TECHNICAL DATA SHEET

HOLZ PROF (HR PROF)

Fire retardant for wood in interior and exterior

DESCRIPTION:

HOLZ PROF (HR PROF) is ready-to-use, water-based fire-retardant chemical agent for wood. It transforms solid wood into material that is resistant to fire and flame spreading. HOLZ PROF (HR PROF) is tested and approved internationally by accredited laboratories, meets the requirements of the Exova BM TRADA A-Mark. HOLZ PROF (HR PROF) treated wood meets the highest fire classification for wood: Reaction to fire: Class B-s1, d0; B(fl)-s1(EN 13501-1), and Resistance to fire: Class $K_1$10/$K_2$10 (EN 13501-2). HOLZ PROF (HR PROF) deeply penetrates into wood and chemically combines with it, without preventing air circulation and forming any superficial layer. The technology allows interior and exterior end-uses, as the treated wood satisfies fire, durability, and hygroscopicity requirements. The efficiency in outdoor and Nordic climate use conditions, was determined by research method based on EN 16755. Due to its balanced formulation, HOLZ PROF (HR PROF) also helps to extend the service life of the timber and provides major durability to it.

RANGE OF USE:

HOLZ PROF (HR PROF) is suitable for different types of wood (hardwood and conifer), and various application ends in interior and exterior. It is indicated for the treatment of wood and wooden components in buildings and other structures either under construction or being restored. The product meets EU and international quality standards and performance requirements for fire retardants for wood. This enables to obtain the CE mark on the treated timber.

APPLICATION INSTRUCTIONS:

NB: HOLZ PROF (HR PROF) is ready for use and cannot be diluted or mixed with other products. Stir thoroughly before applying (bottom sediment does not affect the quality of the product). A trial area is always recommended before coating entirely, as there may be a slight colour change to the wood. In case of contact with surfaces not intended for processing (painted, metal, glass and other surfaces), wash off immediately with water, as it can affect the colour of the surface. Application and coverage may depend on several factors, such as type of surface, surface conditions, moisture content, method of application and climatic conditions.

The surface to treat: Must be dry (max 18% moisture content), clean and free from any contamination.
HOLZ PROF (HR PROF) is not for the application on surfaces previously covered with oil, paint, varnish or other film-forming or water-repellent material. Any existing coatings, including cutting emulsions, must be removed by stripping or sanding. Some emulsions used for wood cutting can lead to the colour change of the treated wood. Do not process frozen wood.

Application conditions: Apply at a temperature higher than +5ºC (with humidity below 75%). The temperature of the product (HOLZ PROF/HR PROF) should be higher than +15°C, if necessary, it can be warmed up (till max +25ºC) to facilitate the impregnation.

Application methods: Both, superficial and vacuum application methods, are suitable for the right treatment.
HOLZ PROF works on the basis of absorption, not on the number of coats. The application method chosen must ensure the absorption required and depth of impregnation at least 1,5 mm.

Absorption rate: 300 gr (approx. 3,7 m^2 per litre) on most wood species. In the case of Western Red Cedar, the absorption requirement is higher, 400 gr (approx. 2,75 m^2 per litre). The rate of absorption will vary dependent on a number of factors i.e. wood species, rough sawn wood, planed all round (PAR) wood, and moisture content.

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For more information and further advice please contact your supplier or our technical department by email:
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Appendix A

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Tested constructions that are impregnated with "Holz Prof" (HR Prof) - Fire retardant with wood preservative														
Nr	Construction	Orientation of boards	Type of wood	Nominal thickness of wood [mm]	Minimal thickness of wood [mm]	Air gap behind the cladding/ flooring [mm]	FR agent treatment	Additional coating	Fire class of substrate	Fire class according to:			Test report	Classification report
										EN 13501-1	EN 13501-2	The Building Regulations 2000, Fire Safety, Approved Document B		
1	Vertical wall cladding	Vertical	Birch or pine	24	-	-	N/A	-	A1	B-s1, d0	-	-	TM-16/06	EC 2006-1
2	Vertical wall cladding	Horizontal	Spruce	25	-	22	300 [g/m²]	-	A1	B-s1, d0	-	-	SP P906808/rev 1	SP PX06012
3	Vertical wall cladding	Horizontal or vertical	Scotland larch	22	-	20	300 [g/m²]	-	B-s1, d0	B-s1, d0	-	-	MEKA 547-2011; MEKA 547-2/2011	MEKA K15/2011
4	Vertical wall cladding	Horizontal or vertical	Western red cedar	22	-	20	300 [g/m²]	-	B-s1, d0	B-s1, d0	-	-	MEKA 546-1/2011; MEKA 546-2/2011	MEKA K10/2011
5	Vertical wall cladding	Horizontal	Siberian larch	25	-	20	300 [g/m²]	-	B-s1, d0	B-s1, d0	-	-	MEKA 548-1-2011; MEKA 548-2-2011	MEKA K09/2011
6	Vertical wall cladding	Horizontal	Scotch larch	21,5	-	-	N/A	-	A1	-	-	Class 0	BRE Global 276315; BRE Global 276587	BRE Global 277206
7	Vertical wall cladding	Horizontal or vertical	Oak	27	-	27	300 [g/m²]	-	B-s1, d0	B-s1, d0	-	-	MEKA 716/1-2012; MEKA 716/2-2012	MEKA K06/2012
8	Horizontal, vertical, sloped cladding	N/A	Pine	14	-	22	300 [g/m²]	-	K_1 10	-	K_1 10, K_2 10	-	SP 3P00887	SP 3P03654
9	Vertical wall cladding	Horizontal	Pine	14	-	-	300 [g/m²]	-	A2-s1, d0	B-s1, d0	-	-	MEKA 122-1/2013; MEKA 122-2/2013	MEKA K22/2013
10	Vertical wall cladding	Horizontal	Spruce	18	-	-	300 [g/m²]	Worth Coatings stains	A2-s1, d0	B-s1, d0	-	-	MEKA 624/2011 L; MEKA 1120/2014	MEKA K04/2014
11	Vertical wall cladding	Horizontal	Spruce	18	10 ± 1	23	300 [g/m²]	No coating or Primer Jupex 45 (glase) Lasur code: 67-00044	B-s1, d0	B-s1, d0	-	-	MEKA 1249-1/2014; MEKA 1249-2/2014	MEKA K15-1/2014
12	Flooring	N/A	Pine	18 and 50	-	-	300 [g/m²]	-	C_{fl}-s1	B_{fl}-s1	-	-	MEKA 1456-1/2015; MEKA 1456-2/2015	MEKA K08/2015

13	Vertical wall cladding	Horizontal or vertical	Spruce	21	10	23	270 [ml/m²]	Acrylic-alkyd resin-based paint for wood Sikkens Cetol WF-771 (manufacturer Akzo Nobel Industrial Coatings Ltd.), consumption 50-70 g/m²	A1 or A2-s1, d0	B-s1, d0	-	-	MEKA 2320-1/2017; MEKA 2320-2/2017	MEKA K18/2017
14	Vertical wall cladding	Horizontal or vertical	Spruce	21	10	23	270 [ml/m2]	Waterborne acrylic paint for wood Villa Ultima (manufacturer Viva Color Tikkurila AS), consumption 75-100 g/m²	A1 or A2-s1, d0	B-s1, d0	-	-	MEKA 2321-1/2017; MEKA 2321-2/2017	MEKA K14/2017
15	Vertical wall cladding	Horizontal or vertical	Spruce	20	10	23	300 [g/m2]	-	A1 or A2-s1, d0	B-s1, d0	-	-	MEKA 2914-2/2018; MEKA 2914-3/2018	MEKA K18/2018
16	Vertical wall cladding	Vertical	Birch	24	-	24 or no gap	400-500 [g/m2]	-	A1 or A2-s1, d0	B-s1, d0	-	-	TÜVE TM-06/07; TÜVE 010-18TM	TÜVE TEK-219/18
17	Vertical wall cladding	Horizontal or vertical	Spruce	20	10	40	300 [g/m2]	-	A1 or A2-s1, d0	B-s1, d0	-	-	APPLUS 18/17572-1474 Part 1	APPLUS 18/17572-1474 Part 2
18	Flooring	N/A	Birch plywood	16	-	-	270 [ml/m²]	-	A1 or A2-s1, d0	B_{fl}-s1	-	-	MEKA 3618-1/2019; MEKA 3618-2/2019	MEKA K12/2019
19	Flooring	N/A	Wood particleboard	12	-	-	270 [ml/m²]	-	A1 or A2-s1, d0	B_{fl}-s1			MEKA 3740-1/2019; MEKA 3740-2/2019	MEKA K21/2019
20	Flooring	N/A	Oriented strand board	12	-	-	270 [ml/m2]	-	A1 or A2-s1, d0	B_{fl}-s1	-	-	MEKA 3739-1/2019; MEKA 3739-2/2019	MEKA K27/2019
21	Flooring	N/A	Thermally modified pine	28	-	-	270 [ml/m2]	-	A1 or A2-s1, d0	B_{fl}-s1	-	-	MEKA 3741-1/2019; MEKA 3741-2-2019	MEKA K28/2019
22	Panelling and cladding	N/A	Siberian larch	20	-	40	270 [ml/m2] (300 [g/m2])	-	A1 or A2-s1, d0	B-s1, d0	-	-	LZP01-00728/20/Z00NZP; LZP02-00728/20/Z00NZP	ITB 007//20/Z00NZP/E