

## Internal wall - iwrxxo03b-06

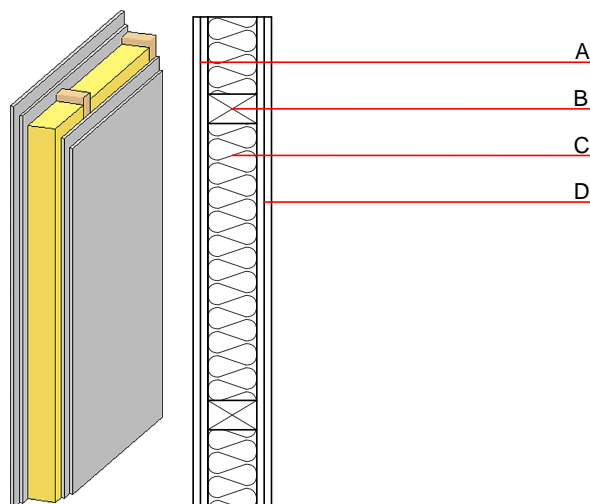
internal wall, timber frame construction, without dry lining, other surface

### Performance rating

**Fire protection performance** REI 90  
 maximum ceiling height = 3 m; maximum load  $E_{d,fi}$  = 19,0 kN/m  
 Classified by HFA

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

**Mass per unit area** m 67.70 kg/m<sup>2</sup>  
 Calculation based on GF



**Note:** The fire resistance is only valid when wall is used as partition with only one side exposed to fire.  
 (B=60/100); e=400

### 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	gypsum plaster boards type DF (2x15 mm) or	0.250	10	800	1.050	A2
A	30.0	gypsum fibre board (2x15 mm)	0.320	21	1000	1.100	A2
B	100.0	construction timber (60/100 or 60/160; e=*)	0.120	50	450	1.600	D
C	100.0	mineral wool [040; $\geq 16$ ; $< 1000^\circ\text{C}$ ]	0.040	1	16	1.030	A1
D	30.0	gypsum plaster boards type DF (2x15 mm) or	0.250	10	800	1.050	A2
D	30.0	gypsum fibre board (2x15 mm)	0.320	21	1000	1.100	A2

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

#### Database ecoinvent

013<sub>Kon</sub> 17.5

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		0.058	0.027	1,84E-6	0.009	

Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	34.938	122.835	157.773	279.473	0.000	279.473