

Designation: awrhho07a-07 Last updated: 8/2/23

Holzforschung Austria Source:

Editor: HFA, SP

External wall - awrhho07a-07

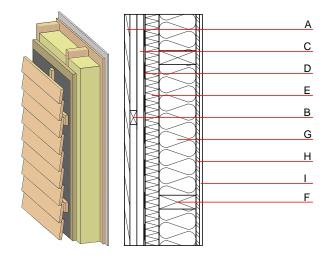
external wall, timber frame construction, ventilated, without dry lining, with cladding, other surface

Performance rating

REI from inside 60 Fire protection performance REI from outside 30 maximum ceiling height = 3 m; maximum load $E_{d,fi}$ = 32,0 kN/m Classified by MA39 Classified by HFA

Thermal performance	U Diffusion	0.24 W/(m ² K) suitable
Acoustic performance	R_w (C;C _{tr}) $L_{n,w}$ (C _I)	46(-2;-8) dB
Assessed by MA39		
Mass per unit area	m	37.40 kg/m ²

Calculation based on GF



Note: According to OIB-RL 2 (Austria) is for ventilated and insulated facades (from building class 2) an insulation material with minimum Euroclass D

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

	Thickness	Building material	Thermal pe	rformance			Reaction to fire
			λ	μ min – max	ρ	С	EN
Α	24.0	larch wood external wall cladding	0.155	150	600	1.600	D
В	30.0	spruce wood battens - ventilation	0.120	50	450	1.600	D
С	30.0	spruce wood cross battens	0.120	50	450	1.600	D
D		wind barrier			1000		
E	60.0	wood-fibre insulation board [045; 140]	0.045	2 - 5	140	2.100	Е
F	160.0	construction timber (60/; e=625)	0.120	50	450	1.600	D
G	160.0	sheep wool [0,041; R=26]	0.041	1	30	1.720	Е
Н	15.0	OSB (sealed with airtight tape)	0.130	200	600	1.700	D
1	12.5	gypsum plaster board type DF or	0.250	10	800	1.050	A2
1	12.5	gypsum fibre board	0.320	21	1000	1.100	A2

Sustainability rating (per m²)

Database ecoinvent

OI3_{Kon} 20.4

Calculated by HFA



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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		0.101	0.046	2,18E-6	0.023	
Lifecycle	PERE	PERM	PERT	PENRE	PENRM	PENRT
(Phases)	[MJ]	[MJ]	[MJ]	[MJ]	[MJ]	[MJ]