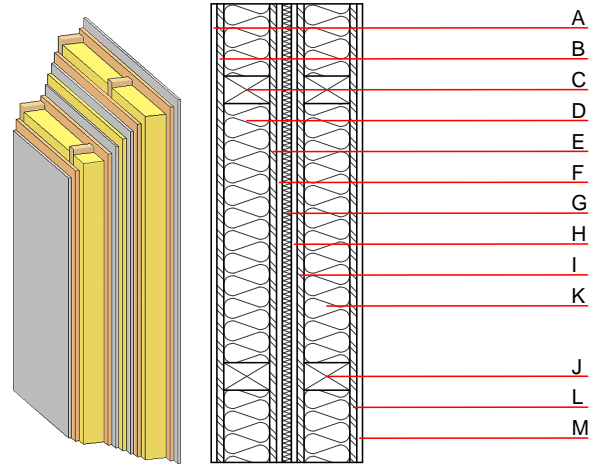


## Compartment wall - twrxxo07a-01

compartment wall, timber frame construction, without dry lining, double-layer, other surface

### Performance rating

<b>Fire protection performance</b>	<b>REI</b>	<b>60</b>
apply to each individual load-bearing wall; the whole wall: EI90; maximum ceiling height = 3 m; maximum load $E_{d,fi} = 19,2 \text{ kN/m}$ Classified by MA39 Classified by HFA		
<b>Thermal performance</b>	<b>U</b> <b>Diffusion</b>	<b>0.16 W/(m<sup>2</sup>K)</b> suitable
Calculated by HFA		
<b>Acoustic performance</b>	<b>R<sub>w</sub> (C;C<sub>tr</sub>)</b> <b>L<sub>n,w</sub> (C<sub>i</sub>)</b>	<b>60(-3;-10) dB</b>
Assessed by MA39		
<b>Mass per unit area</b>	<b>m</b>	<b>98.00 kg/m<sup>2</sup></b>
Calculation based on gypsum plaster board type DF		



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
			$\lambda$	$\mu \text{ min} - \text{max}$	$\rho$	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	100.0	construction timber (60/100; e=*)	0.120	50	450	1.600	D
D	100.0	mineral wool [035; 50; <1000°C]	0.035	1	50	1.030	A1
E	15.0	OSB	0.130	200	600	1.700	D
F	12.5	gypsum plaster board type DF or	0.250	10	800	1.050	A2
F	12.5	gypsum fibre board	0.320	21	1000	1.100	A2
G	20.0	mineral wool [040; ≥16; <1000°C]	0.040	1	16	1.030	A1
H	12.5	gypsum plaster board type DF or	0.250	10	800	1.050	A2
H	12.5	gypsum fibre board	0.320	21	1000	1.100	A2
I	15.0	OSB	0.130	200	600	1.700	D
J	100.0	construction timber (60/100; e=*)	0.120	50	450	1.600	D
K	100.0	mineral wool [035; 50; <1000°C]	0.035	1	50	1.030	A1
L	15.0	OSB	0.130	200	600	1.700	D
M	12.5	gypsum plaster board type DF or	0.250	10	800	1.050	A2
M	12.5	gypsum fibre board	0.320	21	1000	1.100	A2

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

#### Database ecoinvent

**O13<sub>Kon</sub>** 60.0

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		0.249	0.109	4,98E-6	0.039	

Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	170.229	743.284	913.512	880.558	43.364	923.922