

## Internal wall - iwrxo12a-01

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

### Performance rating

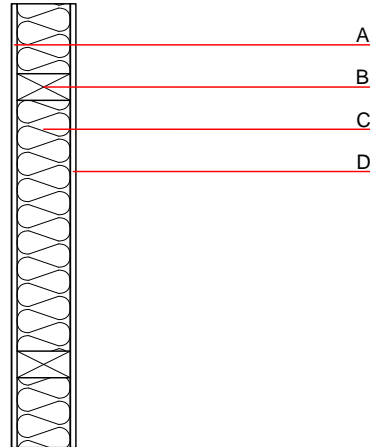
**Fire protection performance** REI 90

maximum ceiling height = 3 m; maximum load  $E_{d,fi} = 27 \text{ kN/m}$   
 Classified by HFA

**Acoustic performance**  $R_w (C; C_{tr})$  43 dB  
 $L_{n,w} (C_i)$

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

**Mass per unit area** m 40.70  $\text{kg/m}^2$



**Note:** The fire resistance is only valid when wall is used as partition with only one side exposed to fire.

### 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	15.0	Rigips Riduro	0.250	4 - 10	1000	1.050	A2
B	160.0	construction timber (60/...; e=625)	0.120	50	450	1.600	D
C	160.0	ISOVER Ultimate	0.035	1	20	1.030	A1
D	15.0	Rigips Riduro	0.250	4 - 10	1000	1.050	A2

### Sustainability rating (per $\text{m}^2$ )

#### Database ecoinvent

$OI_{3kon}$  16.5

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		0.061	0.028	1,62E-6	0.010	
Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	19.570	143.201	162.770	246.042	0.489	246.531