

Floor towards attic (uninhabitable) - ddrtxa01b-00

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

Performance rating

Fire protection performance REI 60
 maximum span = 5 m; maximum load $E_{d,fi} = 3,66 \text{ kN/m}^2$ (without floor construction)
 Classified by HFA

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

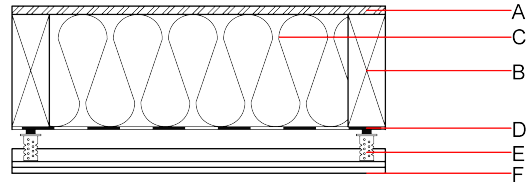
Calculated by HFA

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

$[C_{150-2500}] = [6]$ dB
 Assessed by HFA

Mass per unit area m 54.00 kg/m^2

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 EN
			λ	μ min – max	ρ	c	
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 $s_d \geq 15\text{m}$			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 m^2)

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