SINTEF

SINTEF Certification

No. 2038

Technical Approval

Issued first time: 28.03.1995
Revised: 05.07.2016
Amended:
Valid until: 01.10.2021
Provided listed on www.sintefcertification.no

SINTEF Building and Infrastructure confirms that

Huntonit interior panels

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

Byggma ASA
P.O.Box 21
NO-4701 Vennesla
www.byggma.no

2. Product description

Huntonit interior panels are medium density fibreboards for internal wall lining and ceilings. The boards are manufactured by the wet process method.

Standard board thickness is 11 mm, but some board types are also delivered with 9 mm thickness. The weight is approx. 9,2 kg/m² for 11 mm boards and 8,0 kg/m² for 9 mm boards. Moisture content when delivered from the factory is 4 – 9 percent by weight.

The boards are produced in different dimensions, with widths from 125 mm to 1200 mm net measure, and lengths from 1200 mm to 3050 mm. Measure tolerances are shown in Table 1. Special dimensions are delivered on request.

The product is CE marked in accordance with NS-EN 13986.

Huntonit interior panels have tongue and groove edges with visible V-joint, or shiplap joints with tapered edges for jointing compound, see Fig. 1.

Table 1
Huntonit interior panels. Measure tolerances and density

Property	Value	Test method
Thickness (nominal) - 11 mm - 9 mm	 10,7 mm +0,4/-0,7 mm 8,8 mm ± 0,3 mm	EN 324-1
Width - 11 mm - 9 mm	 ± 0,5 mm ± 1,0 mm	EN 324-1
Length	± 1,0 mm/m	EN 324-1
Squareness	± 1,0 mm/m	EN 324-2
Edge straightness	± 0,5 mm/m	EN 324-2
Density - 11 mm - 9 mm	 900 kg/m³ 900 kg/m³	EN 323

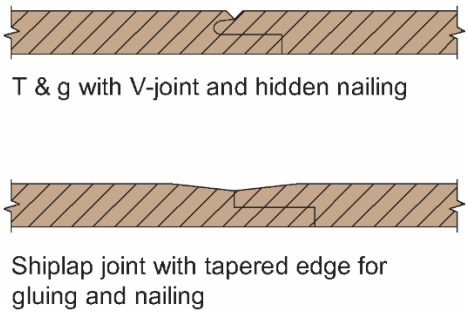

Fig. 1
Standard edge profiles of Huntonit interior panels

Standard boards are untreated, with a smooth surface. Boards may also be delivered with a textured surface and painted in the factory with water based paint and acrylic varnish in hazard class YL group 00. Boards are delivered in several standard colours, and with colour delivered on request according to the NCS colour register.

3. Fields of application

Huntonit interior panels are intended to be used for internal wall lining and for ceilings, installed directly on timber framework. The boards can be applied in dry rooms, and in dry zones of bathrooms and other wet rooms according to Building Research Design Guide No. 527.204.

Huntonit interior panels and Brannit may be used as specified in guidance to regulations on technical requirements for building works TEK10 § 11-9 Table 1A and B1. Huntonit Brannit may be used in structures with strict fire safety regulations such as hotels and nursing homes.

The boards shall not be used as underlay for ceramic tiles, vinyl covering reinforced with glass-fibre, or other surface materials which require very small movements in the underlay caused by moisture variations.

Contact person, SINTEF: Jan Ove Busklein
Author: Elisabeth Wærnes
www.sintefcertification.no
Phone: +47 73 59 30 00
E-mail: certification@sintef.no

4. Properties

Material properties

Huntonit interior panels conform to the requirements for boards type MBH in EN 622-3. Material properties are shown in Table 2.

Table 2
Huntonit interior panels. Material properties

Property	Value	Test method
Thickness swelling, 24 hours	≤ 15 %	NS-EN 317
Moisture movement in the plane of the board, 30-90 % RH, both directions	≤ 0,3 %	NS-NS 318
Water vapour resistance	$3{,}6 \cdot 10^9$ m²sPa/kg s_d = 271 mm	NS-EN 12572
Bending strength - Thickness 11 mm - Thickness 9 mm	≥ 15 N/mm² ≥ 15 N/mm²	NS-EN 310
Internal bond	≥ 0,10 N/mm²	NS-EN 319
Hard body impact resistance, max falling height steel ball	3,5 m	NT Build 066
Surface hardness, steel ball indentation - At load 250 N - Permanent indentation	 0,4 mm 0,1 mm	NT Build 059
Axial withdrawal of screws - Thickness 11 mm - Thickness 9 mm	 1,45 kN 1,35 kN	NS-EN 320
Formaldehyde class	E1	NS-EN 13986

Load-carrying capacity

Boards with shiplap joints and nailed to the framework along all four edges as indicated in clause 6 can be assumed to provide adequate in plane bracing strength to low-rise timber frame houses. Shear capacity for boards installed with other nailing is shown in Building Research Design Guide No. 520.238.

Reaction to fire

Classification is in accordance with NS-EN 13501-1 and applies to mechanically fastened boards with tongue and groove joints.

Unpainted Huntonit interior boards with minimum thickness 9 mm satisfy D-s2,d0. The classification applies when mounted directly on to the timber frame with thermal insulation from fire resistant mineral wool class A1 or A2-s1,d0 or cellulose insulation class E. The classification also is valid when mounted on interior wooden cladding minimum class D-s2,d2 and minimum density 400 kg/m³.

Painted Huntonit interior boards with minimum thickness 11 mm satisfy class D-s1,d0. The classification applies when mounted on to the the timber frame with thermal insulation from fire resistant mineral wool class A1 or A2-s1,d0, with minimum density of 37.5 kg/m³. Classification is also applicable both with and without a cavity behind the boards.

Huntonit Brannit with thickness 11 mm satisfies fire class B-s1,d0. The classification applies when mounted on to the timber frame with thermal insulation from fire resistant mineral wool class A1 with minimum density of 37.5 kg/m³ both with and without a cavity behind the boards. The classification is also applicable when mounted on plasterboard minimum fire class A2-s1,d0.

Resistance to fire

Unpainted Huntonit interior panels thickness minimum 9 mm satisfy fire resistance class $K_2$10 according to NS-EN 13501-2 for all types of underlay. Panels are fastened by screws length minimum 35 mm with maximum spacing of 100 mm.

Huntonit Brannit with thickness 11 mm satisfy fire resistance class $K_2$10 according to NS-EN 13501-2 for all types of underlay, with or without cavity. Panels are fastened by screws minimum dimension 4.25 x 25 mm and with maximum spacing of 150 mm.

5. Environmental aspects

Substances hazardous to health and environment

The boards contain no hazardous substances with priority en quantities that pose any increased risk for human health and environment. Chemicals with priority include CMR, PBT and vPvB substances.

Effect on indoor environment

The panels are assessed not to emit any particles, gasses or radiation that can have a negative impact on indoor environment, or to have any health effect.

Waste treatment/recycling

The boards shall be recycled as wood on constructions sites. The boards must be delivered to authorized disposal site to be energy recycled.

Environmental declaration

An environmental product declaration according to NS-EN 15804 has been worked out for Huntonit (painted) interior panels. Environmental indicators are shown in table 3. Full EPD see EPD nr. NEPD00296 NEPD00296E, www.epd-norge.no.

Table 3: Environmental product declaration according to NS-EN 15804 for Huntonit painted interior panels. Cradle to gate and grave (Norway). Functional unit 1 m² (11 mm thick) product life 60 years.

Indicator	Verdi
Global warming potential	7,7 kg CO^2 equivalent.
Total energy consumption	343 MJ

6. Special conditions for use and installation

Design considerations

Huntonit interior panels shall be installed so late in the building construction period that swelling or bowing due to high moisture levels are avoided.

Installation

The boards shall be installed according to the recommended principles in Building Research Design Guide No. 543.204 and Huntonit installation guide.

The boards can be installed on timber studs or beams spaced max. c/c 600 mm, with the longest side parallel or perpendicular to the stud/beam direction. Joints perpendicular to the supports do not require separate support, but otherwise all edges must be supported by studs, beams or nogging. Boards with 280 mm width may also be installed at an angle to the underlay.

Celling panels with 600 mm width should be installed parallel to supports spaced max. c/c 600 mm in ceilings to obtain adequate fastening strength. Alternatively, the boards may be installed perpendicular to supports spaced c/c 300 mm. In ceilings boards with 280 mm width may be installed parallel to battens spaced c/c 280 mm, or perpendicular to supports spaced c/c 300 mm. All underlays must be dry and adjusted into plane.

The boards shall be fastened with cramps of dimension 10 x 40 mm or screws with dimensions 4.2 x 35 mm for walls and 4.2 x 25 mm for celling. The fasteners are placed hidden in the groove or rebate with c/c 150 mm nail spacing when the boards are installed parallel to the supports. At short edges, the nail spacing shall be c/c 100 mm. When boards in ceilings are fastened perpendicular to the supports two nails shall be used at each support if the board width exceeds 300 mm.

When the boards are applied in wet rooms (dry zones) the surface must be treated with a water repellent paint or covering.

Holes in walls with fire rating must be filled with documented products that maintain the fire rating of the wall.

Transport and storage

The products are to be stored dry and on a flat surface.

7. Factory production control

The product is produced by Huntonit AS, Vennesla, Norge.

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.
Production control of Huntonit Brannit is certified by SINTEF according to NS-EN 13986, certificate No. 1071-CPD-3071. The quality management system is certified by Det Norske Veritas according to EN ISO 9001, certificate No. 2002-OSL-AQ-7219.

8. Basis for the approval

The approval is based on type testing which is documented in the following report, plus results from audit testing and experience from use over many years:

- Norwegian Building Research Institute. Report No. O 14429 dated 20.09.2004.
- SP-rapport 4P04322-1rev1, Reaction to fire classification report, SP, dated 30.10.2014 (fire class Brannit)
- SP-rapport 5P09479-4rev1, Reaction to fire classification report, SP, dated 09.05.2016 (fire class painted)
- NS-EN 13986:2004+A1:2015 Trebaserte plater til bruk i bygg og anlegg - Egenskaper, evaluering av samsvar og merking (brannteknisk klasse ubehandlete Bygningsplater)
- Commission delegated regulation No. 1291/2014, EU Kommisjonen, dated 16.07.2014 (brannmotstand ubehandlete Bygningsplater)
- SPFR-rapport nr. 150040-01, Brannteknisk prøving av kledning i henhold til NS-EN 14135:2004, SP Fire Research AS, datert 25.04.2016 (brannmotstand Brannit)

9. Marking

Pallets and stacks are marked with a label showing the name of the manufacturer and a product identification according to the requirements in NS-EN 622-3 and NS-EN 13986. The approval mark for Technical Approval No. 2038 may also be used.
The product is CE marked in accordance with NS-EN 13986 The approval mark for SINTEF Technical Approval No. 2038 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 Building and Infrastructure

Hans Boye Skogstad
Approval Manager