

## Compartment wall - twrxo09b-01

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

### Performance rating

<b>Fire protection performance</b>	REI	90
EI 90 (for the whole construction); maximum ceiling height = 3 m; maximum load $E_{d,fi} = x \text{ kN/m}$ Classified by HFA		

<b>Thermal performance</b>	U Diffusion	0.18 W/(m <sup>2</sup> K)
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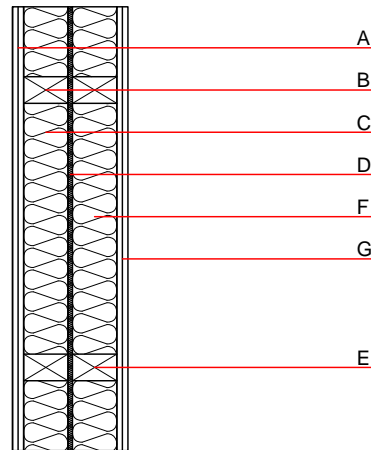
Calculated by HFA

<b>Acoustic performance</b>	$R_w$ ( $C_i$ ; $C_{tr}$ ) $L_{n,w}$ ( $C_i$ )	68 dB
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The acoustic insulation assessment is based on a length-related flow resistance of  $r \geq 5 \text{ kPa.s/m}^2$ . If this value is lower for the insulation material used, the  $R_w$  value is reduced by 3 dB.

Assessed by TGM

<b>Mass per unit area</b>	m	73.00 kg/m <sup>2</sup>
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Note: Fill the separating joint > 10 mm with mineral wool or seal off floor by floor

### 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	30.0	Rigips Riduro 2x...mm	0.250	4 - 10	1000	1.050	A2
B	100.0	construction timber (60/...; e=625)	0.120	50	450	1.600	D
C	100.0	ISOVER Multi-Kombi Holzrahmenfilz	0.033	1	11	1.030	A1
D	10.0	mineral wool [040; $\geq 16$ ; <1000°C]	0.040	1	16	1.030	A1
E	100.0	construction timber (60/...; e=625)	0.120	50	450	1.600	D
F	100.0	ISOVER Multi-Kombi Holzrahmenfilz	0.033	1	11	1.030	A1
G	30.0	Rigips Riduro 2x...mm	0.250	4 - 10	1000	1.050	A2

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

#### Database ecoinvent

013 <sub>Kon</sub>	27.5
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Calculated by IBO

## 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		0.095	0.043	2,80E-6	0.014	

Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	55.270	191.189	246.459	412.055	0.978	413.033