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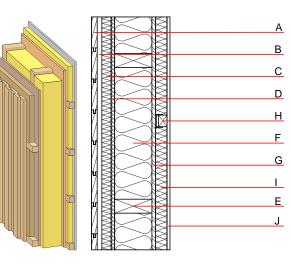
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External wall - awrohi02a-10

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

Performance rating

Fire protection performance maximum ceiling height =	REI from inside REI from outside = 3 m; maximum load E	60 30 c _{d,fi} = 19,2 kN∕m
Classified by HFA		
Thermal performance	U Diffusion	0.19 W∕(m ² K) suitable
Calculated by HFA		
Acoustic performance	R _w (C;C _{tr}) L _{n,w} (C _I)	50(-3;-9) dB
Vertical battens for the dr Rw(C;Ctr)=47(-1;-5) dB Assessed by MA39	y lining screwed onto t	he ledger beams lead to an
Mass per unit area	m	64.50 kg/m ²



Calculation based on GF

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
4	24.0	larch wood external wall cladding	0.155	150	600	1.600	D
3	50.0	spruce wood cross battens	0.120	50	450	1.600	D
2	40.0	softboard [045; 250] - rigid underlay	0.045	5	250	2.100	E
D	15.0	fibreboard (MDF)	0.140	11	600	1.700	D
=	160.0	construction timber (60/; $e=*$)	0.120	50	450	1.600	D
-	160.0	sheep wool [0,041; R=26]	0.041	1	30	1.720	E
Ĵ	15.0	OSB (sealed with airtight tape)	0.130	200	600	1.700	D
1	40.0	spruce wood cross battens (a=400) or battens offset)	0.120	50	450	1.600	D
	40.0	sheep wool [0,041; R=26] or air layer in type 02	0.041	1	30	1.720	E
	12.5	gypsum fibre board or	0.320	21	1000	1.100	A2
	12.5	gypsum plaster board type DF	0.250	10	800	1.050	A2

Sustainability rating (per m²)

Database ecoinvent

OI3_{Kon}

Calculated by HFA

24.4

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Details of sustainability rating

Database ecoinvent

Lifecycle	GWP	AP	EP	ODP	POCP	
(Phases)	[kg CO ₂ -e.]	[kg SO ₂ -e.]	[kg PO ₄ -e.]	[kg R11-e.]	[kg Ethen-e.]	
A1 - A3		0.125	0.055	2,51E-6	0.027	
Lifecycle	PERE	PERM	PERT	PENRE	PENRM	PENRT
(Phases)	[LM]	[M]	[M]	[M]	[MJ]	[LM]
			1	478.291	43.968	522.259

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.