

## Floor towards attic (uninhabitable) - ddrxxa01a-02

floor towards attic (uninhabitable), timber frame construction, suspended, dry, other surface

### Performance rating

**Fire protection performance** REI 60

maximum span = 5 m; maximum load  $E_{d,fi} = 3,5 \text{ kN/m}^2$   
 Classified by HFA

**Thermal performance** U 0.09 W/(m<sup>2</sup>K)  
 Diffusion suitable

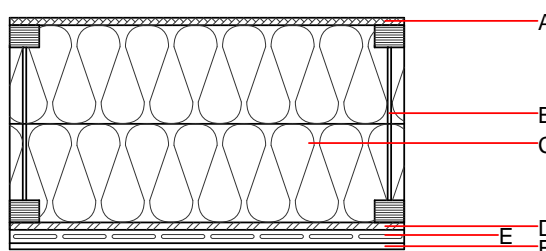
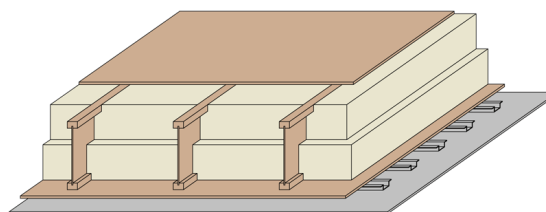
The stated thermal characteristics in the product data sheet are specified for the hard board intermediate web; the flanges are calculated with solid wood.  
 Calculated by HFA

**Acoustic performance**  $R_w (C; C_{tr})$  37 dB  
 $L_{n,w} (C_i)$

Assessed by HFA

**Mass per unit area** m 42.40 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
			$\lambda$	$\mu \text{ min} - \text{max}$	$\rho$	c	
A	15.0	fibreboard (MDF)	0.140	11	600	1.700	D
B	400.0	Light composite wood-based beams (I-beams) with solid wood flanges (60/45) and hard board intermediate web ( $\geq 6,7$ )	0.400	20 - 30	800	1.700	D
C	400.0	mineral wool [034; 18; <1000°C]	0.034	1	18	1.030	A1
D	15.0	OSB	0.130	200	600	1.700	D
E	27.0	metal rail					
F	15.0	gypsum plaster board type DF or	0.250	10	800	1.050	A2
F	15.0	gypsum fibre board	0.320	21	1000	1.100	A2

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

#### Database ecoinvent

013<sub>Kon</sub> 43.0

Calculated using gypsum plaster board type DF  
 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		0.175	0.081	3,05E-6	0.023	
Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	73.526	413.606	487.132	591.394	30.435	621.829