

SINTEF Technical Approval

TG 20027

Issued first time: 26.03.2010
 Revised: 24.02.2021
 Amended: 08.05.2023
 Valid until: 01.07.2026
 Provided listed on
www.sintefcertification.no

SINTEF confirms that

BACA Dampsperre vapour barrier

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

Baca Plastindustri AS
 Ulsmåvegen 20
 5224 Nestun
www.baca.no

2. Product description

Baca Dampsperre is an age resistant, UV stabilized vapour barrier, made of polyethylene. The film is transparent. This Technical Approval concerns five different vapour barrier products, listed in table 1.

Table 1
 BACA Dampsperre products.

Product	Thickness mm	Length m	Width mm
L2615	0,15	15	2600
L2620	0,20	15	2600
L3003UV	0,20	25	3000
L4003UV	0,20	25	4000
I6003UV	0,20	25	6000

The vapour barriers listed in Table 1 may also be supplied with other length- and width dimensions. Dimensions- and weight tolerances are shown in table 2.

Table 2
 Tolerances BACA Dampsperre

Property	Unit	Tolerance
Length	m	± 2 %
Width	m	± 2 %
Thickness	mm	0,15 mm: ± 0,03 mm 0,20 mm: ± 0,04 mm
Weight	g/m ²	0,15 mm: 140 ± 10 % 0,20 mm: 185 ± 20 %

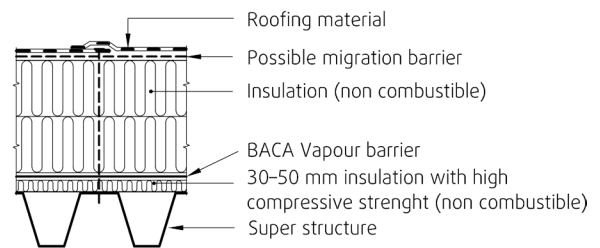


Fig. 1
 Baca Dampsperre installed in a compact roof construction

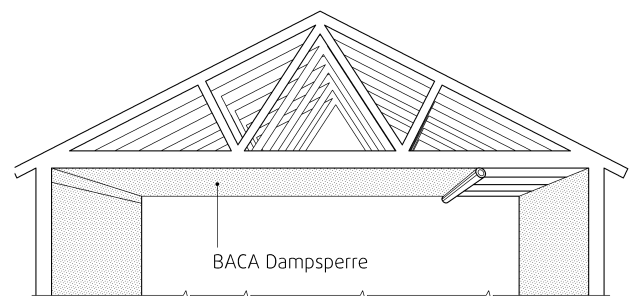


Fig. 2
 Baca Dampsperre installed in outdoor walls and in roofs against cold lofts

3. Fields of application

Baca Dampsperre is used as an indoor vapour barrier in insulated building constructions, see examples in figure 1-3. SINTEF recommend vapour barriers with thickness 0,15 mm in walls and in ventilated pitched roofs. In compact flat roofs and in floors, we recommend thickness 0,2 mm.

4. Properties

Product properties for fresh material are shown in table 3. Baca Dampsperre is mainly tested according to EN 13984 with a few simple tests in addition.

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Table 3
Product properties for Baca Dampsperre, fresh material

Property	Test Method	BACA Dampsperre		Unit
		DoP ¹⁾	Control limit ²⁾	
Dimensional stability	EN 1107-2	-	± 0,4	%
Water tightness	EN 1928 (A)	Tight at 2 kPa for 24 hours	Tight at 2 kPa for 24 hours	-
Resistance to tearing (nail shank)	EN 12310-1	-	≥60	N
Elongation	EN 12311-2 (B)	-	Longitudinal ≥ 300 Transversal ≥ 300	%
Tensile strength	EN 12311-2 (B)	Longitudinal ≥ 13 Transversal ≥ 12	Longitudinal ≥ 13 Transversal ≥ 12	N/mm ²
Water vapour resistance	EN ISO 12572	≥ 20 ≥ 100 x 10 ⁹	≥ 20 ≥ 100 x 10 ⁹	S _d -value (m) m ² sPa/kg
Resistance to impact (23 ± 2)°C	EN 12691 (A)	-	≥ 100	mm
Resistance to static loading	EN 12730 (A)	-	≥ 5 ³⁾	kg

¹⁾ Manufacturers Declaration of Performance, DoP

²⁾ Control limit shows values, product has to satisfy during internal factory production control and audit testing

³⁾ Result from type testing

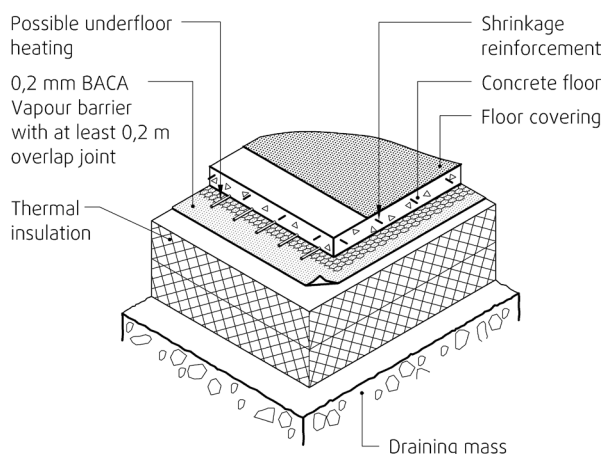


Fig. 3
Baca Dampsperre installed in a concrete floor on the ground

Durability

BACA Dampsperre with thickness 0,2 mm is assessed to have satisfactory durability when used as described in clause 6. The durability is evaluated based on laboratory tests after accelerated ageing consisting of alkaline ageing and ageing with and UV radiation followed by heat ageing.

5. Environmental aspects

Substances hazardous to health and environment

Baca Dampsperre 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

Effect on indoor environment

Baca Dampsperre is not regarded as emitting any particles, gases or radiation that have a perceptible impact on the indoor climate, or to have any significant impact on health.

Waste treatment/recycling

Baca Dampsperre shall be sorted as plastic. The product shall be delivered to an authorized waste treatment plant for material recycling.

Environmental declaration

An environmental declaration (EPD) has been worked out according to EN 15804 for Baca Dampsperre. For complete documentation see EPD no. NEPD-2100-951-NO, www.epd-norge.no.

6. Special conditions for use and installation

General

The vapour barrier should generally be installed on the inner warm side of the construction. Continuously clamping of the joints, together with sealing of bushings, is a prerequisite to prevent air leakage and water vapour transmission into the construction.

External walls and insulated pitched wooden roofs

The installation must be done as soon as the construction is insulated, and before the heating of the building commences. The installation must be done in a way that the film will not be punctured or teared.

The vapour barrier shall generally be installed according to SINTEF Building Research Design Sheet No. 523.255 *Bindingsverk av tre. Varmeisolering og tetting*, 525.101 *Isolerte skrå tretak med lufting mellom vindsperre og undertak*, 525.102 *Isolerte skrå tretak med kombinert undertak og vindsperre*, 525.106 *Skrå tretak med kaldt loft* and 525.107 *Skrå tretak med oppholdsrom på deler av loftet*.

Vapour barrier installed into the insulation layer

For easier to avoid damage from for example hidden electrical systems, the vapour barrier can be installed behind an internal battening. To avoid condensation on the vapor barrier, the insulation thickness on the cold side should then be at least three times that on the warm side.

Flat roofs on load-bearing profiled steel decks

In roofs with supporting profiled steel decks, the vapour barrier should be placed on a flat surface, e.g. of 50 mm rock wool, and not directly on the steel plates to ensure that the overlapping joints is closed (see fig. 1). See also SINTEF Building Research Design Sheet No. 525.207 *Kompakte tak*.

Floors on the ground

In floors on the ground the vapour barrier should be installed above the insulation layer to prevent moisture accumulation in the heat insulation during the building period. In the case that pipes for district heating is installed in the ground under the floor, it is recommended to install a additional vapor barrier under the heat insulation a few meters to each side of the heating pipes. See also SINTEF Building Research Design Sheet No. 521.112 *Golv på grunnen med ringmur. Varmeisolering, frostsikring og beregning av varmetap*.

7. Factory production control

Baca Dampsperrre is produced by Baca Plastindustri AS, Ulsmåvegen 20, 5224 Nestun, Norway.

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

The manufacturing of BACA Dampsperrre 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 evaluation of BACA Dampsperrre is based on reports owned by the holder of the approval.

9. Marking

BACA Dampsperrre shall be marked with the name of holder, product name, production date and item number directly on the product.

Baca Dampsperrre is CE marked in accordance with EN 13984.

The approval mark for SINTEF Technical Approval TG 20027 may also be used.

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



Hans Boye Skogstad
Approval Manager