

Dedicated Outdoor Air System (DOAS) Sizing Summary for VRF 2P

Project Name: EDUSESC TAGUATINGA
Prepared by: CBR ENGENHARIA SS LTDA

07/26/2023
09:44

Air System Information

Air System Name **VRF 2P**
Equipment Class **TERM**
Air System Type **VRF**

Number of zones **19**
Floor Area **621,5** m²
Location **Brasilia, Brazil**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone L/s Sizing **Sum of space airflow rates**
Space L/s Sizing **Individual peak space loads**

NOTE: No other data is applicable for a Terminal Units air system without a Dedicated Outdoor Air System (DOAS).

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Zone L/s Sizing **Sum of space airflow rates**
Space L/s Sizing **Individual peak space loads**

Terminal Unit Sizing Data - Cooling

Zone Name	Total Coil Load (kW)	Sens Coil Load (kW)	Coil Entering DB / WB (°C)	Coil Leaving DB / WB (°C)	Water Flow @ 5,6 K (L/s)	Time of Peak Coil Load	Zone L/(s·m²)
2P - ENFERMARIA	2,6	1,5	26,9 / 21,1	15,5 / 15,1	-	Jan 1500	10,83
2P - COPA	1,5	1,3	24,7 / 18,1	15,4 / 14,8	-	Jan 1600	33,92
2P - LAB CIÊNCIAS	15,2	7,7	29,2 / 22,9	15,5 / 15,1	-	Feb 1500	13,90
2P - LAB. INFORMÁTICA	14,9	7,7	28,0 / 22,2	15,4 / 14,9	-	Dec 1600	15,02
2P - SALA DE AULA A205	14,6	7,5	28,7 / 22,5	15,3 / 14,9	-	Feb 1500	13,69
2P - SALA DE AULA A206	12,2	5,4	30,4 / 24,6	15,2 / 14,9	-	Dec 1600	8,69
2P - SALA DE AULA A207	12,1	5,4	30,6 / 24,6	15,6 / 15,2	-	Dec 1500	8,94
2P - SALA DE AULA A208	14,8	7,6	28,6 / 22,4	15,1 / 14,7	-	Feb 1500	13,88
2P - SALA DE AULA A209	12,1	5,5	30,7 / 24,5	15,5 / 15,1	-	Feb 1600	8,97
2P - SALA DE AULA A210	12,9	6,1	29,7 / 23,7	15,5 / 15,1	-	Feb 1600	10,42
2P - SALA DE AULA B206	12,2	5,4	30,4 / 24,6	15,2 / 14,9	-	Dec 1600	8,69
2P - SALA DE AULA B207	16,9	9,1	27,3 / 21,6	15,4 / 14,9	-	Dec 1600	12,86
2P - SALA DE AULA 208	15,3	8,1	27,8 / 22,0	15,7 / 15,2	-	Dec 1600	16,56
2P - SALA DE AULA B209	12,1	5,5	30,7 / 24,5	15,5 / 15,1	-	Feb 1600	8,97
2P - SALA DE AULA B210	15,3	8,3	27,9 / 21,9	15,8 / 15,3	-	Jan 1600	16,55
2P - SALA DE AULA B211	12,8	5,9	29,2 / 23,5	15,3 / 15,0	-	Feb 1700	10,40
2P - SALA DE RECURSOS	2,8	1,6	26,2 / 20,6	15,4 / 14,9	-	Jan 1700	11,55
2P - SALA DOS PROFESSORES	10,4	5,5	27,7 / 21,9	15,7 / 15,2	-	Dec 1600	15,78
2P - SOE	2,2	1,3	25,5 / 20,0	15,6 / 15,1	-	Dec 1500	9,50

Terminal Unit Sizing Data - Heating, Fan, Ventilation

Zone Name	Heating Coil Load (kW)	Heating Coil Ent/Lvg DB (°C)	Htg Coil Water Flow @11,1 K (L/s)	Fan Design Airflow (L/s)	Fan Motor (BHP)	Fan Motor (kW)	OA Vent Design Airflow (L/s)
2P - ENFERMARIA	1,0	17,9 / 25,9	-	121	0,000	0,000	30
2P - COPA	0,3	21,1 / 23,5	-	136	0,000	0,000	0
2P - LAB CIÊNCIAS	4,7	15,2 / 23,6	-	528	0,000	0,000	248
2P - LAB. INFORMÁTICA	3,9	16,2 / 22,6	-	572	0,000	0,000	225
2P - SALA DE AULA A205	5,1	15,9 / 24,9	-	527	0,000	0,000	225
2P - SALA DE AULA A206	3,8	12,8 / 23,7	-	331	0,000	0,000	225
2P - SALA DE AULA A207	3,8	12,9 / 23,5	-	341	0,000	0,000	225
2P - SALA DE AULA A208	5,0	15,9 / 24,7	-	529	0,000	0,000	225
2P - SALA DE AULA A209	3,9	13,0 / 23,9	-	340	0,000	0,000	225
2P - SALA DE AULA A210	4,4	14,2 / 24,6	-	401	0,000	0,000	225
2P - SALA DE AULA B206	3,8	12,8 / 23,7	-	331	0,000	0,000	225
2P - SALA DE AULA B207	5,0	17,3 / 23,9	-	719	0,000	0,000	225
2P - SALA DE AULA 208	4,7	16,7 / 23,7	-	631	0,000	0,000	225
2P - SALA DE AULA B209	3,9	13,0 / 23,9	-	340	0,000	0,000	225
2P - SALA DE AULA B210	5,1	16,7 / 24,1	-	649	0,000	0,000	225
2P - SALA DE AULA B211	4,4	14,2 / 24,4	-	401	0,000	0,000	225
2P - SALA DE RECURSOS	1,1	18,4 / 25,6	-	142	0,000	0,000	28
2P - SALA DOS PROFESSORES	3,2	16,9 / 23,9	-	434	0,000	0,000	150
2P - SOE	1,0	19,5 / 26,6	-	127	0,000	0,000	14

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07/26/2023
09:44

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (kW)	Time of Peak Sensible Cooling Load	Zone Heating Load (kW)	Zone Floor Area (m²)
2P - ENFERMARIA	1,2	Jan 1600	0,7	11,2
2P - COPA	1,4	Jan 1700	0,3	4,0
2P - LAB CIÊNCIAS	5,3	Feb 1500	1,6	38,0
2P - LAB. INFORMÁTICA	5,7	Jan 1700	1,1	38,1
2P - SALA DE AULA A205	5,3	Jan 1600	2,1	38,5
2P - SALA DE AULA A206	3,3	Jan 1700	0,9	38,1
2P - SALA DE AULA A207	3,4	Jan 1700	1,1	38,1
2P - SALA DE AULA A208	5,3	Feb 1700	2,1	38,1
2P - SALA DE AULA A209	3,4	Jan 1700	1,1	37,9
2P - SALA DE AULA A210	4,0	Feb 1800	1,5	38,5
2P - SALA DE AULA B206	3,3	Jan 1700	0,9	38,1
2P - SALA DE AULA B207	7,2	Jan 1700	2,0	55,9
2P - SALA DE AULA 208	6,3	Jan 1700	1,7	38,1
2P - SALA DE AULA B209	3,4	Jan 1700	1,1	37,9
2P - SALA DE AULA B210	6,5	Jan 1700	2,4	39,2
2P - SALA DE AULA B211	4,0	Feb 1800	1,5	38,6
2P - SALA DE RECURSOS	1,4	Jan 1700	0,8	12,3
2P - SALA DOS PROFESSORES	4,4	Jan 1700	1,2	27,5
2P - SOE	1,3	Jan 1600	0,8	13,4

Space Loads and Airflows

Zone Name / Space Name	Mult.	Cooling Sensible (kW)	Time of Peak Sensible Load	Air Flow (L/s)	Heating Load (kW)	Floor Area (m²)	Space L/(s·m²)
2P - ENFERMARIA							
2P - ENFERMARIA	1	1,2	Jan 1600	121	0,7	11,2	10,83
2P - COPA							
2P - CPD	1	1,4	Jan 1700	136	0,3	4,0	33,92
2P - LAB CIÊNCIAS							
2P - LAB CIÊNCIAS	1	5,3	Feb 1500	528	1,6	38,0	13,90
2P - LAB. INFORMÁTICA							
2P - LAB. INFORMÁTICA	1	5,7	Jan 1700	572	1,1	38,1	15,02
2P - SALA DE AULA A205							
2P - SALA DE AULA A205	1	5,3	Jan 1600	527	2,1	38,5	13,69
2P - SALA DE AULA A206							
2P - SALA DE AULA A206	1	3,3	Jan 1700	331	0,9	38,1	8,69
2P - SALA DE AULA A207							
2P - SALA DE AULA A207	1	3,4	Jan 1700	341	1,1	38,1	8,94
2P - SALA DE AULA A208							
2P - SALA DE AULA A208	1	5,3	Feb 1700	529	2,1	38,1	13,88
2P - SALA DE AULA A209							
2P - SALA DE AULA A209	1	3,4	Jan 1700	340	1,1	37,9	8,97
2P - SALA DE AULA A210							
2P - SALA DE AULA A210	1	4,0	Feb 1800	401	1,5	38,5	10,42
2P - SALA DE AULA B206							
2P - SALA DE AULA B206	1	3,3	Jan 1700	331	0,9	38,1	8,69
2P - SALA DE AULA B207							
2P - SALA DE AULA B207	1	7,2	Jan 1700	719	2,0	55,9	12,86
2P - SALA DE AULA 208							
2P - SALA DE AULA B208	1	6,3	Jan 1700	631	1,7	38,1	16,56
2P - SALA DE AULA B209							
2P - SALA DE AULA B209	1	3,4	Jan 1700	340	1,1	37,9	8,97
2P - SALA DE AULA B210							
2P - SALA DE AULA B210	1	6,5	Jan 1700	649	2,4	39,2	16,55
2P - SALA DE AULA B211							

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07/26/2023
09:44

Zone Name / Space Name	Mult.	Cooling Sensible (kW)	Time of Peak Sensible Load	Air Flow (L/s)	Heating Load (kW)	Floor Area (m²)	Space L/(s·m²)
2P - SALA DE AULA B211	1	4,0	Feb 1800	401	1,5	38,6	10,40
2P - SALA DE RECURSOS							
2P - SALA DE RECURSO	1	1,4	Jan 1700	142	0,8	12,3	11,55
2P - SALA DOS PROFESSORE							
2P - SALA DOS PROFESSORE	1	4,4	Jan 1700	434	1,2	27,5	15,78
2P - SOE							
2P - SOE	1	1,3	Jan 1600	127	0,8	13,4	9,50

Ventilation Sizing Summary for VRF 2P

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07/26/2023
09:44

1. Summary

Ventilation Sizing Method Sum of Space OA Airflows

2. Space Ventilation Analysis

2.1 Zone: 2P - ENFERMARIA

Zone Name / Space Name	Mult.	Floor Area (m²)	Maximum Occupants	Maximum Supply Air (L/s)	Required Outdoor Air (L/s/person)	Required Outdoor Air (L/(s·m²))	Required Outdoor Air (L/s)	Required Outdoor Air (% of supply)	Uncorrected Outdoor Air (L/s)
2P - ENFERMARIA									
2P - ENFERMARIA	1	11,2	4,0	121,3	7,50	0,00	0,0	0,0	30,0
Totals (incl. Space Multipliers)				121,3					30,0

2.2 Zone: 2P - COPA

Zone Name / Space Name	Mult.	Floor Area (m²)	Maximum Occupants	Maximum Supply Air (L/s)	Required Outdoor Air (L/s/person)	Required Outdoor Air (L/(s·m²))	Required Outdoor Air (L/s)	Required Outdoor Air (% of supply)	Uncorrected Outdoor Air (L/s)
2P - COPA									
2P - CPD	1	4,0	0,0	135,7	4,70	0,00	0,0	0,0	0,0
Totals (incl. Space Multipliers)				135,7					0,0

2.3 Zone: 2P - LAB CIÊNCIAS

Zone Name / Space Name	Mult.	Floor Area (m²)	Maximum Occupants	Maximum Supply Air (L/s)	Required Outdoor Air (L/s/person)	Required Outdoor Air (L/(s·m²))	Required Outdoor Air (L/s)	Required Outdoor Air (% of supply)	Uncorrected Outdoor Air (L/s)
2P - LAB CIÊNCIAS									
2P - LAB CIÊNCIAS	1	38,0	33,0	528,2	7,50	0,00	0,0	0,0	247,5
Totals (incl. Space Multipliers)				528,2					247,5

2.4 Zone: 2P - LAB. INFORMÁTICA

Zone Name / Space Name	Mult.	Floor Area (m²)	Maximum Occupants	Maximum Supply Air (L/s)	Required Outdoor Air (L/s/person)	Required Outdoor Air (L/(s·m²))	Required Outdoor Air (L/s)	Required Outdoor Air (% of supply)	Uncorrected Outdoor Air (L/s)
2P - LAB. INFORMÁTICA									
2P - LAB. INFORMÁTICA	1	38,1	30,0	572,4	7,50	0,00	0,0	0,0	225,0
Totals (incl. Space Multipliers)				572,4					225,0

2.5 Zone: 2P - SALA DE AULA A205

Zone Name / Space Name	Mult.	Floor Area (m²)	Maximum Occupants	Maximum Supply Air (L/s)	Required Outdoor Air (L/s/person)	Required Outdoor Air (L/(s·m²))	Required Outdoor Air (L/s)	Required Outdoor Air (% of supply)	Uncorrected Outdoor Air (L/s)
2P - SALA DE AULA A205									
2P - SALA DE AULA A205	1	38,5	30,0	527,2	7,50	0,00	0,0	0,0	225,0
Totals (incl. Space Multipliers)				527,2					225,0

2.6 Zone: 2P - SALA DE AULA A206

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07/26/2023
09:44

Zone Name / Space Name	Mult.	Floor Area (m²)	Maximum Occupants	Maximum Supply Air (L/s)	Required Outdoor Air (L/s/person)	Required Outdoor Air (L/(s·m²))	Required Outdoor Air (L/s)	Required Outdoor Air (% of supply)	Uncorrected Outdoor Air (L/s)
2P - SALA DE AULA A206									
2P - SALA DE AULA A206	1	38,1	30,0	331,1	7,50	0,00	0,0	0,0	225,0
Totals (incl. Space Multipliers)				331,1					225,0

2.7 Zone: 2P - SALA DE AULA A207

Zone Name / Space Name	Mult.	Floor Area (m²)	Maximum Occupants	Maximum Supply Air (L/s)	Required Outdoor Air (L/s/person)	Required Outdoor Air (L/(s·m²))	Required Outdoor Air (L/s)	Required Outdoor Air (% of supply)	Uncorrected Outdoor Air (L/s)
2P - SALA DE AULA A207									
2P - SALA DE AULA A207	1	38,1	30,0	340,5	7,50	0,00	0,0	0,0	225,0
Totals (incl. Space Multipliers)				340,5					225,0

2.8 Zone: 2P - SALA DE AULA A208

Zone Name / Space Name	Mult.	Floor Area (m²)	Maximum Occupants	Maximum Supply Air (L/s)	Required Outdoor Air (L/s/person)	Required Outdoor Air (L/(s·m²))	Required Outdoor Air (L/s)	Required Outdoor Air (% of supply)	Uncorrected Outdoor Air (L/s)
2P - SALA DE AULA A208									
2P - SALA DE AULA A208	1	38,1	30,0	528,9	7,50	0,00	0,0	0,0	225,0
Totals (incl. Space Multipliers)				528,9					225,0

2.9 Zone: 2P - SALA DE AULA A209

Zone Name / Space Name	Mult.	Floor Area (m²)	Maximum Occupants	Maximum Supply Air (L/s)	Required Outdoor Air (L/s/person)	Required Outdoor Air (L/(s·m²))	Required Outdoor Air (L/s)	Required Outdoor Air (% of supply)	Uncorrected Outdoor Air (L/s)
2P - SALA DE AULA A209									
2P - SALA DE AULA A209	1	37,9	30,0	340,0	7,50	0,00	0,0	0,0	225,0
Totals (incl. Space Multipliers)				340,0					225,0

2.10 Zone: 2P - SALA DE AULA A210

Zone Name / Space Name	Mult.	Floor Area (m²)	Maximum Occupants	Maximum Supply Air (L/s)	Required Outdoor Air (L/s/person)	Required Outdoor Air (L/(s·m²))	Required Outdoor Air (L/s)	Required Outdoor Air (% of supply)	Uncorrected Outdoor Air (L/s)
2P - SALA DE AULA A210									
2P - SALA DE AULA A210	1	38,5	30,0	401,3	7,50	0,00	0,0	0,0	225,0
Totals (incl. Space Multipliers)				401,3					225,0

2.11 Zone: 2P - SALA DE AULA B206

Zone Name / Space Name	Mult.	Floor Area (m²)	Maximum Occupants	Maximum Supply Air (L/s)	Required Outdoor Air (L/s/person)	Required Outdoor Air (L/(s·m²))	Required Outdoor Air (L/s)	Required Outdoor Air (% of supply)	Uncorrected Outdoor Air (L/s)
2P - SALA DE AULA B206									
2P - SALA DE AULA B206	1	38,1	30,0	331,1	7,50	0,00	0,0	0,0	225,0
Totals (incl. Space Multipliers)				331,1					225,0

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07/26/2023
09:44

2.12 Zone: 2P - SALA DE AULA B207

Zone Name / Space Name	Mult.	Floor Area (m²)	Maximum Occupants	Maximum Supply Air (L/s)	Required Outdoor Air (L/s/person)	Required Outdoor Air (L/(s·m²))	Required Outdoor Air (L/s)	Required Outdoor Air (% of supply)	Uncorrected Outdoor Air (L/s)
2P - SALA DE AULA B207									
2P - SALA DE AULA B207	1	55,9	30,0	719,1	7,50	0,00	0,0	0,0	225,0
Totals (incl. Space Multipliers)				719,1					225,0

2.13 Zone: 2P - SALA DE AULA 208

Zone Name / Space Name	Mult.	Floor Area (m²)	Maximum Occupants	Maximum Supply Air (L/s)	Required Outdoor Air (L/s/person)	Required Outdoor Air (L/(s·m²))	Required Outdoor Air (L/s)	Required Outdoor Air (% of supply)	Uncorrected Outdoor Air (L/s)
2P - SALA DE AULA 208									
2P - SALA DE AULA B208	1	38,1	30,0	631,0	7,50	0,00	0,0	0,0	225,0
Totals (incl. Space Multipliers)				631,0					225,0

2.14 Zone: 2P - SALA DE AULA B209

Zone Name / Space Name	Mult.	Floor Area (m²)	Maximum Occupants	Maximum Supply Air (L/s)	Required Outdoor Air (L/s/person)	Required Outdoor Air (L/(s·m²))	Required Outdoor Air (L/s)	Required Outdoor Air (% of supply)	Uncorrected Outdoor Air (L/s)
2P - SALA DE AULA B209									
2P - SALA DE AULA B209	1	37,9	30,0	340,0	7,50	0,00	0,0	0,0	225,0
Totals (incl. Space Multipliers)				340,0					225,0

2.15 Zone: 2P - SALA DE AULA B210

Zone Name / Space Name	Mult.	Floor Area (m²)	Maximum Occupants	Maximum Supply Air (L/s)	Required Outdoor Air (L/s/person)	Required Outdoor Air (L/(s·m²))	Required Outdoor Air (L/s)	Required Outdoor Air (% of supply)	Uncorrected Outdoor Air (L/s)
2P - SALA DE AULA B210									
2P - SALA DE AULA B210	1	39,2	30,0	648,8	7,50	0,00	0,0	0,0	225,0
Totals (incl. Space Multipliers)				648,8					225,0

2.16 Zone: 2P - SALA DE AULA B211

Zone Name / Space Name	Mult.	Floor Area (m²)	Maximum Occupants	Maximum Supply Air (L/s)	Required Outdoor Air (L/s/person)	Required Outdoor Air (L/(s·m²))	Required Outdoor Air (L/s)	Required Outdoor Air (% of supply)	Uncorrected Outdoor Air (L/s)
2P - SALA DE AULA B211									
2P - SALA DE AULA B211	1	38,6	30,0	401,4	7,50	0,00	0,0	0,0	225,0
Totals (incl. Space Multipliers)				401,4					225,0

2.17 Zone: 2P - SALA DE RECURSOS

Zone Name / Space Name	Mult.	Floor Area (m²)	Maximum Occupants	Maximum Supply Air (L/s)	Required Outdoor Air (L/s/person)	Required Outdoor Air (L/(s·m²))	Required Outdoor Air (L/s)	Required Outdoor Air (% of supply)	Uncorrected Outdoor Air (L/s)
2P - SALA DE RECURSOS									

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07/26/2023
09:44

2P - SALA DE RECURSO	1	12,3	6,0	142,0	4,70	0,00	0,0	0,0	28,2
Totals (incl. Space Multipliers)				142,0					28,2

2.18 Zone: 2P - SALA DOS PROFESSORE

Zone Name / Space Name	Mult.	Floor Area (m²)	Maximum Occupants	Maximum Supply Air (L/s)	Required Outdoor Air (L/s/person)	Required Outdoor Air (L/(s·m²))	Required Outdoor Air (L/s)	Required Outdoor Air (% of supply)	Uncorrected Outdoor Air (L/s)
2P - SALA DOS PROFESSORE									
2P - SALA DOS PROFESSORE	1	27,5	20,0	433,8	7,50	0,00	0,0	0,0	150,0
Totals (incl. Space Multipliers)				433,8					150,0

2.19 Zone: 2P - SOE

Zone Name / Space Name	Mult.	Floor Area (m²)	Maximum Occupants	Maximum Supply Air (L/s)	Required Outdoor Air (L/s/person)	Required Outdoor Air (L/(s·m²))	Required Outdoor Air (L/s)	Required Outdoor Air (% of supply)	Uncorrected Outdoor Air (L/s)
2P - SOE									
2P - SOE	1	13,4	3,0	127,3	4,70	0,00	0,0	0,0	14,1
Totals (incl. Space Multipliers)				127,3					14,1

Air System Design Load Summary for VRF 2P

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07/26/2023
09:44

	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA AT Jan 1600 COOLING OA DB / WB 33,8 °C / 26,8 °C			HEATING DATA AT DES HTG HEATING OA DB / WB 8,9 °C / 4,3 °C		
ZONE LOADS	Details	Sensible (W)	Latent (W)	Details	Sensible (W)	Latent (W)
Window & Skylight Solar Loads	44 m²	9894	-	44 m²	-	-
Wall Transmission	205 m²	5366	-	205 m²	5929	-
Roof Transmission	0 m²	0	-	0 m²	0	-
Window Transmission	44 m²	2183	-	44 m²	3320	-
Skylight Transmission	0 m²	0	-	0 m²	0	-
Door Loads	0 m²	0	-	0 m²	0	-
Floor Transmission	0 m²	0	-	0 m²	0	-
Partitions	558 m²	3862	-	558 m²	6247	-
Ceiling	633 m²	4381	-	633 m²	7086	-
Overhead Lighting	10740 W	8994	-	0	0	-
Task Lighting	0 W	0	-	0	0	-
Electric Equipment	8000 W	7479	-	0	0	-
People	456	26102	20520	0	0	0
Infiltration	-	0	0	-	0	0
Miscellaneous	-	0	0	-	0	0
Safety Factor	10% / 10%	6826	2052	10%	2258	0
>> Total Zone Loads	-	75087	22572	-	24840	0
Zone Conditioning	-	72738	22572	-	24597	0
Plenum Wall Load	0%	0	-	0	0	-
Plenum Roof Load	0%	0	-	0	0	-
Plenum Lighting Load	0%	0	-	0	0	-
Exhaust Fan Load	0 L/s	0	-	0 L/s	0	-
Ventilation Load	3395 L/s	32853	81363	3395 L/s	43641	0
Ventilation Fan Load	0 L/s	0	-	0 L/s	0	-
Space Fan Coil Fans	-	0	-	-	0	-
Duct Heat Gain / Loss	0%	0	-	0%	0	-
>> Total System Loads	-	105591	103935	-	68238	0
Terminal Unit Cooling	-	105591	103942	-	0	0
Terminal Unit Heating	-	0	-	-	68238	-
>> Total Conditioning	-	105591	103942	-	68238	0
Key:	Positive values are clg loads Negative values are htg loads			Positive values are htg loads Negative values are clg loads		

Zone Design Load Summary for VRF 2P

Project Name: EDUSESC TAGUATINGA
Prepared by: CBR ENGENHARIA SS LTDA

07/26/2023
09:44

2P - ENFERMARIA	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA AT Jan 1600			HEATING DATA AT DES HTG		
	COOLING OA DB / WB 33,8 °C / 26,8 °C			HEATING OA DB / WB 8,9 °C / 4,3 °C		
	OCCUPIED T-STAT 23,9 °C			OCCUPIED T-STAT 21,1 °C		
ZONE LOADS	Details	Sensible (W)	Latent (W)	Details	Sensible (W)	Latent (W)
Window & Skylight Solar Loads	0 m²	0	-	0 m²	-	-
Wall Transmission	10 m²	267	-	10 m²	283	-
Roof Transmission	0 m²	0	-	0 m²	0	-
Window Transmission	0 m²	0	-	0 m²	0	-
Skylight Transmission	0 m²	0	-	0 m²	0	-
Door Loads	0 m²	0	-	0 m²	0	-
Floor Transmission	0 m²	0	-	0 m²	0	-
Partitions	19 m²	130	-	19 m²	211	-
Ceiling	12 m²	85	-	12 m²	138	-
Overhead Lighting	194 W	162	-	0	0	-
Task Lighting	0 W	0	-	0	0	-
Electric Equipment	250 W	234	-	0	0	-
People	4	229	180	0	0	0
Infiltration	-	0	0	-	0	0
Miscellaneous	-	0	0	-	0	0
Safety Factor	10% / 10%	111	18	10%	63	0
>> Total Zone Loads	-	1218	198	-	695	0

2P - COPA	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA AT Jan 1700			HEATING DATA AT DES HTG		
	COOLING OA DB / WB 32,9 °C / 26,6 °C			HEATING OA DB / WB 8,9 °C / 4,3 °C		
	OCCUPIED T-STAT 23,9 °C			OCCUPIED T-STAT 21,1 °C		
ZONE LOADS	Details	Sensible (W)	Latent (W)	Details	Sensible (W)	Latent (W)
Window & Skylight Solar Loads	0 m²	0	-	0 m²	-	-
Wall Transmission	5 m²	139	-	5 m²	145	-
Roof Transmission	0 m²	0	-	0 m²	0	-
Window Transmission	0 m²	0	-	0 m²	0	-
Skylight Transmission	0 m²	0	-	0 m²	0	-
Door Loads	0 m²	0	-	0 m²	0	-
Floor Transmission	0 m²	0	-	0 m²	0	-
Partitions	12 m²	74	-	12 m²	129	-
Ceiling	4 m²	26	-	4 m²	45	-
Overhead Lighting	69 W	59	-	0	0	-
Task Lighting	0 W	0	-	0	0	-
Electric Equipment	1000 W	941	-	0	0	-
People	0	0	0	0	0	0
Infiltration	-	0	0	-	0	0
Miscellaneous	-	0	0	-	0	0
Safety Factor	10% / 10%	124	0	10%	32	0
>> Total Zone Loads	-	1362	0	-	350	0

Zone Design Load Summary for VRF 2P

Project Name: EDUSESC TAGUATINGA
Prepared by: CBR ENGENHARIA SS LTDA

07/26/2023
09:44

2P - LAB CIÊNCIAS	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA AT Feb 1500			HEATING DATA AT DES HTG		
	COOLING OA DB / WB 34,2 °C / 26,9 °C			HEATING OA DB / WB 8,9 °C / 4,3 °C		
	OCCUPIED T-STAT 23,9 °C			OCCUPIED T-STAT 21,1 °C		
ZONE LOADS	Details	Sensible (W)	Latent (W)	Details	Sensible (W)	Latent (W)
Window & Skylight Solar Loads	6 m²	931	-	6 m²	-	-
Wall Transmission	8 m²	223	-	8 m²	220	-
Roof Transmission	0 m²	0	-	0 m²	0	-
Window Transmission	6 m²	298	-	6 m²	449	-
Skylight Transmission	0 m²	0	-	0 m²	0	-
Door Loads	0 m²	0	-	0 m²	0	-
Floor Transmission	0 m²	0	-	0 m²	0	-
Partitions	36 m²	249	-	36 m²	399	-
Ceiling	38 m²	266	-	38 m²	426	-
Overhead Lighting	657 W	540	-	0	0	-
Task Lighting	0 W	0	-	0	0	-
Electric Equipment	500 W	464	-	0	0	-
People	33	1849	1485	0	0	0
Infiltration	-	0	0	-	0	0
Miscellaneous	-	0	0	-	0	0
Safety Factor	10% / 10%	482	149	10%	149	0
>> Total Zone Loads	-	5302	1634	-	1642	0

2P - LAB. INFORMÁTICA	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA AT Jan 1700			HEATING DATA AT DES HTG		
	COOLING OA DB / WB 32,9 °C / 26,6 °C			HEATING OA DB / WB 8,9 °C / 4,3 °C		
	OCCUPIED T-STAT 23,9 °C			OCCUPIED T-STAT 21,1 °C		
ZONE LOADS	Details	Sensible (W)	Latent (W)	Details	Sensible (W)	Latent (W)
Window & Skylight Solar Loads	0 m²	0	-	0 m²	-	-
Wall Transmission	0 m²	0	-	0 m²	0	-
Roof Transmission	0 m²	0	-	0 m²	0	-
Window Transmission	0 m²	0	-	0 m²	0	-
Skylight Transmission	0 m²	0	-	0 m²	0	-
Door Loads	0 m²	0	-	0 m²	0	-
Floor Transmission	0 m²	0	-	0 m²	0	-
Partitions	49 m²	316	-	49 m²	549	-
Ceiling	38 m²	246	-	38 m²	427	-
Overhead Lighting	658 W	561	-	0	0	-
Task Lighting	0 W	0	-	0	0	-
Electric Equipment	2500 W	2351	-	0	0	-
People	30	1751	1350	0	0	0
Infiltration	-	0	0	-	0	0
Miscellaneous	-	0	0	-	0	0
Safety Factor	10% / 10%	522	135	10%	98	0
>> Total Zone Loads	-	5746	1485	-	1073	0

Zone Design Load Summary for VRF 2P

Project Name: EDUSESC TAGUATINGA
Prepared by: CBR ENGENHARIA SS LTDA

07/26/2023
09:44

2P - SALA DE AULA A205	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA AT Jan 1600			HEATING DATA AT DES HTG		
	COOLING OA DB / WB 33,8 °C / 26,8 °C			HEATING OA DB / WB 8,9 °C / 4,3 °C		
	OCCUPIED T-STAT 23,9 °C			OCCUPIED T-STAT 21,1 °C		
ZONE LOADS	Details	Sensible (W)	Latent (W)	Details	Sensible (W)	Latent (W)
Window & Skylight Solar Loads	6 m²	836	-	6 m²	-	-
Wall Transmission	30 m²	813	-	30 m²	853	-
Roof Transmission	0 m²	0	-	0 m²	0	-
Window Transmission	6 m²	295	-	6 m²	449	-
Skylight Transmission	0 m²	0	-	0 m²	0	-
Door Loads	0 m²	0	-	0 m²	0	-
Floor Transmission	0 m²	0	-	0 m²	0	-
Partitions	13 m²	93	-	13 m²	150	-
Ceiling	39 m²	267	-	39 m²	431	-
Overhead Lighting	665 W	557	-	0	0	-
Task Lighting	0 W	0	-	0	0	-
Electric Equipment	250 W	234	-	0	0	-
People	30	1717	1350	0	0	0
Infiltration	-	0	0	-	0	0
Miscellaneous	-	0	0	-	0	0
Safety Factor	10% / 10%	481	135	10%	188	0
>> Total Zone Loads	-	5293	1485	-	2071	0

2P - SALA DE AULA A206	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA AT Jan 1700			HEATING DATA AT DES HTG		
	COOLING OA DB / WB 32,9 °C / 26,6 °C			HEATING OA DB / WB 8,9 °C / 4,3 °C		
	OCCUPIED T-STAT 23,9 °C			OCCUPIED T-STAT 21,1 °C		
ZONE LOADS	Details	Sensible (W)	Latent (W)	Details	Sensible (W)	Latent (W)
Window & Skylight Solar Loads	0 m²	0	-	0 m²	-	-
Wall Transmission	0 m²	0	-	0 m²	0	-
Roof Transmission	0 m²	0	-	0 m²	0	-
Window Transmission	0 m²	0	-	0 m²	0	-
Skylight Transmission	0 m²	0	-	0 m²	0	-
Door Loads	0 m²	0	-	0 m²	0	-
Floor Transmission	0 m²	0	-	0 m²	0	-
Partitions	36 m²	229	-	36 m²	399	-
Ceiling	38 m²	246	-	38 m²	427	-
Overhead Lighting	658 W	561	-	0	0	-
Task Lighting	0 W	0	-	0	0	-
Electric Equipment	250 W	235	-	0	0	-
People	30	1751	1350	0	0	0
Infiltration	-	0	0	-	0	0
Miscellaneous	-	0	0	-	0	0
Safety Factor	10% / 10%	302	135	10%	83	0
>> Total Zone Loads	-	3324	1485	-	908	0

Zone Design Load Summary for VRF 2P

Project Name: EDUSESC TAGUATINGA
Prepared by: CBR ENGENHARIA SS LTDA

07/26/2023
09:44

2P - SALA DE AULA A207	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA AT Jan 1700			HEATING DATA AT DES HTG		
	COOLING OA DB / WB 32,9 °C / 26,6 °C			HEATING OA DB / WB 8,9 °C / 4,3 °C		
	OCCUPIED T-STAT 23,9 °C			OCCUPIED T-STAT 21,1 °C		
ZONE LOADS	Details	Sensible (W)	Latent (W)	Details	Sensible (W)	Latent (W)
Window & Skylight Solar Loads	0 m²	0	-	0 m²	-	-
Wall Transmission	0 m²	0	-	0 m²	0	-
Roof Transmission	0 m²	0	-	0 m²	0	-
Window Transmission	0 m²	0	-	0 m²	0	-
Skylight Transmission	0 m²	0	-	0 m²	0	-
Door Loads	0 m²	0	-	0 m²	0	-
Floor Transmission	0 m²	0	-	0 m²	0	-
Partitions	49 m²	316	-	49 m²	549	-
Ceiling	38 m²	246	-	38 m²	427	-
Overhead Lighting	658 W	561	-	0	0	-
Task Lighting	0 W	0	-	0	0	-
Electric Equipment	250 W	235	-	0	0	-
People	30	1751	1350	0	0	0
Infiltration	-	0	0	-	0	0
Miscellaneous	-	0	0	-	0	0
Safety Factor	10% / 10%	311	135	10%	98	0
>> Total Zone Loads	-	3419	1485	-	1073	0

2P - SALA DE AULA A208	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA AT Feb 1700			HEATING DATA AT DES HTG		
	COOLING OA DB / WB 32,9 °C / 26,6 °C			HEATING OA DB / WB 8,9 °C / 4,3 °C		
	OCCUPIED T-STAT 23,9 °C			OCCUPIED T-STAT 21,1 °C		
ZONE LOADS	Details	Sensible (W)	Latent (W)	Details	Sensible (W)	Latent (W)
Window & Skylight Solar Loads	6 m²	791	-	6 m²	-	-
Wall Transmission	30 m²	879	-	30 m²	853	-
Roof Transmission	0 m²	0	-	0 m²	0	-
Window Transmission	6 m²	278	-	6 m²	449	-
Skylight Transmission	0 m²	0	-	0 m²	0	-
Door Loads	0 m²	0	-	0 m²	0	-
Floor Transmission	0 m²	0	-	0 m²	0	-
Partitions	13 m²	86	-	13 m²	150	-
Ceiling	38 m²	246	-	38 m²	427	-
Overhead Lighting	658 W	561	-	0	0	-
Task Lighting	0 W	0	-	0	0	-
Electric Equipment	250 W	235	-	0	0	-
People	30	1751	1350	0	0	0
Infiltration	-	0	0	-	0	0
Miscellaneous	-	0	0	-	0	0
Safety Factor	10% / 10%	483	135	10%	188	0
>> Total Zone Loads	-	5310	1485	-	2066	0

Zone Design Load Summary for VRF 2P

Project Name: EDUSESC TAGUATINGA
Prepared by: CBR ENGENHARIA SS LTDA

07/26/2023
09:44

2P - SALA DE AULA A209	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA AT Jan 1700			HEATING DATA AT DES HTG		
	COOLING OA DB / WB 32,9 °C / 26,6 °C			HEATING OA DB / WB 8,9 °C / 4,3 °C		
	OCCUPIED T-STAT 23,9 °C			OCCUPIED T-STAT 21,1 °C		
ZONE LOADS	Details	Sensible (W)	Latent (W)	Details	Sensible (W)	Latent (W)
Window & Skylight Solar Loads	0 m²	0	-	0 m²	-	-
Wall Transmission	0 m²	0	-	0 m²	0	-
Roof Transmission	0 m²	0	-	0 m²	0	-
Window Transmission	0 m²	0	-	0 m²	0	-
Skylight Transmission	0 m²	0	-	0 m²	0	-
Door Loads	0 m²	0	-	0 m²	0	-
Floor Transmission	0 m²	0	-	0 m²	0	-
Partitions	49 m²	315	-	49 m²	548	-
Ceiling	38 m²	244	-	38 m²	424	-
Overhead Lighting	655 W	558	-	0	0	-
Task Lighting	0 W	0	-	0	0	-
Electric Equipment	250 W	235	-	0	0	-
People	30	1751	1350	0	0	0
Infiltration	-	0	0	-	0	0
Miscellaneous	-	0	0	-	0	0
Safety Factor	10% / 10%	310	135	10%	97	0
>> Total Zone Loads	-	3413	1485	-	1069	0

2P - SALA DE AULA A210	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA AT Feb 1800			HEATING DATA AT DES HTG		
	COOLING OA DB / WB 31,5 °C / 26,3 °C			HEATING OA DB / WB 8,9 °C / 4,3 °C		
	OCCUPIED T-STAT 23,9 °C			OCCUPIED T-STAT 21,1 °C		
ZONE LOADS	Details	Sensible (W)	Latent (W)	Details	Sensible (W)	Latent (W)
Window & Skylight Solar Loads	0 m²	0	-	0 m²	-	-
Wall Transmission	22 m²	699	-	22 m²	636	-
Roof Transmission	0 m²	0	-	0 m²	0	-
Window Transmission	0 m²	0	-	0 m²	0	-
Skylight Transmission	0 m²	0	-	0 m²	0	-
Door Loads	0 m²	0	-	0 m²	0	-
Floor Transmission	0 m²	0	-	0 m²	0	-
Partitions	28 m²	156	-	28 m²	314	-
Ceiling	39 m²	215	-	39 m²	432	-
Overhead Lighting	665 W	575	-	0	0	-
Task Lighting	0 W	0	-	0	0	-
Electric Equipment	250 W	236	-	0	0	-
People	30	1781	1350	0	0	0
Infiltration	-	0	0	-	0	0
Miscellaneous	-	0	0	-	0	0
Safety Factor	10% / 10%	366	135	10%	138	0
>> Total Zone Loads	-	4028	1485	-	1520	0

Zone Design Load Summary for VRF 2P

Project Name: EDUSESC TAGUATINGA
Prepared by: CBR ENGENHARIA SS LTDA

07/26/2023
09:44

2P - SALA DE AULA B206	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA AT Jan 1700			HEATING DATA AT DES HTG		
	COOLING OA DB / WB 32,9 °C / 26,6 °C			HEATING OA DB / WB 8,9 °C / 4,3 °C		
	OCCUPIED T-STAT 23,9 °C			OCCUPIED T-STAT 21,1 °C		
ZONE LOADS	Details	Sensible (W)	Latent (W)	Details	Sensible (W)	Latent (W)
Window & Skylight Solar Loads	0 m²	0	-	0 m²	-	-
Wall Transmission	0 m²	0	-	0 m²	0	-
Roof Transmission	0 m²	0	-	0 m²	0	-
Window Transmission	0 m²	0	-	0 m²	0	-
Skylight Transmission	0 m²	0	-	0 m²	0	-
Door Loads	0 m²	0	-	0 m²	0	-
Floor Transmission	0 m²	0	-	0 m²	0	-
Partitions	36 m²	229	-	36 m²	399	-
Ceiling	38 m²	246	-	38 m²	427	-
Overhead Lighting	658 W	561	-	0	0	-
Task Lighting	0 W	0	-	0	0	-
Electric Equipment	250 W	235	-	0	0	-
People	30	1751	1350	0	0	0
Infiltration	-	0	0	-	0	0
Miscellaneous	-	0	0	-	0	0
Safety Factor	10% / 10%	302	135	10%	83	0
>> Total Zone Loads	-	3324	1485	-	908	0

2P - SALA DE AULA B207	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA AT Jan 1700			HEATING DATA AT DES HTG		
	COOLING OA DB / WB 32,9 °C / 26,6 °C			HEATING OA DB / WB 8,9 °C / 4,3 °C		
	OCCUPIED T-STAT 23,9 °C			OCCUPIED T-STAT 21,1 °C		
ZONE LOADS	Details	Sensible (W)	Latent (W)	Details	Sensible (W)	Latent (W)
Window & Skylight Solar Loads	8 m²	2405	-	8 m²	-	-
Wall Transmission	12 m²	471	-	12 m²	335	-
Roof Transmission	0 m²	0	-	0 m²	0	-
Window Transmission	8 m²	389	-	8 m²	628	-
Skylight Transmission	0 m²	0	-	0 m²	0	-
Door Loads	0 m²	0	-	0 m²	0	-
Floor Transmission	0 m²	0	-	0 m²	0	-
Partitions	20 m²	129	-	20 m²	224	-
Ceiling	56 m²	361	-	56 m²	627	-
Overhead Lighting	966 W	823	-	0	0	-
Task Lighting	0 W	0	-	0	0	-
Electric Equipment	250 W	235	-	0	0	-
People	30	1751	1350	0	0	0
Infiltration	-	0	0	-	0	0
Miscellaneous	-	0	0	-	0	0
Safety Factor	10% / 10%	656	135	10%	181	0
>> Total Zone Loads	-	7219	1485	-	1996	0

Zone Design Load Summary for VRF 2P

Project Name: EDUSESC TAGUATINGA
Prepared by: CBR ENGENHARIA SS LTDA

07/26/2023
09:44

2P - SALA DE AULA 208	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA AT Jan 1700			HEATING DATA AT DES HTG		
	COOLING OA DB / WB 32,9 °C / 26,6 °C			HEATING OA DB / WB 8,9 °C / 4,3 °C		
	OCCUPIED T-STAT 23,9 °C			OCCUPIED T-STAT 21,1 °C		
ZONE LOADS	Details	Sensible (W)	Latent (W)	Details	Sensible (W)	Latent (W)
Window & Skylight Solar Loads	7 m²	2061	-	7 m²	-	-
Wall Transmission	10 m²	398	-	10 m²	283	-
Roof Transmission	0 m²	0	-	0 m²	0	-
Window Transmission	7 m²	333	-	7 m²	538	-
Skylight Transmission	0 m²	0	-	0 m²	0	-
Door Loads	0 m²	0	-	0 m²	0	-
Floor Transmission	0 m²	0	-	0 m²	0	-
Partitions	17 m²	110	-	17 m²	190	-
Ceiling	48 m²	310	-	48 m²	539	-
Overhead Lighting	658 W	561	-	0	0	-
Task Lighting	0 W	0	-	0	0	-
Electric Equipment	250 W	235	-	0	0	-
People	30	1751	1350	0	0	0
Infiltration	-	0	0	-	0	0
Miscellaneous	-	0	0	-	0	0
Safety Factor	10% / 10%	576	135	10%	155	0
>> Total Zone Loads	-	6334	1485	-	1706	0

2P - SALA DE AULA B209	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA AT Jan 1700			HEATING DATA AT DES HTG		
	COOLING OA DB / WB 32,9 °C / 26,6 °C			HEATING OA DB / WB 8,9 °C / 4,3 °C		
	OCCUPIED T-STAT 23,9 °C			OCCUPIED T-STAT 21,1 °C		
ZONE LOADS	Details	Sensible (W)	Latent (W)	Details	Sensible (W)	Latent (W)
Window & Skylight Solar Loads	0 m²	0	-	0 m²	-	-
Wall Transmission	0 m²	0	-	0 m²	0	-
Roof Transmission	0 m²	0	-	0 m²	0	-
Window Transmission	0 m²	0	-	0 m²	0	-
Skylight Transmission	0 m²	0	-	0 m²	0	-
Door Loads	0 m²	0	-	0 m²	0	-
Floor Transmission	0 m²	0	-	0 m²	0	-
Partitions	49 m²	315	-	49 m²	548	-
Ceiling	38 m²	244	-	38 m²	424	-
Overhead Lighting	655 W	558	-	0	0	-
Task Lighting	0 W	0	-	0	0	-
Electric Equipment	250 W	235	-	0	0	-
People	30	1751	1350	0	0	0
Infiltration	-	0	0	-	0	0
Miscellaneous	-	0	0	-	0	0
Safety Factor	10% / 10%	310	135	10%	97	0
>> Total Zone Loads	-	3413	1485	-	1069	0

Zone Design Load Summary for VRF 2P

Project Name: EDUSESC TAGUATINGA
Prepared by: CBR ENGENHARIA SS LTDA

07/26/2023
09:44

2P - SALA DE AULA B210	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA AT Jan 1700			HEATING DATA AT DES HTG		
	COOLING OA DB / WB 32,9 °C / 26,6 °C			HEATING OA DB / WB 8,9 °C / 4,3 °C		
	OCCUPIED T-STAT 23,9 °C			OCCUPIED T-STAT 21,1 °C		
ZONE LOADS	Details	Sensible (W)	Latent (W)	Details	Sensible (W)	Latent (W)
Window & Skylight Solar Loads	6 m²	1718	-	6 m²	-	-
Wall Transmission	30 m²	878	-	30 m²	868	-
Roof Transmission	0 m²	0	-	0 m²	0	-
Window Transmission	6 m²	278	-	6 m²	449	-
Skylight Transmission	0 m²	0	-	0 m²	0	-
Door Loads	0 m²	0	-	0 m²	0	-
Floor Transmission	0 m²	0	-	0 m²	0	-
Partitions	36 m²	232	-	36 m²	403	-
Ceiling	39 m²	253	-	39 m²	439	-
Overhead Lighting	677 W	577	-	0	0	-
Task Lighting	0 W	0	-	0	0	-
Electric Equipment	250 W	235	-	0	0	-
People	30	1751	1350	0	0	0
Infiltration	-	0	0	-	0	0
Miscellaneous	-	0	0	-	0	0
Safety Factor	10% / 10%	592	135	10%	216	0
>> Total Zone Loads	-	6513	1485	-	2374	0

2P - SALA DE AULA B211	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA AT Feb 1800			HEATING DATA AT DES HTG		
	COOLING OA DB / WB 31,5 °C / 26,3 °C			HEATING OA DB / WB 8,9 °C / 4,3 °C		
	OCCUPIED T-STAT 23,9 °C			OCCUPIED T-STAT 21,1 °C		
ZONE LOADS	Details	Sensible (W)	Latent (W)	Details	Sensible (W)	Latent (W)
Window & Skylight Solar Loads	0 m²	0	-	0 m²	-	-
Wall Transmission	22 m²	699	-	22 m²	636	-
Roof Transmission	0 m²	0	-	0 m²	0	-
Window Transmission	0 m²	0	-	0 m²	0	-
Skylight Transmission	0 m²	0	-	0 m²	0	-
Door Loads	0 m²	0	-	0 m²	0	-
Floor Transmission	0 m²	0	-	0 m²	0	-
Partitions	28 m²	156	-	28 m²	314	-
Ceiling	39 m²	215	-	39 m²	432	-
Overhead Lighting	667 W	577	-	0	0	-
Task Lighting	0 W	0	-	0	0	-
Electric Equipment	250 W	236	-	0	0	-
People	30	1781	1350	0	0	0
Infiltration	-	0	0	-	0	0
Miscellaneous	-	0	0	-	0	0
Safety Factor	10% / 10%	366	135	10%	138	0
>> Total Zone Loads	-	4030	1485	-	1520	0

Zone Design Load Summary for VRF 2P

Project Name: EDUSESC TAGUATINGA
Prepared by: CBR ENGENHARIA SS LTDA

07/26/2023
09:44

2P - SALA DE RECURSOS	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA AT Jan 1700			HEATING DATA AT DES HTG		
	COOLING OA DB / WB 32,9 °C / 26,6 °C			HEATING OA DB / WB 8,9 °C / 4,3 °C		
	OCCUPIED T-STAT 23,9 °C			OCCUPIED T-STAT 21,1 °C		
ZONE LOADS	Details	Sensible (W)	Latent (W)	Details	Sensible (W)	Latent (W)
Window & Skylight Solar Loads	0 m²	0	-	0 m²	-	-
Wall Transmission	11 m²	305	-	11 m²	318	-
Roof Transmission	0 m²	0	-	0 m²	0	-
Window Transmission	0 m²	0	-	0 m²	0	-
Skylight Transmission	0 m²	0	-	0 m²	0	-
Door Loads	0 m²	0	-	0 m²	0	-
Floor Transmission	0 m²	0	-	0 m²	0	-
Partitions	23 m²	145	-	23 m²	252	-
Ceiling	12 m²	79	-	12 m²	138	-
Overhead Lighting	213 W	181	-	0	0	-
Task Lighting	0 W	0	-	0	0	-
Electric Equipment	250 W	235	-	0	0	-
People	6	350	270	0	0	0
Infiltration	-	0	0	-	0	0
Miscellaneous	-	0	0	-	0	0
Safety Factor	10% / 10%	130	27	10%	71	0
>> Total Zone Loads	-	1426	297	-	779	0

2P - SALA DOS PROFESSORES	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA AT Jan 1700			HEATING DATA AT DES HTG		
	COOLING OA DB / WB 32,9 °C / 26,6 °C			HEATING OA DB / WB 8,9 °C / 4,3 °C		
	OCCUPIED T-STAT 23,9 °C			OCCUPIED T-STAT 21,1 °C		
ZONE LOADS	Details	Sensible (W)	Latent (W)	Details	Sensible (W)	Latent (W)
Window & Skylight Solar Loads	5 m²	1374	-	5 m²	-	-
Wall Transmission	5 m²	211	-	5 m²	150	-
Roof Transmission	0 m²	0	-	0 m²	0	-
Window Transmission	5 m²	222	-	5 m²	359	-
Skylight Transmission	0 m²	0	-	0 m²	0	-
Door Loads	0 m²	0	-	0 m²	0	-
Floor Transmission	0 m²	0	-	0 m²	0	-
Partitions	26 m²	168	-	26 m²	291	-
Ceiling	28 m²	177	-	28 m²	308	-
Overhead Lighting	475 W	405	-	0	0	-
Task Lighting	0 W	0	-	0	0	-
Electric Equipment	250 W	235	-	0	0	-
People	20	1167	900	0	0	0
Infiltration	-	0	0	-	0	0
Miscellaneous	-	0	0	-	0	0
Safety Factor	10% / 10%	396	90	10%	111	0
>> Total Zone Loads	-	4355	990	-	1219	0

Zone Design Load Summary for VRF 2P

Project Name: EDUSESC TAGUATINGA
Prepared by: CBR ENGENHARIA SS LTDA

07/26/2023
09:44

2P - SOE	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA AT Jan 1600			HEATING DATA AT DES HTG		
	COOLING OA DB / WB 33,8 °C / 26,8 °C			HEATING OA DB / WB 8,9 °C / 4,3 °C		
	OCCUPIED T-STAT 23,9 °C			OCCUPIED T-STAT 21,1 °C		
ZONE LOADS	Details	Sensible (W)	Latent (W)	Details	Sensible (W)	Latent (W)
Window & Skylight Solar Loads	0 m²	0	-	0 m²	-	-
Wall Transmission	12 m²	327	-	12 m²	347	-
Roof Transmission	0 m²	0	-	0 m²	0	-
Window Transmission	0 m²	0	-	0 m²	0	-
Skylight Transmission	0 m²	0	-	0 m²	0	-
Door Loads	0 m²	0	-	0 m²	0	-
Floor Transmission	0 m²	0	-	0 m²	0	-
Partitions	21 m²	143	-	21 m²	232	-
Ceiling	13 m²	93	-	13 m²	150	-
Overhead Lighting	232 W	194	-	0	0	-
Task Lighting	0 W	0	-	0	0	-
Electric Equipment	250 W	234	-	0	0	-
People	3	172	135	0	0	0
Infiltration	-	0	0	-	0	0
Miscellaneous	-	0	0	-	0	0
Safety Factor	10% / 10%	116	14	10%	73	0
>> Total Zone Loads	-	1278	149	-	802	0