

REVISIONS

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Project Information:
INTERIOR RENOVATIONS FOR EXISTING WAREHOUSE
 OWNER INFORMATION:
 VALPART ENTERPRISES LLC
 PROJECT ADDRESS:
 10200 NW 25TH ST UNIT 113
 DORAL, FL 33172
 This item has been digitally signed and sealed by ROSARIO MONTERO, PE, on 09/05/2024. Printed copies of this document are not considered signed and the signature must be verified on any electronic copies

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DATE: 07.22.2024
 DRAWN BY: R.G.
 CHECKED BY: R.M.
 SCALE: AS SHOW

H.V.A.C. GENERAL NOTES:

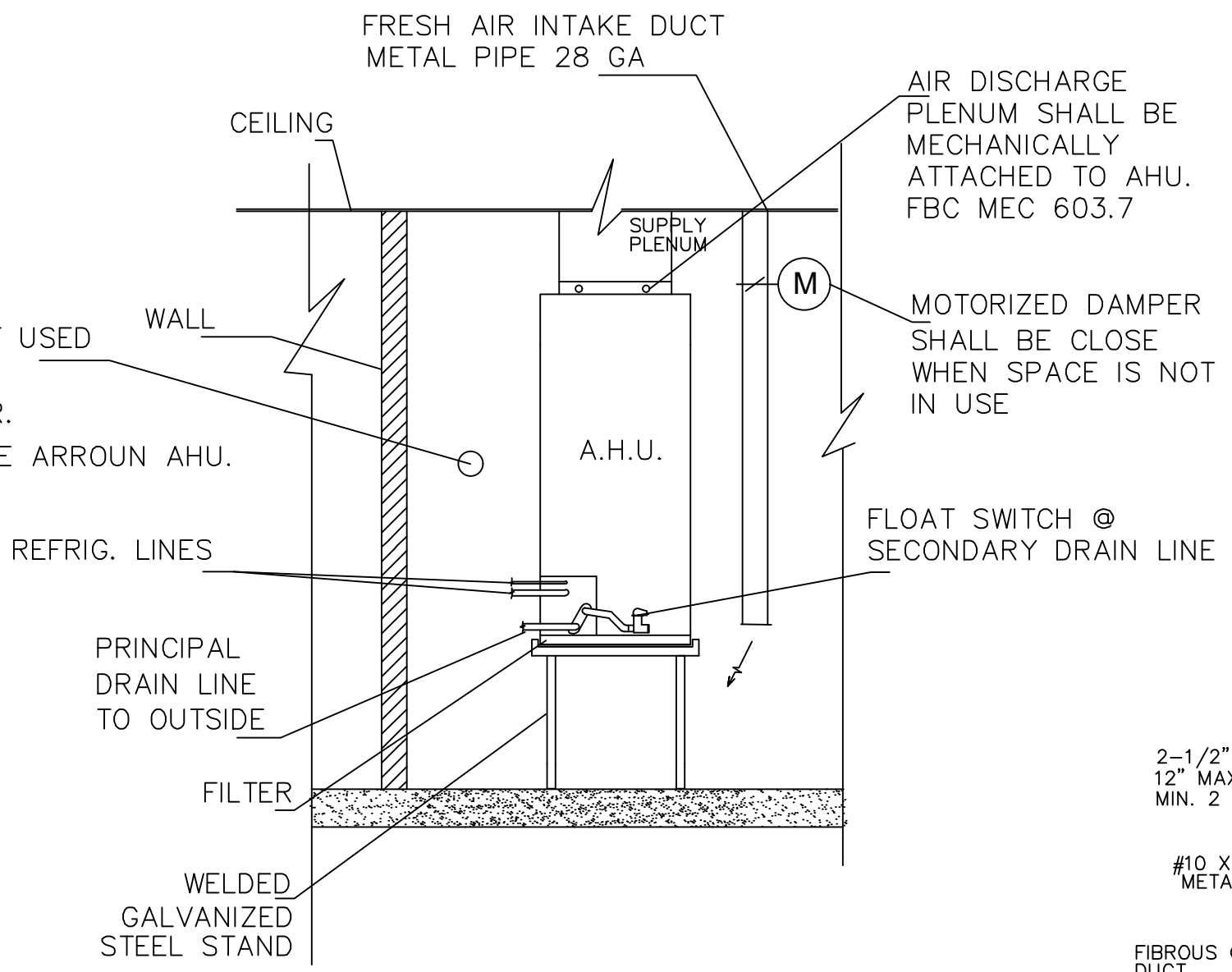
- THE WORK THAT IS TO BE DONE UNDER (FBC 2023, 8th EDITION). THIS HEADING INCLUDES THE FURNISHING OF ALL LABOR MATERIALS, EQUIPMENT, PERMITS, FEES INSPECTIONS, TESTS, INSURANCE, ETC. REQUIRED FOR THE COMPLETION OF THE AIR CONDITIONING SYSTEM SHOWN ON THE DRAWINGS AND/ OR LISTED BELOW.
- VENTILATION DUCTWORK SHALL BE GALVANIZED STEEL WITH 30 GAUGES, DUCT CONSTRUCTION, BRACING AND SUSPENSION IN ACCORDANCE WITH THE RECOMMENDATIONS SET FORTH IN THE LATEST EDITION OF THE A.S.H.R.A.E. GUIDE AND S.M.A.C.N.A. STANDARDS. DUCT SIZES SHOWN ARE "INSIDE" DIMENSIONS. VERIFY EXACT LOCATION OF DUCT WITH RESPECT TO STRUCTURE BEFORE FABRICATION.
- FLEXIBLE DUCT SHALL BE STEEL HELIX WIRE ON 7/8" CENTERS, ENCAPSULATED IN A CONTINUOUS SOFT VINYL FILM, JOINED BY MOLECULAR WELDING TO FORM AN AIR TIGHT INNER CORE, THE CORE IS TO BE INSULATED WITH FIBERGLASS INSULATION (R-6), AND SHEATHED IN A REINFORCED, ALUMINUM METALIZED POLYESTER VAPOR BARRIER JACKET.
- AIR CONDITIONING SUPPLY AND RETURN DUCTWORK RUNNING IN ATTIC SPACE SHALL BE 1-1/2" (R=6 MIN.) FIBERGLASS U.L. 181 LISTED, CLASS I AIR DUCT. DUCTWORK SHALL BE FABRICATED IN ACCORDANCE WITH S.M.A.C.N.A. STANDARDS. DUCTWORK SHALL BE FACED ON ONE SIDE WITH A FIRE-RESISTANT FOIL-SCRIM-KRAFT (FSK) VAPOR RETARDER, AND ITS AIRSTREAM SURFACE SHALL BE FACED WITH A TIGHTLY BONDED NON-WOVEN MAT. AIRSTREAM SURFACE MAT FACING SHALL BE TREATED WITH AN EPA-REGISTERED ANTI-MICROBIAL AGENT TO AID IN THE PREVENTION OF FUNGAL AND BACTERIAL GROWTH. DUCTWORK RUNNING IN CONDITION SPACE COULD BE R=4, VERIFY LOCAL CODES
- ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION AND IN STRICT COMPLIANCE WITH ALL APPLICABLE CODES AND STANDARDS.
- SUBMIT SHOP DRAWING OF ALL MATERIALS AND EQUIPMENT FOR APPROVAL PRIOR TO FABRICATION.
- UNDERCUT 1 INCH ALL INTERIOR DOORS.
- CUT ALL OPENINGS AND CHASES REQUIRED TO ACCOMMODATE THE WORK UNDER THIS DIVISION, AND REPAIR ALL FLOORS, WALLS, ETC., DAMAGED BY SUCH CUTTINGS. ALL WORK DONE UNDER THIS HEADING MUST CONFORM IN EVERY RESPECT TO FINISH AND QUALITY OF MATERIALS AND WORKMANSHIP SPECIFIED UNDER APPROPRIATE SECTIONS FOR THE BUILDING.
- TEMPERATURE CONTROL SHALL BE PROGRAMMABLE THERMOSTAT
- DUCT LOCATIONS MAY CHANGE DUE TO FIELD CONDITIONS
- NONCOMBUSTIBLE MATERIALS WITHIN RETURN AIR PLENUM OR SHALL BE HAVE A FLAME SPREAD INDEX OF NOT MORE 25 AND A SMOKE-DEVELOPED INDEX OF NOT MORE THAN 50.
- ALL CONDENSATE PIPING SHALL BE NO COMBUSTIBLE. INSULATE COND. PIPES ABOVE GROUND WITH 1/2 INCH ARMAFLEX INSULATION.
- GENERAL CONTRACTOR SHALL BE VERIFY ALL INSULATION VALUE USED FOR CALCUALTUIONS IN ENERGY AND/OR HEAT LOAD PROVIDED BY MECHANICAL ENGINEER.
- CONTRATOR SHALL VERIFY AND COORDIANTE EXISTING CONDITIONS OF THE BUILDING BEFORE INSTALLATION AND COORDINATE RUTE F REFRIGERANT LINES USING EXISTING
- IN THE EVENT ADDITIONAL CALCULATIONS ARE REQUIRED FOR A/C UNITS TIE DOWN @ ROOF, A LETTER FROM AN STRUCTURAL INGINEER BE PROBIDED BY ARCHITECTH.

SPLIT SYSTEM SCHEDULE

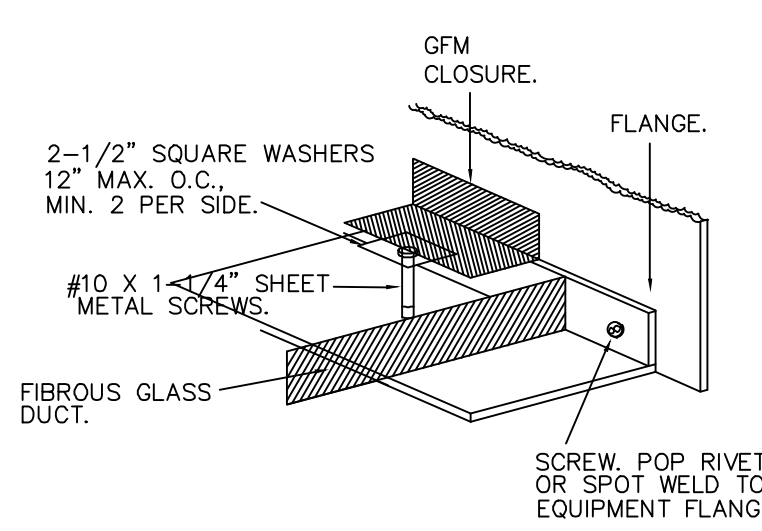
NOMINAL TONS	4
TOTAL COOLING CAP. (BTU/HR)	46,000
SENSIBLE COOLING CAP.(BTU/HR)	32,500
SUPPLY (CFM)	1600
HEATER (KW)	10
ESP-IN WG	0.3
AHU MIN CIRCUIT AMPACITY.	56
CU MIN CIRCUIT AMPACITY	25
VOLTAGE	208V-1P
DESIGN MANUFACTURE	RHEEM
AHU MODEL	RH2T4824STANNJ
CU MODEL	RA14AZ48AJIN
SEER2	15.2
REFRIGERANT LINE SIZE	7/8"-3/8"

OUTDOOR AIR CALCULATIONS

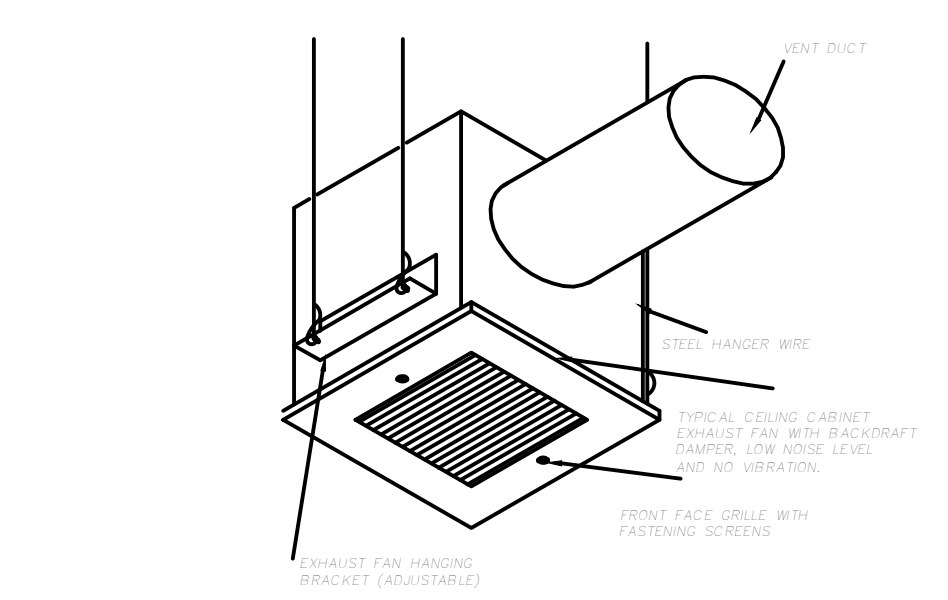
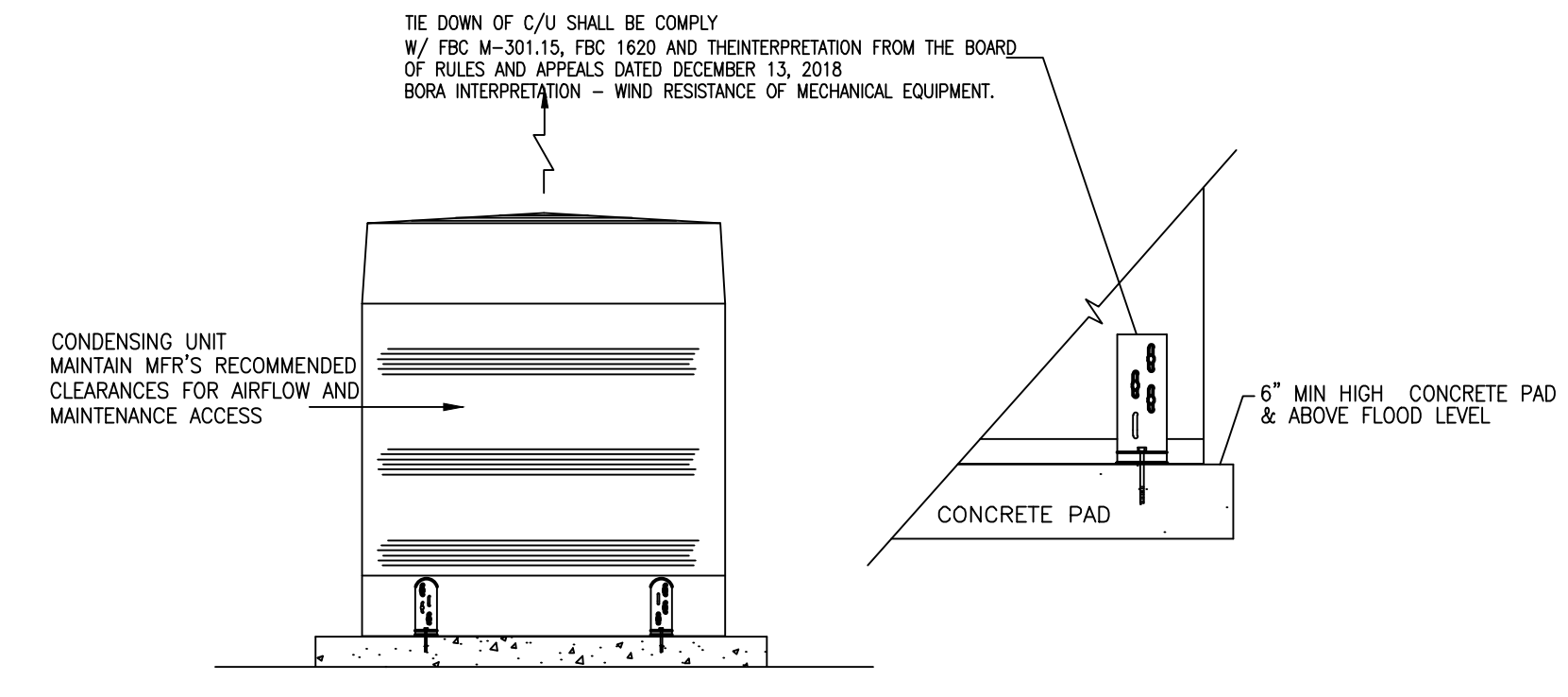
OFFICE AREA: 5 cfm/pers X 5 pers/1000SQFT X 1325 SQFT + 0.06 cfm/sqft X 1325 sqft = 112 CFM
 (PROVIDED: 200 CFM)



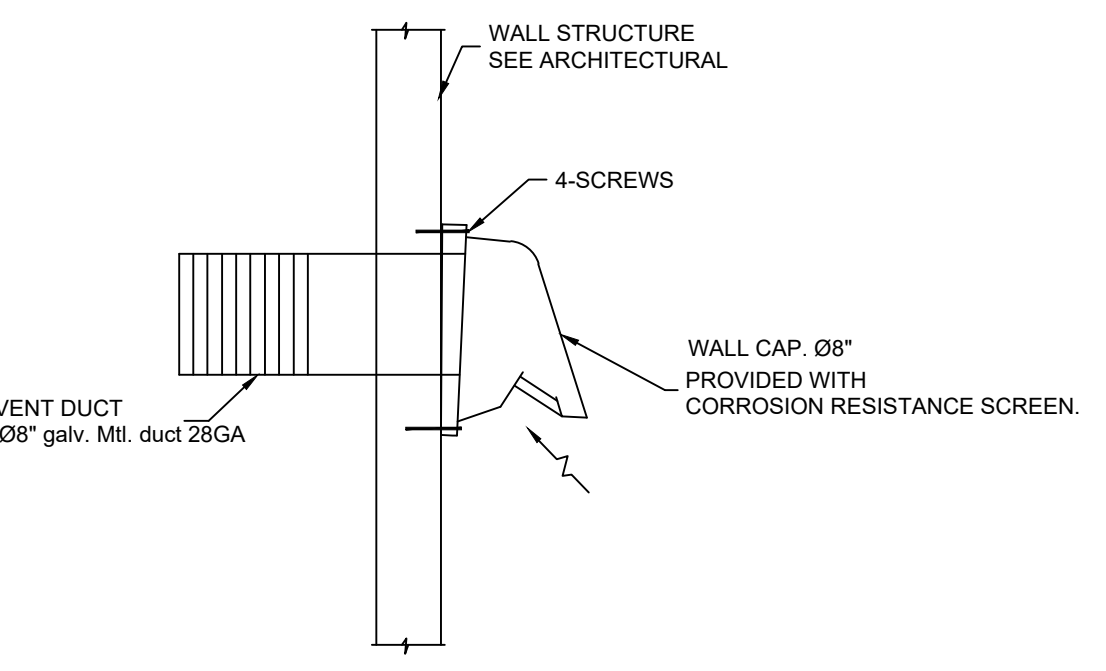
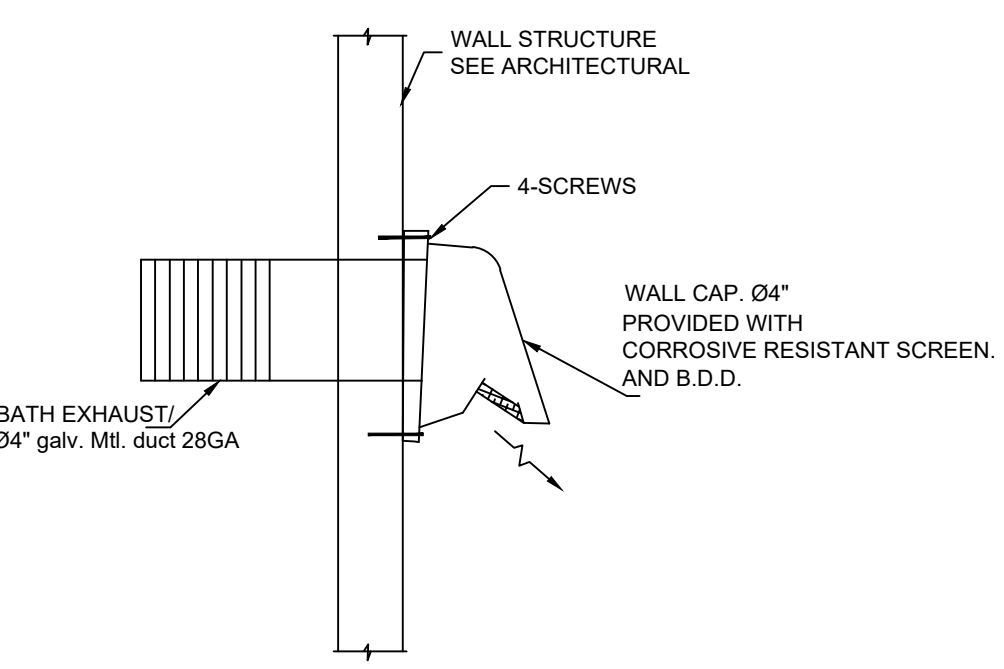
A.H.U PLENUM CONNECTION.



CONDENSING UNIT INSTALLATION DETAIL



EF#1
 EXH FAN PANASONIC, MODEL FV-03VQ5, 50 CFM & B.D.D.
 #4" METAL PIPE 28GA
 WIRE CONNECTED TO INDEPENT SWITCH.



HVAC DESIGN REQUIRES	YES	NO
DUCT SMOKE DETECTOR		X
FIRE DAMPER(S)		X
SMOKE DAMPER(S)		X
FIRE RATED ENCLOSURE		X
FIRE RATED ROOF/ FLOOR CEILING ASSEMBLY		X
FIRE STOPPING		X
SMOKE CONTROL		X

STANDARD 3" WIDE HANGERS
 Hanger extension to be the sum of the distances between the hanging wires and the duct size, ID (Spanna)

Duct size, inches	Maximum Hanger Spacing
48: Wide or greater	4 ft
Less tho 48" wide and less than 48" deep	6ft
Width between 28" & 48" and greater than 18" deep	6ft
Less than 28" wide and 18" depth or less	8ft

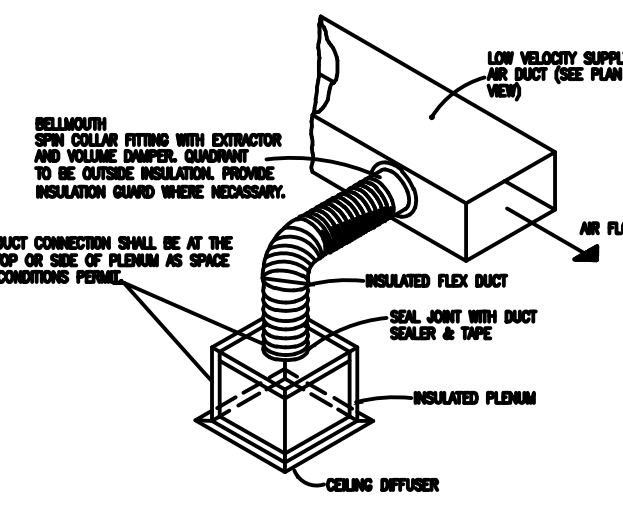
CHANNEL SECTION

If Total Extension is not greater than:	Minimum Channel Gauge	Minimum Channel Profile
6"	24	3" X 1.5"
18"	22	3" X 2"
30"	18	3" X 2"

USE OF Cambridge Duct Support Webbing 50' x 1- 3/4" Black UL 2045

A/C GRILLE SPECS.

SUPPLY GRILLE	TITUS MODEL: 250-AA W/O.B.D. or similar
RETURN GRILLE	TITUS MODEL: 350FL or similar



- DUCT SHALL BE INSTALLED FULLY EXPOSED. THE TOTAL EXTENDED LENGTH OF DUCT INSULATION SHALL NOT EXCEED 5 PERCENT OF THE ORIGINAL INSULATED LENGTH FOR THIS AREA.
- SEALS SHALL BE INSTALLED AT EVERY JOINT AND AT THE TOP OR SIDE OF PLENUM AS SPACE CONDITIONS PERMIT.
- TERMINAL GRILLES SHALL BE SUPPORTED INDEPENDENTLY OF THE FLEXIBLE DUCT.
- HORIZONTAL DUCT SHALL BE SUPPORTED AT INTERVALS NOT GREATER THAN 5 FEET. DUCT END BRACING SUPPORTS SHALL NOT EXCEED 1/2 INCH PER FOOT OF LENGTH. SUPPORTS SHALL BE PROVIDED WITH 1/2 INCH OF INSULATION BETWEEN THEM AND BETWEEN INSULATION FITTINGS AND SEALS. COLUMN JOISTS AND END BRACE OR BRACING SHALL BE CONSIDERED TO BE SUPPORTS.
- VERTICAL DUCT SHALL BE STABILIZED WITH SUPPORT STRIPS AT INTERVALS NOT GREATER THAN 5 FEET.
- HANGERS, BRACES AND OTHER SUPPORTS SHALL MEET THE DUCT MANUFACTURER'S REQUIREMENTS AND SHALL BE OF SUFFICIENT WEIGHT TO PREVENT DEFORMATION OF THE INTERNAL DUCT CHANNELS. IN NO CASE SHALL THE WEIGHT SUPPORTED FLEXIBLE DUCT BE IN DIRECT CONTACT WITH IT IF LESS THAN 1/2 INCHES AWAY.

MECHANICAL DETAIL PLAN

N.T.SCALE