

Non-Residential Nuanced

Region	north
Bldg Type	Office_flat
rel Anzahl	0.005
Age Class	1984-1994



Exterior Wall

Type: massive

U [W/m²K]: 0.376

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	8	-
1	aerated concrete blocks	29.2	1600	0.87	1050	5	16
2	mineral wool	4.24	60	0,04	850	4	-
3	exterior plaster	1,5	1800	0.87	850	1	-
4	mineral wool	4.24	60	0,04	850	4	-

Roof

Type: -

U [W/m²K]: 0.175

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	8	-
1	reinforced concrete	27.6	2400	2.1	776	13	16
2	rafters	8	600	0.13	1500	15	-
3	mineral wool	10	60	0,04	850	12	-
4	moving air layer	6	1,184	0,0261	1,005	-	-

Foundation

U [W/m²K]: 0.312

Layer	Material Name	t_i [cm]	ρ_i [kg/m³]	λ_i [W/mK]	c_i [J/kgK]	EPD ₁	EPD ₂
0	cement screed	4	2000	1,4	1000	7	-
1	polystyrene	10	40	0,035	1380	3	-
2	reinforced concrete	22.8	2400	2.04	776	13	16



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Floor

U [W/m²K]: 0.75

Layer	Material Name	t_i [cm]	ρ_i [kg/m³]	λ_i [W/mK]	c_i [J/kgK]	EPD ₁	EPD ₂
0	reinforced concrete	26	2400	2,1	778	10	16
1	mineral wool	4	60	0,04	850	9	-

Window System

U [W/m²K]	Percentage of walls	Glazing	EPD _{Gl}	Frame type	EPD _{Fr}	Shading type	EPD _{Sh}
	0.25	2	14	aluminium	11	exterior_variable	2

Heating System

Unit type	Generator	EPD _{HEG}	Transfer type	Heating energy carrier	EPD _{HEC}
per_bldg	boiler	17	radiative_single	gas	6

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	5737.44	-	no	-	no	-	-	-



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NLA [m²]	1434.4
Height [m]	8.99
Stories a.g.	2.25
Stories b.g.	-



Façade length [m]			
N	S	E	W
27.82	28.53	25.06	23.69

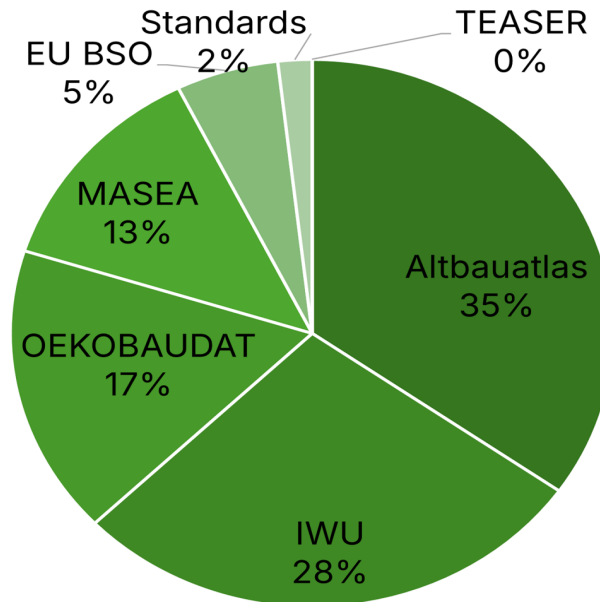
Façade area [m²]			
N	S	E	W
273.39	283.9	236.32	222.16

EPD Summary Table

EPD No.	Full UUID	Material Title	Weblink
1	004f3f4e-5bb8-4d9e-a104-6999a9e8ad5b	Gips Kalk Putz	Link
3	4e83c488-bb36-40b0-bfd4-b2aa7f1c0f04	EPS-Hartschaum (Rohdichte 30 kg/m³)	Link
4	50d421e2-3a7b-4659-92a4-f20d6a52fcf0	Mineralwolle (Fassaden-Dämmung)	Link
5	80b2a264-25e6-4202-bfd0-553998815eb4	Hebel Porenbeton, bewehrt	Link
6	84aa7483-9824-49a9-a3e3-f9fb092ea7b7	Nutzung - 1 kWh Endenergie aus Gas Brennwert (entspr. GEG)	Link
7	86d919ee-8f30-4ca4-9b7e-717aecba6ac0	Zementestrich	Link
8	9a670d29-efb9-4fde-95ab-182a0b1e7280	Kalk-Gips-Innenputz	Link
9	ac779922-219f-4730-9aef-a7da84d334c1	Mineralwolle (Boden-Dämmung)	Link
10	b3fb0ba9-2376-49bf-b21a-7f7a5cd97233	Beton der Druckfestigkeitsklasse C30/37	Link
11	d0e0f205-2f4d-4c7f-b63a-23a9abd6e60a	Aluminium-Rahmenprofil, pulverbeschichtet	Link
12	d3661bd8-0107-4081-987b-4bdd5cfc6b8d	Mineralwolle (Schrägdach-Dämmung)	Link
13	d6f982e3-beda-49f0-a298-694fcfb3ba38	Transportbeton C30/37	Link
14	dcf38066-e336-46a7-b0a8-b2453dd2872d	Fensterglas einfach	Link
15	efa55966-4f29-4f15-bfec-8c08b3945923	Brettschichtholz (Update)	Link
16	f6861618-5a92-4c3a-94ba-9f7329b29662	Bewehrungsstahl	Link
17	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