

Floor towards attic (uninhabitable) - ddrtxn03b-03

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 HFA

Thermal performance U Diffusion 0.18 $\text{W}/(\text{m}^2\text{K})$
 suitable

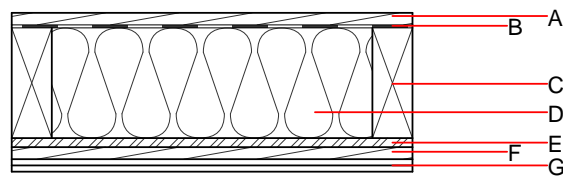
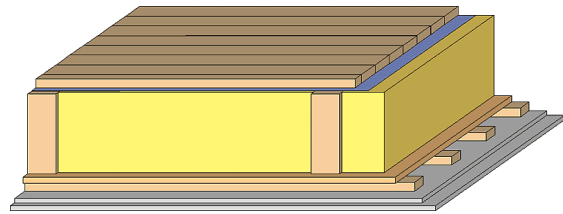
Calculated by HFA

Acoustic performance $R_w (C;C_{tr})$ 43(-2;-6) dB
 $L_{n,w} (C_i)$

Assessed by TGM

Mass per unit area m 70.50 kg/m^2

Calculation based on gypsum plaster board type DF



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	24.0	planking spruce wood	0.120	50	450	1.600	D
B		wind barrier			1000		
C	220.0	construction timber (80/...; e=*)	0.120	50	450	1.600	D
D	220.0	mineral wool [035; 50; <1000°C]	0.035	1	50	1.030	A1
E	18.0	OSB (sealed with airtight tape)	0.130	200	600	1.700	D
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

$O13_{kon}$ 47.9

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		0.211	0.096	3,94E-6	0.035	

Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	121.057	634.533	755.590	690.664	19.412	710.077