# dataholz.eu

Designation: Last updated: Source: Editor: awropi31a-05 8/2/23 Holzforschung Austria HFA, SP

# External wall - awropi31a-05

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

### Performance rating

5 5	<b>REI from inside</b> <b>REI from outside</b> 3 m; maximum load E <sub>d,fi</sub> = 3	60 90 32,0 kN∕m
Classified by HFA		
Thermal performance	U Diffusion	0.13 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> )	51(-4;-10) dB
frequency range 50-3500: Assessed by HFA	C50-3500 -11 dB; Ctr 50-3	500 -23 dB
Mass per unit area	m	72.50 kg/m <sup>2</sup>

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$\geq$	$\sim$	$\geq$	
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		$\leq$	_
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Register of building materials used for this application, cross-section (from outside to inside, dimensions in mm)

	Thickness	Building material	Thermal per	formance			Reaction to fire
			λ	µ min – max	ρ	с	EN
A	7.0	plaster	1.000	10 - 35	2000	1.130	A1
В	100.0		0.040	1	100	1.030	A1
С	15.0	OSB	0.130	200	600	1.700	D
D	200.0	construction timber (60/; e=625)	0.120	50	450	1.600	D
E	200.0	Cellulose fibre [040; 50]	0.040	1	50	2.000	E
F	15.0	OSB	0.130	200	600	1.700	D
G		vapour barrier sd≥ 14m					
Н	27.0	resilient channel a=625 vertical					
I	27.0	Wood fibre insulation [039; 45]	0.039	1 - 2	45	2.100	E
J	12.5	gypsum plaster board type DF or	0.250	10	800	1.050	A2
J	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

53.0

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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		0.251	0.086	2.98E-6	0.074	
Lifecycle	PERE	PERM	PERT	PENRE	PENRM	PENRT
(Phases)	[LM]	[MJ]	[MJ]	[LM]	[M]	[MJ]
(				626.808	30.573	657.381

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.