

Intermediate floor - gdstxx02-01

intermediate floor, exposed beams, without lining, dry, with filling, wooden surface

Performance rating

Fire protection performance REI 30

maximum span = 5 m; maximum load $E_{d,fi} = 5,29 \text{ kN/m}^2$
 Classified by HFA

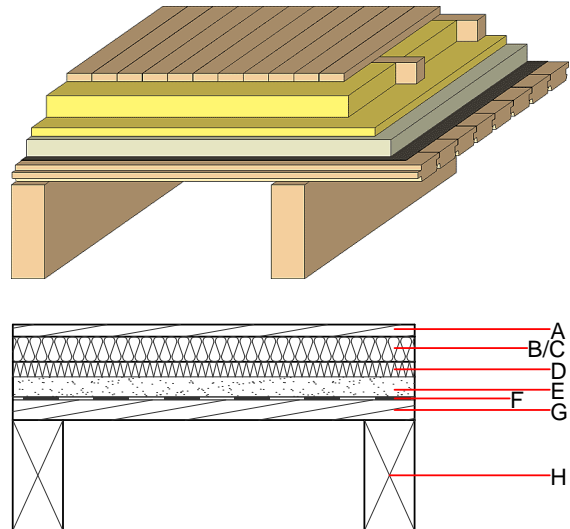
Thermal performance U 0.41 W/(m²K)
 Diffusion suitable

Calculated by HFA

Acoustic performance $R_w (C; C_{tr})$ 56(-5;-11) dB
 $L_{n,w} (C_i)$ 62(2)

Assessed by TGM

Mass per unit area m 105.90 kg/m²



Register of building materials used for this application, cross-section (from outside to inside, dimensions in mm)

	Thickness	Building material	Thermal performance				Reaction to fire EN
			λ	μ min – max	ρ	c	
A		spruce wood 3-strip parquet	0.120	50	450	1.600	D
B	50.0	spruce wood sleeper (50/80; e=600)	0.120	50	450	1.600	D
C	50.0	mineral wool [040; ≥ 16 ; <1000°C]	0.040	1	16	1.030	A1
D	30.0	impact sound absorbing subflooring EPS-T	0.040	20 - 50	11	1.450	E
E	40.0	fill	0.700	1	1800	1.000	A1
F		trickling protection					E
G	40.0	planking spruce wood	0.120	50	450	1.600	D
H		construction timber floor joists (in acc. with structural design)	0.120	50	450	1.600	D

Sustainability rating (per m²)

Database ecoinvent

013_{kon} 8.1

Calculated by HFA

Details of sustainability rating

Database ecoinvent

Lifecycle (Phases)	GWP [kg CO ₂ -e.]	AP [kg SO ₂ -e.]	EP [kg PO ₄ -e.]	ODP [kg R11-e.]	POCP [kg Ethen-e.]	
A1 - A3		0.075	0.032	1,07E-6	0.027	
Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	133.821	744.107	877.928	217.958	17.022	234.980