# dataholz.eu

Designation: Last updated: Source: Editor:

M

A B C E F G H

D

awropo12a-08 8/2/23 Holzforschung Austria HFA, SP

### External wall - awropo12a-08

external wall, timber frame construction, not ventilated, without dry lining, with rendering, 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,f</sub>	<sub>i</sub> = 32,0 kN/m		
Thermal performance	U Diffusion	0.21 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> )	44(-2;-6) dB		
Assessed by MA39				
Mass per unit area	m	49.60 kg/m <sup>2</sup>		
Calculation based on gyp	sum plaster board type D	F		

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
4.0	plaster	1.000	10 - 35	2000	1.130	A1
50.0	Polystyrene EPS-F [0,040]	0.040	20 - 50	17	1.450	E
15.0	OSB	0.130	200	600	1.700	D
160.0	construction timber (60/160; $e=*$ )	0.120	50	450	1.600	D
160.0	mineral wool [040; ≥16; <1000 °C]	0.040	1	16	1.030	A1
15.0	OSB	0.130	200	600	1.700	D
	vapour barrier sd≥ 23m			1000		
12.5	gypsum plaster board type DF or	0.250	10	800	1.050	A2
12.5	gypsum fibre board	0.320	21	1000	1.100	A2

Note: e=400

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

Database ecoinvent

OI3<sub>Kon</sub>

Calculated by HFA

27.2

# dataholz.eu

Designation: Last updated: Source: Editor: awropo12a-08 8/2/23 Holzforschung Austria HFA, SP

#### 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		0.116	0.047	2,08E-6	0.026	
Lifecycle	PERE	PERM	PERT	PENRE	PENRM	PENRT
(Phases)	[LM]	[LM]	[LM]	[LM]	[M]	[MJ]
		460.261	556.946	402.557	55.562	458.119

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.