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Designation: Last updated: Source: Editor: iwmxxo02a-02 8/2/23 Holzforschung Austria HFA, PLB

Internal wall - iwmxxo02a-02

internal wall, solid wood construction, with dry lining, other surface

Performance rating

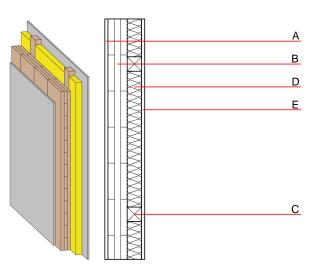
Fire protection performance	REI	60
maximum ceiling height = Classified by HFA	3 m; maximum loa	d E _{d,fi} = 35 kN∕m
Acoustic performance	R _w (C;C _{tr})	42 dB

L_{n,w} (C_l)

m

Assessed by TU-GRAZ

Mass per unit area



Note: The fire resistance is only valid when wall is used as partition with only one side exposed to fire. A=12,5; E=2*12,5

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

	Thickness	Building material	Thermal per	rformance			Reaction to fire
			λ	µ min – max	ρ	с	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
В	78.0	cross laminated timber 3- or 5-ply (e.g. thickness ≥ 78mm; 3-ply at least, surface layer at least 25mm)	0.130	50	500	1.600	D
С	60.0	spruce wood battens (60/60; e=625)	0.120	50	450	1.600	D
D	50.0	mineral wool [040; 13]	0.040	1	13	1.030	A2
Е	25.0	gypsum plaster board type DF or	0.250	10	800	1.050	A2
E	25.0	gypsum fibre board	0.320	21	1000	1.100	A2

Sustainability rating (per m²)

Database ecoinvent

OI3_{Kon}

22.4

Calculated with gypsum plaster fire protection board (GKF/DF); this data includes 3-, 5-, and 7-ply cross laminated timber elements; Calculated by HFA

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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		0.109	0.047	2,39E-6	0.032	
Lifecycle	PERE	PERM	PERT	PENRE	PENRM	PENRT
(Phases)	[LM]	[M]	[LM]	[LM]	[MJ]	[LM]
A1 - A3	34.300	580.689	614.988	412.414	13.401	425.815

dataholz.eu – Catalogue of timber building materials, components and component connections reviewed to consider thermal, acoustic, fire performance requirements and ecological drivers for timber construction released by accredited testing institutes. These datasheets will generally be accepted as proofs of compliance by building authorities.