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BWA JOB # 2019-0895



BR+A
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Charlotte, NC 28203

PROJECT NUMBER: 19-018
CONSTRUCTION ISSUE: 6.20.2019

OUTSIDE AIR TABLES -
MECHANICAL
SCALE: AS NOTED

M0.6

Ventilation Sizing Summary for RTU-1

Project Name: 2019-0895 - BR+A
Prepared by: Barrett, Woodyard & Associates

06/19/2019
06/20/2019

1. Summary
Ventilation Sizing Method: ASHRAE Std 62.1-2013
Design Condition: Minimum Row Heating
Occupant Density (D): 1.000
Unconnected Outdoor Air Inlets (V_{UL}): 111 CFM
System Ventilation Efficiency (E_v): 0.800
Outdoor Air Inlets (V_{UL}): 133 CFM

2. Space Ventilation Analysis

Zone Name / Source Name	Mult.	Minimum Supply Air (CFM)	Space Floor Area (Sq Ft)	Area Outdoor Air Rate (CFM/Sq Ft)	Time Averaged Occupancy (Pe)	People Outdoor Air Rate (Ppa)	Air Distribution Effectiveness (Ea)	Space Outdoor Air (V _{OA}) (V/hr)	Breathing Zone Outdoor Air (V _{BZ}) (V/hr)	Space Ventilation Efficiency (E _v)
RTU 1 - ZONE 1										
310 - OFFICE	1	16	130.0	0.08	1.0	0.95	0.9	16	16	0.800
RTU 1 - ZONE 2										
300 - OPEN OFFICE SW	1	106	825.0	0.08	1.0	0.95	86	106	0.800	
306 - OPEN OFFICE S	1	17	145.0	0.08	1.0	0.95	17	17	0.800	
Totals (incl. Space Multipliers)		129							131	0.800

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Ventilation Sizing Summary for RTU-2

Project Name: 2019-0895 - BR+A
Prepared by: Barrett, Woodyard & Associates

06/19/2019
06/20/2019

1. Summary
Ventilation Sizing Method: ASHRAE Std 62.1-2013
Design Condition: Minimum Row Heating
Occupant Density (D): 1.000
Unconnected Outdoor Air Inlets (V_{UL}): 440 CFM
System Ventilation Efficiency (E_v): 0.800
Outdoor Air Inlets (V_{UL}): 520 CFM

2. Space Ventilation Analysis

Zone Name / Source Name	Mult.	Minimum Supply Air (CFM)	Space Floor Area (Sq Ft)	Area Outdoor Air Rate (CFM/Sq Ft)	Time Averaged Occupancy (Pe)	People Outdoor Air Rate (Ppa)	Air Distribution Effectiveness (Ea)	Space Outdoor Air (V _{OA}) (V/hr)	Breathing Zone Outdoor Air (V _{BZ}) (V/hr)	Space Ventilation Efficiency (E _v)
RTU 1 - ZONE 1										
311 - OFFICE	1	16	130.0	0.08	1.0	0.95	0.9	16	16	0.800
312 - OFFICE	1	16	129.0	0.08	1.0	0.95	0.9	16	16	0.800
RTU 1 - ZONE 2										
300 - RECEPTION	1	33	248.0	0.08	0.0	0.00	0.0	37	37	0.800
301 - CONF	1	100	230.0	0.08	12.0	0.00	0.0	100	100	0.800
Zone 3										
303 - CONF	1	46	145.0	0.08	0.0	0.00	0.0	46	46	0.800
Zone 4										
304 - OPEN OFFICE INT	1	171	1093.0	0.08	13.0	0.00	0.0	171	171	0.800
305 - CORRIDOR - I	1	33	440.0	0.08	0.0	0.00	0.0	33	33	0.800
306 - COPY	1	111	240.0	0.12	12.0	0.00	0.0	111	111	0.800
304 - WELLNESS	1	10	45.0	0.08	1.0	0.95	0.9	10	10	0.800
305 - PHONE	1	9	30.0	0.08	1.0	0.95	0.9	9	9	0.800
Totals (incl. Space Multipliers)		520							440	0.800

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Ventilation Sizing Summary for RTU-3

Project Name: 2019-0895 - BR+A
Prepared by: Barrett, Woodyard & Associates

06/19/2019
06/20/2019

1. Summary
Ventilation Sizing Method: ASHRAE Std 62.1-2013
Design Condition: Minimum Row Heating
Occupant Density (D): 1.000
Unconnected Outdoor Air Inlets (V_{UL}): 247 CFM
System Ventilation Efficiency (E_v): 0.800
Outdoor Air Inlets (V_{UL}): 300 CFM

2. Space Ventilation Analysis

Zone Name / Source Name	Mult.	Minimum Supply Air (CFM)	Space Floor Area (Sq Ft)	Area Outdoor Air Rate (CFM/Sq Ft)	Time Averaged Occupancy (Pe)	People Outdoor Air Rate (Ppa)	Air Distribution Effectiveness (Ea)	Space Outdoor Air (V _{OA}) (V/hr)	Breathing Zone Outdoor Air (V _{BZ}) (V/hr)	Space Ventilation Efficiency (E _v)
RTU 1 - ZONE 1										
308 - OPEN OFFICE SW	1	16	130.0	0.08	0.0	0.00	0.0	16	16	0.800
309 - CORRIDOR - SE	1	14	180.0	0.08	0.0	0.00	0.0	14	14	0.800
RTU 1 - ZONE 2										
308 - BR RM - INT	1	131	170.0	0.12	12.0	0.00	0.0	131	131	0.800
308 - BR RM - SE	1	97	215.0	0.12	0.0	0.00	0.0	97	97	0.800
307 - JOURNAL ROOM	1	40	110.0	0.08	0.0	0.00	0.0	40	40	0.800
Totals (incl. Space Multipliers)		300							247	0.800

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