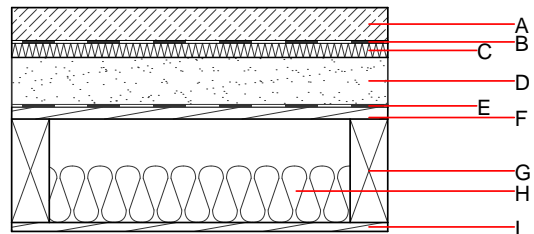
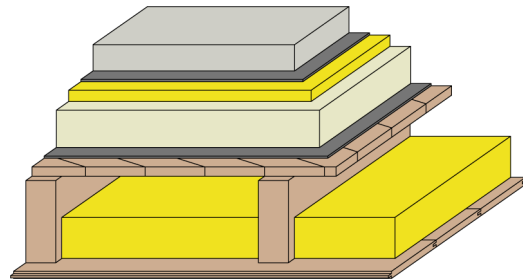


Intermediate floor - gdsnxn01a-01

intermediate floor, timber frame construction, directly, wet, with filling, wooden surface

Performance rating

Fire protection performance	REI	30
maximum span = 5 m; maximum load $E_{d,fi} = 3,66 \text{ kN/m}^2$ Classified by HFA		
Thermal performance	U Diffusion	0.21 $\text{W}/(\text{m}^2\text{K})$ suitable
Calculated by HFA		
Acoustic performance	$R_w (C;C_{tr})$ $L_{n,w} (C_i)$	65(-1;-6) dB 51(2)
Assessed by TGM		
Mass per unit area	m	355.20 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	70.0	cement screed	1.330	50 - 100	2000	1.080	A1
B		plastic separation layer	0.200	100000	1400	1.400	E
C	30.0	impact sound absorbing subflooring MW-T [$s' = 10 \text{ MN}/\text{m}^3$]	0.033	1	70	1.030	A1
D	100.0	fill loose	0.700	1	1800	1.000	A1
E		trickling protection					E
F	25.0	planking spruce wood diagonal	0.120	50	450	1.600	D
G	240.0	construction timber (80/...; e=800)	0.120	50	450	1.600	D
H	120.0	mineral wool [035; ≥ 23 ; $\geq 1000^\circ\text{C}$]	0.035	1	23	1.030	A1
I	19.0	planking profile C	0.120	50	450	1.600	

Sustainability rating (per m^2)

Database ecoinvent

$O13_{Kon}$ 36.8

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		0.166	0.075	2,21E-6	0.044	

Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	119.463	556.852	676.315	495.921	7.645	503.566