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Designation: iwrxxo07a-03
Last updated: 8/2/23
Source: Holzforschung Austria
Editor: HFA, PLB

Internal wall - iwrxxo07a-03

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

Performance rating

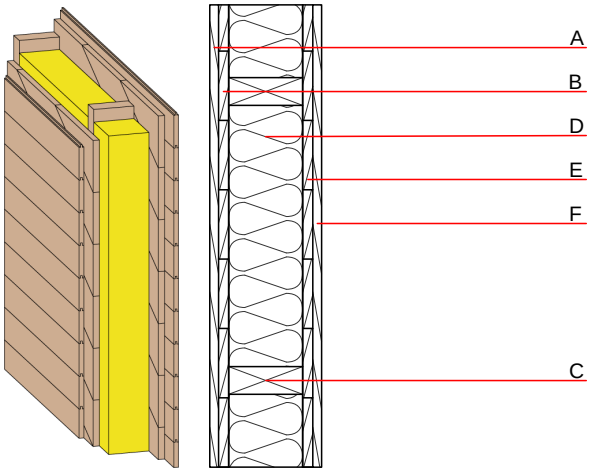
Fire protection performance	**REI**	60

maximum ceiling height = 3 m; maximum load $E_{d,fi}$ = 32 kN/m
Classified by HFA

Acoustic performance	**R_w (C_i;C_{tr})**	39(-2;-6) dB
	$L_{n,w}$ (C_I)	

Assessed by TGM

Mass per unit area	**m**	48.60 kg/m²



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
			λ	μ min – max	ρ	c	EN
A	19.0	planking tongue and groove	0.120	50	450	1.600	D
B	22.0	planking spruce wood diagonal	0.120	50	450	1.600	D
C	160.0	construction timber (60/160; e=625)	0.120	50	450	1.600	D
D	160.0	mineral wool [038; ≥33; ≥1000°C]	0.038	1	33	1.030	A1
E	22.0	planking spruce wood diagonal	0.120	50	450	1.600	D
F	19.0	planking tongue and groove	0.120	50	450	1.600	D

Sustainability rating (per m²)

Database ecoinvent

$OI3_{Kon}$	15.4

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		0.123	0.042	1,19E-6	0.052	

Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	142.808	830.037	972.845	273.823	0.000	273.823