# dataholz.eu

Designation: Last updated: Source: Editor:

awroho01b-04 8/2/23 Holzforschung Austria HFA, SP

### External wall - awroho01b-04

external wall, timber frame construction, not 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 <sub>d,fi</sub>	<sub>i</sub> = 32,0 kN/m
Thermal performance	U Diffusion	0.19 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> )	52(-1;-6) dB
Assessed by MA39		
Mass per unit area	m	80.70 kg∕m²
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
	24.0	larch wood external wall cladding	0.155	150	600	1.600	D
	24.0	spruce wood cross battens	0.120	50	450	1.600	D
	50.0	wood wool composite boards	0.090	2 - 5	370	2.000	В
)	15.0	fibreboard (MDF)	0.140	11	600	1.700	D
	160.0	construction timber (60/; $e=*$ )	0.120	50	450	1.600	D
	160.0	mineral wool [035; 50; <1000 °C]	0.035	1	50	1.030	A1
i	15.0	OSB (sealed with airtight tape)	0.130	200	600	1.700	D
I	15.0	gypsum fibre board or	0.320	21	1000	1.100	A2
1	15.0	gypsum plaster board type DF	0.250	10	800	1.050	A2

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

Database ecoinvent

OI3<sub>Kon</sub> Calculated by HFA 43.8

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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		0.197	0.086	3,54E-6	0.032	
Lifecycle	PERE	PERM	PERT	PENRE	PENRM	PENRT
(Phases)	[LM]	[LM]	[MJ]	[LM]	[M]	[LM]
(Thuses)						

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.