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Designation: ddrtxn03b-04
Last updated: 8/2/23
Source: Holzforschung Austria
Editor: HFA, SP

Floor towards attic (uninhabitable) - ddrtxn03b-04

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 kN/m²
Classified by HFA

Thermal performance	**U**	0.19 W/(m²K)
	Diffusion	suitable

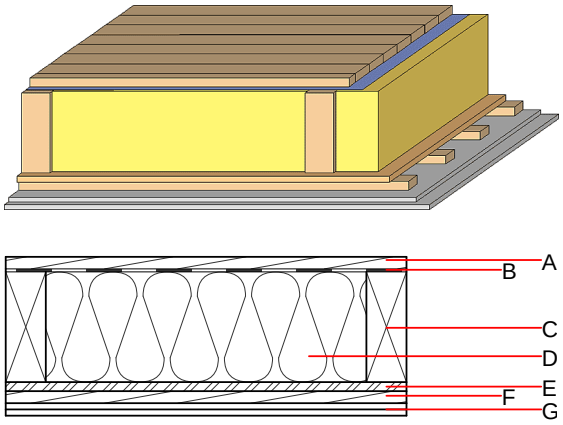
Calculated by HFA

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

Assessed by TGM

Mass per unit area	**m**	67.30 kg/m²

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
			λ	μ min – max	ρ	c	EN
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 [038; ≥33; ≥1000°C]	0.038	1	33	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 m²)

Database ecoinvent

$OI3_{Kon}$	30.0

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		0.158	0.054	1,98E-6	0.058	

Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	106.875	634.533	741.408	415.781	19.412	435.194