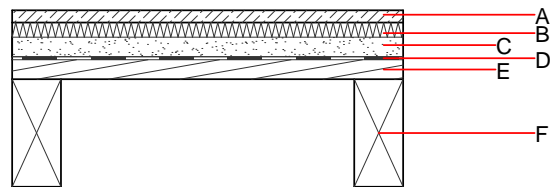
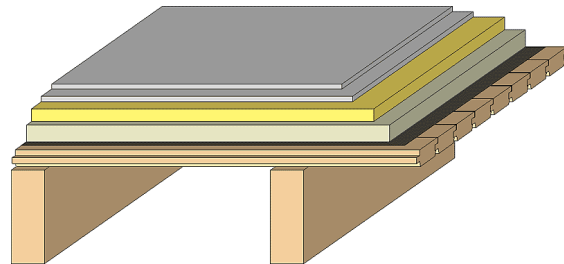


Intermediate floor - gdstxx01-01

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 Diffusion	0.74 $\text{W}/(\text{m}^2\text{K})$ suitable
Calculated by HFA		
Acoustic performance	$R_w (C;C_{tr})$ $L_{n,w} (C_i)$	57(-4;-11) dB 62(1)
Assessed by TGM		
Mass per unit area	m	112.30 kg/m^2



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	25.0	dry screed	0.210	8	900	1.050	A1
B	30.0	impact sound absorbing subflooring EPS-T	0.040	20 - 50	11	1.450	E
C	40.0	fill	0.700	1	1800	1.000	A1
D		trickling protection					E
E	40.0	planking spruce wood tongue and groove fire resistant planking	0.120	50	450	1.600	D
F		construction timber floor joists (in acc. with structural design)	0.120	50	450	1.600	D

Sustainability rating (per m^2)

Database ecoinvent

$OI3_{Kon}$ 8.8

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		0.055	0.023	1,11E-6	0.019	

Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	91.399	484.789	576.188	203.325	17.022	220.347