

## External wall - awropi06a-14

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

### Performance rating

**Fire protection performance** REI from inside 60  
 REI from outside 30  
 maximum ceiling height = 3 m; maximum load  $E_{d,fi} = 32,0 \text{ kN/m}$   
 Classified by HFA

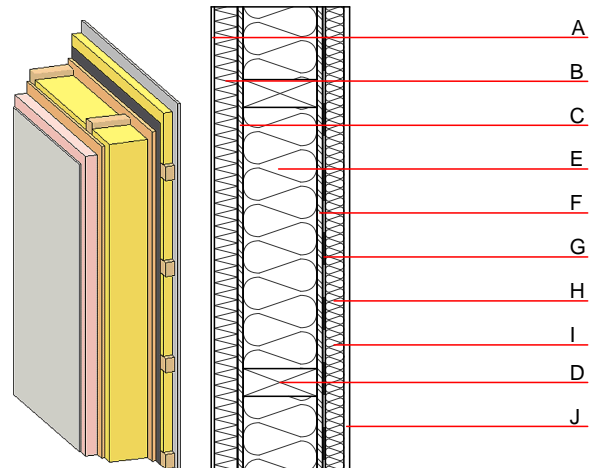
**Thermal performance** U 0.12 W/(m<sup>2</sup>K)  
 Diffusion suitable

Proof of water vapor diffusion was provided for a structurally permanently secured airtightness of the component in accordance with ÖNORM B 8110-2 (2020) Tab.3 (C=0 m<sup>3</sup>/(s\*PA<sup>0.5</sup>)).  
 Calculated by HFA

**Acoustic performance**  $R_w (C; C_{tr})$  51(-6;13) dB  
 $L_{n,w} (C_i)$

frequency range 50-3500:  $C_{50-3500} -11 \text{ dB}$ ;  $C_{tr 50-3500} -23 \text{ dB}$   
 Assessed by MA39/HFA

**Mass per unit area** m 54.00 kg/m<sup>2</sup>



### Register of building materials used for this application, cross-section (from outside to inside, dimensions in mm)

	Thickness	Building material	Thermal performance				Reaction to fire EN
			$\lambda$	$\mu \text{ min - max}$	$\rho$	c	
A	4.0	plaster	1.000	10 - 35	2000	1.130	A1
B	100.0		0.031	20 - 50	16	1.450	E
C	15.0	OSB	0.130	200	600	1.700	D
D	200.0	construction timber (60/...; e=625) (60/...; e=*)	0.120	50	450	1.600	D
E	200.0	mineral wool [040; 30; $\geq 1000^\circ\text{C}$ ]	0.040	1	30	1.030	A1
F	15.0	OSB	0.130	200	600	1.700	D
G		vapour barrier $s_d \geq 50\text{m}$			1000		
H	30.0	resilient channel a=625 vertical cross battens (a=400) or battens offset)					
I	30.0	mineral wool [035; 20; $\geq 1000^\circ\text{C}$ ] or air layer in type 02	0.035	1	20	1.030	A1
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

$O13_{kon}$  42.2

Calculated by HFA

**Details of sustainability rating**

Database ecoinvent

Lifecycle (Phases)	GWP [kg CO <sub>2</sub> -e.]	AP [kg SO <sub>2</sub> -e.]	EP [kg PO <sub>4</sub> -e.]	ODP [kg R11-e.]	POCP [kg Ethen-e.]	
A1 - A3		0.179	0.058	2,17E-6	0.063	

Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	101.752	474.675	576.427	515.752	90.821	606.574