

Intermediate floor - gdmtda01a-03

intermediate floor, solid wood construction, suspended, dry, with filling, Gipsplatte

Performance rating

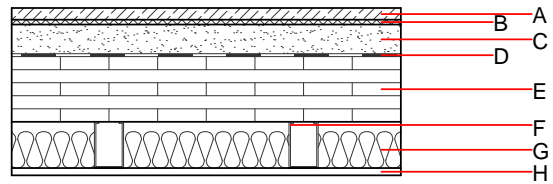
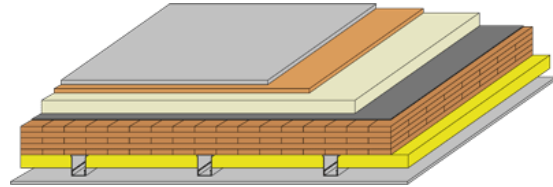
Fire protection performance REI 90
 maximum span = 5 m; maximum load $E_{d,fi} = 8,81 \text{ kN/m}^2$
 Classified by IBS

Thermal performance U Diffusion

Acoustic performance $R_w (C;C_{tr})$ 65(-4;-12) dB
 $L_{n,w} (C_i)$ 47(2)

Assessed by IFT

Mass per unit area m



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 | 20.0 | Rigidur dry screed | 0.200 | 19 | 1200 | 1.100 | A1 |
| B | 10.0 | impact sound absorbing subflooring WF-T [$s^1 = 102 \text{ MN/m}^2$] | 0.040 | 5 - 7 | 200 | 2.100 | E |
| C | 60.0 | bonded chippings | 0.700 | 1 | 1500 | 1.000 | A1 |
| D | | trickling protection | | | | | E |
| E | 150.0 | cross laminated timber BBS 125 5 layer | 0.130 | 50 | 470 | 1.600 | D |
| F | 95.0 | Rigips acoustic direct hanger with CD 60/27 | | | | | |
| G | 75.0 | mineral wool [040; 18] | 0.040 | 1 | 18 | 1.030 | A1 |
| H | 15.0 | gypsum plaster boards Rigips RF or | 0.250 | 10 | 900 | 1.050 | A2 |
| H | 15.0 | gypsum fibre board Rigidur H | 0.350 | 19 | 1200 | 1.100 | A2 |

Sustainability rating (per m^2)

Database ecoinvent

$OI3_{Kon}$ 51.7

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 | | 0.253 | 0.101 | 4,48E-6 | 0.069 | |

| Lifecycle (Phases) | PERE [MJ] | PERM [MJ] | PERT [MJ] | PENRE [MJ] | PENRM [MJ] | PENRT [MJ] |
|-----------------------|--------------|--------------|--------------|---------------|---------------|---------------|
| A1 - A3 | 118.986 | 1005.480 | 1124.466 | 820.532 | 29.078 | 849.610 |