# dataholz.eu

Designation: Last updated: Source: Editor: awropo01a-08 8/2/23 Holzforschung Austria HFA, SP

### External wall - awropo01a-08

external wall, timber frame construction, not ventilated, without dry lining, with rendering, other surface

#### Performance rating A Fire protection **REI** from inside 30 **REI** from outside 30 performance В maximum ceiling height = 3 m; maximum load $E_{d,fi}$ = 19,2 kN/m С Classified by HFA Е Thermal performance υ $0.22 \text{ W/(m^{2}\text{K})}$ Diffusion suitable G Calculated by HFA F Acoustic performance $R_w$ (C;C<sub>tr</sub>) 44(-2;-6) dB L<sub>n,w</sub> (C<sub>l</sub>) Assessed by MA39 D Mass per unit area m 46.90 kg/m<sup>2</sup> Calculation based on GF

Note: e=400

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

	Thickness	Building material	Thermal performance				Reaction to fire	
			λ	µ min – max	ρ	с	EN	
4	4.0	plaster	1.000	10 - 35	2000	1.130	A1	
В	50.0	Polystyrene EPS-F [0,040]	0.040	20 - 50	17	1.450	E	
С	15.0	gypsum fibre board	0.320	21	1000	1.100	A2	
D	160.0	construction timber (60/; $e=*$ )	0.120	50	450	1.600	D	
E	160.0	mineral wool [040; ≥16; <1000°C]	0.040	1	16	1.030	A1	
F		vapour barrier sd≥ 13m			1000			
G	12.5	gypsum fibre board or	0.320	21	1000	1.100	A2	
5	12.5	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 23.9

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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		0.088	0.037	1,84E-6	0.020	
Lifecycle	PERE	PERM	PERT	PENRE	PENRM	PENRT
(Phases)	[M]	[LM]	[MJ]	[LM]	[M]	[MJ]
	47.737	196.536	244.273	329.439	36.048	365.488

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.