# dataholz.eu

Designation: Last updated: Source: Editor: awropi15b-05 8/2/23 Holzforschung Austria HFA, SP

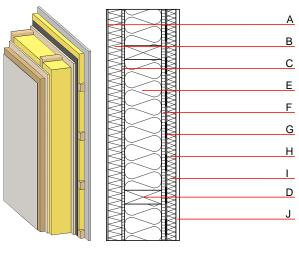
### External wall - awropi15b-05

Calculation based on gypsum plaster board type DF

external wall, timber frame construction, not ventilated, with dry lining, with rendering, other surface

### Performance rating

Fire protection performance maximum ceiling height = Classified by HFA	REI from inside REI from outside 3 m; maximum load E <sub>d,fi</sub> = 3	60 60 32,0 kN∕m
Thermal performance Calculated by HFA	U Diffusion	0.13 W/(m <sup>2</sup> K) suitable
Acoustic performance	R <sub>w</sub> (C;C <sub>tr</sub> ) L <sub>n,w</sub> (C <sub>I</sub> )	53(-2;-9) dB
Vertical battens for the dry Rw(C;Ctr)=51(-1;-7) dB Assessed by MA39	lining screwed onto the led	ger beams lead to an
Mass per unit area	m	81.70 kg/m <sup>2</sup>



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
A	7.0	plaster	1.000	10 - 35	2000	1.130	A1
В	60.0	wood-fibre insulation board WF-PT [045; 180]	0.045	5 - 7	180	2.100	E
С	12.0	particleboard P5	0.130	50 - 100	700	1.700	D
D	200.0	construction timber (60∕; e=*)	0.120	50	450	1.600	D
E	200.0	mineral wool [040; ≥16; <1000°C]	0.040	1	16	1.030	A1
F	16.0	particleboard P4	0.130	50 - 100	700	1.700	D
G		vapour barrier sd≥ 7m			1000		
Н	80.0	spruce wood cross battens (a=400) or battens offset)	0.120	50	450	1.600	D
I	80.0	mineral wool [040; ≥16; <1000°C]	0.040	1	16	1.030	A1
J	15.0	gypsum plaster board type DF or	0.250	10	800	1.050	A2
J	15.0	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

48.7

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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		0.199	0.089	3,73E-6	0.035	
Lifecycle	PERE	PERM	PERT	PENRE	PENRM	PENRT
(Phases)	[LM]	[M]	[LM]	[LM]	[M]	[MJ]
A1 - A3	92,705	771.018	863.722	755.220	73.105	828.325

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.