

Designation: iwrxxo01a-00 Last updated: 8/2/23

Holzforschung Austria Source:

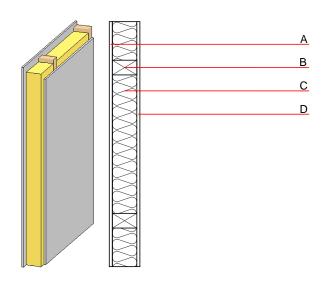
Editor: HFA, PLB

# Internal wall - iwrxxo01a-00

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

## Performance rating

Fire protection 30 performance 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;C<sub>tr</sub>)  $L_{n,w}$  ( $C_l$ ) Mass per unit area  $25.50 \text{ kg/m}^2$ 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=60/100); 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	
			λ	μ min – max	ρ	С	EN	
Α	12.5	gypsum plaster board type DF	0.250	10	800	1.050	A2	
Α	12.5	gypsum fibre board	0.320	21	1000	1.100	A2	
В	100.0	construction timber (60/100 or 60/160; e=*)	0.120	50	450	1.600	D	
С	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 m<sup>2</sup>)

Database ecoinvent

11.2 OI3<sub>Kon</sub>

Calculated by HFA



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### Details of sustainability rating

#### Database ecoinvent

Lifecycle	GWP	AP	EP	ODP	POCP	
(Phases)	[kg CO <sub>2</sub> -e.]	[kg SO <sub>2</sub> -e.]	[kg PO <sub>4</sub> -e.]	[kg R11-e.]	[kg Ethen-e.]	
A1 - A3		0.041	0.019	1,05E-6	0.006	
Lifecycle	PERE	PERM	PERT	PENRE	PENRM	PENRT
(Phases)	[MJ]	[MJ]	[MJ]	[MJ]	[MJ]	[MJ]
A1 - A3	21.549	78.614	100.164	167.418	0.000	167.418