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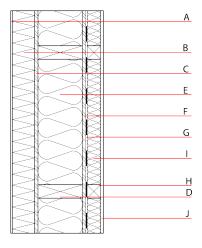
Designation: Last updated: Source: Editor: awropi31a-08 8/2/23 Holzforschung Austria HFA, SP

External wall - awropi31a-08

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 90 |
|---|---|---------------------------------------|
| maximum ceiling height = Classified by HFA | 3 m; maximum load E _{d,fi} = 3 | 32,0 kN/m |
| Thermal performance | U Diffusion | 0.12 W∕(m ² K) suitable |
| Calculated by HFA | | |
| Acoustic performance | R _w (C;C _{tr}) L _{n,w} (C _I) | 61(-5;-13) dB |
| frequency range 50-3500: Assessed by HFA | C50-3500 -13 dB; Ctr 50-3 | 500 -26 dB |
| Mass per unit area | m | 73.10 kg/m ² |



Note: I: 75 mm mineral wool, 25 mm air layer

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 | 7.0 | plaster | 1.000 | 10 - 35 | 2000 | 1.130 | A1 |
| 3 | 100.0 | | 0.040 | 1 | 100 | 1.030 | A1 |
| 2 | 15.0 | OSB | 0.130 | 200 | 600 | 1.700 | D |
| C | 200.0 | construction timber (60/; e=625) | 0.120 | 50 | 450 | 1.600 | D |
| = | 200.0 | Cellulose fibre [040; 50] | 0.040 | 1 | 50 | 2.000 | E |
| - | 15.0 | OSB | 0.130 | 200 | 600 | 1.700 | D |
| Ĵ | | vapour barrier sd≥ 14m | | | | | |
| Н | 100.0 | CW profile freestanding | | | | | |
| | 75.0 | mineral wool [040; 11; <1000°C] | 0.040 | 1 | 11 | 1.030 | A1 |
| | 12.5 | gypsum plaster board type DF or | 0.250 | 10 | 800 | 1.050 | A2 |
| | 12.5 | gypsum fibre board | 0.320 | 21 | 1000 | 1.100 | A2 |

Sustainability rating (per m²)

Database ecoinvent

OI3_{Kon}

Calculated by HFA

57.9

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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 | | 0.269 | 0.094 | 3,25E-6 | 0.076 | |
| | | | | | | |
| 1 Seconda | PERE | PERM | PERT | PENRE | PENRM | PENRT |
| Lifecycle | I LIVE | | | | | |
| (Phases) | [MJ] | [MJ] | [MJ] | [LM] | [MJ] | [MJ] |

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.