

Non-Residential minimal

Bldg Type	Education
rel Anzahl	1.0



Exterior Wall

Type: massive

U [W/m²K]: 0.21

Layer	Material Name	t_i [cm]	ρ_i [kg/m³]	λ_i [W/mK]	c_i [J/kgK]	EPD ₁	EPD ₂
0	interior plaster	1	1400	0,7	850	6	-
1	precast reinforced concrete	32.75	2400	2.04	776	7	12
2	mineral wool	4.13	60	0,04	850	3	-
3	resting air layer	6	1,184	0,0261	1,005	-	-
4	concrete weather shell	12	2400	2.04	776	7	-
5	mineral wool	4.13	60	0,04	850	3	-

Roof

Type: pitched

U [W/m²K]: 0.155

Layer	Material Name	t_i [cm]	ρ_i [kg/m³]	λ_i [W/mK]	c_i [J/kgK]	EPD ₁	EPD ₂
0	interior plaster	1	1400	0,7	850	6	-
1	reinforced concrete	29.0	2400	2.1	776	9	12
2	rafters	8	600	0.13	1500	11	-
3	mineral wool	12.91	60	0,04	850	8	-
4	moving air layer	6	1,184	0,0261	1,005	-	-

Foundation

U [W/m²K]: 0.683

Layer	Material Name	t_i [cm]	ρ_i [kg/m³]	λ_i [W/mK]	c_i [J/kgK]	EPD ₁	EPD ₂
0	floating cement screed	4	1940	1,4	1000	13	-
1	stone wool	10.0	60	0,09	840	1	-
2	reinforced concrete	22.0	2104	1,94	776	7	12



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Floor

U [W/m²K]: 0.537

Layer	Material Name	t_i [cm]	ρ_i [kg/m³]	λ_i [W/mK]	c_i [J/kgK]	EPD ₁	EPD ₂
0	floating cement screed	4.5	2200	2	1000	13	-
1	EPS_040_15	6	15	0,04	1500	2	-
2	reinforced concrete	24.875	2104	1,94	776	7	12

Window System

Percentage of walls	Glazing	EPD _{Gl}	Frame type	EPD _{Fr}	Shading type	EPD _{Sh}
0.41	2	10	pvc	4	...	-

Heating System

Unit type	Generator	EPD _{HEG}	Transfer type	Heating energy carrier	EPD _{HEC}
per_bldg	boiler	14	radiative_single	gas	5

HVAC System

mechanical ventilation	Ventilation volume [m³/m²h]	EPD _{MV}	Ventilation heating	EPD _{VH}	Ventilation cooling	EPD _{VH}	Cooling energy carrier	EPD _{CEC}
only_window	65380.20	-	no	-	no	-	-	-



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NLA [m²]	2179.3
Height [m]	7.98
Stories a.g.	1.84
Stories b.g.	-



Façade length [m]			
N	S	E	W
41.22	40.96	41.37	40.6

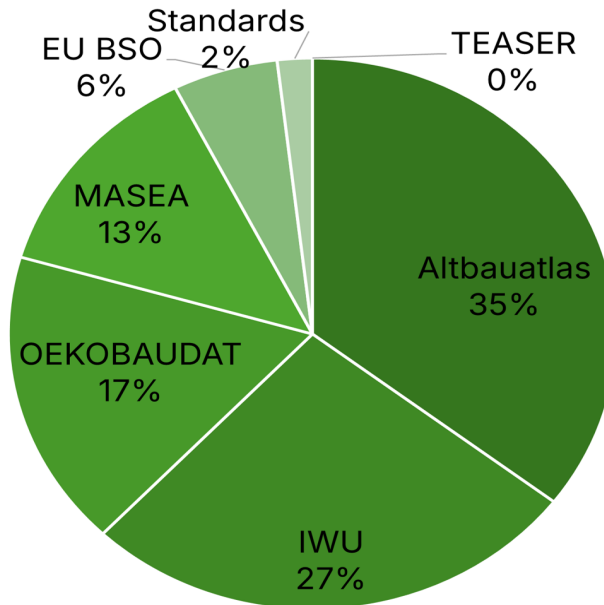
Façade area [m²]			
N	S	E	W
357.76	354.39	354.28	348.34

EPD Summary Table

EPD No.	Full UUID	Material Title	Weblink
1	155a3b83-ed73-4462-a4f1-69ce64e24981	Mineralwolle-Dämmstoff im hohen Rohdichtebereich	Link
2	205b761d-e344-49c3-a3a9-bb1bfd59b916	EPS-Hartschaum (Rohdichte 15 kg/m³)	Link
3	50d421e2-3a7b-4659-92a4-f20d6a52fcf0	Mineralwolle (Fassaden-Dämmung)	Link
4	73de9e80-8ed2-47d8-b5b6-854c84166f24	Flügelrahmen PVC-U	Link
5	84aa7483-9824-49a9-a3e3-f9fb092ea7b7	Nutzung - 1 kWh Endenergie aus Gas Brennwert (entspr. GEG)	Link
6	9a670d29-efb9-4fde-95ab-182a0b1e7280	Kalk-Gips-Innenputz	Link
7	b3fb0ba9-2376-49bf-b21a-7f7a5cd97233	Beton der Druckfestigkeitsklasse C30/37	Link
8	d3661bd8-0107-4081-987b-4bdd5cfcb68d	Mineralwolle (Schrägdach-Dämmung)	Link
9	d6f982e3-beda-49f0-a298-694fcfb3ba38	Transportbeton C30/37	Link
10	dcf38066-e336-46a7-b0a8-b2453dd2872d	Fensterglas einfach	Link
11	efa55966-4f29-4f15-bfec-8c08b3945923	Brettschichtholz (Update)	Link
12	f6861618-5a92-4c3a-94ba-9f7329b29662	Bewehrungsstahl	Link
13	fe371be5-c72f-4203-8569-a085ef375ba4	Calciumsulfat-Fließestrich und konventioneller Calciumsulfat-Estrich	Link
14	fe91b985-60da-45dc-b3fd-29b9e632d49f	Gas-Brennwertgerät 120-400 kW (Standgerät)	Link



Data sources for 156 variables



Data source	Link
Altbauatlas	https://www.altbauatlas.de/index.php
OEKOBAUDAT	https://www.oekobaudat.de/en.html
IWU	https://www.iwu.de/1/research/gebaeudebestand/forschungsdatenbank/
MASEA	https://www.masea-ensan.de/
EU BSO	https://building-stock-observatory.energy.ec.europa.eu/database/
Standards	https://www.din.de/de/mitwirken/normenausschuesse/nabau/veroeffentlichungen/wdc-beuth:din21:293576742 https://www.din.de/de/mitwirken/normenausschuesse/nabau/veroeffentlichungen/wdc-beuth:din21:134234392