

Designation: ddrtxn04b-05 Last updated: 8/2/23

Holzforschung Austria Source:

Editor: HFA, SP

Floor towards attic (uninhabitable) - ddrtxn04b-05

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

Performance rating

REI 60 Fire protection performance maximum span = 5 m; maximum load $E_{d,fi}$ = 3,66 kN/m² Classified by HFA Thermal performance U $0.18 \text{ W/(m}^2\text{K)}$ Diffusion suitable Calculated by HFA Acoustic performance R_w (C;C_{tr}) 44(-2;-6) dB $L_{n,w}$ (C_l) Assessed by TGM Mass per unit area 83.90 kg/m^2

Calculation based on gypsum plaster board type DF

D Ē

Note: e=625

Register of building materials used for this application, cross-section (from outside to inside, dimensions in mm)

	Thickness	Building material	Thermal pe	rformance			Reaction to fire
			λ	μ min – max	ρ	С	EN
Α	50.0	Magnesite-bound lightweight wood wool board	0.120	2 - 5	700	1.400	
В	24.0	spruce wood cladding with spacing of cladding boards(24/100); a=400	0.120	50	450	1.600	D
С	220.0	construction timber (80/; e=*)	0.120	50	450	1.600	D
D	220.0	cellulose fibre [040; E]	0.040	1 - 2	55	2.000	E
E		vapour barrier sd≥ 2m			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 m²) Database ecoinvent OI3_{Kon} 16.3 Calculated by HFA



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Details of sustainability rating

Database ecoinvent

Lifecycle	GWP	AP	EP	ODP	POCP	
(Phases)	[kg CO ₂ -e.]	[kg SO ₂ -e.]	[kg PO ₄ -e.]	[kg R11-e.]	[kg Ethen-e.]	
A1 - A3		0.085	0.034	1,81E-6	0.017	
Lifecycle	PERE	PERM	PERT	PENRE	PENRM	PENRT
(Phases)	[MJ]	[MJ]	[M1]	[MJ]	[MJ]	[MJ]