SINTEF Technical Approval

TG 20371

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Amended:
Valid until 01.10.2028
Provided listed on
www.sintefcertification.no

SINTEF confirms that

RCH P6 22 mm Fast Floor

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

SIA Kronospan Riga
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Riga LV-1016
Latvia
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2. Product description

RCH P6 22 mm Fast Floor are particleboards made of wooden chips, from hardwood and softwood, bonded together under high temperature and pressure with urea formaldehyde adhesive. The boards are made of three layers, using larger chips in the middle layer and finer material in the surface layers.

The boards are produced and CE-marked in accordance with technical class P6 as specified in EN 13986 and EN 312.

Standard nominal thickness is 22 mm, with tongue and groove on all four sides as shown in figure 1.
Standard dimensions are 600 mm x 1800 mm and 600 mm x 2400 mm as installed.

Declared tolerances on dimension are as follows, measured according to EN 324-1 and EN 324-2:

Thickness:	± 0.3 mm
Length and width:	± 2.0 mm
Edge straightness:	≤ 1.5 mm/m
Squareness:	≤ 2.0 mm/m

Mean density is 690 kg/m³ ± 20 kg/m³ measured according to EN 323.
Formaldehyde emission class according to EN 13986 is E1.

3. Fields of application

RCH P6 22 mm Fast Floor satisfies the requirements for internal use as structural components in dry conditions in accordance with EN 13986.

The boards are not moisture resistant and may only be used in service class 1 according to EN 1995-1-1.

RCH P6 22 mm Fast Floor can only be used in dry conditions, i.e. the relative humidity of the surrounding air shall only exceed 65 % in short periods and be installed under dry conditions.

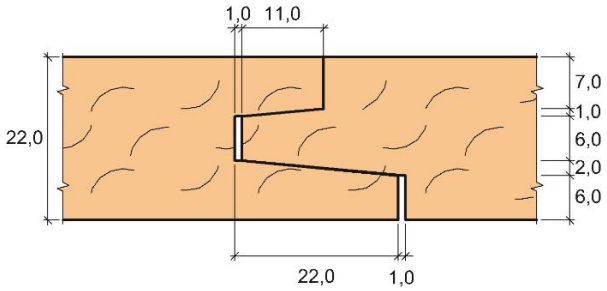

Fig. 1
RCH P6 22 mm Fast Floor flooring. Tongue and groove profiles.

With conditions as specified in section 6, RCH P6 22 mm Fast Floor can be used as a load-bearing subfloor on timber joists and battens in residentials and other buildings with an imposed floor load in category A and B according to EN 1991-1-1.

RCH P6 22 mm Fast Floor may be used as subfloor in non-fire rated constructions in buildings of risk class 1-6 and fire class 1, 2 and 3 according to Norwegian building regulations. When fully covered by materials with the necessary reaction to fire classification, the product can be used in fire rated constructions in risk class 1-6 and fire class 1 and 2. For all other use, including in load bearing and/or fire rated constructions in fire class 3 or in shafts and cavities, the use must be verified by the company responsible for the building fire safety design. Also see SINTEF Building Research Guide 321.022 and 571.046.

Special conditions for application are given in clause 6.

4. Properties

General
RCH P6 22 mm Fast Floor fulfils the material requirements given for P6 in EN 13986. RCH P6 22 mm Fast Floor fulfils the requirements for strength and stiffness requirements for P6.

Load capacity
Installed as specified in section 6, RCH P6 22 mm Fast Floor satisfies the functional requirements for floor underlay according to EN 12871.

Characteristic values for structural design of load-bearing structures in general are given in EN 12369-1.

Reaction to fire
Reaction to fire classification according to EN 13501-1 is D-s2,d0, and D_{fl}-s1 as flooring. The classification is valid for boards mounted on substrates with at least class A1 or A2-s1,d0 with minimum density 10 kg/m³, or on substrates with at least class D-s2, d2 and minimum density 400 kg/m³. This means that the boards can be mounted on for example mineral wool or timber beams and boards.

Thermal properties
Design thermal conductivity is λ = 0,12 W/mK according to EN 13986.

Properties related to moisture
The glue in the board material is not moisture resistant and the boards shall not be exposed to free water. In permanent service the moisture content of the surrounding air must not exceed 65 % RH for longer periods.

Dimensional changes in the plane of the boards when the moisture content determined according to EN 318 change from equilibrium at 35 % RH to equilibrium at 85 % RH may be taken as approx. 2,5 mm/m.

Thickness swelling after 24 hours water immersion is ≤ 15 % measured in accordance with EN 317.

The water vapour resistance according to EN 13986 is μ = 50 in dry conditions. This corresponds to sd = 1,10 m (equivalent air layer thickness) for 22 mm thick boards.

The boards are delivered from the factory with a moisture content of 9 ± 3 % weight, measured according to EN 322.

The boards are not specially treated against growth of mould or fungi.

5. Environmental aspects

Substances hazardous to health and environment
RCH P6 22 mm Fast Floor 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
RCH P6 22 mm Fast Floor is evaluated according to SINTEF Technical Approval – Health and Environmental Requirements version 09.05.2022. The product 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. *Produktet tilfredsstiller krav i BREEAM-NOR v6.0, Emisjoner fra byggeprodukter i henhold til Hea 02 Inneluftskvalitet*.

Waste treatment/recycling
RCH P6 22 mm Fast Floor shall be sorted as wood. 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 RCH P6 22 mm Fast Floor.

6. Special conditions for use and installation

Floor sheathing
The boards shall be installed on floor joists or battens spaced maximum c/c 600 mm, provided that the imposed load is maximum 3,0 kN/m² uniformly distributed load and 2,0 kN concentrated load according to NE-EN 1991-1.

Installation
The boards shall be installed staggered, with the long side perpendicular to the floor joists. The boards shall normally span continuously over at least two spans. Free edges at walls and openings shall always be continuously supported.

End joints shall be staggered, and always be continuously supported by joists.

All tongue and groove joints in floors shall be glued with two adhesive strings as shown in figure 2. Floor sheathing shall also be glued to the floor joists with two continuous adhesives strings on top of the joists. A type of adhesive designed for subfloor installation and suitable for the relevant climate conditions during installation must be applied.

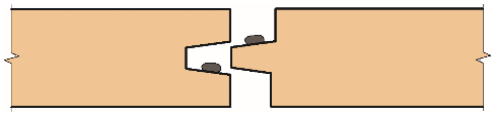

Fig. 2
Tongue and groove joints shall be glued with two adhesive strings. One is applied in the groove and one on the tongue.

The boards shall be fixed to the joists with 4,6 x 64 mm particleboard screws, using four screws at the ends and three screws at intermediate supports. The screw heads shall be countersunk 2-3 mm.

It must be taken into account that some swelling in the plane of the boards will take place after installation.

The use and installation of RCH P6 22 mm Fast Floor, including fastening, shall otherwise be in conformity with the recommendations in SINTEF Building Research Design Guide No. 522.861 *Subfloor on timber joists*.

Surface treatment
The boards shall be cleaned and the moisture content shall be maximum 10 % before floor coverings are installed. Before installation of thin floor coverings surface damages must be repaired with a filler compound, and edge toppings must be sanded. Countersunk screw heads shall not be filled with filler compound.

Underlay for ceramic tiles
When used as an underlay for ceramic tiles the joist spacing should be maximum c/c 300 mm. Alternatively the boards may be installed on joists spaced c/c 600 mm provided a double layer of boards is used, or by applying of a screed material. See also SINTEF Building Research Design Guide no. 541.411 *Ceramic tiles on indoor floors*.

Transport and storage
The boards shall be transported and stored under dry conditions and on a stable and level substrate.

7. Factory production control

RCH P6 22 mm Fast Floor is produced by SIA Kronospan Riga in Riga, Latvia.

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

The manufacturing of RCH P6 22 mm Fast Floor and the manufacturer's system for factory production control (FPC) is subject to continuous surveillance in accordance with the contract regarding SINTEF Technical Approval.

8. Basis for the approval

The evaluation of RCH P6 22 mm Fast Floor is based on reports owned by the holder of the approval.

9. Marking

RCH P6 22 mm Fast Floor is CE-marked in accordance with EN 13986.

The approval mark for SINTEF Technical Approval TG 20371 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

Susanne Skjervø
Approval Manager