

DIAGRID parameter association with zones

Zones	Floor no	Floor parameters	Rotation parameters	Façade design parameters				Glazing types				Complexity												
				North (N)	South (S)	East (E)	West (W)	Glz_N	Glz_S	Glz_E	Glz_W													
Zone1	1 to 6	H1	R1	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12	x13	x14	x15	x16	Glz_N	Glz_S	Glz_E	Glz_W	22 variables
Zone2	7 to 12	H1 H2	R1 R2																					24 variables
Zone3	13 to 18	H1 H2 H3	R1 R2 R3																					26 variables
Zone4	19 to 24	H1 H2 H3 H4	R1 R2 R3 R4																					28 variables
Zone5	25 to 30	H1 H2 H3 H4 H5	R1 R2 R3 R4 R5																					30 variables
Zone6	31 to 36	H1 H2 H3 H4 H5 H6	R1 R2 R3 R4 R5 R6																					32 variables
Zone7	37 to 42	H1 H2 H3 H4 H5 H6 H7	R1 R2 R3 R4 R5 R6 R7																					34 variables
Zone8	43 to 48	H1 H2 H3 H4 H5 H6 H7 H8	R1 R2 R3 R4 R5 R6 R7 R8																					36 variables
Zone9	49 to 54	H1 H2 H3 H4 H5 H6 H7 H8 H9	R1 R2 R3 R4 R5 R6 R7 R8 R9																					38 variables
Zone10	55 to 60	H1 H2 H3 H4 H5 H6 H7 H8 H9 H10	R1 R2 R3 R4 R5 R6 R7 R8 R9 R10																					40 variables

Notations and boundaries of parameters

Notation	Explanation	Boundary	Unit
H1 - H10	Floor to floor height of zones from zone 1 to zone 10	[4.0, 5.0]	Meter
R1 - R10	Rotation of zones from zone 1 to zone 10	[-10, 10]	Degree
x1, x5, x9, x13	Length of shading devices in first diagonal direction for N-S-E-W	[0.0, 1.5]	Meter
x2, x6, x10, x14	Length of shading devices in second diagonal direction for N-S-E-W	[0.0, 1.5]	Meter
x3, x7, x11, x15	Rotation of shading devices in all directions for N-S-E-W	[-60.0, 60.0]	Degree
x4, x8, x12, x16	Amount of shading devices in all directions for N-S-E-W	[0, 5]	-
Glz_N-S-E-W	Glazing types for N-S-E-W orientations	[1, 4]*	-

Radiance parameters used to collect simulation results

-aa	-ab	-ad	-ar	-as
0.15	2	512	256	128

- aa: ambient accuracy
- ab: ambient bounces
- ad: ambient divisions
- ar: ambient resolution
- as: ambient super-samples

Collection of samples from floors

Zone	Sample	Floor
Zone1	ASE_1 & sDA_1	2. floor
	ASE_2 & sDA_2	5. floor
Zone2	ASE_1 & sDA_1	8. floor
	ASE_2 & sDA_2	11. floor
Zone3	ASE_1 & sDA_1	14. floor
	ASE_2 & sDA_2	17. floor
Zone4	ASE_1 & sDA_1	20. floor
	ASE_2 & sDA_2	23. floor
Zone5	ASE_1 & sDA_1	26. floor
	ASE_2 & sDA_2	29. floor
Zone6	ASE_1 & sDA_1	32. floor
	ASE_2 & sDA_2	35. floor
Zone7	ASE_1 & sDA_1	38. floor
	ASE_2 & sDA_2	41. floor
Zone8	ASE_1 & sDA_1	44. floor
	ASE_2 & sDA_2	47. floor
Zone9	ASE_1 & sDA_1	50. floor
	ASE_2 & sDA_2	53. floor
Zone10	ASE_1 & sDA_1	56. floor
	ASE_2 & sDA_2	59. floor

Material	Explanation	Visual Trans.	U Value	G Value
*Glazing 1 (double):	Tinted Float 8mm Blue–12 mm Air–Temperable Low-E 8mm Blue	0.22	1.6	28%
*Glazing 2 (triple):	Temperable Low-E 8mm Neutral–12 mm Air–Clear Float 8 mm–12 mm Air–Temperable Low-E 8 mm Green	0.45	0.9	40%
*Glazing 3 (single):	Tinted Float 8 mm Green	0.68	5.6	51%
*Glazing 4 (double):	Ultra Clear Float 8 mm–12 mm Air–Ultra Clear Float 8 mm	0.82	2.8	81%