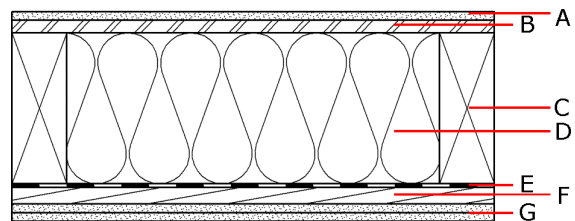
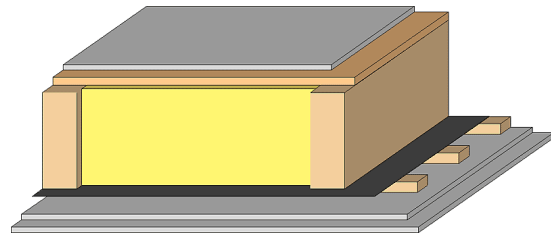


Floor towards attic (uninhabitable) - ddrtxn01b-02

floor towards attic (uninhabitable), timber frame construction, not suspended, dry, other surface

Performance rating

Fire protection performance	REI	60
maximum span = 5 m; maximum load $E_{d,fi} = 3,66 \text{ kN/m}^2$ Classified by IBS		
Thermal performance	U Diffusion	0.19 $\text{W}/(\text{m}^2\text{K})$ suitable
Calculated by HFA		
Acoustic performance	$R_w (C;C_{tr})$ $L_{n,w} (C_i)$	48(-3;-8) dB
Assessed by TGM		
Mass per unit area	m	63.50 kg/m^2
Calculation based on GF		



Note: e=625

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	12.5	gypsum plaster board type DF or	0.250	10	800	1.050	A2
A	12.5	gypsum fibre board	0.320	21	1000	1.100	A2
B	18.0	OSB	0.130	200	600	1.700	D
C	240.0	spruce wood floor joists (80/*); e=*	0.120	50	450	1.600	D
D	240.0	mineral wool [040; ≥ 16 ; $< 1000^\circ\text{C}$]	0.040	1	16	1.030	A1
E		vapour barrier $s_d \geq 15\text{m}$			1000		
F	24.0	spruce wood cladding with spacing of cladding boards(24/100); a=400	0.120	50	450	1.600	D
G	25.0	gypsum plaster board type DF (2x12,5 mm) or	0.250	10	800	1.050	A2
G	25.0	gypsum fibre board (2x12,5 mm)	0.320	21	1000	1.100	A2

Sustainability rating (per m^2)

Database ecoinvent

O_{13kon} 27.1

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	-22.679	0.118	0.052	2,60E-6	0.008	

Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	62.299	498.002	560.301	430.547	22.695	453.242