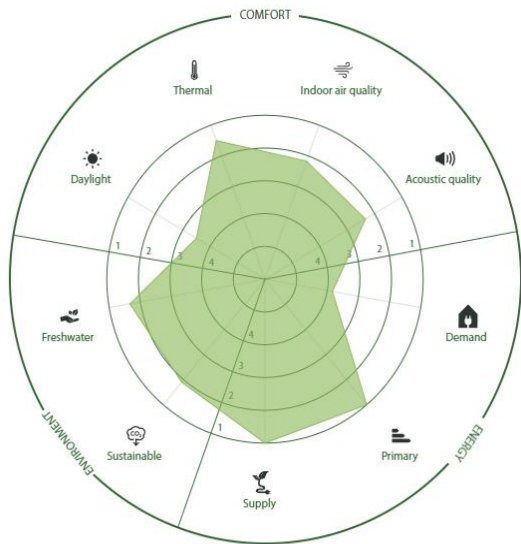
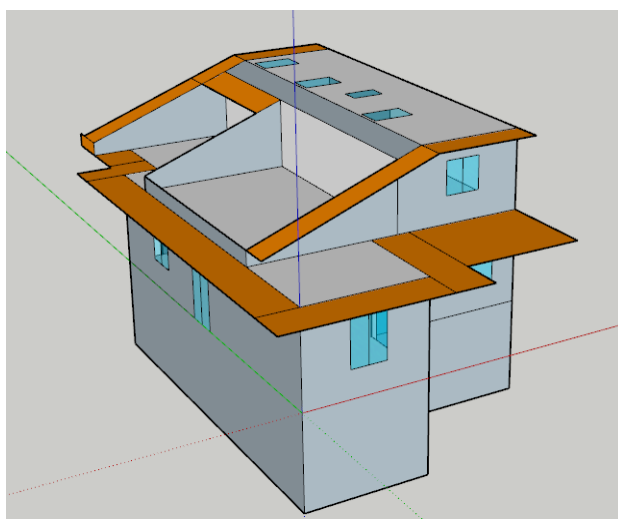


General informations

Object name	AH Berizzi
Object adress	Via don Gotti 11, Brembate di Sopra (BG)
Location	45,716 N, 9,58 E
Name advisor	Mirco Berizzi
Name certifier	Guenther Gantioler
Date	27.03.2023



Mean active score	2.1
Daylight score	3.5
Thermal environment score	1.5
Indoor air quality score	2.2
Acoustic quality score	2.3
Energy demand score	3.8
Primary energy score	1
Energy supply score	1
Sustainable construction score	1.9
Freshwater score	1.7



1. Daylight

Object AH Bertzi

1.1 daylight factor

The amount of daylight in a room is evaluated through the fraction of the room, Fplane,%, that have a daylight factor higher than the target daylight factor (DT).

1.2 daylight autonomy

The amount of daylight in a room is evaluated through daylight levels with a target illuminance of 300 lux in dwellings or 500 lx in office or other public buildings.

SCORE	4 points	3 points	2 points	1 point
Daylight factor	Fp% > 40%	Fp% > 50%	Fp% > 60%	Fp% > 70%
Daylight autonomy	DA > 40%	DA > 50%	DA > 60%	DA > 70%

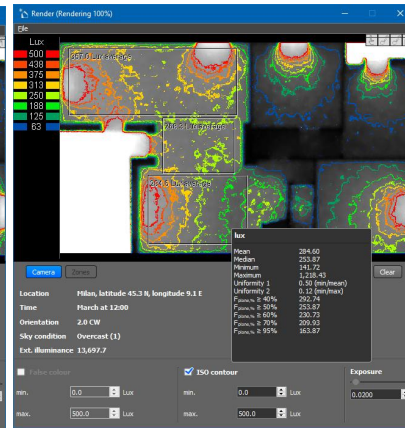
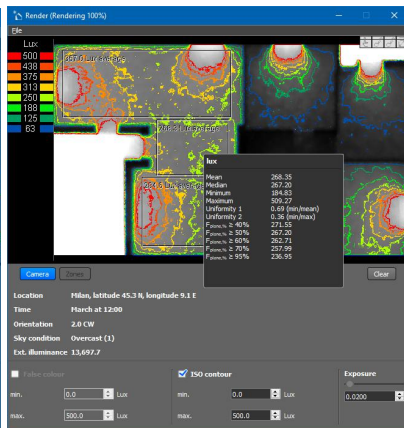
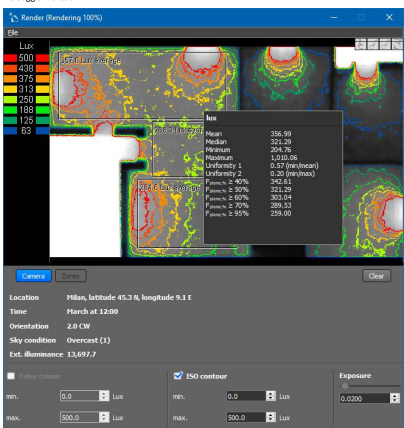
Room	DF/DA score	Daylight hours	No. of people	Weighted score
Piano 0, soggiorno-cucina	4	3,0	5	60,0
Piano 1, letto 4	1	3,0	1	3,0
Subtotal		1,8		63
		Total Average Score		3,5

Object-values

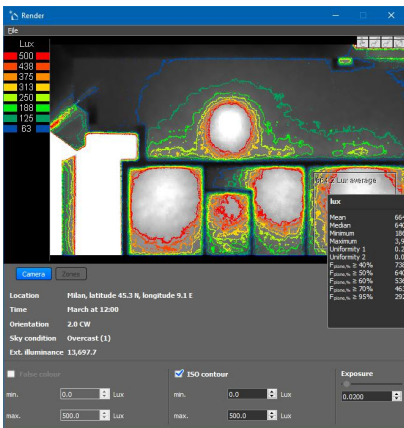
SCORE	4 points	3 points	2 points	1 point
Daylight factor	Fp% > 40%	Fp% > 50%	Fp% > 60%	Fp% > 70%
Piano 0, soggiorno-cucina	302	281	265	252
Piano 1, letto 4	738	641	536	464

>= 40% 738,93
 >= 50% 640,97
 >= 60% 536,46
 >= 70% 463,77

P0 soggiorno-Cucina



p1 camera letto 4



>= 40% 738,93
 >= 50% 640,97
 >= 60% 536,46
 >= 70% 463,77

2. Thermal EnvironmentObject

AH Berizzi

2.1 summer comfort

Days with more than T_{rm} 12°C. Operative hourly temperatures should not exceed the following values for fixed temperatures with HVAC) or adaptive temperatures (without HVAC):

2.2 winter comfort

Days with T_{rm} 12°C or less. Operative hourly temperatures should not be less than the following fixed values:

SCORE	4 points	3 points	2 points	1 point
Summer comfort with HVAC	$T_{i,o} < 28^{\circ}\text{C}$	$T_{i,o} < 27^{\circ}\text{C}$	$T_{i,o} < 26^{\circ}\text{C}$	$T_{i,o} < 25.5^{\circ}\text{C}$
Summer comfort without HVAC	$T_{i,o} < 0.33 \times T_{rm} + 23.8^{\circ}\text{C}$	$T_{i,o} < 0.33 \times T_{rm} + 22.8^{\circ}\text{C}$	$T_{i,o} < 0.33 \times T_{rm} + 21.8^{\circ}\text{C}$	$T_{i,o} < 0.33 \times T_{rm} + 20.8^{\circ}\text{C}$
Winter comfort	$T_{i,o} > 18^{\circ}\text{C}$	$T_{i,o} > 19^{\circ}\text{C}$	$T_{i,o} > 20^{\circ}\text{C}$	$T_{i,o} > 21^{\circ}\text{C}$

Room	Average s/w score	Hours	No. of people	Weighted score
Piano 0, soggiorno-cucina	1,5	5,0	5	37,5
Piano 1, letto 4	1,5	5,0	1	7,5
Subtotal		30		45
Total Average Score				1,5

3. Indoor air qualityObject

AH Berizzi

The fresh air supply shall be established according to the below limit values for indoor CO2 concentration.

SCORE	4 points	3 points	2 points	1 point
CO2-concentration	CO2 < 1.500 ppm	CO2 < 1.200 ppm	CO2 < 950 ppm	CO2 < 800 ppm

Room	DF/DA score	Hours	No. of people	Weighted score
Piano 0, soggiorno-cucina	2	5,0	5	50,0
Piano 1, letto 4	3	5,0	1	15,0
	Subtotal	30		65
		Total Average Score		2,2

Month	Day	Hour	External temperature [°C]	Operative room temperature [°C]	CO2 concentration in room [ppm]	Operative room temperature [°C]	CO2 concentration in room [ppm]	
1	1	1	1,6000002384186	20,8523483276367	495,304534912109	20,8719787597656	764,8017578125	
1	1	2	5,40000009536743	20,8599891662598	430,530731201172	20,8871173858643	876,653625488281	
1	1	3		5	20,8558502197266	394,573852539063	20,8887920379639	932,601196289063
1	1	4		4,5	20,8535118103027	374,603729248047	20,8908958435059	960,572387695313
1	1	5	4,30000019073486	20,8507671356201	363,494079589844	20,8906669616699	974,534423828125	
1	1	6		4	20,8493938446045	357,317230224609	20,8896255493164	981,507385253906
1	1	7	3,79999995231628	20,8465023040772	371,998992919922	20,8791522979736	825,191284179688	
1	1	8	3,59999990463257	20,8501205444336	418,651763916016	20,8613510131836	587,254638671875	
1	1	9	3,40000009536743	20,8633670806885	926,887451171875	20,8536491394043	468,288940429688	
1	1	10	3,79999995231628	20,8521099090576	670,29736328125	20,8529052734375	408,80081767578	
1	1	11	5,40000009536743	20,9037055969238	527,756591796875	20,8726921081543	379,069793701172	
1	1	12	7,30000019073486	20,9717102050781	448,572082519531	20,9051723480225	364,212310791016	
1	1	13	9,10000038146973	21,1162452697754	404,664794921875	20,936767578125	356,770721435547	
1	1	14	10,3999996185303	21,2274017333984	380,266021728516	20,9601173400879	353,05859375	
1	1	15	10,3999996185303	21,0899562835693	443,534576416016	20,9484901428223	351,213836669922	
1	1	16	10,3000001907349	21,2738265991211	653,590454101563	20,943754196167	350,292755126953	
1	1	17	9,39999961853027	21,0909633636475	595,205139160156	20,9224586486816	349,840759277344	
1	1	18	8,19999980926514	20,9840869903564	562,969665527344	20,8985176086426	349,641021728516	
1	1	19	7,80000019073486	20,9611854553223	626,680114746094	20,8873081207275	349,552856445313	
1	1	20		7,5	20,9521179199219	770,76708984375	20,8810234069824	349,511627197266
1	1	21	7,09999990463257	20,9519443511963	896,087646484375	20,8898868560791	349,482299804688	
1	1	22	6,80000019073486	20,9416255950928	811,734497070313	20,8919658660889	349,476684570313	
1	1	23	6,40000009536743	20,9328308105469	683,348937988281	20,892635345459	349,471801757813	
1	1	24		6	20,9256076812744	612,009826660156	20,8957080841064	541,211120605469
1	2	1	5,69999980926514	20,9046421051025	495,362091064453	20,9009227752686	764,868530273438	
1	2	2	5,40000009536743	20,8964538574219	430,575256347656	20,9045238494873	876,703796386719	
1	2	3	5,09999990463257	20,8888282775879	394,585510253906	20,9063129425049	932,611511230469	
1	2	4	4,80000019073486	20,8823585510254	374,583435058594	20,9050445556641	960,548828125	
1	2	5	4,69999980926514	20,88010597229	363,479797363281	20,9061794281006	974,521850585938	
1	2	6		4,5	20,8777713775635	357,313842773438	20,9071273803711	981,506225585938
1	2	7	4,30000019073486	20,8751773834229	372,016754150391	20,8950080871582	825,218017578125	
1	2	8	4,19999980926514	20,8764801025391	418,6787109375	20,8789749145508	587,287231445313	
1	2	9	4,09999990463257	20,8891773223877	926,926696777344	20,8728637695313	468,329864501953	
1	2	10	4,69999980926514	20,8808193206787	670,340698242188	20,8725738525391	408,848083496094	
1	2	11	7,30000019073486	20,9878540039063	527,782287597656	20,8978652954102	379,100555419922	
1	2	12	9,39999961853027	21,1515502929688	448,763946533203	20,929895401001	364,257904052734	
1	2	13	11,3999996185303	21,3079223632813	404,843322753906	20,9599761962891	356,844390869141	
1	2	14	12,6999998092651	21,3917026519775	380,386688232422	20,9789123535156	353,161651611328	
1	2	15	13,3999996185303	21,5497722625732	444,014190673828	20,9876384735107	351,317901611328	
1	2	16		13	21,5494384765625	653,925415039063	20,9723129272461	350,398834728126
1	2	17	11,8000001907349	21,3808135986328	595,583129882813	20,9499588012695	349,968231201172	
1	2	18	10,1999998092651	21,1737594604492	563,08154296875	20,9217910766602	349,756896972656	
1	2	19	9,69999980926514	21,1712493896484	626,915771484375	20,9110012054443	349,652160644531	
1	2	20	9,19999980926514	21,1601085662842	771,121704101563	20,9044609069824	349,623321533203	
1	2	21	8,80000019073486	21,2092018127441	896,708984375	20,9112663269043	349,571258544922	
1	2	22	8,30000019073486	21,1251125335693	811,986328125	20,9140338897705	349,553161621094	
1	2	23	7,90000009536743	21,0614395141602	683,442077636719	20,9143085479736	349,580047607422	
1	2	24		7,5	21,0512599945068	612,169860839844	20,9200325012207	541,377624511719
1	3	1		7	20,9742069244385	495,459777832031	20,9270458221436	765,073669433594
1	3	2	6,69999980926514	20,9591407775879	430,725708007813	20,9312000274658	876,924926757813	
1	3	3	6,30000019073486	20,9483013153076	394,776184082031	20,9332656860352	932,855651855469	
1	3	4		6	20,9400272369385	374,802368164063	20,9340972900391	960,810974121094
1	3	5	5,80000019073486	20,933479309082	363,678924560547	20,9330863952637	974,754516601563	
1	3	6	5,59999990463257	20,9279365539551	357,503967285156	20,9331874847412	981,726318359375	
1	3	7		5,5	20,9230346679688	372,190551757813	20,9214820861816	825,417785644531
1	3	8	5,40000009536743	20,9221515655518	418,840148925781	20,9048347473145	587,47314453125	
1	3	9	5,30000019073486	20,9357433319092	927,108642578125	20,8996505737305	468,542297363281	
1	3	10	5,80000019073486	20,9255466461182	670,538024902344	20,8990917205811	409,078277587891	
1	3	11		7	20,9553928375244	527,997253417969	20,9161720275879	379,34716796875
1	3	12	8,10000038146973	20,9768905639648	448,806091308594	20,9355545043945	364,482177734375	
1	3	13	9,69999980926514	21,0877552032471	404,844024658203	20,9674644470215	357,015411376953	
1	3	14	10,3000001907349	21,025318145752	380,301879882813	20,9731407165527	353,284393310547	
1	3	15		9,5	20,9855136871338	443,722930908203	20,9468822479248	351,428588867188
1	3	16	9,19999980926514	20,9868183135986	653,332214355469	20,9454307556152	350,521392822266	
1	3	17	8,80000019073486	20,981071472168	595,403442382813	20,9372119903564	350,048980712891	
1	3	18	8,10000038146973	20,9581737518311	563,194702148438	20,917121887207	349,788665771484	
1	3	19	7,80000019073486	20,9506187438965	626,825378417969	20,9073543548584	349,659942626953	
1	3	20		7,5	20,9518909454346	770,875610351563	20,901008605957	349,609588623047
1	3	21	7,19999980926514	21,0117301940918	896,393249511719	20,9125499725342	349,599487304688	
1	3	22		7	20,9568576812744	811,799682617188	20,9136276245117	349,579528808594

7. Freshwater

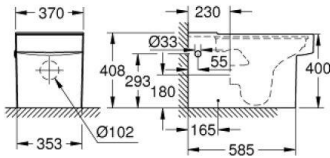
Object AH Berizzi

How many water saving features are included in the building? To determine the fresh water score, determine the water usage of toilets, shower and taps.

SCORE	4 points	3 points	2 points	1 point
Toilet water use	< 12 liter/flush	< 9 liter/flush	< 6 liter/flush	< 4 liter/flush
Shower water use	< 12 liter/min	< 10 liter/min	< 8 liter/min	< 6 liter/min
Tap water use	< 9 liter/min	< 7 liter/min	< 5 liter/min	< 3 liter/min

Room	Score		
Toilet water use	1	3,8 liter/flush	Valore medio
Shower water use	2	6,3 liter/min	a 2 bar
Tap water use	2	5,0 liter/min	a 2 bar
Average	1,7		

39 484 00H CUBE CERAMIC VASO A PAVIMENTO PER CASSETTA DI SCIACQUO ESTERNA



DESCRIZIONE PRODOTTO

- Colore: bianco
- monoblocco
- scarico multi (orizzontale e verticale)
- rimless - senza brida
- volume di sciacquo 3/4,5 l.
- con set di fissaggio
- cassetta di sciacquo da ordinare separatamente
- ceramica sanitaria
- fissaggio invisibile
- GROHE PureGuard rivestimento antiaderente e antibatterico
- compatibile con sedile 39 488 000 (a chiusura rallentata)

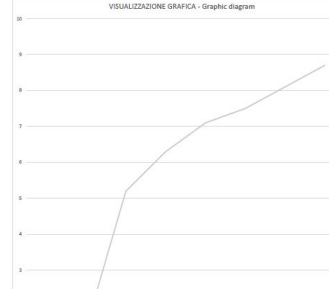
A 2 bar 6,3 L/min



Soffione
90926B Soffione fondo 30 cm - Round shower head 30 cm
VISUALIZZAZIONE GRAFICA - Graphic diagram

Prove di portata - Flow rate (L/min)

Pressione Pressure P (bar)	Valori Results Acqua miscelata Mixed Water
0,5	1
1	1,4
<u>1,5</u>	<u>5,2</u>
<u>2</u>	<u>6,3</u>
2,5	7,1
3	7,5
4	8,1



A 2 bar 5,0 L/min



VitaDue
35065 Monocomando lavabo alto
VISUALIZZAZIONE GRAFICA - Graphic diagram

Prove di portata - Flow rate (L/min)

Pressione Pressure P (bar)	Valori Results Acqua miscelata
1	5,0
2	5,0
3	5,0
4	5,0

