# dataholz.eu

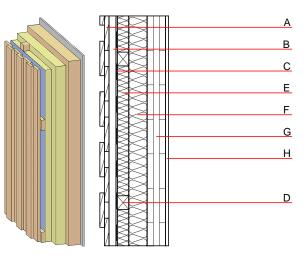
Designation: Last updated: Source: Editor: awmoho01a-00 8/2/23 Holzforschung Austria HFA, SP

## External wall - awmoho01a-00

external wall, solid wood construction, not ventilated, without dry lining, with cladding, other surface

### Performance rating

Fire protection performance maximum ceiling height = 3 Classified by HFA	<b>REI from inside</b> <b>REI from outside</b> 3 m; maximum load E <sub>d,fi</sub> = 3	60 30 5,0 kN∕m
Thermal performance	U Diffusion	0.25 W∕(m <sup>2</sup> K) suitable
Acoustic performance Assessed by TU-GRAZ	R <sub>w</sub> (C;C <sub>tr</sub> ) L <sub>n,w</sub> (C <sub>l</sub> )	51(-3;-9) dB
Mass per unit area	m	69.00 kg/m <sup>2</sup>



Note: When using cross laminated timber:

Variation 02-03: d  $\geq$  94,0; at least 3-layers, top layer at least 30mm; variation 00-01: d  $\geq$  78,0; at least 3-layers, top layer at least 25mm

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

	Thickness	Building material	Thermal per	formance			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 (30/60)	0.120	50	450	1.600	D
С		vapour-permeable membrane $sd \le 0,3m$					
D	50.0	spruce wood battens (40/50 or 80/60;e=625)	0.120	50	450	1.600	D
E	50.0	mineral wool [040; ≥70; ≥1000°C]	0.040	1	70	1.030	A1
F	80.0	mineral wool [040; ≥70; ≥1000°C]	0.040	1	70	1.030	A1
G	80.0	solid glued wood (e.g. cross laminated timber)	0.130	50	500	1.600	D
Н	12.5	gypsum fibre board	0.320	21	1000	1.100	A2

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

Database ecoinvent

 $OI3_{Kon}$ Calculated by HFA 44.9

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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		0.231	0.080	2,80E-6	0.087	
Lifecycle	PERE	PERM	PERT	PENRE	PENRM	PENRT
(Phases)	[LM]	[MJ]	[MJ]	[LM]	[M]	[LM]
			858.932	600.670	19.804	620.474

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.