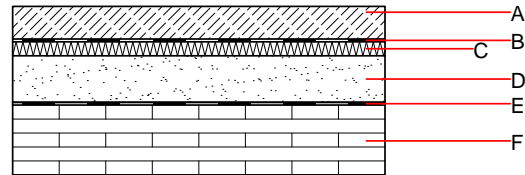


Intermediate floor - gdmnxn05-01

intermediate floor, solid wood construction, without lining, wet, with filling, wooden surface

Performance rating

Fire protection performance	REI	60
maximum span = 5 m; maximum load $E_{d,fi} = 5 \text{ kN/m}^2$ Classified by HFA		
Thermal performance	U Diffusion	0.40 $\text{W}/(\text{m}^2\text{K})$ suitable
Calculated by IBO		
Acoustic performance	$R_w (C;C_{tr})$ $L_{n,w} (C_i)$	71(-7;-16) dB 49(-1)
Assessed by HFA		
Mass per unit area	m	352.30 kg/m^2



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	50.0		0.700	50000	2100	1.400	A1
B		plastic separation layer (PE)	0.200	100000	1400	1.400	E
C	30.0	impact sound absorbing subflooring MW-T [100; $s' \leq 10 \text{ MN}/\text{m}^3$]	0.038	1	100	1.030	A1
D	100.0	non-bonded chippings (set between wooden strips 8cm with 2cm overlap)	0.700	1	1800	1.000	A1
E		trickling protection (construction paper)					E
F	150.0	cross laminated timber 5-ply first layer min. 30mm	0.130	50	500	1.600	D

Sustainability rating (per m^2)

Database ecoinvent

$OI3_{kon}$ 65.4

Calculated by IBO

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		0.275	0.090	8,13E-6	0.081	

Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	50.869	1070.363	1121.232	1164.989	29.933	1194.922