

VAV REHEAT HOSE KIT SPECIFICATION:
FLOW DESIGN INC (FDI) FLOW CONTROL HOSE KIT

PIPE SIZE SCHEDULE			
PIPE MATERIAL	GPM RANGE	PIPE SIZE	REMARKS
COPPER	0.0-1.5	3/4"	UNLESS OTHERWISE SHOWN ON DRAWINGS PIPE SIZES SHALL NOT BE ALLOWED TO EXCEED 5 FEET FRICTION LOSS PER 100 FEET. CONDENSATE DRAIN PIPES SHALL BE COPPER TYPE "L".
	1.6-4.0	3/4"	
	4.1-8.0	1"	
	8.1-14.0	1-1/4"	
	14.1-22.0	1-1/2"	
	22.1-50.0	2"	

- 1- SEE FLOOR PLAN FOR PIPE SIZE.
2- ALL VENTS AND DRAINS TO HAVE HOSE ADAPTER WITH BRASS CAP.
3- TEMPERATURE CONTROL BASED ON 2WAY/3WAY MODULATING VALVE OPERATION. REFER TO FLOOR PLAN FOR LOCATION OF 3 WAY VALVE AT END OF EACH HOT WATER HEATING LOOP.
- 4- UNLESS NOTED OTHERWISE, THE REHEAT COIL ROWS SHALL BE COPPER TUBING INSTALLED BY BOX MANUFACTURER. NUMBER OF THE ROWS AND HEATING WATER ΔT AS INDICATED ON VAV BOX SCHEDULE.

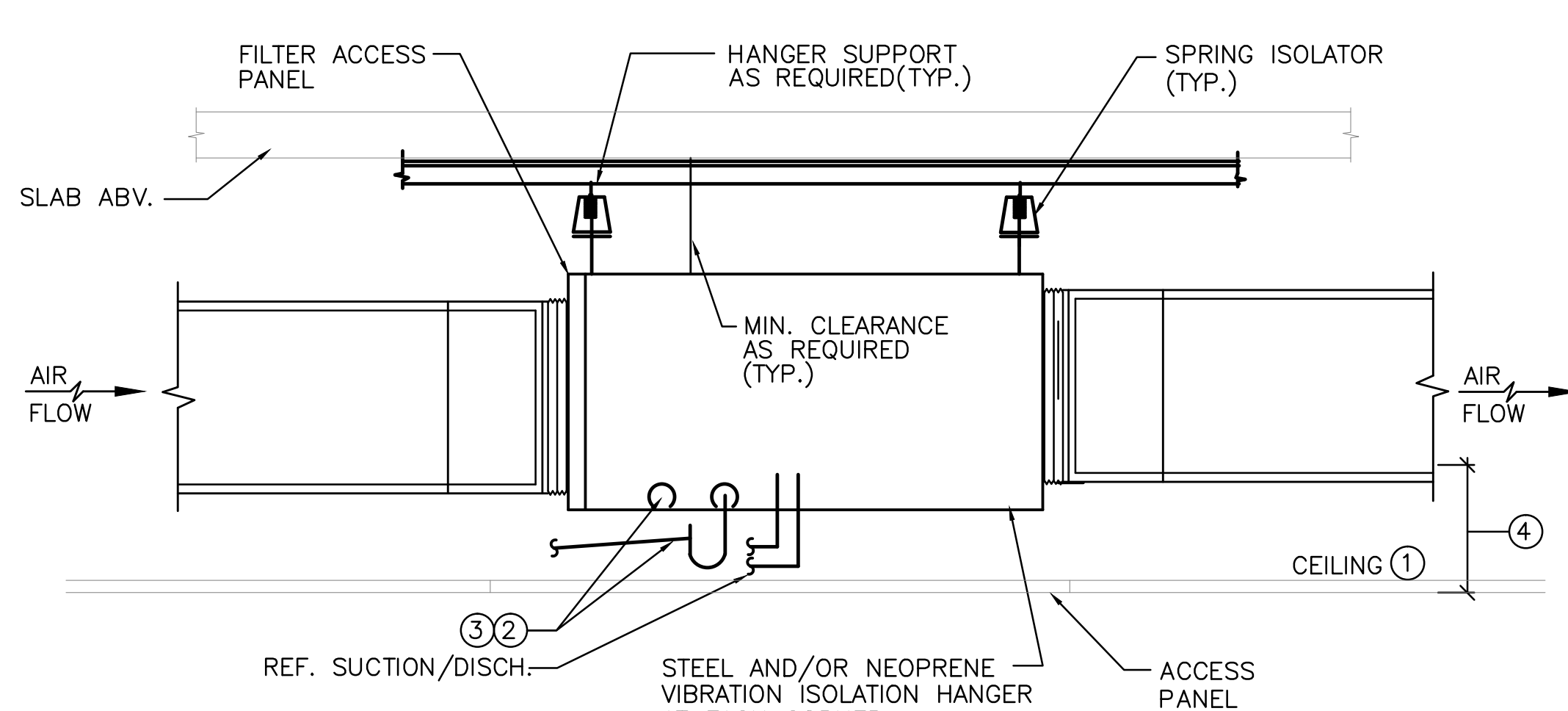
SCALE
NONE

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TYPICAL REHEAT COIL PIPING DIAGRAM

SCALE
NONE

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NOTES:

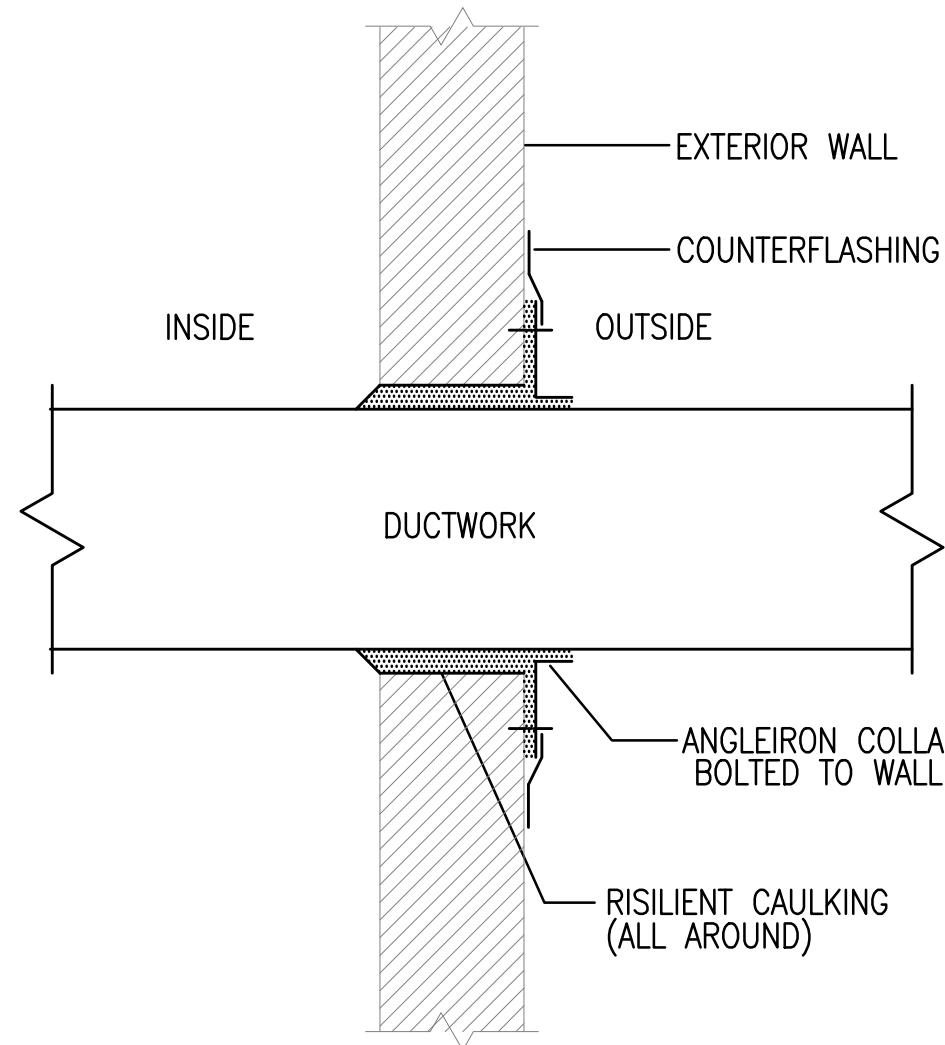
- 1- PROVIDE ACCESSABLE CEILING FOR MAINTENANCE AND INSPECTION.
2- RUN 3/4" CONDERSATE DRAIN TO CONNECT TO APPROVED RECEPTOR.
3- PROVIDE SECONDARY CONDENSATE DRAIN OVERFLOW SAFETY SWITCH TO SHUT OFF UNIT WHEN CONDENSATE DRAIN OVERFLOWS, INSTALLED BY MECHANICAL CONTRACTOR AND WIRED THRU THERMOSTAT CONTROL.
MANUFACTURED BY: RECTOR SEAL/SMD RESEARCH INC. OR OTHER CITY OF LA TEST LAB APPROVED MANUFACTURER.
4- UNIT ELEVATION SHALL BE COORDINATED WITH PLUMBING CONTRACTOR FOR SUITABLE CONDENSATION DRAIN GRAVITY SLOPE TO APPROVED RECEPTOR.
5- FOR MAINTENANCE CLEARANCE SEE MANUFACTURER'S PRINTED INSTRUCTIONS.
6- UNLESS NOTED OTHERWISE PROVIDE AND INSTALL DUCT TYPE SMOKE DETECTORS FOR UNITS 2000 CFM CAPACITY AND ABOVE OR AS INDICATED ON THE DRAWINGS. COORDINATE WITH ELECTRICAL FOR WIRING AND CONDUIT.

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SCALE
NONE

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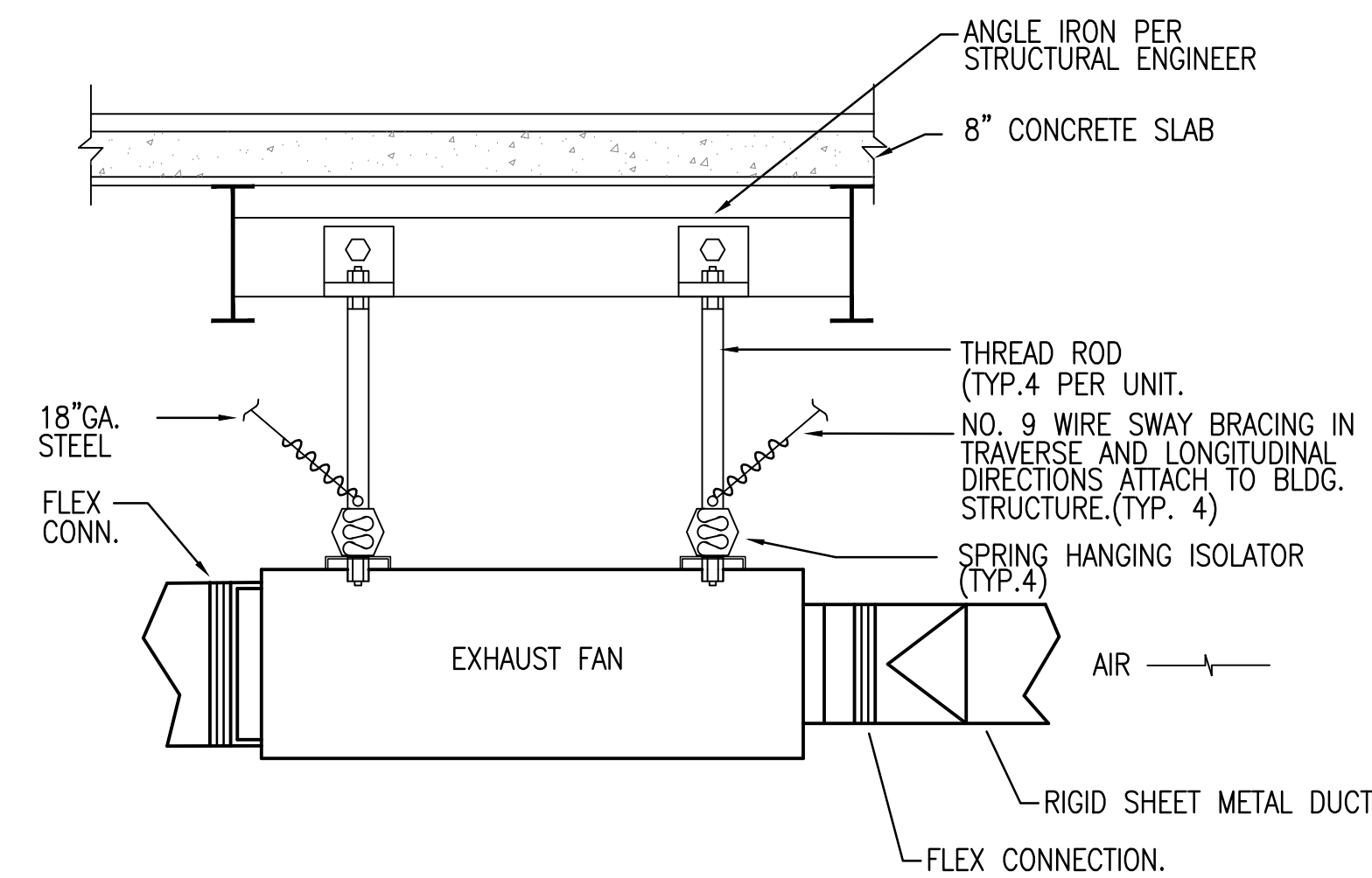
HORIZONTAL FAN COIL UNIT INSTALLATION DIAGRAM



DUCT PENETRATION THRU WALL

SCALE
NONE

3



IN-LINE EXHAUST FAN MOUNTING DETAIL

SCALE
NONE

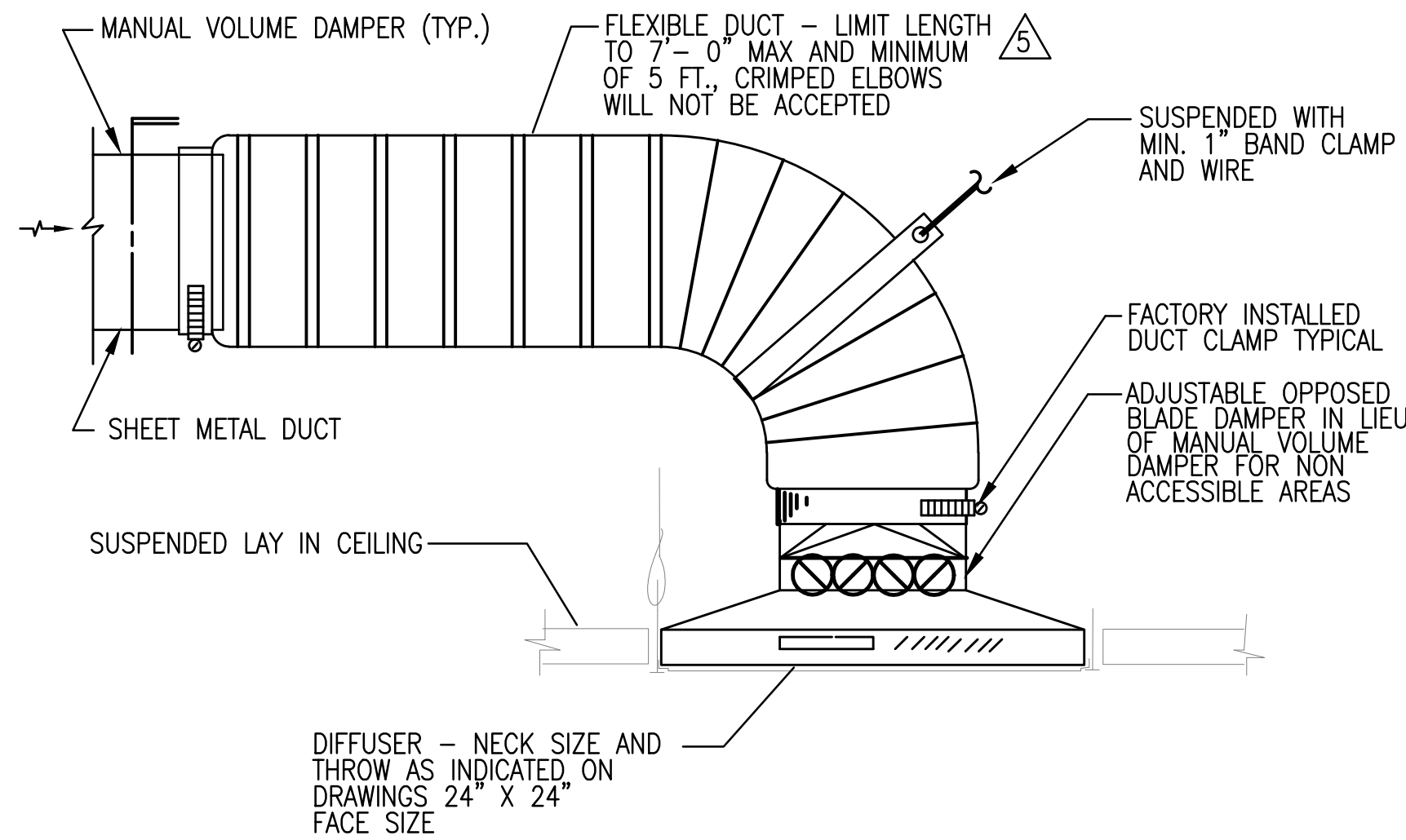
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CEILING AIR OUTLET AND INLET SCHEDULE										
MARK OR SYMBOL	TYPE	RATED CFM	NECK SIZE IN.	FRAME SIZE IN.	MAX. PD IN.W.	MAX. NC	CONN. DUCT SIZE UON	NOTE: FRAME TO MATCH THE CEILING 24X24 FOR T-BAR CLG./ADJUST DEFLECT. OF DIFFUSERS AS SHOWN ON DWGS.		
THROW								REMARKS		
CD-1	SUPPLY	0-100	6X6	24X24	0.09	25	6"ø	TITUS PERFORATED FACE MODEL PMC WITH R.N.R. WHERE REQ.		
CD-2		110-200	8X8	-	-	-	8"ø			
CD-3		210-300	10X10	-	-	-	9"ø			
CD-4		310-400	12X12	-	-	-	10"ø			
CD-5		410-600	15X15	-	-	-	12"ø			
CD-6		610-900	18X18	-	-	-	14"ø			
RG-1	RETURN	0-350		24X24	0.01		PLENUM	TITUS MODEL PMR TO MATCH SUPPLY DIFFUSER		
		360-500			0.01					
		510-650			0.02					
		660-850			0.03					
		860-1000			0.03					
		1010-1300			0.05					
RG-2	RETURN	0-650		12X24	0.05					
ER-1	EXHAUST	0-75	6X6	12X24	0.04		6" ø	MANUFACTURER TITUS, MODEL PMR OR EQUAL		
ER-2		76-140	8X8		0.05		8" ø	DUCTED TO MATCH SUPPLY DIFFUSER WITH ROUND NECK ADAPTOR.		
ER-3		141-220	10X10		0.05		10" ø			
ER-4		221-320	12X12		0.05		12" ø			
ER-5		321-500	14X14		0.03		14" ø			
ER-6		501-600	16X16		0.03		16" ø			
RD-1	SUPPLY	180	6"	13.5"	200	35	12"ø	TITUS TMRA WITH DISCHARGE PATTERN CONTROLLER		
RD-2		300	8"	18"	350	35	12"ø			
RD-3		500	10"	22.5"	550	35	12"ø			
RD-4		650	12"	27"	700	33	12"ø			

LOW PRESSURE DUCTWORK SCHEDULE Ⓢ	
ROUND DUCT	EQUIVALENT RECTANGULAR DUCT Ⓢ
6" ø	6X6
8" ø	8X8
9" ø	10X8
10" ø	10X10
12" ø	12X10
14" ø	14X12
16" ø	16X14
18" ø	18X16
20" ø	20X16

NOTES:

- 1- ALL LOW PRESSURE DUCTWORK SHALL BE SIZED TO NOT EXCEED 0.08 FRICTION DROP PER 100 FEET OF DUCT AND/OR 1000 FEET PER MINUTE VELOCITY.
2- ASPECT RATIO OF RECTANGULAR DUCTWORK SHALL NOT EXCEED A 3 TO 1 RATIO, UNLESS OTHERWISE SHOWN.
3- ALL DUCT JOINT & CONNECTION SHALL COMPLY WITH SMACNA LATEST EDITION.
4- DUCT CONSTRUCTION GAUGE SHALL COMPLY WITH UMC CHAPTER 10 REQUIREMENTS.
5- ALL SIZES ARE INSIDE TO INSIDE DIMENSIONS.



NOTE:
FLEXIBLE DUCT SHALL BE
ACOUSTICAL FLEXIBLE DUCT
COSCO SILENT FLEX II

CEILING DIFFUSER DETAIL AND SCHEDULES

SCALE
NONE

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REVISION	DATE	DESCRIPTION
1	05/07/2015	Medium 02
2	09/04/2015	Medium 03
3	10/20/2015	Medium 04
4	05/27/2016	Medium 05



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DETAILS

DRAWN CM
CHECKED -
APPROVED -
SCALE -
SHEET
M-401
DATE June 25, 2013
PROJECT NUMBER HLA 0000000-00000