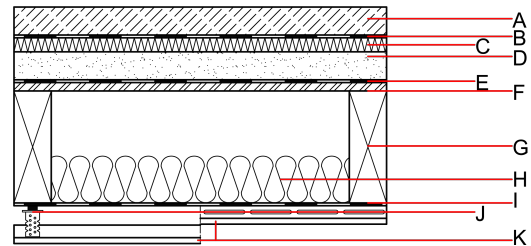


### Intermediate floor - gdrnxa11a-01

intermediate floor, timber frame construction, suspended, wet, with filling, other surface

#### Performance rating

<b>Fire protection performance</b>	REI	30
Classified by HFA		
<b>Thermal performance</b>	U Diffusion	0.25 W/(m <sup>2</sup> K) suitable
Calculated by HFA		
<b>Acoustic performance</b>	R <sub>w</sub> (C;C <sub>tr</sub> ) L <sub>n,w</sub> (C <sub>i</sub> )	85(-9;-17) dB 37(2)
Assessed by HFA		
<b>Mass per unit area</b>	m	295.50 kg/m <sup>2</sup>
Calculation based on gypsum plaster board type DF		



#### 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	60.0	cement screed or anhydrite screed	1.330	50 - 100	2500	1.080	
B		plastic separation layer	0.200	100000	1400	1.400	E
C	30.0	impact sound absorbing subflooring MW-T [s' = 10 MN/m <sup>3</sup> ]	0.033	1	70	1.030	A1
D	60.0	elastic bonded (PUR) chippings, m' approx. 90 kg/m <sup>2</sup> line split m' = 90 kg/m <sup>2</sup>	0.700	1	1500	1.000	A1
E		trickling protection					E
F	18.0	OSB	0.130	200	600	1.700	D
G	240.0	construction timber (80/...; e=625)	0.120	50	450	1.600	D
H	100.0	mineral wool [038; ≥30; ≥1000°C]	0.038	1	30	1.030	A1
I		trickling protection					E
J	60.0	acoustic direct hanger decoupled with CD-profile (a=400)	0.156				
K	12.5	gypsum fibre board	0.320	21	1000	1.100	A2
K	12.5	gypsum plaster board type DF	0.250	10	800	1.050	A2

#### Sustainability rating (per m<sup>2</sup>)

##### Database ecoinvent

OI3<sub>Kon</sub> 49.1

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		0.204	0.096	3,32E-6	0.040	

Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	160.102	714.564	874.666	702.145	52.316	754.461