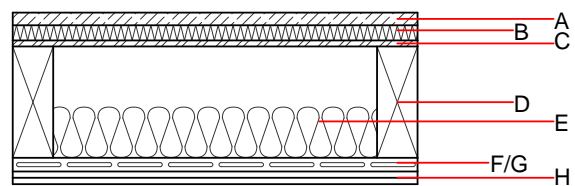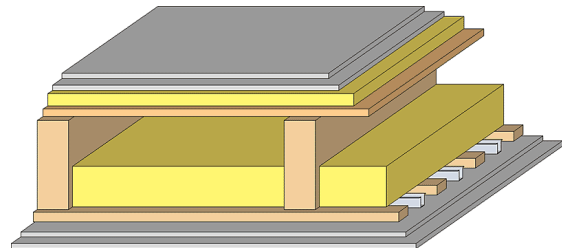## Intermediate floor - gdrtxa03b-00
intermediate floor, timber frame construction, suspended, dry, without filling, other surface

Performance rating

Fire protection performance	REI	60

maximum span = 5 m; maximum load $E_{d,fi}$ = 3,66 kN/m²
Classified by HFA

Thermal performance	U	0.26 W/(m²K)
	Diffusion	suitable

Acoustic performance	R_w (C;C_{tr})	64(-3;-10) dB
	$L_{n,w}$ (C_l)	52(2)

Mass per unit area	m	72.30 kg/m²

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
			λ	μ min − max	ρ	c	EN
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	220.0	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

Calculated by HFA

dataholz.eu

Designation: gdrtxa03b-00
Last updated: 8/2/23
Source: Holzforschung Austria
Editor: HFA, SP

Page 1

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		0.144	0.055	2,53E-6	0.039	

Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	92.278	406.419	498.697	480.931	16.832	497.762

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.

Page 2