# dataholz.eu

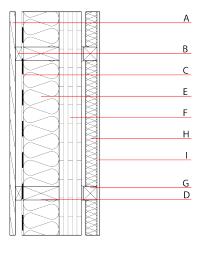
Designation: Last updated: Source: Editor: awmhhi03a-02 8/2/23 Holzforschung Austria HFA, PLB

## External wall - awmhhi03a-02

external wall, solid wood construction, ventilated, with dry lining, with cladding, other surface

### Performance rating

Fire protection performance maximum ceiling height = Classified by HFA	REI from inside REI from outside 3 m; maximum load Ed,fi =	<b>90</b> <b>60</b> 35,0 kN/lfm
Thermal performance	U Diffusion	0.17 W∕(m <sup>2</sup> K) suitable
Calculated by HFA		
Acoustic performance	R <sub>w</sub> (C;C <sub>tr</sub> ) L <sub>n,w</sub> (C <sub>l</sub> )	49(-3;-9) dB
frequency range 50-3500: Assessed by HFA	C50-3500 -4 dB; Ctr 50-35	00 -12 dB
Mass per unit area	m	93.10 kg/m <sup>2</sup>



#### 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	24.0	larch wood external wall cladding, e.g. clapboard facade	0.155	150	600	1.600	D
В	30.0	spruce wood battens vertical (30/60); ventilation	0.120	50	450	1.600	D
С		vapour-permeable membrane $sd \le 0,3m$					
D	160.0	construction timber (60/; e=625)	0.120	50	450	1.600	D
E	160.0	Cellulose fibre [040; 50]	0.040	1	50	2.000	E
F	100.0	cross laminated timber 5-ply	0.130	50	500	1.600	D
G	70.0	battens (60/60) vertical on resilient clips, e=626	0.120	50	450	1.600	
Н	50.0	mineral wool [040; 11; <1000°C]	0.040	1	11	1.030	A1
I	12.5	gypsum plaster board type DF or	0.250	10	800	1.050	A2
I	12.5	gypsum fibre board	0.320	21	1000	1.100	A2

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

#### Database ecoinvent

**OI3<sub>Kon</sub>** Calculated by HFA 29.9

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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		0.184	0.079	3,08E-6	0.052	
	PERE	PERM	PERT	PENRE	PENRM	PENRT
Lifecycle	PERE	I LIWI	1 5111			I LININI
(Phases)	[MJ]	[MJ]	[M]]	[MJ]	[MJ]	[MJ]

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.