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Designation: ddrtxn04a-07
Last updated: 8/2/23
Source: Holzforschung Austria
Editor: HFA, SP

Floor towards attic (uninhabitable) - ddrtxn04a-07

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

Performance rating

Fire protection performance	**REI**	30

maximum span = 5 m; maximum load $E_{d,fi}$ = 3,66 kN/m²
Classified by HFA

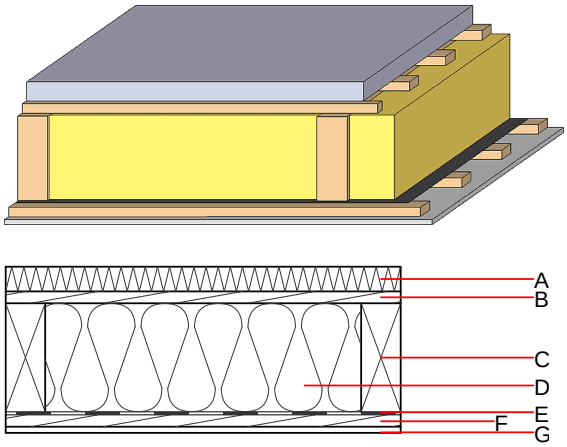
Thermal performance	**U**	0.20 W/(m²K)
	Diffusion	suitable

Calculated by HFA

Acoustic performance	**R_w ($C;C_{tr}$)**	39(-3;-7) dB
	$L_{n,w}$ (C_I)	

Mass per unit area	**m**	74.10 kg/m²

Calculation based on gypsum plaster board type DF



Note: e=400

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	50.0	Magnesite-bound lightweight wood wool board	0.120	2 - 5	700	1.400	
B	24.0	spruce wood cladding with spacing of cladding boards(24/100); a=400	0.120	50	450	1.600	D
C	220.0	construction timber (80/..; e=*)	0.120	50	450	1.600	D
D	220.0	mineral wool [040; ≥16; <1000°C]	0.040	1	16	1.030	A1
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	12.5	gypsum plaster board type DF or	0.250	10	800	1.050	A2
G	12.5	gypsum fibre board	0.320	21	1000	1.100	A2

Sustainability rating (per m²)

Database ecoinvent

$OI3_{Kon}$	21.3

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		0.106	0.045	2,10E-6	0.023	

Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	100.517	577.057	677.574	368.692	4.459	373.151