dataholz.eu

Designation: Last updated: Source: Editor: awroho01a-08 8/2/23 Holzforschung Austria HFA, SP

External wall - awroho01a-08

external wall, timber frame construction, not ventilated, without dry lining, with cladding, other surface

Performance rating A Fire protection **REI** from inside 60 **REI** from outside 30 performance В maximum ceiling height = 3 m; maximum load $E_{d,fi}$ = 32,0 kN/m С Classified by HFA D U Thermal performance $0.22 \text{ W/(m^{2}\text{K})}$ Diffusion F suitable Calculated by HFA G Acoustic performance R_w (C;C_{tr}) 50(-2;-7) dB Н L_{n,w} (C_l) Assessed by MA39 Е Mass per unit area m 74.90 kg/m² Calculation based on GF

Note: e=400

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 |
| ł | 24.0 | larch wood external wall cladding | 0.155 | 150 | 600 | 1.600 | D |
| 3 | 24.0 | spruce wood cross battens | 0.120 | 50 | 450 | 1.600 | D |
| 2 | 50.0 | wood wool composite boards | 0.090 | 2 - 5 | 370 | 2.000 | В |
|) | 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 | mineral wool [040; ≥16; <1000°C] | 0.040 | 1 | 16 | 1.030 | A1 |
| 5 | 15.0 | OSB (sealed with airtight tape) | 0.130 | 200 | 600 | 1.700 | D |
| H | 12.5 | gypsum fibre board or | 0.320 | 21 | 1000 | 1.100 | A2 |
| H | 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 24.8

dataholz.eu

Designation: Last updated: Source: Editor: awroho01a-08 8/2/23 Holzforschung Austria HFA, SP

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 | | 0.130 | 0.055 | 2,31E-6 | 0.026 | |
| | | | | | | |
| | | | | | | |
| Lifecycle | PERE | PERM | PERT | PENRE | PENRM | PENRT |
| Lifecycle (Phases) | PERE [MJ] | PERM [MJ] | PERT [MJ] | PENRE [MJ] | PENRM [MJ] | PENRT [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.