

Floor towards attic (uninhabitable) - ddmxxn01-00

floor towards attic (uninhabitable), solid wood construction, without lining, wooden surface

Performance rating

Fire protection performance REI 60

maximum span = 5 m; maximum load $E_{d,fi} = 0,6 \text{ kN/m}^2$
 Classified by HFA

Germany

REI60

Load $E_{d,fi}$ according to the German certification document

Corresponding proof: manufacturer-specific

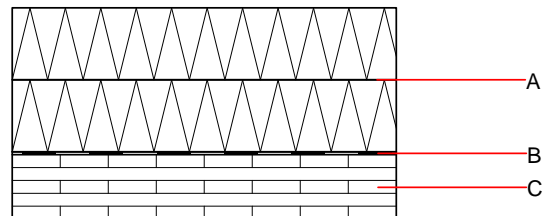
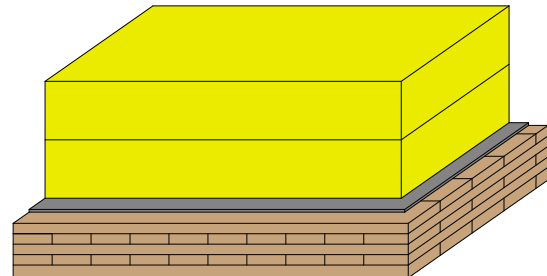
Thermal performance U Diffusion 0.11 $\text{W}/(\text{m}^2\text{K})$ suitable

Calculated by TUM

Acoustic performance $R_w (C; C_{tr})$ 44(-2;-7) dB
 $L_{n,w} (C_i)$

Assessed by Müller-BBM

Mass per unit area m 106.00 kg/m^2



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	300.0	mineral wool [040; 130]	0.040	1	130	1.030	
B		membrane (airtight)					
C	140.0	cross laminated timber	0.130	50	500	1.600	D

Sustainability rating (per m^2)

Database ecoinvent

$OI3_{kon}$ 124.1

Calculated by HFA

Database GaBi (ÖKOBAUDAT)

Built-in renewable materials kg 65.580
Biogenic carbon in $\text{kg CO}_2\text{-e}$. kg CO_2 94.410
Energy use of Primary Energy MJ 1239.540
Share of renewable PE % 25.79

Calculated by TUM

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		0.606	0.181	5,17E-6	0.248	

Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	66.064	957.600	1023.664	1302.831	28.512	1331.343

Database GaBi (ÖKOBAUDAT)

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		0.398	0.058	4,88E-6	0.033	
C1 - C4		0.006	0.012	1,72E-7	0.001	
A1 - C4		0.405	0.070	5,06E-6	0.035	

Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	318.506	1117.721	1433.547	893.862	74.533	967.648
C1 - C4	1.168	-1110.860	-1109.692	24.256	0.000	24.256
A1 - C4	319.686	6.861	323.867	919.850	74.533	993.636