# dataholz.eu

Designation: Last updated: Source: Editor: awropo22b-08 8/2/23 Holzforschung Austria HFA, SP

### External wall - awropo22b-08

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

#### Performance rating

e protection rformance	REI from inside REI from outside	60 60
maximum ceiling height = Classified by MA39 Classified by HFA	= 3 m; maximum load E <sub>d,f</sub>	= 32,0 kN/m
Thermal performance	U	0.21 W∕(m <sup>2</sup> K)
Calculated by HFA	Diffusion	suitable
Acoustic performance	R <sub>w</sub> (C;C <sub>tr</sub> ) L <sub>n,w</sub> (C <sub>l</sub> )	51(-2;-8) dB
Assessed by MA39		
Mass per unit area	m	77.20 kg/m <sup>2</sup>
Calculation based on GF		

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
A	7.0	plaster	1.000	10 - 35	2000	1.130	A1
В	60.0	wood-fibre insulation board [055; 200]	0.055	5 - 7	200	2.100	E
С	15.0	fibreboard (MDF)	0.140	11	600	1.700	D
D	160.0	construction timber (60/; e=400)	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≥ 3m			1000		
G	15.0	gypsum fibre board	0.320	21	1000	1.100	A2
Н	12.5	gypsum fibre board or	0.320	21	1000	1.100	A2
Н	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

38.9

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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		0.164	0.070	3,21E-6	0.022	
Lifecycle	PERE	PERM	PERT	PENRE	PENRM	PENRT
(Phases)	[LM]	[MJ]	[MJ]	[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.