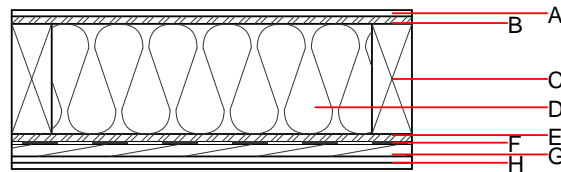
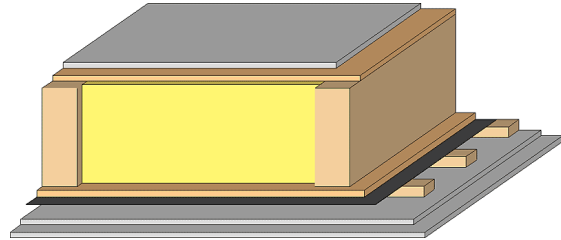


**Floor towards attic (uninhabitable) - ddrtxn06b-02**

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

**Performance rating**

<b>Fire protection performance</b>	REI	60
maximum span = 5 m; maximum load $E_{d,fi}$ = 3,66 kN/m <sup>2</sup> Classified by HFA		
<b>Thermal performance</b>	U Diffusion	0.19 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> )	47(-1;-7) dB
Assessed by TGM		
<b>Mass per unit area</b>	m	69.40 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	15.0	OSB	0.130	200	600	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; ≥16; <1000°C]	0.040	1	16	1.030	A1
E	15.0	OSB	0.130	200	600	1.700	D
F		vapour barrier sd≥ 7m			1000		
G	24.0	spruce wood cladding with spacing of cladding boards(24/100); a=400	0.120	50	450	1.600	D
H	25.0	gypsum plaster board type DF (2x12,5 mm) or	0.250	10	800	1.050	A2
H	25.0	gypsum fibre board (2x12,5 mm)	0.320	21	1000	1.100	A2

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

**Database ecoinvent**

O13<sub>kon</sub> 29.5

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		0.132	0.058	2.75E-6	0.025	

Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	123.650	593.728	717.377	483.668	26.141	509.809