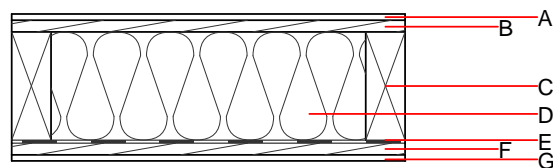
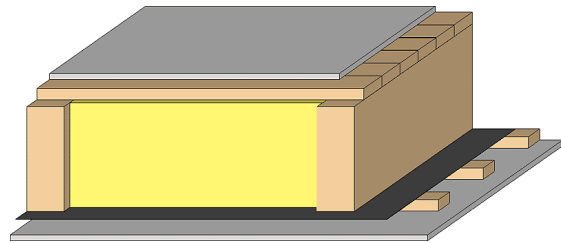


Floor towards attic (uninhabitable) - ddrtxn05a-00

floor towards attic (uninhabitable), timber frame construction, not suspended, dry, other surface

Performance rating

| | | |
|--|-------------------------------------|--|
| Fire protection performance | REI | 30 |
| maximum span = 5 m; maximum load $E_{d,fi} = 3,66 \text{ kN/m}^2$ Classified by HFA | | |
| Thermal performance | U Diffusion | 0.20 $\text{W}/(\text{m}^2\text{K})$ suitable |
| Calculated by HFA | | |
| Acoustic performance | $R_w (C;C_{tr})$ $L_{n,w} (C_i)$ | 47(-4;-9) dB |
| Assessed by TGM | | |
| Mass per unit area | m | 52.30 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 performance | | | | Reaction to fire EN |
|---|-----------|---|---------------------|-----------------|--------|-------|------------------------|
| | | | λ | μ min – max | ρ | c | |
| A | 12.5 | gypsum plaster board type DF or | 0.250 | 10 | 800 | 1.050 | A2 |
| A | 12.5 | gypsum fibre board | 0.320 | 21 | 1000 | 1.100 | A2 |
| B | 24.0 | planking spruce wood | 0.120 | 50 | 450 | 1.600 | D |
| C | 220.0 | spruce wood floor joists (80/*); e=* | 0.120 | 50 | 450 | 1.600 | D |
| D | 220.0 | mineral wool [040; ≥ 16 ; $< 1000^\circ\text{C}$] | 0.040 | 1 | 16 | 1.030 | A1 |
| E | | vapour barrier $s_d \geq 6\text{m}$ | | | 1000 | | |
| F | 24.0 | spruce wood cladding with spacing of cladding boards(24/100); a=400 | 0.120 | 50 | 450 | 1.600 | D |
| G | 12.5 | gypsum plaster board type DF or | 0.250 | 10 | 800 | 1.050 | A2 |
| G | 12.5 | gypsum fibre board | 0.320 | 21 | 1000 | 1.100 | A2 |

Sustainability rating (per m^2)

Database ecoinvent

$OI3_{kon}$ 18.7

Calculated by HFA

Details of sustainability rating

Database ecoinvent

| Lifecycle (Phases) | GWP [kg CO ₂ -e.] | AP [kg SO ₂ -e.] | EP [kg PO ₄ -e.] | ODP [kg R11-e.] | POCP [kg Ethen-e.] | |
|-----------------------|---------------------------------|--------------------------------|--------------------------------|--------------------|-----------------------|--|
| A1 - A3 | | 0.094 | 0.043 | 1,89E-6 | 0.020 | |

| Lifecycle (Phases) | PERE [MJ] | PERM [MJ] | PERT [MJ] | PENRE [MJ] | PENRM [MJ] | PENRT [MJ] |
|-----------------------|--------------|--------------|--------------|---------------|---------------|---------------|
| A1 - A3 | 89.705 | 476.272 | 565.978 | 322.974 | 4.459 | 327.433 |