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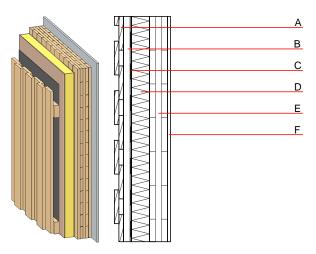
Designation: Last updated: Source: Editor: awmoho02a-00 8/2/23 Holzforschung Austria HFA, SP

External wall - awmoho02a-00

external wall, solid wood construction, not ventilated, without dry lining, with cladding, wooden 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,fi} = 3	35,0 kN∕m
Thermal performance	U Diffusion	0.51 W∕(m ² K) suitable
Calculated by HFA		
Acoustic performance	R _w (C;C _{tr}) L _{n,w} (C _l)	48(-2;-6) dB
Assessed by TU-GRAZ		
Mass per unit area	m	71.90 kg/m ²



Note: When using cross laminated timber: Variation 00-03: d \geq 78,0; at least 3-layers, top layer at least 25mm; variation 04: d \geq 94,0; at least 3-layers, top layer at least 30mm

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
A	20.0	larch wood external wall cladding	0.155	150	600	1.600	D
В	30.0	spruce wood battens	0.120	50	450	1.600	D
С		vapour-permeable membrane $sd \le 0,3m$					
D	50.0	multilayer wood wool composite board (WW-MW-WW)	0.049	2 - 5	130	1.000	В
E	80.0	solid glued wood (e.g. cross laminated timber)	0.130	50	500	1.600	D
F	12.5	gypsum fibre board or 12,5 mm DF	0.320	21	1000	1.100	A2

Sustainability rating (per m²)

Database ecoinvent

 $OI3_{Kon}$ Calculated by HFA 32.5

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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		0.173	0.065	2,37E-6	0.062	
Lifecycle	PERE	PERM	PERT	PENRE	PENRM	PENRT
(DI)	[MJ]	[MJ]	[MJ]	[LM]	[MJ]	[M]
(Phases)	[]					

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.