# dataholz.eu

gdrnxa10b-01 8/2/23 Holzforschung Austria HFA, SP

## Intermediate floor - gdrnxa10b-01

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

### Performance rating

Assessed by Müller-BBM

Mass per unit area

Fire protection performance	REI	60	
maximum span = 5 m; m construction, with ceiling Classified by HFA	aximum load E <sub>d,fi</sub> = 3 beam 80/200)	,66 kN∕m² (without floor	
Germany			
F60			
Load $E_{d,fi}$ according to the	e German certification	n document	
Corresponding proof: DIN	4102-4:2016-05, T	abelle 10.12, Zeile 4	
Thermal performance	U Diffusion		
Acoustic performance	R <sub>w</sub> (C;C <sub>tr</sub> )	73(-1;-6) dB	
	L <sub>n,w</sub> (C <sub>l</sub> )	51(2)	

m



### Register of building materials used for this application, cross-section (from outside to inside, dimensions in mm)

180.10 kg/m<sup>2</sup>

	Thickness	Building material Thermal performance					Reaction to fire
			λ	µ min – max	ρ	с	EN
А	60.0	anhydrite screed or cement screed	0.700	10	2200	1.300	A1
В	0.2	plastic separation layer	0.200	100000	1400	1.400	E
С	40.0	impact sound absorbing subflooring MW [s' =7 MN/m <sup>2</sup> ]	0.033	1	30	0.030	A1
D	22.0	OSB	0.130	200	600	1.700	D
Е	240.0	construction timber (80/; e=625)	0.120	50	450	1.600	D
F	200.0	mineral wool [040; 11; <1000°C]	0.040	1	11	1.030	A1
G	0.2	trickling protection					E
Н	27.0	resilient channel	0.156				
I	25.0	gypsum plaster board type DF (2xmm)	0.250	10	800	1.050	A2

#### Sustainability rating (per m<sup>2</sup>)

Database ecoinvent		Database GaBi (ÖKOBAUDAT)				
<b>OI3<sub>Kon</sub></b> Calculated by HFA	48.6	Built-in renewable materials Biogenic carbon in kg CO <sub>2</sub> -e. Energy use of Primary Energy Share of renewable PE	kg kg CO <sub>2</sub> MJ %	24.490 36.880 733.480 18.76		
		Calculated by TUM				

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#### Details of sustainability rating

#### Database ecoinvent

Lifecycle	GWP	AP	EP	ODP	POCP	
(Phases)	[kg CO <sub>2</sub> -e.]	[kg SO <sub>2</sub> -e.]	[kg PO <sub>4</sub> -e.]	[kg R11-e.]	[kg Ethen-e.]	
A1 - A3		0.187	0.091	3,37E-6	0.032	
Lifecycle	PERE	PERM	PERT	PENRE	PENRM	PENRT
(Phases)	[M]	[LM]	[LM]	[LM]	[MJ]	[MJ]
A1 - A3	118.983	466.453	585.436	674.886	23.545	698.431

#### Database GaBi (ÖKOBAUDAT)

Lifecycle	GWP	AP	EP	ODP	POCP	
(Phases)	[kg CO <sub>2</sub> -e.]	[kg SO <sub>2</sub> -e.]	[kg PO <sub>4</sub> -e.]	[kg R11-e.]	[kg Ethen-e.]	
A1 - A3		0.176	0.025	9,09E-7	0.026	
C1 - C4		0.012	0.005	7,29E-8	0.002	
A1 - C4		0.194	0.032	9,98E-7	0.027	
Lifecycle	PERE	PERM	PERT	PENRE	PENRM	PENRT
(Phases)	[MJ]	[LM]	[LM]	[LM]	[LM]	[MJ]
A1 - A3	135.981	435.483	572.381	572.108	35.407	607.626
C1 - C4	0.884	-423.099	-420.849	12.004	-9.389	21.335
A1 - C4	137.632	12.902	153.398	595.845	26.122	650.565