

## Intermediate floor - gdstxx01-01

intermediate floor, exposed beams, without lining, dry, with filling, wooden surface

### Performance rating

**Fire protection performance** REI 30

maximum span = 5 m; maximum load  $E_{d,fi} = 5,29 \text{ kN/m}^2$   
 Classified by HFA

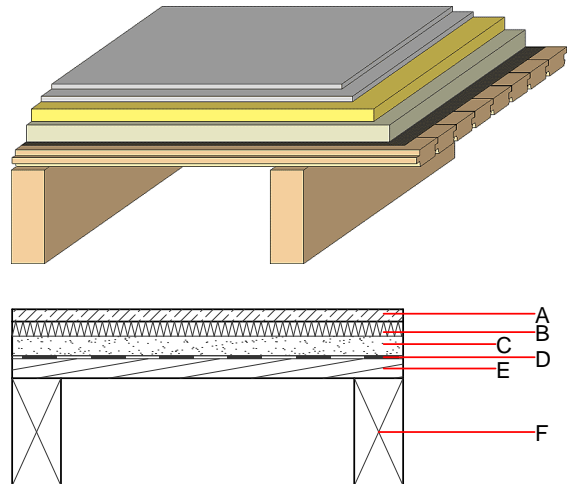
**Thermal performance** U 0.74 W/(m<sup>2</sup>K)  
 Diffusion suitable

Calculated by HFA

**Acoustic performance**  $R_w (C; C_{tr})$  57(-4; 11) dB  
 $L_{n,w} (C_i)$  62(1)

Assessed by TGM

**Mass per unit area** m 112.30 kg/m<sup>2</sup>



### 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
			$\lambda$	$\mu$ min – max	$\rho$	c	
A	25.0	dry screed	0.210	8	900	1.050	A1
B	30.0	impact sound absorbing subflooring EPS-T	0.040	20 - 50	11	1.450	E
C	40.0	fill	0.700	1	1800	1.000	A1
D		trickling protection					E
E	40.0	planking spruce wood tongue and groove fire resistant planking	0.120	50	450	1.600	D
F		construction timber floor joists (in acc. with structural design)	0.120	50	450	1.600	D

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

#### Database ecoinvent

OI3<sub>Kon</sub> 8.8

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		0.055	0.023	1,11E-6	0.019	

Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	91.399	484.789	576.188	203.325	17.022	220.347