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Designation: iwrxxo01a-07
Last updated: 8/2/23
Source: Holzforschung Austria
Editor: HFA, PLB

Internal wall - iwrxxo01a-07

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

Performance rating

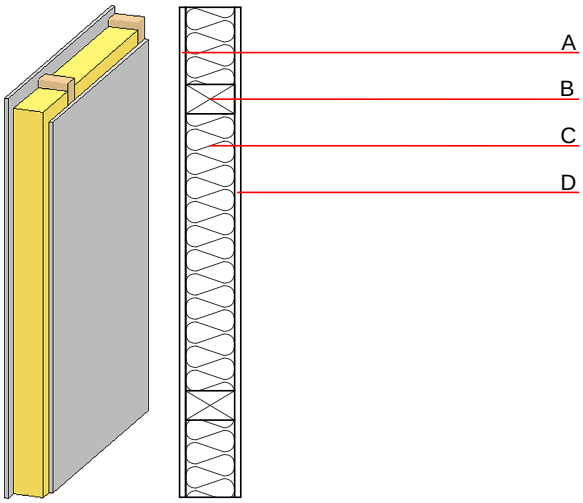
Fire protection performance	**REI**	30

maximum ceiling height = 3 m; maximum load $E_{d,fi}$ = 19,2 kN/m
Classified by MA39
Classified by HFA

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

Mass per unit area	**m**	33.40 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.
(B=60/160); 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
			λ	μ min – max	ρ	c	EN
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	160.0	construction timber (60/100 or 60/160; e=*)	0.120	50	450	1.600	D
C	100.0	mineral wool [040; ≥16; <1000°C]	0.040	1	16	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 m²)

Database ecoinvent

$OI3_{Kon}$	11.2

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		0.048	0.022	1,15E-6	0.010	

Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	42.438	196.536	238.974	187.514	0.000	187.514