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Designation: ddrtxa01b-00
Last updated: 8/2/23
Source: Holzforschung Austria
Editor: HFA, SP

Floor towards attic (uninhabitable) - ddrtxa01b-00

floor towards attic (uninhabitable), timber frame construction, suspended, dry, other surface

Performance rating

Fire protection performance	**REI**	60

maximum span = 5 m; maximum load $E_{d,fi}$ = 3,66 kN/m² (without floor construction)
Classified by HFA

Thermal performance	**U**	0.18 W/(m²K)
	Diffusion	suitable

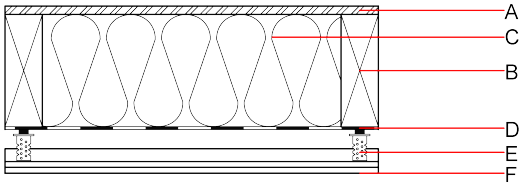
Calculated by HFA

Acoustic performance	**R_w (C_i;C_{tr})**	63(-4;-11) dB
	$L_{n,w}$ (C_I)	55(0)

[$C_{I50\text{-}2500}$] = [6] dB
Assessed by HFA

Mass per unit area	**m**	54.00 kg/m²

Calculation based on gypsum plaster board type DF



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	18.0	OSB	0.130	200	600	1.700	D
B	240.0	spruce wood floor joists (80/*); e=625	0.120	50	450	1.600	D
C	240.0	mineral wool [038; ≥30]	0.038	1	30	1.030	
D		vapour barrier sd≥ 15m			1000		
E	60.0	acoustic direct hanger decoupled with CD-profile (a=400)					
F	25.0	gypsum plaster board type DF (2x12,5 mm) or	0.250	10	800	1.050	A2
F	25.0	gypsum fibre board (2x12,5 mm)	0.320	21	1000	1.100	A2

Sustainability rating (per m²)

Database ecoinvent

$OI3_{Kon}$	41.1

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		0.172	0.077	3,17E-6	0.028	

Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	102.878	442.034	544.912	579.786	18.553	598.339