



HOSPITALITY



Region	south
Bldg Type	Non-residential
Variant	Nuanced
Age Class	-1918
Rel Anzahl	0.91
NLA [m²]	1013.16
Height [m]	8.15
storeys a.g.	2.78
storeys b.g.	1.23



Exterior Wall

Type: massive

U [W/m²K]: 0.54

Layer	Material Name	t_i [cm]	ρ_i [kg/m³]	λ_i [W/mK]	c_i [J/kgK]	EPD ₁	EPD ₂
0	gypsum	1.5	850	0.3	1000	9	-
1	reinforced concrete	15	2400	2.1	776	4	-
2	mineral wool	6.2	60	0.04	850	2	-
3	exterior plaster	1.5	1600	0.87	850	1	-

Interior Wall

U [W/m²K]: 4.04

Layer	Material Name	t_i [cm]	ρ_i [kg/m³]	λ_i [W/mK]	c_i [J/kgK]	EPD ₁	EPD ₂
0	gypsum	1.5	850	0.3	1000	9	-
1	reinforced concrete	15	2400	2.1	776	4	-
2	mineral wool	6.2	60	0.04	850	2	-
3	exterior plaster	1.5	1600	0.87	850	1	-

Roof

U [W/m²K]: 0.34

Layer	Material Name	t_i [cm]	ρ_i [kg/m³]	λ_i [W/mK]	c_i [J/kgK]	EPD ₁	EPD ₂
0	hardwood	3	600	0.14	1500	8	-
1	concrete_wz05	15	2400	2.1	776	4	-
2	mineral wool	10	60	0.04	850	2	-



HOSPITALITY



Region	south
Bldg Type	Non-residential
Variant	Nuanced
Age Class	-1918
Rel Anzahl	0.91
NLA [m²]	1013.16
Height [m]	8.15
storeys a.g.	2.78
storeys b.g.	1.23



Foundation

U [W/m²K]: 0.31

Layer	Material Name	t_i [cm]	ρ_i [kg/m³]	λ_i [W/mK]	c_i [J/kgK]	EPD ₁	EPD ₂
0	hardwood	5	650	0.13	1500	8	-
1	mineral wool	10	60	0.04	850	2	-
2	reinforced concrete	18	2400	2.04	776	5	-

Floor

U [W/m²K]: 4.04

Layer	Material Name	t_i [cm]	ρ_i [kg/m³]	λ_i [W/mK]	c_i [J/kgK]	EPD ₁	EPD ₂
0	hardwood	5	650	0.13	1500	8	-
1	reinforced concrete	18	2104	1.94	776	4	-

Window System

Percentage of walls	Glazing	EPD _{Gl}	Frame type	EPD _{Fr}	Shading type	EPD _{Sh}
...	2	7	wood	6	-	-

Heating System

Unit type	Generator	EPD _{HEG}	Heating energy carrier	EPD _{HEC}
per_bldg	boiler_gas_large_condensing	10	gas	3



HOSPITALITY



Region	south
Bldg Type	Non-residential
Variant	Nuanced
Age Class	-1918
Rel Anzahl	0.91
NLA [m²]	1013.16
Height [m]	8.15
storeys a.g.	2.78
storeys b.g.	1.23

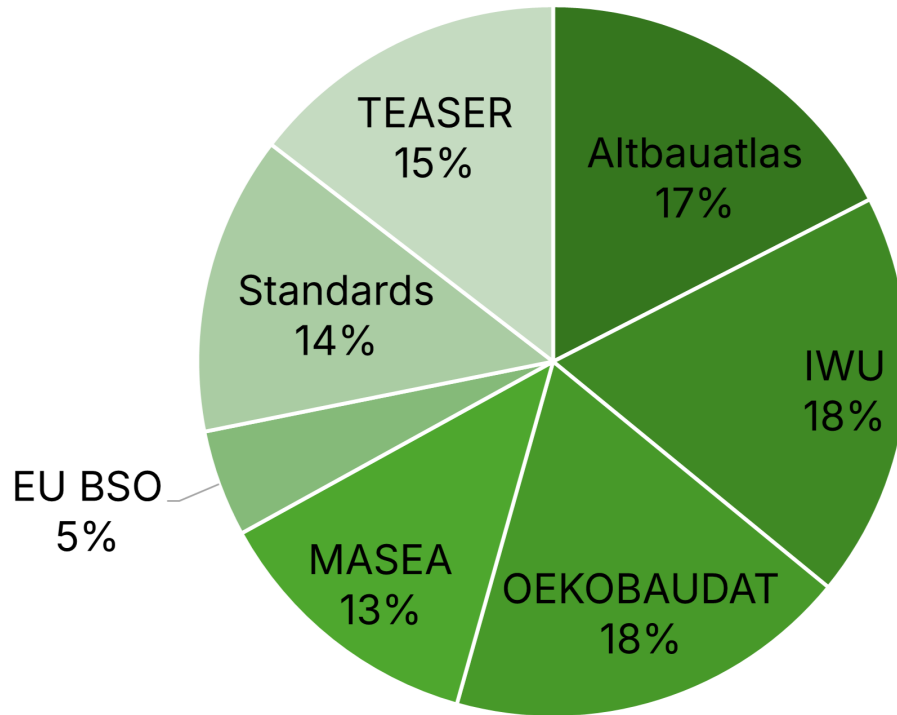


Façade length [m]							
N		S		E		W	
Mean	SE	Mean	SE	Mean	SE	Mean	SE
18.44	3.49	16.92	4.93	19.27	5.54	21.26	4.64

Façade area [m²]							
N		S		E		W	
Mean	SE	Mean	SE	Mean	SE	Mean	SE
171.97	42.76	165.63	49.91	172.56	56.55	182.21	51.53

EPD Summary Table

Serial No.	Full UUID	Material Name
1	004f3f4e-5bb8-4d9e-a104-6999a9e8ad5b	Gypsum lime plaster
2	50d421e2-3a7b-4659-92a4-f20d6a52fcf0	Mineral wool (facade insulation)
3	84aa7483-9824-49a9-a3e3-f9fb092ea7b7	Use - 1 kWh of final energy from gas calorific value (according to GEG)
4	Synthetic_2	Concrete C30/37 with reinforcement steel
5	Synthetic_7	Ready-mix concrete C30/37 with reinforcement steel
6	b0c75d7b-4cce-41cf-b785-1db434ee9c3f	Window sash (spruce)
7	dcf38066-e336-46a7-b0a8-b2453dd2872d	Window glass, single
8	e131431f-4d99-4d7a-ae0a-744a06de3524	Hardwood lumber - kiln dried (German average)
9	e6c2de31-b1a6-4c5d-ba5e-df252391321b	Gypsum (CaSO4 alpha semihydrate)
10	fe91b985-60da-45dc-b3fd-29b9e632d49f	Gas condensing boiler120-400 kW (upright unit)



Data source	Link
Altbauatlas	https://www.altbauatlas.de/index.php
OEKOBAUDAT	https://www.oekobaudat.de/en.html
IWU	https://datenbasis.iwu.de/ https://wohngebaeuedaten2016.iwu.de/
MASEA	https://www.masea-ensan.de/
TEASER	https://ebc-tools.eonerc.rwth-aachen.de/en/teaser
EU BSO	https://building-stock-observatory.energy.ec.europa.eu/database/

* Building images are generated by AI