# dataholz.eu

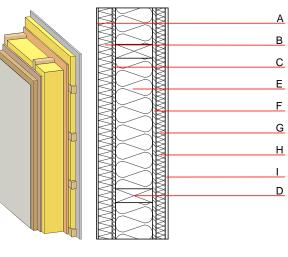
Designation: Last updated: Source: Editor: awropi16a-00 8/2/23 Holzforschung Austria HFA, SP

### External wall - awropi16a-00

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

#### Performance rating

Fire protection performance	REI from inside REI from outside	60 60
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	0.17 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(-3;-10) dB
Vertical battens for the dr Rw(C;Ctr)=49(-1;-7) dB Assessed by MA39	y lining screwed onto the	ledger beams lead to an
Mass per unit area	m	70.80 kg∕m <sup>2</sup>



Calculation based on gypsum plaster board type DF

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	15.0	fibreboard (MDF)	0.140	11	600	1.700	D
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	15.0	OSB (sealed with airtight tape)	0.130	200	600	1.700	D
G	40.0	spruce wood cross battens (a=400) or battens offset)	0.120	50	450	1.600	D
Н	40.0	mineral wool [040; ≥16; <1000°C]	0.040	1	16	1.030	A1
I	12.5	gypsum plaster board type DF or	0.250	10	800	1.050	A2
I	12.5	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 41.7

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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		0.179	0.079	3,29E-6	0.026	
Lifecycle	PERE	PERM	PERT	PENRE	PENRM	PENRT
(Phases)	[M]	[MJ]	[LM]	[LM]	[M]	[MJ]
(Thuses)					58.943	

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.