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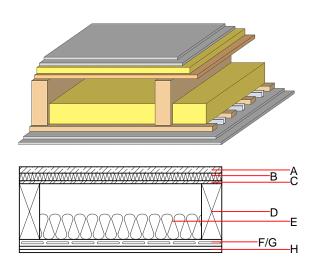
gdrtxa03b-13 8/2/23 Holzforschung Austria HFA, SP

Intermediate floor - gdrtxa03b-13

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

Performance rating

Fire protection performance Classified by HFA	REI	60
Germany		
Load $E_{d,fi}$ according to the	e German certification	document
Thermal performance	U Diffusion	suitable
Acoustic performance	R _w (C;C _{tr}) L _{n,w} (C _l)	64(-3;-10) dB 55(0)
Mass per unit area	m	79.30 kg/m ²
Calculation based on gyp	sum plaster board type	e 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	с	EN	
	25.0	dry screed	0.210	8	900	1.050	A1	
	30.0		0.040	1	180	1.030	A1	
	22.0	OSB	0.130	200	600	1.700	D	
)	240.0	construction timber (80/; e=625) (80/; e=*)	0.120	50	450	1.600	D	
	100.0	Wood fibre insulation [039; 45]	0.039	1 - 2	45	2.100	E	
	24.0	0 spruce wood cladding with spacing of cladding boards(24/100); $a=400$		50	450	1.600	D	
	27.0	resilient channel (placed between open formwork)	0.156					
1	25.0	gypsum plaster board type DF (2x12,5 mm) or	0.250	10	800	1.050	A2	
I	25.0	gypsum fibre board (2x12,5 mm)	0.320	21	1000	1.100	A2	

Sustainability rating (per m²)

Database ecoinvent		Database GaBi (ÖKOBAUDAT)		
OI3_{Kon} Calculated by HFA	32.5	Built-in renewable materials Biogenic carbon in kg CO ₂ -e. Energy use of Primary Energy Share of renewable PE	kg kg CO ₂ MJ %	33.650 49.920 887.840 27.59

dataholz.eu – Catalogue of timber building materials, components and component connections reviewed to consider thermal, acoustic, fire performance requirements and ecological drivers for timber construction released by accredited testing institutes. These datasheets will generally be accepted as proofs of compliance by building authorities.

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Designation: Last updated: Source: Editor: gdrtxa03b-13 8/2/23 Holzforschung Austria HFA, SP

Details of sustainability rating

Database ecoinvent

Lifecycle	GWP	AP	EP	ODP	POCP	
(Phases)	[kg CO ₂ -e.]	[kg SO ₂ -e.]	[kg PO ₄ -e.]	[kg R11-e.]	[kg Ethen-e.]	
A1 - A3		0.142	0.054	2,52E-6	0.040	
Lifecycle	PERE	PERM	PERT	PENRE	PENRM	PENRT
(Phases)	[LM]	[M]	[M]	[LM]	[MJ]	[MJ]
	108.396	537.959	646.355	488.798	26.477	515.275

Database GaBi (ÖKOBAUDAT)

Lifecycle	GWP	AP	EP	ODP	POCP	
(Phases)	[kg CO ₂ -e.]	[kg SO ₂ -e.]	[kg PO ₄ -e.]	[kg R11-e.]	[kg Ethen-e.]	
A1 - A3		0.126	0.022	8,22E-7	0.027	
C1 - C4		0.006	0.002	8,70E-8	0.001	
A1 - C4		0.135	0.025	9,24E-7	0.028	
Lifecycle	PERE	PERM	PERT	PENRE	PENRM	PENRT
(Phases)	[MJ]	[MJ]	[MJ]	[LM]	[MJ]	[MJ]
A1 - A3	242.160	730.030	973.720	608.120	30.720	638.990
C1 - C4	2.040	-718.960	-716.920	24.130	-23.170	0.970
A1 - C4	244.960	11.590	258.080	642.880	7.660	650.690