LIGNATUR®

DECLARATION OF PERFORMANCE
202X0050 / 202X0051 / 202X0052 / 202X0053 / 202X0054

1. Unique identification code of the product-type:

   LIGNATUR easy 110 with insulation
   LIGNATUR easy 150 without insulation
   LIGNATUR easy 150 with insulation
   LIGNATUR easy 190 without insulation
   LIGNATUR easy 190 with insulation

2. Intended use:

   As load bearing or non load bearing elements in floors and roofs

3. Manufacturer:

   Lignatur AG
   Herisauerstrasse 30
   CH-9104 Waldstatt
   Schweiz

4. Authorised representative:

   N/A

5. System of assessment and verification of constancy of performance:

   1

6. European Assessment Document:

   Guideline for European Technical Assessment EAD 140022-00-0304 "Pre-fabricated wood-based loadbearing stressed Skin Panels", edition November 2018, used as European Assessment Document (EAD) pursuant to article 66, para. 3 of Regulation (EU) No. 305/2011

   European Technical Assessment:

   ETA-11/0137 of 31.05.2021

   Technical Assessment Body:

   Österreichisches Institut für Bautechnik, Schenkenstraße 4, 1010 Wien, Österreich

   Notified Body:

   0672

7. Declared performance:

Essential characteristics	Performance
Load bearing capacity	Bending resistance $R_{m,y,k}$ for easy 110 = 42.7 kNm/m[1] for easy 150 = 70.5 kNm/m[1] for easy 190 = 102.2 kNm/m[1] and shear resistance $R_{v,z,k}$ for easy 110 = 45 kN/m[1] for easy 150 = 63 kN/m[1] for easy 190 = 80 kN/m[1] in accordance with ETA-11/0137 and overview-of-formulas.lignatur.ch

Essential characteristics	Performance
Serviceability	Moment of intertia I_y for easy 110 = 97.8 mm^4/m^1 * 10^6 for easy 150 = 220.4 mm^4/m^1 * 10^6 for easy 190 = 404.7 mm^4/m^1 * 10^6 and E-value $E_{0,mean}$ = 11'000 N/mm² in accordance with ETA-11/0137 and overview-of-formulas.lignatur.ch
Moisture content	10 +/- 2%
Reaction to fire	D-s1, d0
Resistance to fire	Bending resistance $R_{m,y,k,fi}$ for easy 110 with insulation = 11.1 kNm/m^1 for easy 150 with insulation = 25.3 kNm/m^1 for easy 190 with insulation = 44.9 kNm/m^1 and shear resistance $R_{v,z,k,fi}$ for easy 110 with insulation = 36 kN/m^1 for easy 150 with insulation = 55 kN/m^1 for easy 190 with insulation = 75 kN/m^1
Water vapour permeability and moisture resistance	μ = 20 - 50
Water tightness	NPD
Release of dangerous substances	Formaldehyde emission: E1
Slipperiness of floors	NPD
Impact resistance	Satisfactory
Airbourne sound insulation	NPD
Impact sound insulation	NPD
Sound absorbtion	NPD
Thermal resistance	Spruce: α = 0,130 W/(m²*K)
Air permeability	Satisfactory
Thermal inertia	Spruce: λ = 0,13 W/(m*K) ρ = 350 kg/m^3 c_p = 1 600 J/(kg*K)

8.   Appropriate Technical Documentation and/or Specific Technical Documentation:

N/A

The performance of the product identified above is in conformity with the set of declared performances. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

Ruedi Jud, Ralph Schläpfer
names

Waldstatt, 15.02.24
place, date of issue

signatures