

## Internal wall - iwrxo01a-02

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

### Performance rating

**Fire protection performance** REI 30

maximum ceiling height = 3 m; maximum load  $E_{d,fi} = 19,2 \text{ kN/m}$

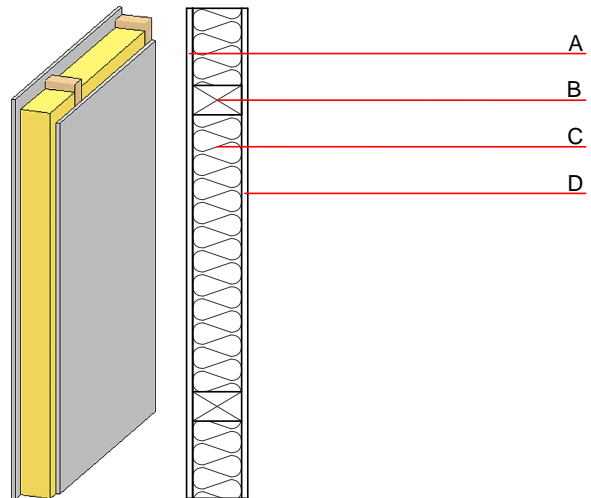
Classified by MA39

Classified by HFA

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

**Mass per unit area** m 28.60 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=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	0.250	10	800	1.050	A2
A	12.5	gypsum fibre board	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 [035; 50; <1000°C]	0.035	1	50	1.030	A1
D	12.5	gypsum plaster board type DF	0.250	10	800	1.050	A2
D	12.5	gypsum fibre board	0.320	21	1000	1.100	A2

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

#### Databaseecoinvent

O13<sub>Kon</sub> 22.6

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		0.084	0.039	1,81E-6	0.011	

Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	27.642	78.614	106.256	299.711	0.000	299.711