# dataholz.eu

Designation: Last updated: Source: Editor:

iwrxxo06a-03 8/2/23 Holzforschung Austria HFA, SP

### Internal wall - iwrxxo06a-03

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

#### Performance rating

ire protection erformance	REI	60
maximum ceiling height	= 3 m; maximum load	l E <sub>d,fi</sub> = 19,2 kN∕m
Classified by MA39 Classified by HFA		
Germany		
F60		
Load $E_{d,fi}$ according to the	e German certification	n document
Corresponding proof: ma	anufacturer-specific	
Acoustic performance	R <sub>w</sub> (C;C <sub>tr</sub> ) L <sub>n,w</sub> (C <sub>l</sub> )	50 dB
Assessed by Müller-BBM		
Mass per unit area	m	46.80 kg∕m <sup>2</sup>
Calculation based on gy	ncum plactor board tur	

Note: The fire resistance is only valid when wall is used as partition with only one side exposed to fire. (C=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	Reaction to fire			
			λ	µ min – max	ρ	с	EN
٩	12.5	gypsum fibre board or	0.320	21	1000	1.100	A2
Ą	12.5	gypsum plaster board type DF	0.250	10	800	1.050	A2
В	15.0	OSB	0.130	200	600	1.700	D
2	100.0	construction timber ( $60/100$ or $60/160$ ; e=*)	0.120	50	450	1.600	D
)	100.0	mineral wool [038; ≥33; ≥1000°C]	0.038	1	33	1.030	A1
-	15.0	OSB	0.130	200	600	1.700	D
	12.5	gypsum fibre board or	0.320	21	1000	1.100	A2
-	12.5	gypsum plaster board type DF	0.250	10	800	1.050	A2

#### Sustainability rating (per m<sup>2</sup>)

Database ecoinvent		Database GaBi (ÖKOBAUDAT)			
OI3 <sub>Kon</sub>	20.9	Built-in renewable materials	kg	22.730	
Calculated by HFA		Biogenic carbon in kg CO <sub>2</sub> -e.	kg CO₂	34.720	
Calculation by thirt		Energy use of Primary Energy	MJ	480.720	
		Share of renewable PE	%	21.87	
		Calculated by TUM			

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.

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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		0.097	0.034	1,52E-6	0.030	
Lifecycle	PERE	PERM	PERT	PENRE	PENRM	PENRT
(Dhacac)	[MJ]	[MJ]	[MJ]	[LM]	[M]	[LM]
(Phases)	· · · ·					

#### Database GaBi (ÖKOBAUDAT)

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		0.078	0.012	4,12E-7	0.024	
C1 - C4		0.002	0.001	5,34E-8	0.000	
A1 - C4		0.084	0.014	4,81E-7	0.024	
Lifecycle	PERE	PERM	PERT	PENRE	PENRM	PENRT
(Phases)	[MJ]	[MJ]	[LM]	[LM]	[MJ]	[M]
A1 - A3	103.449	403.719	507.553	355.817	19.009	374.873
C1 - C4	0.908	-392.815	-391.908	8.801	-12.691	-3.890
A1 - C4	105.120	11.422	116.925	375.598	6.422	382.067