

Intermediate floor - gdrta03b-01

intermediate floor, timber frame construction, suspended, dry, without filling, other surface

Performance rating

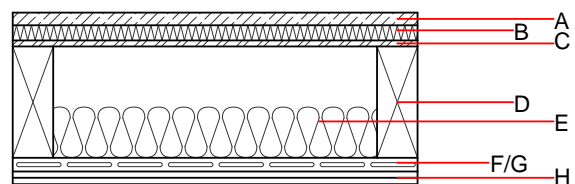
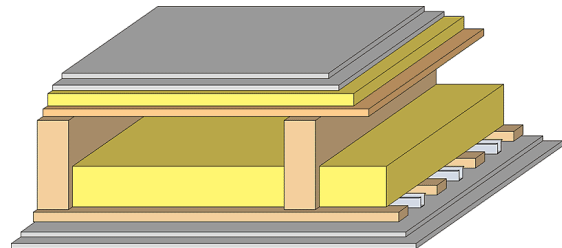
Fire protection performance	REI	60
maximum span = 5 m; maximum load $E_{d,fi}$ = 3,66 kN/m ² Classified by HFA		

Thermal performance	U Diffusion	0.26 W/(m²K) suitable
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Acoustic performance	R_w (C;C_{tr})	64(-3;-10) dB
	L_{n,w} (C_i)	53(2)

Mass per unit area	m	71.00 kg/m²
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Calculation based on GF



Note: e=625;

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	25.0	dry screed	0.210	8	900	1.050	A1
B	30.0		0.040	1	180	1.030	A1
C	18.0	OSB	0.130	200	600	1.700	D
D	200.0	construction timber (80/..; e=625) (80/..; e=*)	0.120	50	450	1.600	D
E	100.0	mineral wool [040; ≥16; <1000°C]	0.040	1	16	1.030	A1
F	24.0	spruce wood cladding with spacing of cladding boards(24/100); a=400	0.120	50	450	1.600	D
G	27.0	resilient channel (placed between open formwork)	0.156				
H	25.0	gypsum plaster board type DF (2x12,5 mm) or	0.250	10	800	1.050	A2
H	25.0	gypsum fibre board (2x12,5 mm)	0.320	21	1000	1.100	A2

Sustainability rating (per m²)

Database ecoinvent

OI3_{Kon}	34.1
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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		0.143	0.055	2,51E-6	0.038	

Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	88.528	385.455	473.983	476.568	16.832	493.400