

RETURN DIFFUSER NECK SIZE SCHEDULE		
CFM RANGE	SQUARE NECK SIZE	ROUND NECK SIZE
0 - 90	6 X 6	6"ø
95 - 140	8 X 8	8"ø
145 - 220	10 X 10	10"ø
225 - 315	12 X 12	12"ø
320 - 430	-	14"ø
435 - 560	-	16"ø

SUPPLY DIFFUSER NECK SIZE SCHEDULE		
CFM RANGE	SQUARE NECK SIZE	ROUND NECK SIZE
0 - 120	6 X 6	6"ø
125 - 220	8 X 8	8"ø
225 - 330	10 X 10	10"ø
335 - 450	12 X 12	12"ø
455 - 530	15 X 15	14"ø
540 - 700	16 X 16	16"ø

AIR DEVICE SCHEDULE			
MARK	MANUF. + MODEL	TYPE	REMARKS
	TITUS OMNI OR EQUAL	CEILING SUPPLY	24x24/12x12 PLAQUE FACE. FACE SHALL BE ALUMINUM WITH A STEEL BACK PAN. PROVIDE AIR PATTERN CONTROLS. FACE AND FRAME SHALL HAVE AN OFF-WHITE ENAMEL FINISH. COORDINATE CEILING MOUNTING TYPE WITH ARCHITECTURAL CEILING TYPE. PROVIDE REMOTE DAMPER OPERATORS IN AREAS WITH INACCESSIBLE CEILINGS.
	TITUS OMNI OR EQUAL	CEILING RETURN	24x24/12x12 PLAQUE FACE. FACE SHALL BE ALUMINUM WITH A STEEL BACK PAN. FACE AND FRAME SHALL HAVE AN OFF-WHITE ENAMEL FINISH. COORDINATE CEILING MOUNTING TYPE WITH ARCHITECTURAL CEILING TYPE.
	BUILDING STANDARD	CEILING SUPPLY	48" LONG SUPPLY DIFFUSER WITH AN EXTRUDED ALUMINUM, ADJUSTABLE AIR OUTLET DESIGNED TO DIRECT SUPPLY AIR HORIZONTALLY ACROSS THE CEILING OR DOWN THE WALL. COORDINATE MOUNTING WITH CEILING TYPE.

$$\begin{aligned}
 & \text{OUTSIDE AIR SHALL BE PROVIDED IN ACCORDANCE WITH THE MECHANICAL CODES:} \\
 & \quad (\text{Rp} \quad \times \quad \text{Pz}) \quad + \quad (\text{Ra} \quad \times \quad \text{Az}) \quad = \quad \text{Vbz} \\
 & \text{OFFICE SPACE:} \quad (5 \text{ CFM/PER } \times 14 \text{ PPL}) + (0.06 \text{ CFM/SqFT } \times 2398 \text{ SQFT}) \quad = \quad 284 \text{ CFM}
 \end{aligned}$$

$$\begin{aligned}
 & \text{TOTAL} \quad = \quad 284 \text{ CFM} \\
 & \text{OVERALL:} \quad \text{Vbz} \quad / \quad \text{Ez} \quad = \quad \text{Voz} \\
 & \quad \quad 284 \text{ CFM} \quad / \quad 1 \quad = \quad 284 \text{ CFM}
 \end{aligned}$$

$$\text{TOTAL OUTSIDE AIR REQUIRED} \quad = \quad 284 \text{ CFM}$$

RTU UNITS:

$$\begin{aligned}
 & \text{RTU-1:} \quad 190 \text{ CFM} \\
 & \text{RTU-2:} \quad 95 \text{ CFM}
 \end{aligned}$$

$$\begin{aligned}
 & \text{TOTAL OUTSIDE AIR PROVIDED} \quad = \quad 285 \text{ CFM} \\
 & \text{TOTAL OUTSIDE AIR REQUIRED} \quad = \quad 284 \text{ CFM}
 \end{aligned}$$

EXHAUST SYSTEM ANALYSIS:

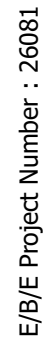
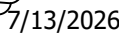
ROOMS SHALL BE EXHAUSTED IN ACCORDANCE WITH MECHANICAL CODES. RESTROOMS SHALL BE EXHAUSTED AT A MINIMUM 70 CFM/FIXTURE.

<u>EF-1:</u>		
112 MENS RR	REQUIRED 70 CFM	DESIGN 70 CFM
<u>EF-2</u>		
113 WOMENS RR	REQUIRED 70 CFM	DESIGN 70 CFM
<u>EF-3</u>		
106 JAN	REQUIRED 15 CFM	DESIGN 20 CFM

LEGEND OF MECHANICAL SYMBOLS	
SYMBOL	DESCRIPTION
	SUPPLY DUCT VIEW INTO DUCT
	SUPPLY DUCT VIEW HEEL OF ELBOW
	RETURN OR EXHAUST DUCT VIEW INTO DUCT
	RETURN OR EXHAUST DUCT VIEW HEEL OF ELBOW
	SQUARE TO ROUND TRANSITION
	SQUARE ELBOW WITH TURNING VANES.
	RADIUS ELBOW WITHOUT TURNING VANES.
	SUPPLY SIDEWALL REGISTER
	RETURN OR EXHAUST SIDEWALL REGISTER
	ROUND S.A. DIFFUSER
	EXISTING FLEX DUCT
	NEW FLEX DUCT
	EXISTING DUCTWORK
	NEW DUCTWORK
	DUCTWORK TO BE REMOVED
	SQUARE CEILING DIFFUSER
	RETURN AIR GRILLE
	RETURN OR EXHAUST AIR REGISTER W/ SQUARE NECK
	PLENUM SLOT DIFFUSER
	MANUAL DAMPER
	FIRE DAMPER WITH ACCESS DOOR
	DRAIN LINE
	PIPE RISING
	PIPE TURNING DOWN
	EXHAUST FAN SPEED CONTROL
	THERMOSTAT
(E)	EXISTING TO REMAIN
(R)	RELOCATED
R.A.	RETURN AIR
S.A.	SUPPLY AIR
C.F.M.	CUBIC FEET PER MINUTE
AHU	AIR HANDLER UNIT

NOTES:

1. ALL SYMBOLS MAY NOT BE USED ON THIS DRAWINGS.

[illegible]

M-1.00