Voxel Size

	Kleinere voxels:	25/20	4 treden	h (meters)	l (m)	b (m)				h	l	b
Stairs 1 floor 2 pers lxbxh	5x2x4											
Stairs 1 floor 3 pers lxbxh	5x3x4						19x16 of 19x15	304 of 285 cm		304	400	400
Hallway 2 pers lxbxh	?x2x4						25x16 of 25x15	400 of 375		285	375	375
Hallway 1 stretcher lxbxh	?x3x4											
Hallway 2 stretchers lxbxh	?x4x4											

	1	2	3	4	5	6	7	8				
voxels	1	2	3	4	5	6	7	8	17x18 of 17x17	306 of 289	306	522	522
hoogtes m	0,8	1,6	2,4	3,2	4	4,8	5,6	6,4	29x18 of 29x17	522 of 493	289	493	493
breedtes m	0,6	1,2	1,8	2,4	3	3,6	4,2	4,8					
lengtes m	1	2	3	4	5	6	7	8					

Project Area defined

										gebied opp	program opp	voxel opp	
Project Area defined										9250	22085	16	14,0625	27,2484	24,3049

	short description	m2			Housing PVE	residents target	total square meters
compulsory area		9250				studenten	1200
optional area	old railway	3375				starters	4200
	football square	2000				assisted elderly li	1600
	communual garden	2200					7000
	rest area	2000					
	tot	18825	sum				
			% groen van plot				
			33,33333333				

Right-side calculations:
- benodigd # vox: 1380,3125 | 1570,488889 | 810,506305 | 908,664508
- voxels op grond: 578,125 | 657,7777778 | 339,4694734 | 380,5816934
- lagen: 2,387567568

Communal PVE — Per Function

Communal PVE	Per Function	short description	d	b	h	m2	quantity		total square mete	location (NWZO)
	Housing					-	120		7000	
	Housing bvo									
	Parking	(minimum 0.5 parking lots per apartment= 60) + 40 visitors, 2:	3.5		22.5	100		2250	ZO
	communual garden		40	50	-			2200	NO
	Vegetation	25% of the plot	-	-	-			2310	
	Workshops		10	5	3	50	2	100	
	Fablabs		5	5	3	25	2	50	
	start up offices		5	10	3	50	6	300	
	Co-work	Artistic ambiance	50	50	6	2500	1	2500	
	Library		20	10	3	200	1	200	
	Cinema		25	17	9	425	1	425	
	Pub		10	10	3	100	1	100	
	Arcade		10	5	3	50	1	50	
	Co-Cook		10	10	6	100	1	100	
	Restaurant		30	20	6	600	6	3600	
	Community hub		20	20	3	400	1	400	
	Shop		10	20	3	200	2	400	
	Gym		20	20	6	400	1	400	
	tot							22385	

VOXELTYPES

VOXELTYPES	Voxel 1	Voxel 2	Voxel 3	Voxel 4	SmallVoxel			m2				
Height	3,04	2,85	3,06	2,89	0,8							
Length	4	3,75	5,22	4,93	1			totaal	courtyard	total-courtyard		50%
Width	4	3,75	5,22	4,93	1			11250	2000	9250	4625
Area	16	14,0625	27,2484	24,3049	1		750000					

VOXELS

Communal PvE	FUNCTIONS	Area	Voxel 1	Voxel 2	Voxel 3	Voxel 4	Small Voxel	r	Area size	Length	Width	Height	Volume
Student	Student housing	1200	75	86	45	50	4800	90,39462227	Meters	150	75	100	1125000 m3
Student Free Time	Arcade	50	4	4	2	3	200	10,86430043	Voxel1	38	19	33	23826 voxels
	Pub	100	7	8	4	5	400	17,24600193	Voxel2	40	20	36	28800 voxels
cluster total(voxel totals are sums not from total Opp)		150	86	98	51	58	600	22,59865557	Voxel3	29	15	33	14355 voxels
Work	Offices	300	19	22	12	13	1200	35,87312962	Voxel4	31	16	35	17360 voxels
	Co-Work	2500	157	178	92	103	12500	147,4512424	SmallVoxel	150	75	125	1406250 voxels
	Fablab	50	4	4	2	3	200	10,86430043					
	Workshop	100	7	8	4	5	400	17,24600193					
cluster total(voxel totals are sums not from total Opp)		2950	187	212	110	124	14300	164,6530479	Smallvoxels				
Evening	Restaurant	600	38	43	23	25	2400	56,9450437			45		55	
	Co-Cook	100	7	8	4	5	400	17,24600193		67 -------->		<---- 67	
	Cinema	425	27	31	16	18	1700	45,24956241	125			50	<-- 125
cluster total(voxel totals are sums not from total Opp)		1125	72	82	43	48	4500	86,5878146					
Day-to-Day	Shop	400	25	29	15	17	1600	43,45720171				150	
	Gym	400	25	29	15	17	1600	43,45720171					
cluster total(voxel totals are sums not from total Opp)		800	50	58	30	34	3200	68,98400771					
Elderly	Assisted Living	1600	100	114	59	66	6400	109,5052864		Factors			
	Community Centre	400	25	29	15	17	1600	43,45720171		Social	1		
cluster total(voxel totals are sums not from total Opp)		2000	125	143	74	83	8000	127,0696286		Environmental	0,9		
Starters		3600	225	256	133	149	14400	188,0283915		Building	0,5		
Library		200	13	15	8	9	1000	27,3763216					
Parking		2250	141	160	83	93	9000	137,449588					
Vegetation		2310											
TOTAL		14275	974	1110	577	648	59800						
To Place		12025	833	950	494	555	50800						
Minus Evening		10900	761	868	451	507	46300						

Right-hand summary (smallvoxels)

		smallvoxels	smallvoxels * 4
Student	Student housing	8000	125
Student Free Time	Arcade	336	5,25
	Pub	668	10,4375
cluster total(voxel totals are sums not from tot		1004	15,6875
Work	Offices	2000	31,25
	Co-Work	20835	325,546875
	Fablab	336	5,25
	Workshop	668	10,4375
cluster total(voxel totals are sums not from tot		23839	372,484375
Evening	Restaurant	4000	62,5
	Co-Cook	668	10,4375
	Cinema	4963	77,546875
cluster total(voxel totals are sums not from tot		9631	150,484375
Day-to-Day	Shop	2668	41,6875
	Gym	3335	52,109375
cluster total(voxel totals are sums not from tot		6003	93,796875
Elderly	Assisted Living	10668	166,6875
	Community Cent	3335	52,109375
cluster total(voxel totals are sums not from tot		14003	218,796875
Starters		46668	729,1875
Library		1670	26,09375
Parking		15000	234,375
Vegetation			0
TOTAL		125818	1965,90625
To Place		110818	1731,53125
Minus Evening		101187	1581,046875

	m2	voxels	voxels	voxels	voxels					2000			Attributes	Hoogte
		dont place												

Clusters/Attributen	Student Free Time	Work	Evening	Daytoday	Elderly	Starters	Library	Student Housing					Attributes	Hoogte
Hoogte	GF	0	0	0	1st floor pref	10	GF must, 2	10						
distance to Teilingerstraat	2	-3	0	0	3	3	6	2	Fiets weg	geen zon			Afstand tot Vijverhofstraat	
distance to Vijverhofstraat	6	0	0	0	7	7	7	6	Trein / groenpark	avond zon/schaduw			Afstand tot Schoterhofstraat	
distance to Schoterbosstraat	2	5	10	8	4	5	0	2	Restaurant / hofje	geen zon			Afstand tot Zomerhofstraat	
distance to Zomerhofstraat	-1	0	0	10	-2	0	-4	-1	Auto weg	zon			Afstand tot centraal hofje	
distance to central courtyard	5	10	5	0	5	7	-3	5					Hoeveelheid zon	
Amount of Sunlight	6	-5	8	0	10	10	0	10					afstand tot student	
Amount of Indirect light	7	5	5	0	5	6	5	7						
Amount of Visible Green	6	2	8	0	7	8	4	6						
distance to Student Free Time	10	3	3	0	3	-3	6	6		10			work	
distance to Work	10	10	6	0	-4	7	-4	0					elderly	
distance to Evening	0	0	10	0	6	7	3	3					daytoday	
distance to Daytoday	0	0	0	10	10	7	0	5					evening	
distance to Elderly	0	0	0	0	10	0	6	0					starters	
distance to Starters	0	0	0	0	0	10	4	0					wegingsfactor	
distance to Library	0	0	0	0	0	0	10	5						
distance to Student Housing	0	0	0	0	0	0	4	10						
ClusterFactor	5	6	-	1	3	7	2	4						
Factors to size	0,1247401247	2,453222453	0,9355509356	0,6652806653	1,663201663	2,993762994	0,1663201663	0,9979209979						
Zomerhof / teilingen	3	-3	0	-10	5	3	10	3						
Vijverhof / schoterbos	-4	5	10	8	-3	-2	-7	-4						
on scale weighfactors (0.0 - 2.0)														

pixel location

Hoogte	@P.z*(2.0)
distance to Teilingerstraat	@P.x*(0.2)*150
distance to Vijverhofstraat	@P.y*(1.0)*125
distance to central courtyard	@P.x*[ ] ; @P.y*[ ]
Amount of Sunlight	@P.z*(2.0)*125;@P.x*(0.1)*150;@P.y* (0.1)*125
Amount of Indirect light	-
Amount of Visible Green	-

Parking	@P.y > -3.5 && @P.y <= 0
Library	@P.y > 3 && @P.y <= 6
Elderly	@P.y > 3 && @P.y <= 6
Starters	@P.y > 0 && @P.y <= 100
Student housing	@P.y > 0 && @P.y <= 100
Student freetime	@P.y > 0 && @P.y <= 6
Work	@P.y > 0 && @P.y <= 6
DaytoDay	@P.y > 0 && @P.y <= 6

Area size	Length	Width	Height	Volume
Meters	150	75	100	1125000 m3
SmallVoxel	150	75	125	1406250 voxels

Smallvoxels

schoterbosstraat

45   55

40 ------->   <---- 40   zomerhofstraat

teijlingestraat   75   50   <-- 75

150   y   x   vijverhofstraat   30

WORK

scale -10/10

cluster / attrition	offices	Co-work	Fablab	Workshop
Hoogte	0	0	0	0
offices	-	10	0	-5
Co-work	10	-	10	10
Fablab	0	10	-	
Workshop	-5	10	5	-

VOXELS

Communal PvE		Small Voxel	4xVoxel		50
Student	Student housing	4800	75	Student	225
Student Free Time	Arcade	200	4		12
	Pub	400	7		21
cluster total(voxel totals are sums not from total Opp)		600	11	Student Free Tim	33
Work	Offices	1200	19		57
	Co-Work	12500	196		588
	Fablab	200	4		12
	Workshop	400	7		21
cluster total(voxel totals are sums not from total Opp)		14300	226	Work	678
Evening	Restaurant	2400	38		114
	Co-Cook	400	7		21
	Cinema	1700	27		81
cluster total(voxel totals are sums not from total Opp)		4500	72	Evening	216
Day-to-Day	Shop	1600	25		75
	Gym	1600	25		75
cluster total(voxel totals are sums not from total Opp)		3200	50	Day-to-Day	150
Elderly	Assisted Living	6400	100		300
	Community Centre	1600	25		75
cluster total(voxel totals are sums not from total Opp)		8000	125	Elderly	375
Starters		14400	225	Starters	675
Library		1000	16	Library	48
Parking		9000	141	Parking	423
Vegetation					
TOTAL		73400	1147		3441
To Place		64400	1007		3021
Minus Evening		59900	936		2808

46m hoog

45 9 11 46   100   15 25   75   30   50   40   55   130   70   150   10   80   75   100   70   22 20   18

VOXELS

Communal PvE	FUNCTIONS	Area	in Voxels	4x Voxels
Student	Student housing	1200	4800	75
Student Free Time	Arcade	50	200	4
	Pub	100	400	7
cluster total(voxel totals are sums not from total Area)		150	600	11
Work	Offices	300	1200	19
	Co-Work	2500	10000	157
	Fablab	50	200	4
	Workshop	100	400	7
cluster total(voxel totals are sums not from total Area)		2950	11800	187
Evening	Restaurant	600	2400	38
	Co-Cook	100	400	7
	Cinema	560	2240	35
cluster total(voxel totals are sums not from total Area)		1260	5040	80
Day-to-Day	Shop	400	1600	25
	Gym	400	1600	25
cluster total(voxel totals are sums not from total Area)		800	3200	50
Elderly	Assisted Living	1600	6400	100
	Community Centre	400	1600	25
cluster total(voxel totals are sums not from total Area)		2000	8000	125
Starters		3600	14400	225
Library		200	800	13
Parking		2250	9000	141
Vegetation		2310	9240	145
TOTAL		14410	57640	907
To Place (Minus Parking)		12160	48640	766
Minus Evening		10900	43600	686
		m2	smallvoxels	4xvoxel