dataholz.eu

Designation: Last updated: Source: Editor: awrhho08a-07 8/2/23 Holzforschung Austria HFA, SP

> A B C D F G H

> Е

External wall - awrhho08a-07

external wall, timber frame construction, ventilated, without dry lining, with cladding, other surface

Performance rating

Fire protection performance	REI from inside REI from outside	60 30	
maximum ceiling height Classified by HFA	= 3 m; maximum load E _{d,f}	_i = 32,0 kN/m	
Thermal performance	U Diffusion	0.29 W∕(m ² K) suitable	
Calculated by HFA			
Acoustic performance	R _w (C;C _{tr}) L _{n,w} (C _l)	47(-2;-8) dB	
Battens for the ventilation Rw(C;Ctr)=43(-1;-7) dB Assessed by MA39	n space screwed onto the	structural timber result in an	
Mass per unit area	m	44.90 kg/m ²	

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 per	rformance			Reaction to fire
			λ	µ min – max	ρ	с	EN
4	24.0	larch wood external wall cladding	0.155	150	600	1.600	D
3	30.0	spruce wood battens offset (30/50; 30/80) - ventilation	0.120	50	450	1.600	D
2		wind barrier			1000		
D	12.5	gypsum fibre board	0.320	21	1000	1.100	A2
Ξ	160.0	construction timber (60/; $e=*$)	0.120	50	450	1.600	D
-	160.0	sheep wool [0,041; R=26]	0.041	1	30	1.720	E
Ĵ	15.0	OSB (sealed with airtight tape)	0.130	200	600	1.700	D
4	12.5	gypsum fibre board or	0.320	21	1000	1.100	A2
H	12.5	gypsum plaster board type DF	0.250	10	800	1.050	A2

Sustainability rating (per m²)

Database ecoinvent

OI3_{Kon} Calculated by HFA 16.1

dataholz.eu

Designation: Last updated: Source: Editor: awrhho08a-07 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		0.078	0.036	1,88E-6	0.019	
Lifecycle	PERE	PERM	PERT	PENRE	PENRM	PENRT
(Phases)	[M]	[LM]	[MJ]	[LM]	[LM]	[M]
(Thuses)					18.112	

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.