

## Floor towards attic (uninhabitable) - ddrtn02a-02

floor towards attic (uninhabitable), timber frame construction, not suspended, dry, other surface

### Performance rating

**Fire protection performance** REI 30

maximum span = 5 m; maximum load  $E_{d,fi} = 3,66 \text{ kN/m}^2$   
Classified by HFA

**Thermal performance** U 0.19 W/(m<sup>2</sup>K)  
Diffusion suitable

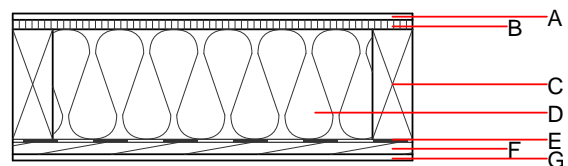
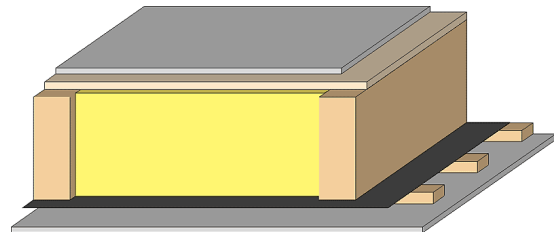
Calculated by HFA

**Acoustic performance**  $R_w (C; C_{tr})$  47(-3;-8) dB  
 $L_{n,w} (C_i)$

Assessed by TGM

**Mass per unit area** m 55.90 kg/m<sup>2</sup>

Calculation based on GF



Note: e=625

### 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	12.5	gypsum plaster board type DF or	0.250	10	800	1.050	A2
A	12.5	gypsum fibre board	0.320	21	1000	1.100	A2
B	19.0	particleboard	0.130	50 - 100	700	1.700	D
C	240.0	spruce wood floor joists (80/*); e=*	0.120	50	450	1.600	D
D	240.0	mineral wool [040; $\geq 16$ ; $< 1000^\circ\text{C}$ ]	0.040	1	16	1.030	A1
E		vapour barrier sd $\geq 8\text{m}$			1000		
F	24.0	spruce wood cladding with spacing of cladding boards(24/100); a=400	0.120	50	450	1.600	D
G	12.5	gypsum plaster board type DF or	0.250	10	800	1.050	A2
G	12.5	gypsum fibre board	0.320	21	1000	1.100	A2

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

#### Database ecoinvent

013<sub>Kon</sub> 26.5

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		0.113	0.051	2,16E-6	0.023	

Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	70.238	494.699	564.937	435.399	33.674	469.073