

Designation: iwrxx003a-05 Last updated: 8/2/23

Source: Holzforschung Austria

Editor: HFA, SP

Internal wall - iwrxxo03a-05

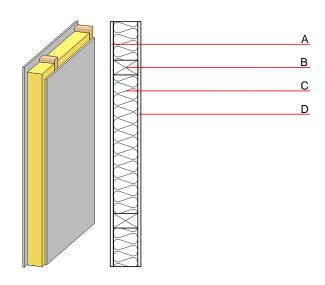
internal wall, timber frame construction, without dry lining, other surface

Performance rating

Fire protection REI 45 performance maximum ceiling height = 3 m; maximum load $E_{d,fi}$ = 19,2 kN/m Classified by HFA

Acoustic performance R_{w} (C;Ctr) $L_{n,w}$ (C₁)

Mass per unit area m 35.50 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=60/100); e=625

Register of building materials used for this application, cross-section (from outside to inside, dimensions in mm)

	Thickness	Building material	Thermal pe	rformance			Reaction to fire
			λ	μ min – max	ρ	С	EN
Α	15.0	gypsum plaster board type DF or	0.250	10	800	1.050	A2
Α	15.0	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	sheep wool [0,041; R=16]	0.041	1	16	1.720	E
D	15.0	gypsum fibre board or	0.320	21	1000	1.100	A2
D	15.0	gypsum plaster board type DF	0.250	10	800	1.050	A2

Sustainability rating (per m²)

 Database ecoinvent
 7.8

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Details of sustainability rating

Database ecoinvent

Lifecycle	GWP	AP	EP	ODP	POCP	
(Phases)	[kg CO ₂ -e.]	[kg SO ₂ -e.]	[kg PO ₄ -e.]	[kg R11-e.]	[kg Ethen-e.]	
A1 - A3		0.025	0.012	9,51E-7	0.005	
Lifecycle	PERE	PERM	PERT	PENRE	PENRM	PENRT
(Phases)	[MJ]	[MJ]	[MJ]	[MJ]	[MJ]	[MJ]
A1 - A3	19.897	111.911	131.808	139.455	0.325	139.781