

Ol3 Statement

Result sheet building – new building



www.baubook.at/eco2soft
Ökobilanz für Gebäude

Project name: CLT

building overall

*Ol3 BG3 ref. Area:	102 points	GFA:	3.000 m ²
El10:	7,24 points	ref. area_{Ol}:	3.000 m ²
PENRT:	1.967 MJ / (m ² ref. area _{Ol})	catalog of LCA indicators:	IBO benchmarks 2012
GWP-total:	-212 kg CO ₂ equ. / (m ² ref. area _{Ol})	useful life considered:	yes, replacements rates with whole numbers (according to EN 15804 standard)
AP:	0,541 kg SO ₂ equ. / (m ² ref. area _{Ol})	study period:	50 years
Guide version Ol3:	V4.0 (September 2018)	service life catalog:	2018
Guide version El10:	V2, 2018		



* Taking into account the manufacturing phase (A1-A3) and the use phase (B1-B4) of EN 15804

test- and educational-version. not for commercial use!

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components from the energy certificate

quantity	building element	ΔOl3		PENRT MJ	GWP-total kg CO ₂ equ.	AP kg SO ₂ equ.	EI _{KON} per m ²
		BG3, ref. Area	per m ²				
1.715,00 m ²	F1_F1-8_in	34	60	653	-73	0,185	0,37
190,00 m ²	F2_F1-8_ex	3	46	59	-9	0,018	0,11
268,00 m ²	R1	7	82	136	-8	0,031	0,45
30,00 m ²	R2	0	44	9	-1	0,003	0,06
212,00 m ²	W1_F1_L_ex	3	49	65	-6	0,017	0,43
178,00 m ²	W2_F1_L_in	3	55	64	-8	0,018	0,44
1.035,00 m ²	W3_F2-8_L_ex1	17	48	308	-27	0,081	0,44
219,00 m ²	W4_F2-8_L_ex2	3	43	69	-12	0,021	0,30
77,00 m ²	W5_F2-8_L_ex3	1	45	23	-3	0,006	0,40
925,00 m ²	W6_F2-8_L_in	16	52	312	-37	0,087	0,44
211,00 m ²	W7_F1-8_L_in	3	43	54	-4	0,014	0,41
sum				1.751	-186	0,480	

interior walls

quantity	building element	ΔOl3		PENRT MJ	GWP-total kg CO ₂ equ.	AP kg SO ₂ equ.	EI _{KON} per m ²
		BG3, ref. Area	per m ²				
538,00 m ²	stair	2	10	38	-5,5	0,0114	0,01
406,00 m ²	W8_F1-8_N_in	5	35	94	-10,5	0,0255	0,19
303,00 m ²	W9_F1-8_N_in	4	42	84	-9,9	0,0233	0,20
sum				215	-26,0	0,0602	

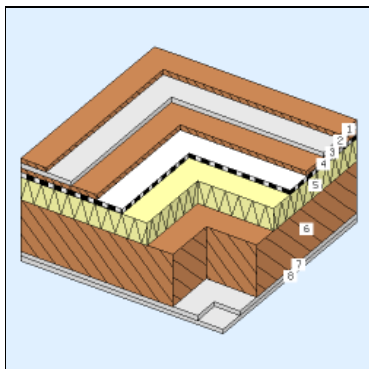
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graphic details of solid and transparent building elements

Project name: CLT

F1_F1-8_in (components from the energy certificate, BG3)



ΣΔOI3: 60 points/m²

El_{KON}: 0,37 points/m²

mass: 164,6 kg/m²

PENRT: 1.142 MJ/m²

GWP-total: -127 kg CO₂ equ./m²

AP: 0,323 kg SO₂ equ./m²

service life: yes, replacements rates with whole numbers (according to EN 15804 standard)

no. layer	d _{cm}	Useful life >b	ΔOI3 pts/m ²	Disposal- classification	Exploitation potential
1 Trittschalldämmung (Isover Akustic EP3) (Timber (525 kg/m ³ - e.g. larch) - rough, technically drier)	1,30	50	0	1	1
2 Rigidur Estrichelement (Rigips Feuerschutzplatte)	1,25	50	2	4	3
3 Splittschüttung gebunden (MDF panels semi-dense fibreboard (400 kg/m ³))	2,20	50	7	3	3
4 Rieselschutz (Sisalex™ 30)	0,01	¹ 50	² 0	3	3
5 Brettsperrholz BBS (5-lagig) (Mineral thermal insulating panel (93 kg/m ³))	10,00	50	8	2	3
6 schallentkoppelte U-Direktabhängiger mit Rigips CD Profil / Mineralwolle (z. B. Isover Trennwand Filz)	23,00	100	40	1	1
7 Rigips Feuerschutzplatte	1,25	50	2	4	3
8 Rigips Feuerschutzplatte	1,25	50	2	4	3
building element	40,26				

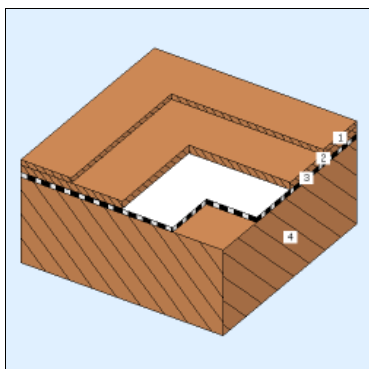
annotations: Importiert am 06. 03. 2022: Bauteil "DE06e_" aus Gebäude ""

¹ self-entered value ² layer is OI-relevant from BG1

16. 05. 2022, Qiming SUN (Tianjin University)

Project name: CLT

F2_F1-8_ex (components from the energy certificate, BG3)



ΣΔOI3: 46 points/m²

El_{KON}: 0,11 points/m²

mass: 124,2 kg/m²

PENRT: 925 MJ/m²

GWP-total: -140 kg CO₂ equ./m²

AP: 0,288 kg SO₂ equ./m²

service life: yes, replacements rates with whole numbers (according to EN 15804 standard)

no. layer	d _{cm}	Useful life >b	ΔOI3 pts/m ²	Disposal- classification	Exploitation potential
1 Trittschalldämmung (Isover Akustic EP3) (Timber (525 kg/m ³ - e.g. larch) - rough, technically drier)	1,30	50	0	1	1
2 Splittschüttung gebunden (MDF panels semi-dense fibreboard (400 kg/m ³))	2,00	50	6	3	3
3 Rieselschutz (Sisalex™ 30)	0,01	¹ 50	² 0	3	3
4 schallentkoppelte U-Direktabhängiger mit Rigips CD Profil / Mineralwolle (z. B. Isover Trennwand Filz)	23,00	100	40	1	1
building element	26,31				

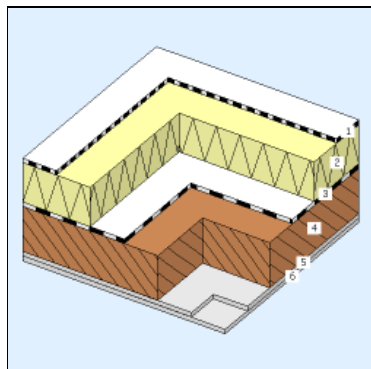
annotations: Importiert am 06. 03. 2022: Bauteil "DE06e_" aus Gebäude ""

¹ self-entered value ² layer is OI-relevant from BG1

16. 05. 2022, Qiming SUN (Tianjin University)

Project name: CLT

R1 (components from the energy certificate, BG3)



$\Sigma\Delta\text{OI3}$: 82 points/m²

EI_{KON} : 0,45 points/m²

mass: 152,3 kg/m²

PENRT: 1.521 MJ/m²

GWP-total: -87,0 kg CO₂ equ./m²

AP: 0,343 kg SO₂ equ./m²

service life: yes, replacements rates with whole numbers (according to EN 15804 standard)

0,142 W/m²K

U value ³



A++

OI-Class (BG3) ⁴



no. layer	d cm	Useful life >b	ΔOI3 pts/m ²	Disposal- classification	Exploitation potential
1 gewebearmierte Kunststoff-Schweißbahn (>1,7 kg/m ²) (Polyethylene (PE) sealing sheeting)	0,25	25	¹ 18	3	4
2 Expandiertes Polystyrol (Gefälledämmung) (Mineral thermal insulating panel (93 kg/m ³))	20,00	50	16	2	3
3 Abdichtungsbahn (sd=220m) (Bauder TEC KSD, Bauder TEC KSD DUO)	0,15	² 50	¹ 4	3	5
4 Brettsperrholz BBS (5-lagig) (KLH® - CLT)	23,00	100	40	1	1
5 Brettsperrholz BBS (5-lagig) (Rigips Feuerschutzplatte)	1,25	50	2	4	3
6 Brettsperrholz BBS (5-lagig) (Rigips Feuerschutzplatte)	1,25	50	2	4	3
building element	45,90				

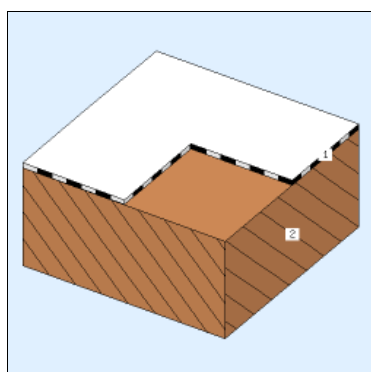
annotations: Importiert am 06. 03. 2022: Bauteil "DA05a_" aus Gebäude ""

¹ layer is OI-relevant from BG1 ² self-entered value ³ U value (Heat transfer coefficient) calculated according to ÖNORM EN ISO 6946. ⁴ For the OI class, the U-value of the component is taken into account in addition to the ecological key figures

16. 05. 2022, Qiming SUN (Tianjin University)

Project name: CLT

R2 (components from the energy certificate, BG3)



$\Sigma\Delta\text{OI3}$: 44 points/m²

EI_{KON} : 0,06 points/m²

mass: 111,0 kg/m²

PENRT: 887 MJ/m²

GWP-total: -119 kg CO₂ equ./m²

AP: 0,257 kg SO₂ equ./m²

service life: yes, replacements rates with whole numbers (according to EN 15804 standard)

U value ³

0,484 W/m²K



B

OI-Class (BG3) ⁴



no. layer	d cm	Useful life >b	ΔOI3 pts/m ²	Disposal- classification	Exploitation potential
1 Abdichtungsbahn (sd=220m) (Bauder TEC KSD, Bauder TEC KSD DUO)	0,15	¹ 50	² 4	3	5
2 Brettsperrholz BBS (5-lagig) (KLH® - CLT)	23,00	100	40	1	1
building element	23,15				

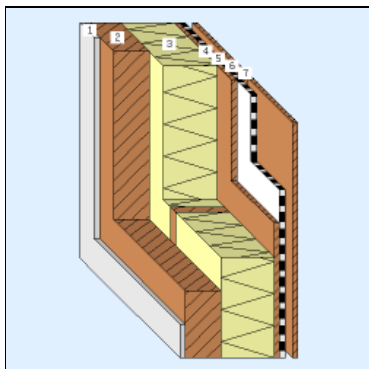
annotations: Importiert am 06. 03. 2022: Bauteil "DA05a_" aus Gebäude ""

¹ self-entered value ² layer is OI-relevant from BG1 ³ U value (Heat transfer coefficient) calculated according to ÖNORM EN ISO 6946. ⁴ For the OI class, the U-value of the component is taken into account in addition to the ecological key figures

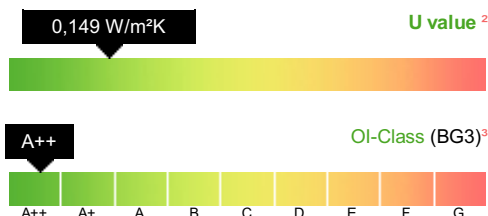
16. 05. 2022, Qiming SUN (Tianjin University)

Project name: CLT

W1_F1_L_ex (components from the energy certificate, BG3)



$\Sigma \Delta OI3$: 49 points/m²
 $E_{l_{kon}}$: 0,43 points/m²
 mass: 120,3 kg/m²
 $PENRT$: 923 MJ/m²
 GWP -total: -84,8 kg CO₂ equ./m²
 AP : 0,245 kg SO₂ equ./m²
 service life: yes, replacements rates with whole numbers (according to EN 15804 standard)



no. layer (from inside to outside)	d cm	Useful life >b	$\Delta OI3$ pts/m ²	Disposal- classification	Exploitation potential
1 Rigips Feuerschutzplatte (<i>Rigips Feuerschutzplatte</i>)	1,25	50	2	4	3
2 Brettsperrholz BBS (3-lagig) (<i>KLH® - CLT</i>)	14,50	100	25	1	1
3 <i>inhomogeneous (parts vertical)</i>	22,00				
115 cm (96%) Mineral thermal insulating panel (93 kg/m ³)	22,00	50	17	2	3
5 cm (4%) Timber (475 kg/m ³ - e.g. spruce/fir) - rough, technically dried	22,00	100	0	1	1
4 MDF panels semi-dense fibreboard (400 kg/m ³)	1,50	50	4	3	3
5 Unterspannbahn (<i>Polyethylene (PE) sealing sheeting</i>)	0,02	25	¹ 1	3	4
6 <i>inhomogeneous (parts vertical)</i>	3,00				
115 cm (96%) Vertical air layer, heat flow down 26 < d <= 30 mm	3,00		¹ 0	0	0
5 cm (4%) Timber (475 kg/m ³ - e.g. spruce/fir) - rough, technically dried	3,00	50	¹ 0	1	1
7 Holz Außenwandverkleidung (<i>Timber (525 kg/m³ - e.g. larch) - rough, technically dried</i>)	2,00	50	¹ 0	1	1
building element	44,27				

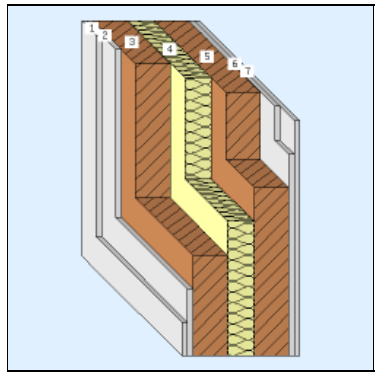
annotations: Importiert am 01. 03. 2022: Bauteil "AW10d_" aus Gebäude ""

¹ layer is OI-relevant from BG1 ² U value (Heat transfer coefficient) calculated according to ÖNORM EN ISO 6946. ³ For the OI class, the U-value of the component is taken into account in addition to the ecological key figures

16. 05. 2022, Qiming SUN (Tianjin University)

Project name: CLT

W2_F1_L_in (components from the energy certificate, BG3)



$\Sigma\Delta OI3$: 55 points/m²
 $E_{l_{kon}}$: 0,44 points/m²
mass: 165,8 kg/m²
PENRT: 1.082 MJ/m²
GWP-total: -129 kg CO₂ equ./m²
AP: 0,303 kg SO₂ equ./m²
service life: yes, replacements rates with whole numbers (according to EN 15804 standard)

no. layer (from inside to outside)	d cm	Useful life >b	$\Delta OI3$ pts/m ²	Disposal- classification	Exploitation potential
1 Rigips Feuerschutzplatte	1,25	50	¹ 2	4	3
2 Rigips Feuerschutzplatte	1,25	50	¹ 2	4	3
3 Brettsperrholz BBS (3-lagig) (KLH® - CLT)	13,00	100	¹ 23	1	1
4 Sheep's wool - insulation felt (18 kg/m ³)	10,00	50	¹ 2	3	3
5 Brettsperrholz BBS (3-lagig) (KLH® - CLT)	13,00	100	¹ 23	1	1
6 Rigips Feuerschutzplatte	1,25	50	¹ 2	4	3
7 Rigips Feuerschutzplatte	1,25	50	¹ 2	4	3
building element	41,00				

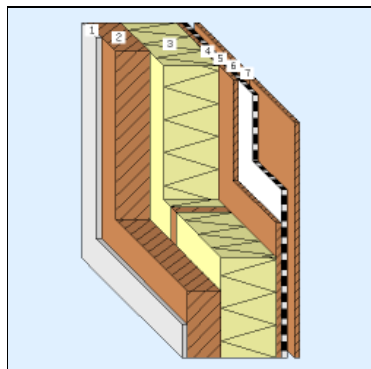
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¹ layer is OI-relevant from BG3

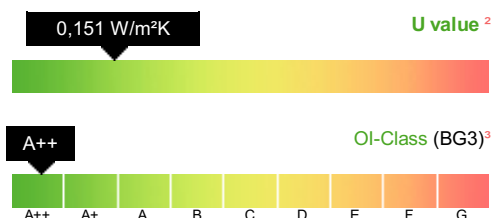
16. 05. 2022, Qiming SUN (Tianjin University)

Project name: CLT

W3_F2-8_L_ex1 (components from the energy certificate, BG3)



$\Sigma \Delta OI3$: 48 points/m²
 $E_{I_{KON}}$: 0,44 points/m²
mass: 117,6 kg/m²
PENRT: 894 MJ/m²
GWP-total: -79,3 kg CO₂ equ./m²
AP: 0,235 kg SO₂ equ./m²
service life: yes, replacements rates with whole numbers (according to EN 15804 standard)



no. layer (from inside to outside)	d cm	Useful life >b	$\Delta OI3$ pts/m ²	Disposal- classification	Exploitation potential
1 Rigips Feuerschutzplatte (Rigips Feuerschutzplatte)	1,50	50	2	4	3
2 Brettsperrholz BBS (3-lagig) (KLH® - CLT)	13,50	100	24	1	1
3 inhomogeneous (parts vertical)	22,00				
115 cm (96%) Mineral thermal insulating panel (93 kg/m ³)	22,00	50	17	2	3
5 cm (4%) Timber (475 kg/m ³ - e.g. spruce/fir) - rough, technically dried	22,00	100	0	1	1
4 MDF panels semi-dense fibreboard (400 kg/m ³)	1,50	50	4	3	3
5 Unterspännbahn (Polyethylene (PE) sealing sheeting)	0,02	25	¹ 1	3	4
6 inhomogeneous (parts vertical)	3,00				
115 cm (96%) Vertical air layer, heat flow down 26 < d <= 30 mm	3,00		¹ 0	0	0
5 cm (4%) Timber (475 kg/m ³ - e.g. spruce/fir) - rough, technically dried	3,00	50	¹ 0	1	1
7 Holz Außenwandverkleidung (Timber (525 kg/m ³ - e.g. larch) - rough, technically dried)	2,00	50	¹ 0	1	1
building element	43,52				

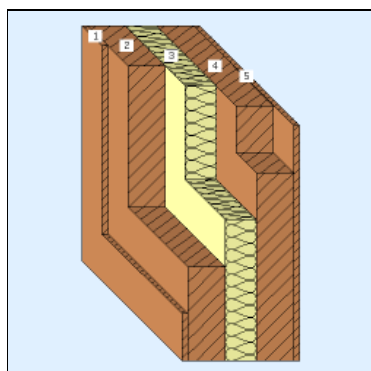
annotations: Importiert am 01. 03. 2022: Bauteil "AW10d_" aus Gebäude ""

¹ layer is OI-relevant from BG1 ² U value (Heat transfer coefficient) calculated according to ÖNORM EN ISO 6946. ³ For the OI class, the U-value of the component is taken into account in addition to the ecological key figures

16. 05. 2022, Qiming SUN (Tianjin University)

Project name: CLT

W4_F2-8_L_ex2 (components from the energy certificate, BG3)



$\Sigma \Delta OI3$: 43 points/m²
 $E_{I_{KON}}$: 0,30 points/m²
mass: 136,8 kg/m²
PENRT: 945 MJ/m²
GWP-total: -159 kg CO₂ equ./m²
AP: 0,287 kg SO₂ equ./m²
service life: yes, replacements rates with whole numbers (according to EN 15804 standard)

no. layer (from inside to outside)	d cm	Useful life >b	$\Delta OI3$ pts/m ²	Disposal- classification	Exploitation potential
1 Timber (525 kg/m ³ - e.g. larch) - rough, technically dried	2,00	50	¹ 0	1	1
2 Brettsperrholz BBS (3-lagig) (KLH® - CLT)	12,00	100	¹ 21	1	1
3 Sheep's wool - insulation felt (18 kg/m ³)	10,00	50	¹ 2	3	3
4 Brettsperrholz BBS (3-lagig) (KLH® - CLT)	12,00	100	¹ 21	1	1
5 Timber (525 kg/m ³ - e.g. larch) - rough, technically dried	2,00	50	¹ 0	1	1
building element	38,00				

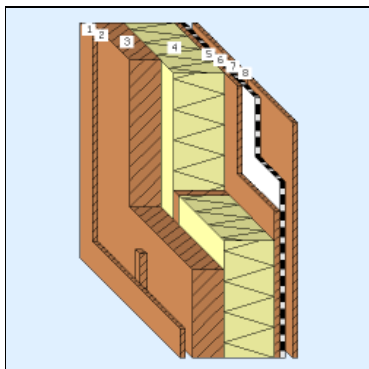
annotations: Importiert am 06. 03. 2022: Bauteil "IW11b_" aus Gebäude ""

¹ layer is OI-relevant from BG3

16. 05. 2022, Qiming SUN (Tianjin University)

Project name: CLT

W5_F2-8_L_ex3 (components from the energy certificate, BG3)



$\Sigma \Delta OI3$: 45 points/m²

$E_{l_{kon}}$: 0,40 points/m²

mass: 116,5 kg/m²

PENRT: 887 MJ/m²

GWP-total: -99,4 kg CO₂ equ./m²

AP: 0,242 kg SO₂ equ./m²

service life: yes, replacements rates with whole numbers (according to EN 15804 standard)

0,152 W/m²K

U value ²



A++

OI-Class (BG3) ³



no. layer (from inside to outside)	d cm	Useful life >b	$\Delta OI3$ pts/m ²	Disposal- classification	Exploitation potential
1 Holz Außenwandverkleidung (Timber (525 kg/m ³ - e.g. larch) - rough, technically dried)	2,00	50	¹ 0	1	1
2 inhomogeneous (parts vertical)	3,00				
115 cm (96%) Vertical air layer, heat flow down 26 < d <= 30 mm	3,00		¹ 0	0	0
5 cm (4%) Timber (475 kg/m ³ - e.g. spruce/fir) - rough, technically dried	3,00	50	¹ 0	1	1
3 Brettsperrholz BBS (3-lagig) (KLH® - CLT)	13,50	100	24	1	1
4 inhomogeneous (parts vertical)	22,00				
115 cm (96%) Mineral thermal insulating panel (93 kg/m ³)	22,00	50	17	2	3
5 cm (4%) Timber (475 kg/m ³ - e.g. spruce/fir) - rough, technically dried	22,00	100	0	1	1
5 MDF panels semi-dense fibreboard (400 kg/m ³)	1,50	50	4	3	3
6 Unterspannbahn (Polyethylene (PE) sealing sheeting)	0,02	25	¹ 1	3	4
7 inhomogeneous (parts vertical)	3,00				
115 cm (96%) Vertical air layer, heat flow down 26 < d <= 30 mm	3,00		¹ 0	0	0
5 cm (4%) Timber (475 kg/m ³ - e.g. spruce/fir) - rough, technically dried	3,00	50	¹ 0	1	1
8 Holz Außenwandverkleidung (Timber (525 kg/m ³ - e.g. larch) - rough, technically dried)	2,00	50	¹ 0	1	1
building element	47,02				

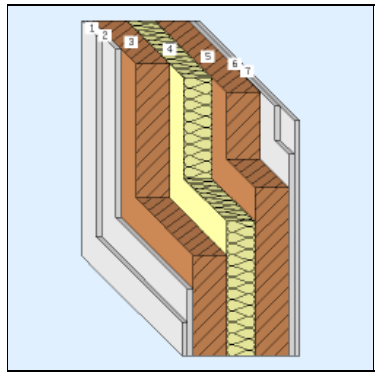
annotations: Importiert am 01. 03. 2022: Bauteil "AW10d_" aus Gebäude ""

¹ layer is OI-relevant from BG1 ² U value (Heat transfer coefficient) calculated according to ÖNORM EN ISO 6946. ³ For the OI class, the U-value of the component is taken into account in addition to the ecological key figures

16. 05. 2022, Qiming SUN (Tianjin University)

Project name: CLT

W6_F2-8_L_in (components from the energy certificate, BG3)



$\Sigma \Delta OI3$: 52 points/m²
 $E_{l_{kon}}$: 0,44 points/m²
mass: 156,3 kg/m²
PENRT: 1.012 MJ/m²
GWP-total: -118 kg CO₂ equ./m²
AP: 0,282 kg SO₂ equ./m²
service life: yes, replacements rates with whole numbers (according to EN 15804 standard)

no.	layer (from inside to outside)	d cm	Useful life >b	$\Delta OI3$ pts/m ²	Disposal- classification	Exploitation potential
1	Rigips Feuerschutzplatte	1,25	50	¹ 2	4	3
2	Rigips Feuerschutzplatte	1,25	50	¹ 2	4	3
3	Brettsperrholz BBS (3-lagig) (KLH® - CLT)	12,00	100	¹ 21	1	1
4	Sheep's wool - insulation felt (18 kg/m ³)	10,00	50	¹ 2	3	3
5	Brettsperrholz BBS (3-lagig) (KLH® - CLT)	12,00	100	¹ 21	1	1
6	Rigips Feuerschutzplatte	1,25	50	¹ 2	4	3
7	Rigips Feuerschutzplatte	1,25	50	¹ 2	4	3
building element		39,00				

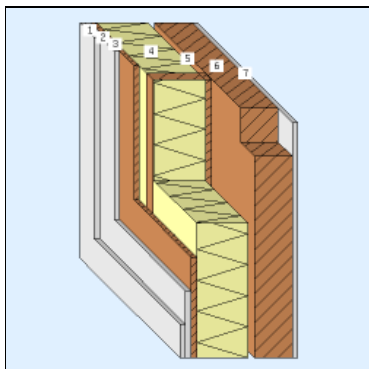
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¹ layer is OI-relevant from BG3

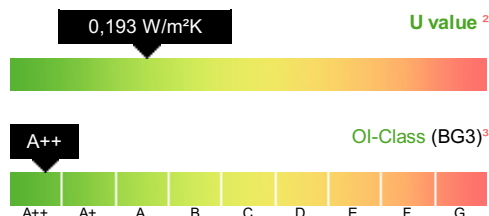
16. 05. 2022, Qiming SUN (Tianjin University)

Project name: CLT

W7_F1-8_L_in (components from the energy certificate, BG3)



$\Sigma\Delta\text{OI3}$: 43 points/m²
 EI_{KON} : 0,41 points/m²
mass: 110,6 kg/m²
PENRT: 764 MJ/m²
GWP-total: -53,8 kg CO₂ equ./m²
AP: 0,196 kg SO₂ equ./m²
service life: yes, replacements rates with whole numbers (according to EN 15804 standard)



no. layer (from inside to outside)	d cm	Useful life >b	ΔOI3 pts/m ²	Disposal- classification	Exploitation potential
1 Rigips Feuerschutzplatte (Rigips Feuerschutzplatte)	1,25	50	2	4	3
2 Rigips Feuerschutzplatte (Rigips Feuerschutzplatte)	1,25	50	2	4	3
3 Holz Außenwandverkleidung (MDF panels semi-dense fibreboard (400 kg/m ³))	1,20	50	¹ 4	3	3
4 inhomogeneous (parts vertical)	16,50				
115 cm (96%) Mineral thermal insulating panel (93 kg/m ³)	16,50	50	13	2	3
5 cm (4%) Timber (475 kg/m ³ - e.g. spruce/fir) - rough, technically dried	16,50	100	0	1	1
5 inhomogeneous (parts vertical)	2,00				
115 cm (96%) Vertical air layer, heat flow down 16 < d ≤ 20 mm	2,00		¹ 0	0	0
5 cm (4%) Timber (475 kg/m ³ - e.g. spruce/fir) - rough, technically dried	2,00	100	¹ 0	1	1
6 Brettsperrholz BBS (3-lagig) (KLH® - CLT)	12,00	100	21	1	1
7 Rigips Feuerschutzplatte (Rigips Feuerschutzplatte)	1,25	50	2	4	3
building element	35,45				

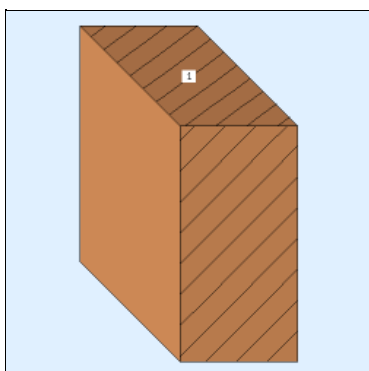
annotations: Importiert am 01. 03. 2022: Bauteil "AW10d_" aus Gebäude ""

¹ layer is OI-relevant from BG1 ² U value (Heat transfer coefficient) calculated according to ÖNORM EN ISO 6946. ³ For the OI class, the U-value of the component is taken into account in addition to the ecological key figures

16. 05. 2022, Qiming SUN (Tianjin University)

Project name: CLT

stair (interior walls, BG3)



$\Sigma\Delta\text{OI3}$: 10 points/m²
 EI_{KON} : 0,01 points/m²
mass: 28,0 kg/m²
PENRT: 209 MJ/m²
GWP-total: -30,9 kg CO₂ equ./m²
AP: 0,0634 kg SO₂ equ./m²
service life: yes, replacements rates with whole numbers (according to EN 15804 standard)

no. layer (from inside to outside)	d cm	Useful life >b	ΔOI3 pts/m ²	Disposal- classification	Exploitation potential
1 Brettsperrholz BBS (3-lagig) (KLH® - CLT)	5,90	100	¹ 10	1	1
building element	5,90				

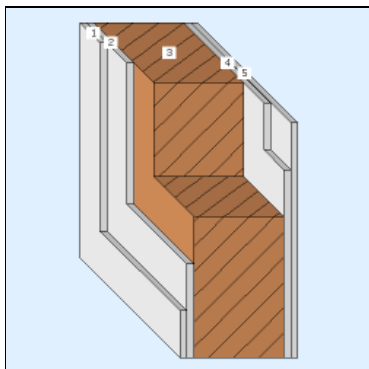
annotations: Importiert am 06. 03. 2022: Bauteil "IW01b_" aus Gebäude ""

¹ layer is OI-relevant from BG3

16. 05. 2022, Qiming SUN (Tianjin University)

Project name: CLT

W8_F1-8_N_in (interior walls, BG3)



$\Sigma\Delta OI3$: 35 points/m²

$E_{l_{kon}}$: 0,19 points/m²

mass: 116,5 kg/m²

PENRT: 692 MJ/m²

GWP-total: -77,5 kg CO₂ equ./m²

AP: 0,188 kg SO₂ equ./m²

service life: yes, replacements rates with whole numbers (according to EN 15804 standard)

no. layer (from inside to outside)	d cm	Useful life >b	$\Delta OI3$ pts/m ²	Disposal- classification	Exploitation potential
1 Rigips Feuerschutzplatte (Rigips Feuerschutzplatte)	1,25	50	¹ 2	4	3
2 Rigips Feuerschutzplatte (Rigips Feuerschutzplatte)	1,25	50	¹ 2	4	3
3 Brettsperrholz BBS (3-lagig) (KLH® - CLT)	16,00	100	¹ 28	1	1
4 Rigips Feuerschutzplatte (Rigips Feuerschutzplatte)	1,25	50	¹ 2	4	3
5 Rigips Feuerschutzplatte (Rigips Feuerschutzplatte)	1,25	50	¹ 2	4	3
building element	21,00				

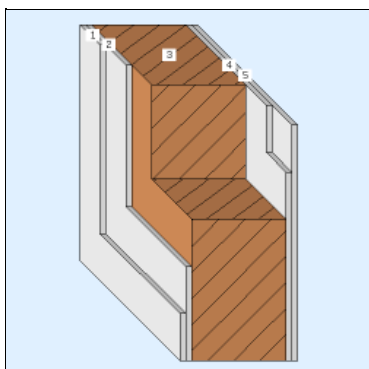
annotations: Importiert am 06. 03. 2022: Bauteil "AW15b_" aus Gebäude ""

¹ layer is OI-relevant from BG2

16. 05. 2022, Qiming SUN (Tianjin University)

Project name: CLT

W9_F1-8_N_in (interior walls, BG3)



$\Sigma\Delta OI3$: 42 points/m²

$E_{l_{kon}}$: 0,20 points/m²

mass: 135,5 kg/m²

PENRT: 834 MJ/m²

GWP-total: -98,5 kg CO₂ equ./m²

AP: 0,231 kg SO₂ equ./m²

service life: yes, replacements rates with whole numbers (according to EN 15804 standard)

no. layer (from inside to outside)	d cm	Useful life >b	$\Delta OI3$ pts/m ²	Disposal- classification	Exploitation potential
1 Rigips Feuerschutzplatte (Rigips Feuerschutzplatte)	1,25	50	¹ 2	4	3
2 Rigips Feuerschutzplatte (Rigips Feuerschutzplatte)	1,25	50	¹ 2	4	3
3 Brettsperrholz BBS (3-lagig) (KLH® - CLT)	20,00	100	¹ 35	1	1
4 Rigips Feuerschutzplatte (Rigips Feuerschutzplatte)	1,25	50	¹ 2	4	3
5 Rigips Feuerschutzplatte (Rigips Feuerschutzplatte)	1,25	50	¹ 2	4	3
building element	25,00				

annotations: Importiert am 06. 03. 2022: Bauteil "AW15b_" aus Gebäude ""

¹ layer is OI-relevant from BG2

16. 05. 2022, Qiming SUN (Tianjin University)

List of materials

material	mass kg	mass- percentage	cumulated percentage	Building material ID	Density kg/m³	λ- Value W/m²K	PENRT MJ/FU (functional unit)	GWP-total kg CO₂ equ./FU (functional unit)	AP kg SO₂ equ./FU (functional unit)	FU (functional unit)
KLH® - CLT	565.731	67,6%	67,6%	2142715713	475	0,120	7,46	-1,10	0,00226	kg
Rigips Feuerschutzplatte	152.037	18,2%	85,8%	2142711094	810	0,250	3,09	0,157	0,000399	kg
Mineral thermal insulating panel (93 kg/m³)	49.998	6,0%	91,7%	2142715044	93	0,041	12,3	1,01	0,00214	kg
Timber (525 kg/m³ - e.g. larch) - rough, technically dried	32.311	3,9%	95,6%	2142715293	525	0,130	2,77	-1,65	0,00104	kg
MDF panels semi-dense fibreboard (400 kg/m³)	25.569	3,1%	98,6%	2142715125	400	0,100	11,1	-1,04	0,00413	kg
Timber (475 kg/m³ - e.g. spruce/fir) - rough, technically dried	7.369	0,9%	99,5%	2142715290	475	0,120	2,52	-1,50	0,000944	kg
Sheep's wool - insulation felt (18 kg/m³)	2.380	0,3%	99,8%	2142715068	18		19,7	0,537	0,00412	kg
Polyethylene (PE) sealing sheeting	916	0,1%	99,9%	2142712507	980	0,500	69,8	2,10	0,00792	kg
Bauder TEC KSD, Bauder TEC KSD DUO	514	0,1%	100,0%	2142732461	1.150	0,170	41,6	0,819	0,00556	kg
Sisalex™ 30	152	0,0%	100,0%	2142684992	800	0,180	14,2	-0,953	0,00589	kg
Vertical air layer, heat flow down 26 < d ≤ 30 mm	48	0,0%	100,0%	2142684539	1	0,146	0,00	0,00	0,00	kg
Vertical air layer, heat flow down 16 < d ≤ 20 mm	5	0,0%	100,0%	2142684541	1	0,105	0,00	0,00	0,00	kg