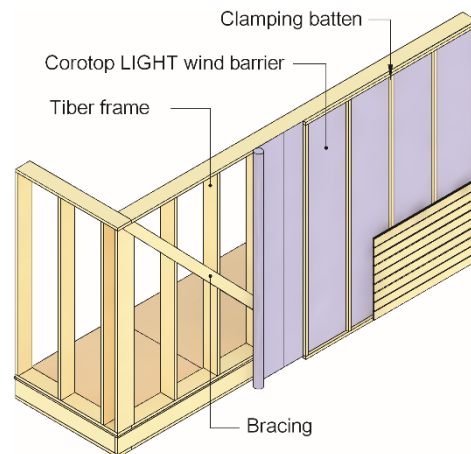


Fig. 1  
 Corotop LIGHT used as wind barrier in a timber frame wall.

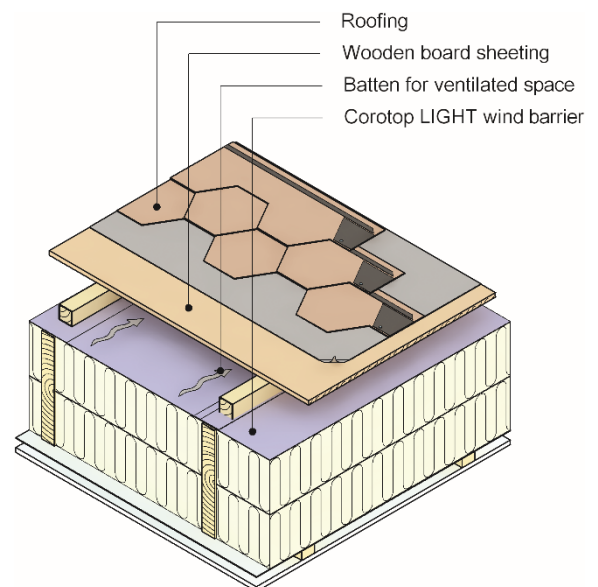


Fig. 2  
 Corotop LIGHT used as wind barrier in an insulated and ventilated roof construction with a rain tight layer above.

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

Property	Test method	Declaration of performance <sup>1)</sup>	Control limit <sup>2)</sup>	Unit
Dimensional stability, -Longitudinal -Transversal	EN 1107	-	≤ 2 ≤ 2	%
Water tightness 200 mm water column for 2 hours	EN 1928/ EN 13859-2	W1	Tight	-
Air tightness material	EN 12114	-	≤ 0.1 <sup>3)</sup>	m <sup>3</sup> /(m <sup>2</sup> h50Pa)
Air tightness construction	EN 12114	-	≤ 0.9 <sup>3)</sup>	m <sup>3</sup> /(m <sup>2</sup> h50Pa)
Tear resistance (nail shank) -Longitudinal -Transversal	EN 12310.1	100 ±20 % 125 ±20 %	≥ 80 ≥ 100	N
Tensile strength -Longitudinal -Transversal	EN 12311-1/EN 13859-2	250 ±30 % 150 ±30 %	≥ 175 ≥ 105	N/50 mm
Elongation at max. load -Longitudinal -Transversal	EN 12311-1/EN 13859-2	70 ±30 % 110 ±30 %	≥ 49 ≥ 77	%
Water vapour resistance s <sub>d</sub> -value	EN ISO 12572	0.02 -0.01/+0.03	≤ 0.05	m

<sup>1)</sup> Manufacturers Declaration of Performance, DoP

<sup>2)</sup> Control limit shows values the product must satisfy during internal factory production control and audit testing

<sup>3)</sup> Result from type testing

### 3. Fields of application

Corotop LIGHT wind barrier is designed to be used as an external wind barrier in thermal insulated wooden walls and wooden roof constructions. See figure 1 and 2.

Corotop LIGHT wind barrier can be used as a wind barrier in roofs in residential buildings in risk class 1-6 in fire class 1, 2 and 3.

Corotop LIGHT wind barrier can be used in buildings in hazard class 1-6 in fire class 1, and in residential buildings with 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 must be performed.

Corotop LIGHT wind barrier cannot be used as a combined roofing underlay and wind barrier.

Corotop Band is used for reparation of ruptures, holes or cuts in Corotop LIGHT wind barrier.

Corotop Mix is used for sealing of overlap joints of Corotop LIGHT.

### 4. Properties

#### Material Properties

Material characteristics for fresh material of Corotop LIGHT wind barrier are shown in Table 2.

#### Properties related to fire

Corotop LIGHT wind barrier has according to EN 13501-1 a reaction to fire class E when installed on wood based substrate with a density of at least 338 kg/m<sup>3</sup>, and on all substrates with class A1 or A2-s1,d0.

#### Durability

Corotop LIGHT wind barrier is considered to have satisfactory durability based on laboratory testing before and after accelerated artificial climate ageing. The product must be protected against direct exposure to UV radiation in the complete construction. The product must be covered as soon as possible after installation on roofs and walls, without unnecessary delay.

Corotop Band and Corotop Mix have been tested before and after artificial climate ageing. The tapes are considered to have satisfying adhesion against Corotop LIGHT.

#### Air tightness

Corotop LIGHT wind barrier is sufficiently airtight to protect the insulation to avoid cooling from wind, but not to fulfil the requirements regarding airtightness (n<sub>50</sub>) given in the building regulations and the Norwegian passive house standards, without installing the vapour barrier.

### 5. Environmental aspects

#### Substances hazardous to health and environment

The products contain 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 products shall be sorted as plastic-based material. The product shall be delivered to an authorized waste treatment plant for material and energy recycling.

#### Environmental declaration

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

## 6. Special conditions for use and installation

### *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 before it is checked that the roofing underlay has been mounted properly.

To avoid reduced clamping of the overlaps, due to shrinkage, the moisture content of the rafters, wall studs and battens should not exceed 20 % when Corotop LIGHT wind barrier is installed.

### *Installation*

Corotop LIGHT wind barrier shall be installed on the external side of the insulated wall constructions. All joints shall have minimum 50 mm overlap and shall be sealed with Corotop Mix.

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

Corotop LIGHT wind barrier shall be installed tightly to prevent the membrane from resting against cladding or roof boards.

The wind barrier shall be mounted with an airtight overlap over ridges, eaves, valleys, and bushings.

Corotop LIGHT wind barrier shall be installed in accordance with the vendor's installation manual and the principles described in Building Research Design Guide no. 523.255 *Bindingsverk av tre. Varmeisolering og tetting*, 525.101 *Skrå, luftede tretak med isolerte takflater*, 520.308 *Yttervegger og tak i trehus med 30 minutters brannmotstand* and 520.322 *Brannmotstand for vegger av tre, mur og betong*.

### *Transport and storage*

Corotop LIGHT wind barrier shall be stored in a dry location, on a clean and plane surface, protected with packaging and shielded from direct sun light.

## 7. Factory production control

Corotop LIGHT wind barrier is produced by COROTOP S.A., Ul. Ozimska 2a, 46-053 Chrzęstowice, Poland.

The holder of the approval is responsible for the factory production control in order to ensure that Corotop LIGHT wind barrier and the tapes are produced in accordance with the preconditions applying to this approval.

The manufacturing of the products and the manufacturer's system for factory production control (FPC) is subject to continuous surveillance in accordance with the contract regarding SINTEF Technical Approval.

COROTOP S.A. has a quality management system certified according to EN ISO 9001.

## 8. Basis for the approval

The evaluation of Corotop LIGHT wind barrier and the tapes is based on reports owned by the holder of the approval.

The evaluation of design and technical solutions are based on recommendations given in SINTEF Building Research Design Guides.

## 9. Marking

Each roll of Corotop LIGHT wind barrier is marked with product name, name of the manufacturer and date of manufacturing.

Corotop Mix and Corotop Band are marked with product name and batch number.

Corotop LIGHT wind barrier is CE-marked in accordance with EN 13859-2.

Corotop LIGHT wind barrier can also be marked with the approval mark for SINTEF Technical Approval TG 20647.

## 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



Susanne Skjervø  
Approval Manager