

### Internal wall - iwrxo08b-03

internal wall, timber frame construction, without dry lining, Gipsplatte

#### Performance rating

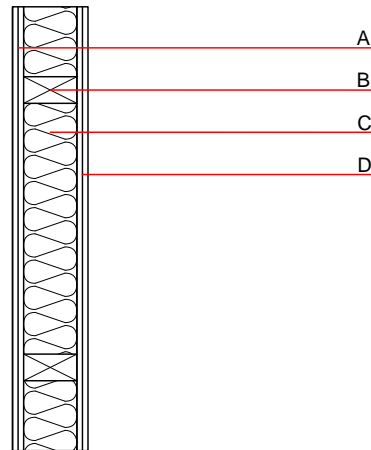
**Fire protection performance**      REI                      90

maximum ceiling height = 3 m; maximum load  $E_{d,fi}$  = 23,4 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  $r \geq 5$  kPa.s/m<sup>2</sup>. If this value is lower for the insulation material used, the  $R_w$  value is reduced by 3dB.  
 Assessed by TGM

**Mass per unit area**                      m                                      61.30 kg/m<sup>2</sup>



**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	25.0	Rigips Riduro 2*12,5mm	0.250	4 - 10	1000	1.050	A2
B	120.0	construction timber (60/...; e=625)	0.120	50	450	1.600	D
C	120.0	Cellulose fibre [040; 50]	0.040	1	50	2.000	E
D	25.0	Rigips Riduro 2*12,5mm	0.250	4 - 10	1000	1.050	A2

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

##### Database ecoinvent

$O_{13kon}$                                       13.6

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		0.047	0.020	1,70E-6	0.007	
Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	38.936	183.460	222.396	227.903	0.815	228.718