

Internal wall - iwrxo06b-04

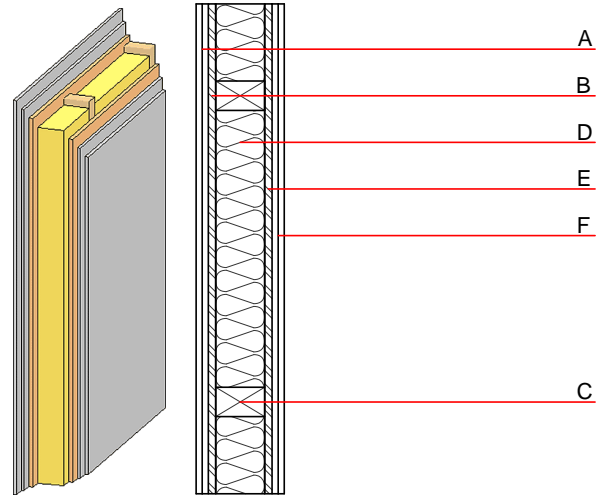
internal wall, timber frame construction, without dry lining, other surface

Performance rating

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

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

Mass per unit area m 68.60 kg/m²
 Calculation based on GF



Note: The fire resistance is only valid when wall is used as partition with only one side exposed to fire.
 (C=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
			λ	μ min – max	ρ	c	
A	25.0	gypsum plaster board type DF (2x12,5 mm) or	0.250	10	800	1.050	A2
A	25.0	gypsum fibre board (2x12,5 mm)	0.320	21	1000	1.100	A2
B	15.0	OSB	0.130	200	600	1.700	D
C	100.0	construction timber (60/100 or 60/160; e=*)	0.120	50	450	1.600	D
D	100.0	cellulose fibre [0,040; R=55]	0.040	1 - 2	55	2.000	B
E	15.0	OSB	0.130	200	600	1.700	D
F	25.0	gypsum plaster board type DF (2x12,5 mm) or	0.250	10	800	1.050	A2
F	25.0	gypsum fibre board (2x12,5 mm)	0.320	21	1000	1.100	A2

Sustainability rating (per m²)

Database ecoinvent

O13_{kon} 19.1
 Calculated by HFA

Details of sustainability rating

Database ecoinvent

Lifecycle (Phases)	GWP [kg CO ₂ -e.]	AP [kg SO ₂ -e.]	EP [kg PO ₄ -e.]	ODP [kg R11-e.]	POCP [kg Ethen-e.]	
A1 - A3		0.081	0.034	2,02E-6	0.014	

Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	84.493	422.328	506.820	335.538	21.682	357.220