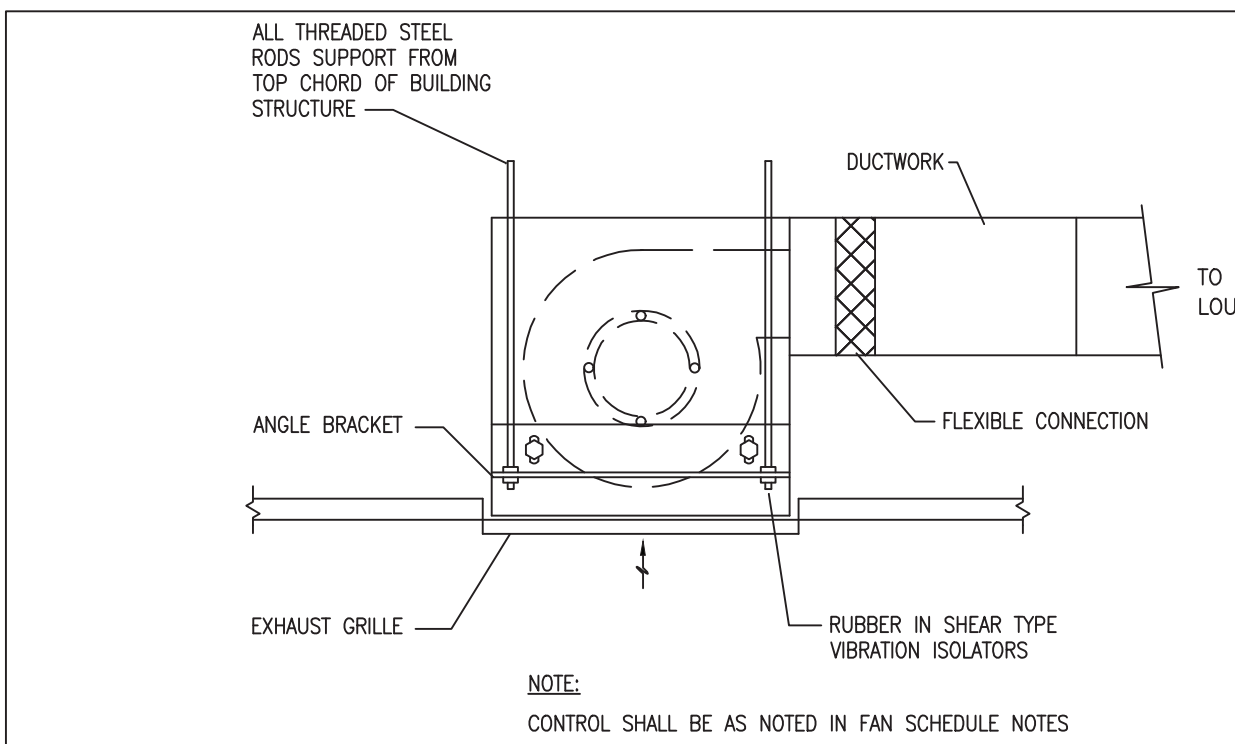
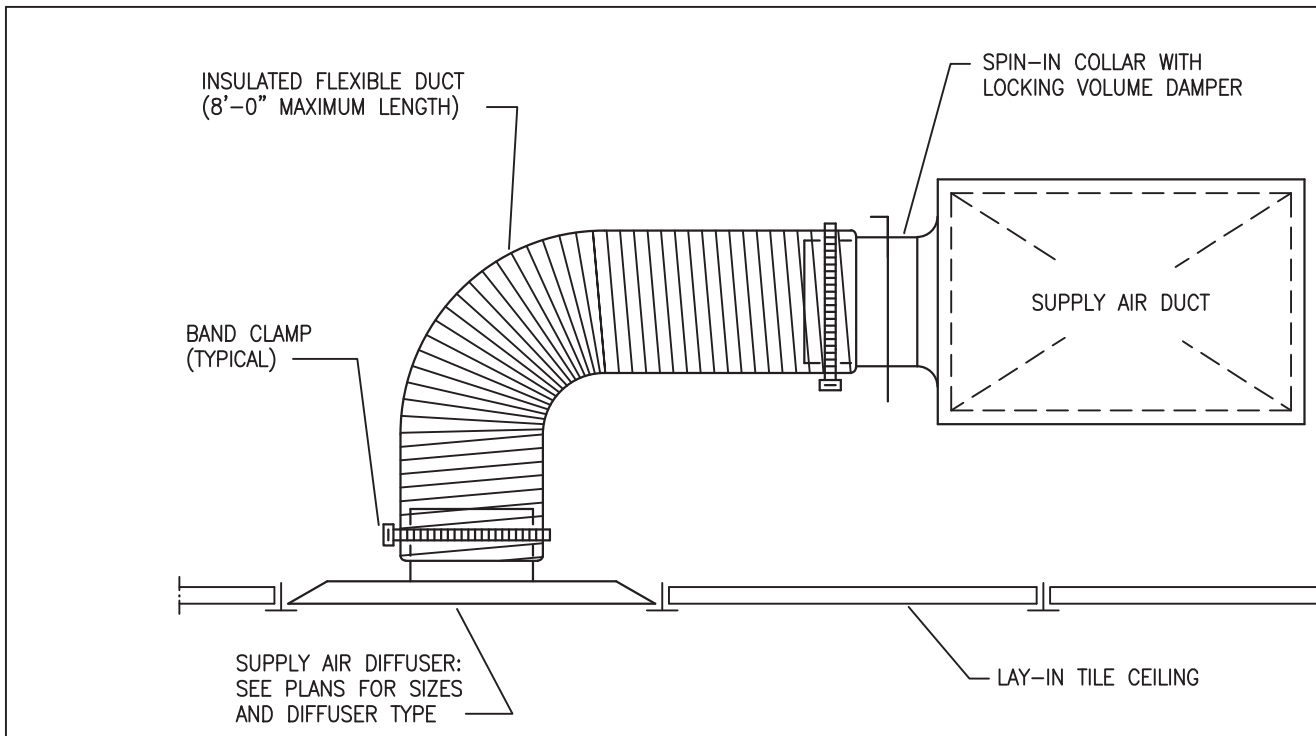


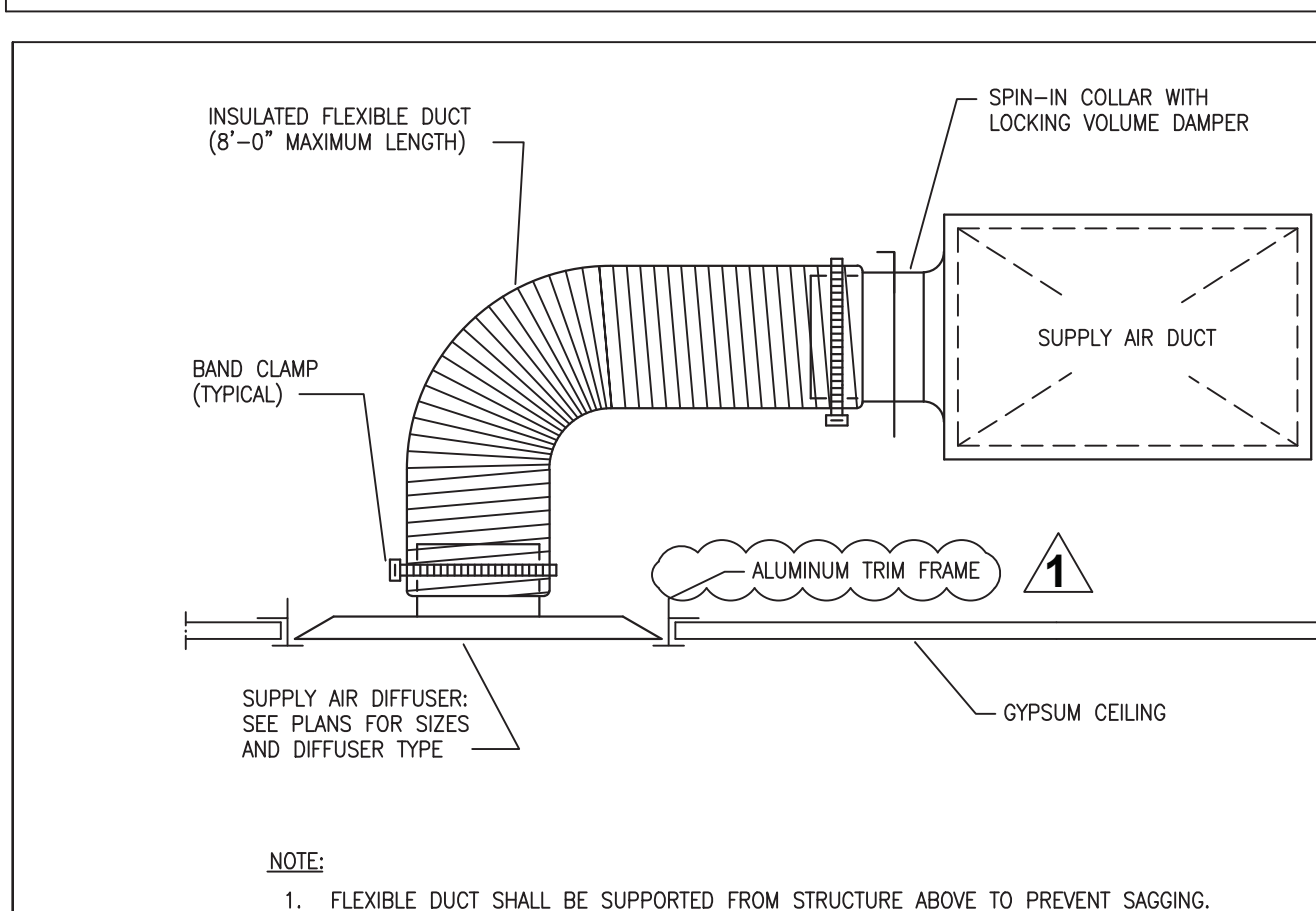
1 DUCTWORK FITTINGS DETAIL
NOT TO SCALE



2 CEILING CABINET EXHAUST FAN DETAIL
NOT TO SCALE



3 SUPPLY AIR DIFFUSER IN ACOUSTICAL CEILING
NOT TO SCALE



4 SUPPLY AIR DIFFUSER IN GYPSUM CEILING
NOT TO SCALE

UNIT DESIGNATION	TOTAL CFM	MINIMUM G.A. CFM	NOMINAL TONS	FAN BHP	E.S.P. IN. W.G.	GAS HEATER EFF.	GAS HEATER INPUT (BTU/H)	GAS HEATER OUTPUT (BTU/H)	TOTAL MBH	SENSIBLE MBH	OA DB (F)	EER AT AIR	IEER AT AIR	V/PH/AZ	MCA	MOCP	WEIGHT LBS	BASIS OF DESIGN	NOTES
RTU-1	3,000	530	7.5	2.4	1.0	82.0%	224,000	184,000	86.8	54.1	95	12.0	13.8	208/3/60	50	60	1,600	CARRIER 48HCFE08K2AASDWH	3,4,7,8,9,10,11,14,15,16,17
RTU-2	4,750	600	12.5	3.7	1.0	81.0%	240,000	195,000	141.6	93.4	95	12.2	13.9	208/3/60	68	80	2,200	CARRIER 48HCFE14K2AASDWH	3,4,7,8,9,10,11,14,15,16,17
RTU-3	4,000	400	10.0	2.6	1.0	80.0%	250,000	205,000	113.6	70.5	95	11.5	12.7	208/3/60	62	70	1,800	CARRIER 48HCFE12K2AASDWH	3,4,7,8,9,10,11,14,15,16,17
RTU-4	3,000	450	7.5	2.4	1.0	82.0%	224,000	184,000	86.8	54.1	95	12.0	13.8	208/3/60	50	60	1,600	CARRIER 48HCFE08K2AASDWH	3,4,7,8,9,10,11,14,15,16,17
RTU-5	4,000	ERV 200	10.0	3.7	1.0	80.0%	250,000	205,000	113.6	70.5	95	11.5	12.7	208/3/60	81	90	2,700	CARRIER 48HCFE12K2AASDWH	3,4,7,8,9,10,12,14,15,16,17

NOTES:

- THRU-THE-BASE GAS CONNECTION
- TWO (2) STAGE COOLING
- SINGLE (1) STAGE COOLING
- TWO (2) STAGE GAS HEATING
- SINGLE (1) STAGE GAS HEATING
- HIGH STATIC BELT DRIVE BLOWER
- MEDIUM STATIC BELT DRIVE BLOWER
- 2-SPEED INDOOR FAN MOTOR CONTROLLED BY VFD
- PROVIDE LOW AMBIENT COOLING TO 40°F MINIMUM OR 0°F (WHERE AVAILABLE).
- HINGED ACCESS DOOR & SIDE FILTER ACCESS DOOR KIT.
- HORIZONTAL AIRFLOW DISCHARGE
- ENTHALPY LOW LEAK ECONOMIZER W/ ERV & HOODS.
- ENTHALPY LOW LEAK ECONOMIZER W/ BAROMETRIC RELIEF & HOODS.
- PROVIDE DEHUMIDIFICATION OPTION W/ HUMIDITY SENSOR
- PROVIDE CARRIER 7-DAY PROGRAMMABLE THERMOSTAT OR EQUAL.
- PROVIDE POWERED-CHAMBERING-CHILLET.
- PROVIDE 24 INCH TALL ROOF CURB
- MODULATING GAS HEATING (10:1 TURNDOWN)
- COMPARATIVE ENTHALPY ECONOMIZER CONTROL
- ALL ALUMINUM ENERGY RECOVERY WHEEL WITH BYPASS DAMPERS AND SLIDE OUT FOR SERVICEABILITY
- SUPPLY AND EXHAUST AIR PATH
- WHEEL SHALL HAVE A PURGE RATED FOR NO MORE THAN 0.04% CROSSOVER BETWEEN SUPPLY AND EXHAUST AIR PATH
- ALL OUTDOOR AIR SHALL PASS THRU THE WHEEL WHEN UNIT IS IN NO ECONOMIZING
- HEAVY B FILTRATION
- NON-FUSED DISCONNECT SWITCH W/ CONVENIENCE OUTLET
- BACNET COMPATIBLE DDC CONTROLLER INCLUDING PROGRAMMING/SEQUENCING AND SENSORS AS REQUIRED FOR CONSTANT VOLUME SPACE CONTROL
- AUTO-RESTART AFTER A POWER FAILURE
- STANDARD MANUFACTURER KNOCKDOWN CURB
- STARTUP & 1-YEAR WARRANTY LABOR BY MANUFACTURER; EXTENDED 5 YEAR COMPRESSOR PARTS ONLY WARRANTY

SCHEDULE NOTES FOR RTU-5 (WITH ERV):

- BASIS OF DESIGN IS CARRIER 48HCFE12K2AASDWH W/ ENERGY ERV W/ ECONOMIZER AND FREEZE PROTECTION, ONLY PREAPPROVED ALTERNATES MEETING ALL THE PROJECT REQUIREMENTS WILL BE CONSIDERED
- IN ORDER TO BE CONSIDERED AN ACCEPTABLE ALTERNATE, PROPOSED UNIT MUST MEET THE SPECIFIED PERFORMANCE INCLUDING, BUT NOT LIMITED TO, DX COIL LEAVING DEWPOINT (DP-47)
- PROVIDE UNITS WITH THE FOLLOWING FEATURES:
 - 2" DOUBLE WALL FOAM INJECTED R13 INSULATED CASING (INCLUDING R13 INSULATED BASE), ENTIRELY PRE-PANDED EXTERIOR
 - DIGITAL SCROLL COMPRESSOR, BOTH CIRCUITS (IF APPLICABLE); HOT GAS BYPASS IS NOT ACCEPTABLE
 - MODULATING HOT GAS REHEAT WITH ACTIVE HEAD PRESSURE CONTROL VFD DRIVEN CONDENSER FANS TO ENSURE 70 DEG F UNIT LEAVING AIR TEMPERATURE
 - GLV LIGHTS BETWEEN DX AND HOT GAS REHEAT COIL
 - DIRECT DRIVE PLENUM SUPPLY AND POWERED EXHAUST FANS W/VFD AND PIEZO RINGS FOR AIR MEASUREMENT
 - BOTH FANS SHALL HAVE SLIDE-OUT FEATURE FOR SERVICEABILITY

EXHAUST FAN SCHEDULE											
PERFORMANCE DATA			CONSTRUCTION DATA		ELECTRICAL DATA						
MARK	CFM	SP (IN. W.G.)	RPM	TYPE	DRIVE	MOTOR H.P. (WATTS)	VOLT	PH	MAX. WEIGHT (LB)	MANUFACTURER OR EQUAL	NOTES
EF-1	70	0.375	838	CEILING MOUNTED	DIRECT	(24-1)	115	1	12	GREENHECK SP-A50-90-VG	1,2,6,7
EF-2	1380	0.500	1385	ROOF MOUNTED	DIRECT	1/2	115	1	65	GREENHECK G-120-VG	4,5,6,7
EF-3	1000	0.500	1650	ROOF MOUNTED	DIRECT	1/4	115	1	56	GREENHECK G-099-VG	3,4,5,6,7
EF-4	220	0.250	1664	INLINE MOUNTED	DIRECT	1/15	115	1	41	GREENHECK SQ-70-VG	4,6,7

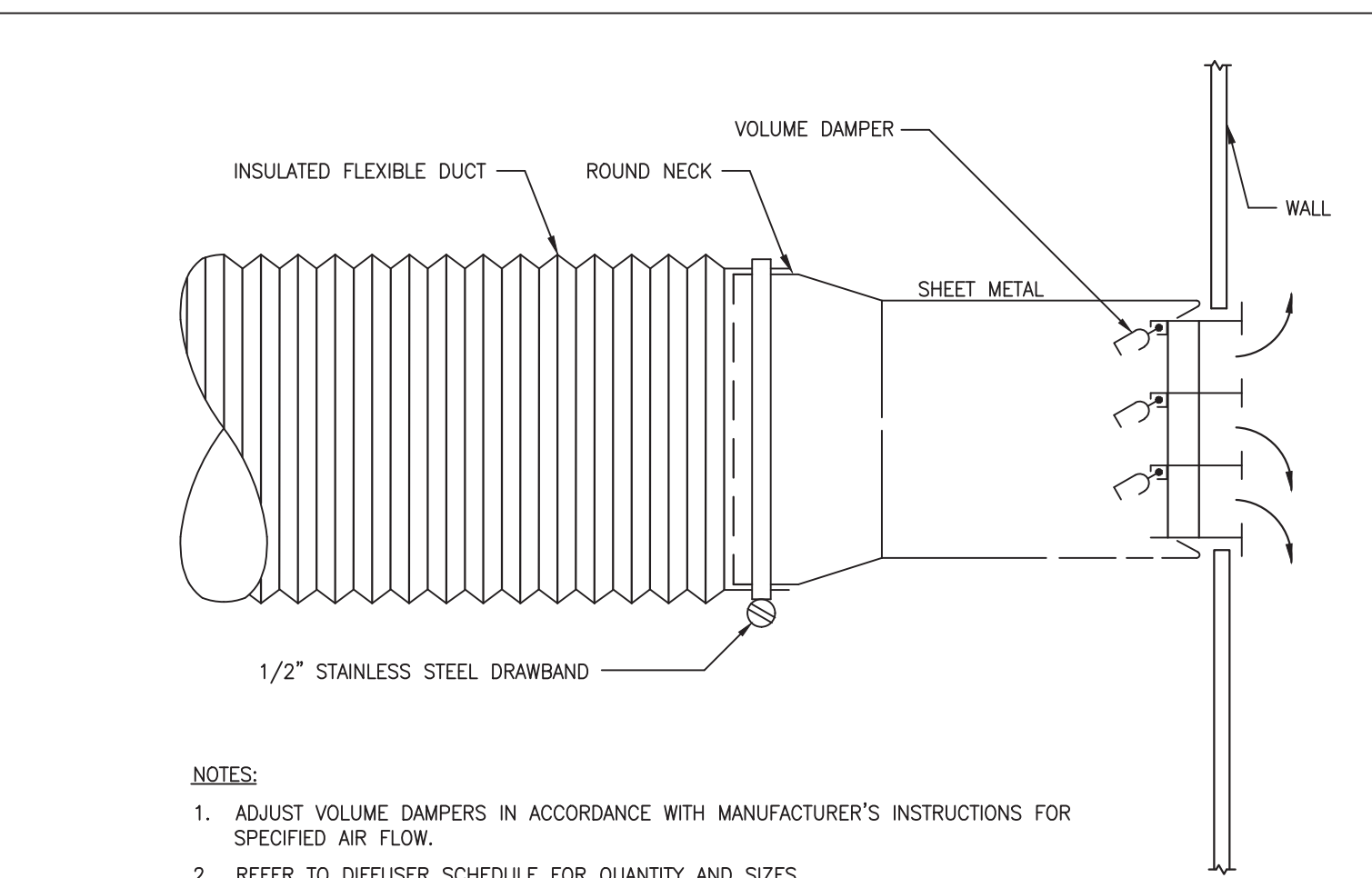
NOTES:

- FANS IN RESTROOMS SHALL SWITCH WITH LIGHT.
- FANS IN BATHING, MOP CLOSETS, & EXAM ROOMS SHALL ENERGIZE WITH WALL SWITCH.
- FANS IN ISOLATION & OXYGEN ROOMS SHALL RUN CONTINUOUSLY.
- FANS IN HOUSING, RUNS, & WARDS SHALL RUN CONTINUOUSLY.
- PROVIDE 12" ROOF CURB FOR ALL ROOF EXHAUST CAPS ON FLAT ROOF.
- STANDARD PREWIRED DISCONNECT SWITCH.
- VIBRATION ISOLATORS AND BRACKETS.

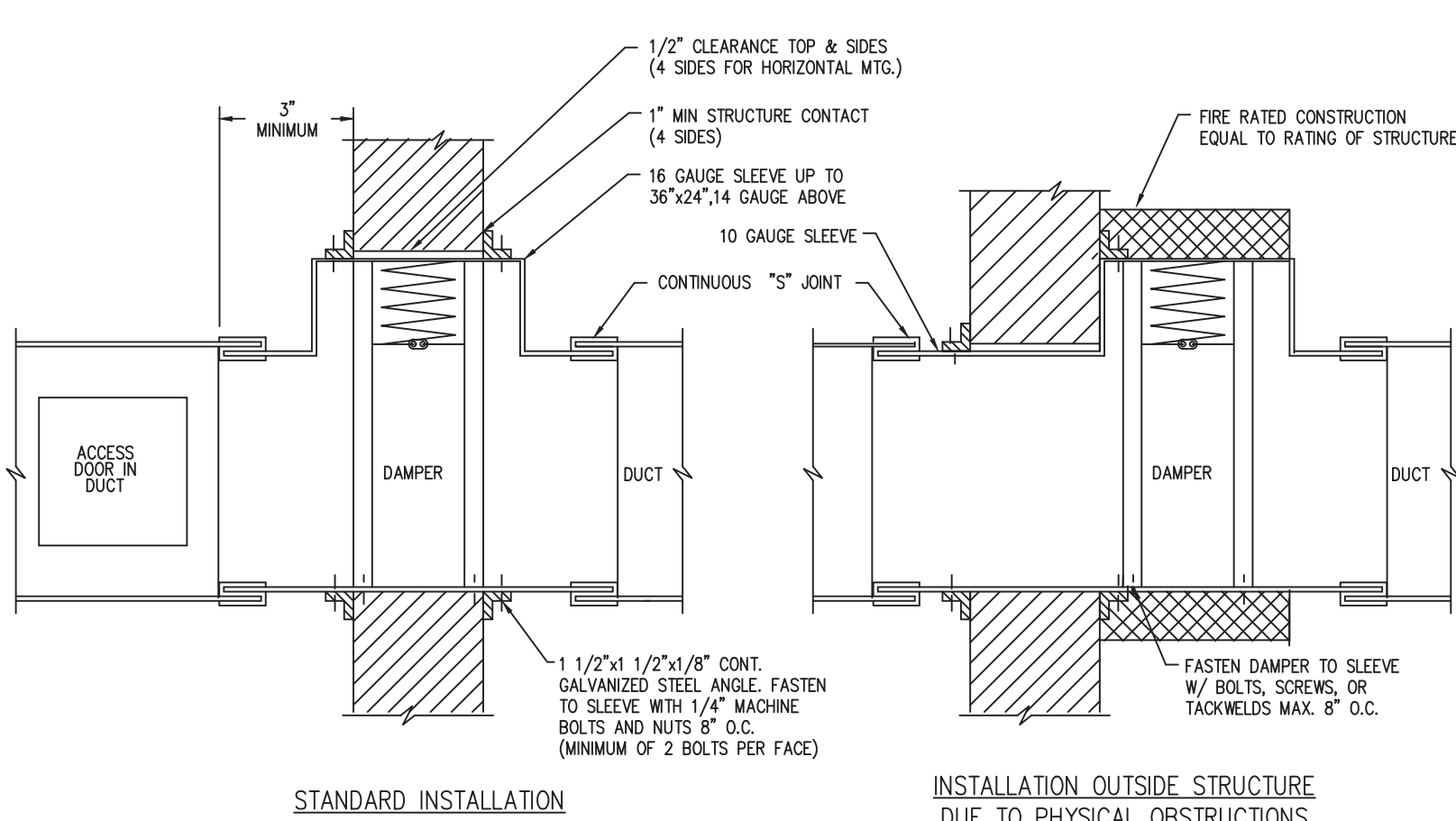
TYPE	SERVICE	CFM	DIMENSIONS IN/IN	FREE AREA FT ²	FINISH	BASIS OF DESIGN	NOTES
L-1	EXHAUST	220	15"10"x12"	0.28	ALUMINUM	GREENHECK: ESJ-202	1-2
L-2	EXHAUST	140	13"10"x12"	0.23	ALUMINUM	GREENHECK: ESJ-202	1-2
L-3	OUTSIDE AIR INTAKE	70	11"x7"x2"	0.10	ALUMINUM	GREENHECK: ESJ-202	1-2

NOTES:

- COORDINATE WITH OWNER FINAL COLOR & FINISH (IF PAINTED).
- CONTRACTOR SHALL CONFIRM ACTUAL FINAL DIMENSIONS WITH VENDOR.



5 SIDEWALL DIFFUSER/GRILLE DETAIL
NOT TO SCALE

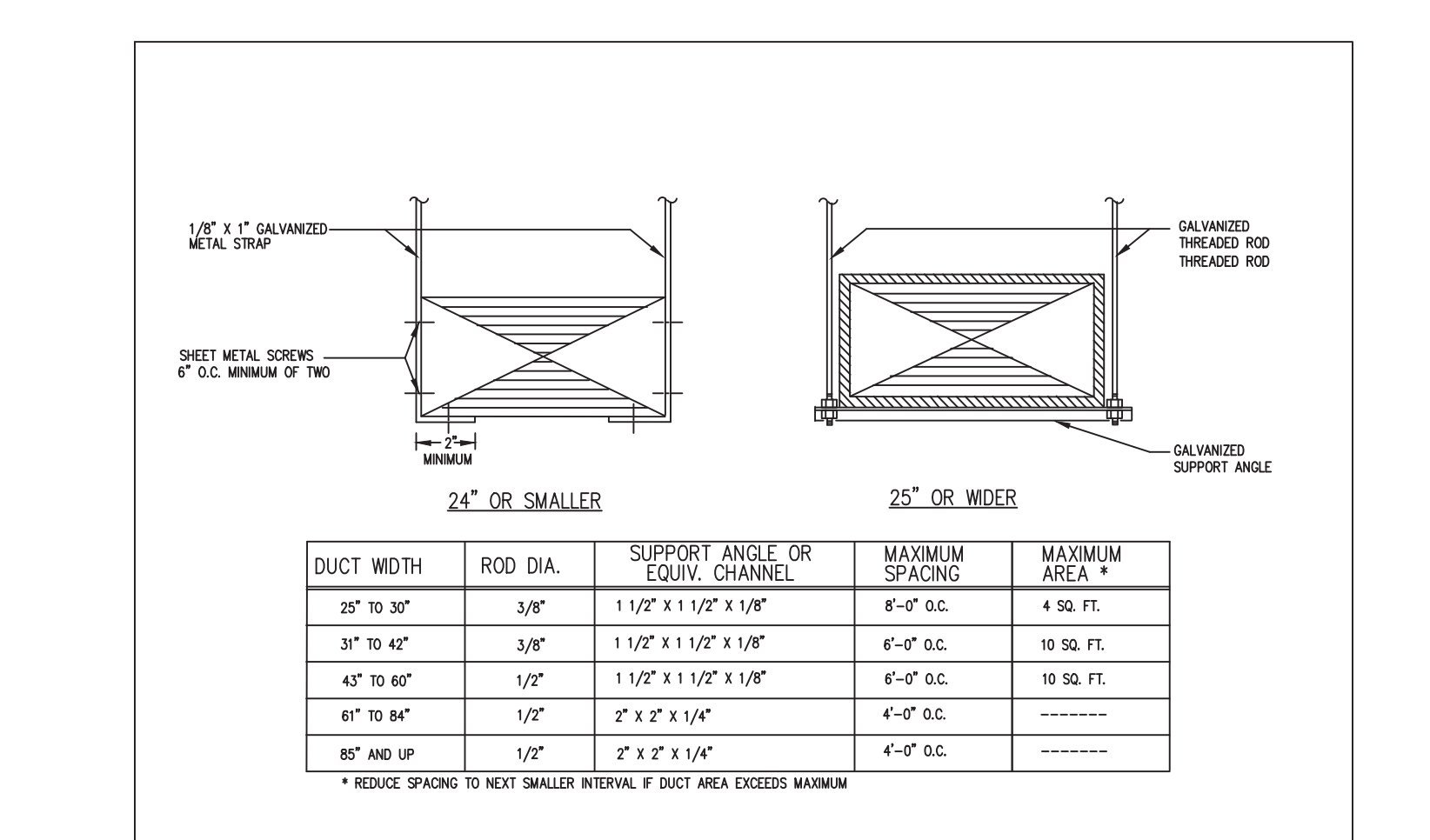


6 RATED WALL OPENING FIRE DAMPER
NOT TO SCALE

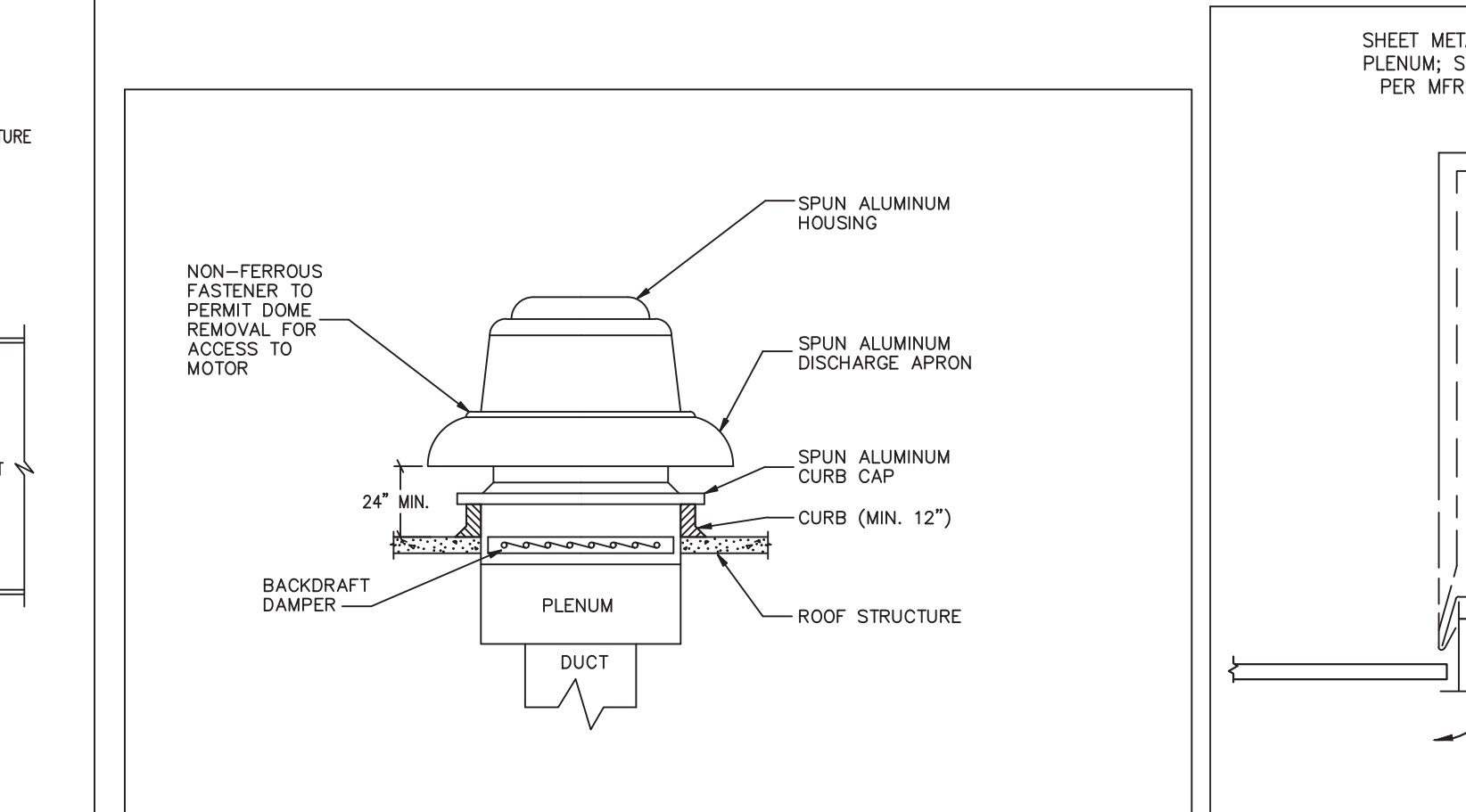
TYPE	SERVICE	CFM RANGE	FACE DIMENSION	NECK DIMENSION	FINISH	BASIS OF DESIGN	NOTES
1	SUPPLY AIR DIFFUSER	0 - 125	24"x24"	6"	WHITE	TUTTLE & BAILEY: T1100	1,2,3,4,5,7
2	SUPPLY AIR DIFFUSER	126 - 250	12"x12"	6"	WHITE	TUTTLE & BAILEY: T1100	1,2,3,4,5,7
3	SUPPLY AIR DIFFUSER	251 - 400	48"x24"	8"	WHITE	TUTTLE & BAILEY: 4000	1,2,4,5,7,9
4	SUPPLY AIR DIFFUSER	401 - 600	48"x36"	10"	WHITE	TUTTLE & BAILEY: 4000	1,2,4,5,7,9
1	RETURN AIR DIFFUSER	0 - 125	24"x24"	6"	WHITE	TUTTLE & BAILEY: PR	1,2,6,7
2	RETURN AIR DIFFUSER	126 - 250	12"x12"	6"	WHITE	TUTTLE & BAILEY: PR	1,2,6,7
3	RETURN AIR DIFFUSER	251 - 400	48"x24"	8"	WHITE	TUTTLE & BAILEY: 4000	1,2,5,6,8,9
1	EXHAUST AIR GRILLE	0 - 125	12"x12"	6"	WHITE	TUTTLE & BAILEY: PR	1,2,6,7
2	EXHAUST AIR GRILLE	126 - 250	20"x20"	18"x18"	WHITE	TUTTLE & BAILEY: PR	1,2,6,7
3	DOOR TRANSFER GRILLE	251 - 400	16"x16"	N/A	WHITE	TUTTLE & BAILEY: DXFR	1,2

NOTES:

- COORDINATE WITH OWNER COLOR & FINISH.
- CONTRACTOR SHALL CONFIRM ACTUAL FINAL DIFFUSER DIMENSIONS WITH VENDOR, AND COORDINATE W/ CEILING/WALL/DOOR TYPE AS NECESSARY.
- WAY THROW PATTERN.
- PROVIDE WITH OPPOSED BLADE DAMPER.
- PROVIDE INSULATED BACKINGS WHEN INSTALLED ABOVE CEILINGS, UNCONDITIONED, AND/OR PARTIALLY CONDITIONED SPACE.
- PERFORATED PATTERN
- CEILING MOUNTED
- WALL MOUNTED
- AD CORE, STANDARD UNIT, & 1/2" MARGINS



7 DUCT SUPPORT DETAIL
NOT TO SCALE

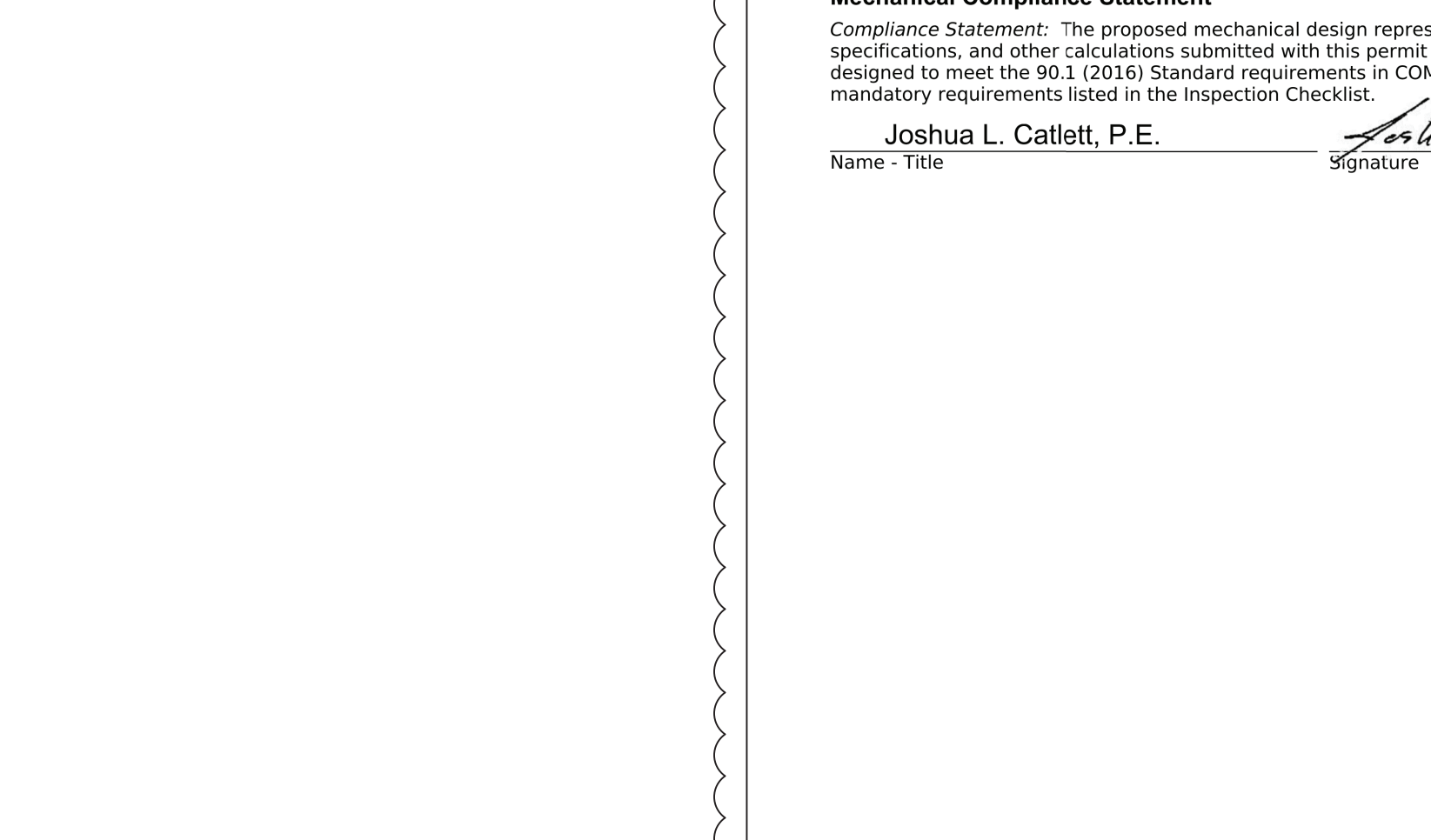


8 ROOF EXHAUST FAN DETAIL
NOT TO SCALE

MARK	AREA / SERVICE	CFM	TYPE	KW	VOLT	PH	AMPS	MANUFACTURER	NOTES
EH-1	ENTRY/EXIT	100	WALL MOUNTED	2	208/230	1	8.3	MARKEL F30521ZDWB	1,2

NOTES:

- ELECTRICAL CORD SHALL BE CONCEALED W/ CASING.
- BUILT IN CONTROLLABLE THERMOSTAT



9 LINEAR SLOT DIFFUSER DETAIL
NOT TO SCALE

MARK	MFR*	MODEL	MAX AIR TEMP. (F)	TUBE QTY	CURRENT AMP	POWER WATTS	VOLTAGE	WEIGHT LBS.
ACU	ATMOS AIR	500EC	200	5	0.6	52	115/1/60	15

NOTES:

- MANUFACTURER OR APPROVED EQUAL
- UNITS SHALL BE INSTALLED IN THE SUPPLY DUCT DISCHARGE AIR
- UNIT SHALL INTERLOCK TO ENERGIZE WITH RTU FAN OR AIR PRESSURE SWITCH
- PROVIDE NEMA 5-15 PLUG OR 3 WIRE TO JUNCTION BOX
- COORDINATE WITH ELECTRICAL CONTRACTOR.

		CONSTRUCTION DATA		ELECTRICAL DATA					
MARK	AREA / SERVICE	CFM	TYPE	KW	VOLT	PH	AMPS	MANUFACTURER	NOTES
EH-1	ENTRY/EXIT	100	WALL MOUNTED	2	208/230	1	8.3	MARKEL F30521ZDWB	1,2

4. PROVIDE HANGERS AND STRUCTURAL SUPPORT PER MFR.	
SCHEDULE	
BASIS OF DESIGN	NOTES
LE & BAILEY: T1100	1,2,3,4,5,7
LE & BAILEY: T1100	1,2,3,4,5,7
LE & BAILEY: 4000	1,2,4,5,7,9

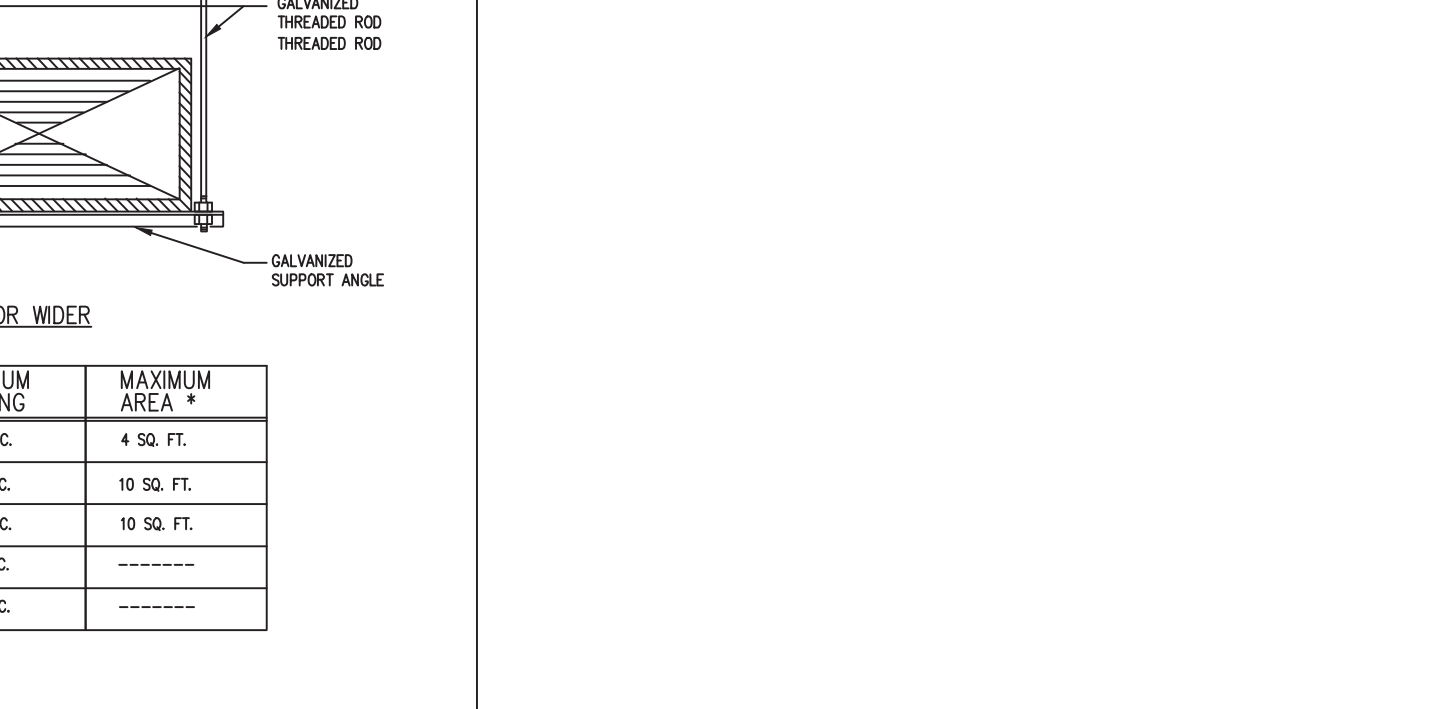
NOTES:

- MAXIMUM MOUNTING HEIGHT = 10 FT.
- BUILT IN CONTROLLABLE THERMOSTAT
- PROVIDE VENT FOR COMBUSTION AIR & EXHAUST VENTING
- PROVIDE HANGERS AND STRUCTURAL SUPPORT PER MFR.

TYPE	SERVICE	CFM RANGE	FACE DIMENSION	NECK DIMENSION	FINISH	BASIS OF DESIGN	NOTES
1	SUPPLY AIR DIFFUSER	0 - 125	24"x24"	6"	WHITE	TUTTLE & BAILEY: T1100	1,2,3,4,5,7
2	SUPPLY AIR DIFFUSER	126 - 250	12"x12"	6"	WHITE	TUTTLE & BAILEY: T1100	1,2,3,4,5,7
3	SUPPLY AIR DIFFUSER	251 - 400	48"x24"	8"	WHITE	TUTTLE & BAILEY: 4000	1,2,4,5,7,9
4	SUPPLY AIR DIFFUSER	401 - 600	48"x36"	10"	WHITE	TUTTLE & BAILEY: 4000	1,2,4,5,7,9
1	RETURN AIR DIFFUSER	0 - 125	24"x24"	6"	WHITE	TUTTLE & BAILEY: PR	1,2,6,7
2	RETURN AIR DIFFUSER	126 - 250	12"x12"	6"	WHITE	TUTTLE & BAILEY: PR	1,2,6,7
3	RETURN AIR DIFFUSER	251 - 400	48"x24"	8"	WHITE	TUTTLE & BAILEY: 4000	1,2,5,6,8,9
1	EXHAUST AIR GRILLE	0 - 125	12"x12"	6"	WHITE	TUTTLE & BAILEY: PR	1,2,6,7
2	EXHAUST AIR GRILLE	126 - 250	20"x20"	18"x18"	WHITE	TUTTLE & BAILEY: PR	1,2,6,7
3	DOOR TRANSFER GRILLE	251 - 400	16"x16"	N/A	WHITE	TUTTLE & BAILEY: DXFR	1,2

NOTES:

- COORDINATE WITH OWNER COLOR & FINISH.
- CONTRACTOR SHALL CONFIRM ACTUAL FINAL DIFFUSER DIMENSIONS WITH VENDOR, AND COORDINATE W/ CEILING/WALL/DOOR TYPE AS NECESSARY.
- WAY THROW PATTERN.
- PROVIDE WITH OPPOSED BLADE DAMPER.
- PROVIDE INSULATED BACKINGS WHEN INSTALLED ABOVE CEILINGS, UNCONDITIONED, AND/OR PARTIALLY CONDITIONED SPACE.
- PERFORATED PATTERN
- CEILING MOUNTED
- WALL MOUNTED
- AD CORE, STANDARD UNIT, & 1/2" MARGINS



9 LINEAR SLOT DIFFUSER DETAIL
NOT TO SCALE

COMcheck Software Version 4.1.5.3
Mechanical Compliance Certificate

Project Information

Energy Code: 90.1 (2016) Standard
Project Title: Capital Project #1483
Location: Pomona, New York
Climate Zone: 5a
Project Type: New Construction

Owner/Agent: _____
Designer/Contractor: _____

Mechanical Systems List

Quantity System Type & Description

1 RTU-1 (Single Zone)
Heating: 1 each - Central Furnace, Gas, Capacity = 224 kBtu/h
Proposed Efficiency = 82.00% EI, Required Efficiency: 80.00 % EI (or 78% AFUE)
Cooling: 1 each - Single Package DX Unit, Capacity = 87 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 12.20 EER, Required Efficiency: 11.00 EER + 12.7 IEER
Fan System: FAN SYSTEM 1 - Compliance (Motor nameplate HP method) : Passes

Fans:
FAN 1 Supply, Constant Volume, 3000 CFM, 2.8 motor nameplate hp, 0.0 fan efficiency grade

1 RTU-2 (Single Zone)
Heating: 1 each - Central Furnace, Gas, Capacity = 240 kBtu/h
Proposed Efficiency = 81.00% EI, Required Efficiency: 80.00 % EI
Cooling: 1 each - Single Package DX Unit, Capacity = 142 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 12.20 EER, Required Efficiency: 11.00 EER + 12.7 IEER
Fan System: FAN SYSTEM 2 - Compliance (Motor nameplate HP method) : Passes

Fans:
FAN 2 Supply, Constant Volume, 4750 CFM, 5.0 motor nameplate hp, 0.0 fan efficiency grade

1 RTU-3 (Single Zone)
Heating: 1 each - Central Furnace, Gas, Capacity = 224 kBtu/h
Proposed Efficiency = 82.00% EI, Required Efficiency: 80.00 % EI
Cooling: 1 each - Single Package DX Unit, Capacity = 114 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 11.50 EER, Required Efficiency: 11.00 EER + 12.7 IEER
Fan System: FAN SYSTEM 3 - Compliance (Motor nameplate HP method) : Passes

Fans:
FAN 4 Supply, Constant Volume, 4000 CFM, 2.8 motor nameplate hp, 0.0 fan efficiency grade

1 RTU-4 (Single Zone)
Heating: 1 each - Central Furnace, Gas, Capacity = 224 kBtu/h
Proposed Efficiency = 82.00% EI, Required Efficiency: 80.00 % EI (or 78% AFUE)
Cooling: 1 each - Single Package DX Unit, Capacity = 114 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 12.20 EER, Required Efficiency: 11.00 EER + 12.7 IEER
Fan System: FAN SYSTEM 4 - Compliance (Motor nameplate HP method) : Passes

Fans:
FAN 5 Supply, Constant Volume, 3000 CFM, 2.8 motor nameplate hp, 0.0 fan efficiency grade

1 RTU-5 (Single Zone)
Heating: 1 each - Central Furnace, Gas, Capacity = 250 kBtu/h
Proposed Efficiency = 80.00% EI, Required Efficiency: 80.00 % EI

Project Title: Capital Project #1483
Data filename: C:\Users\j\c\OneDrive\Projects\cd\19\1961-Washington Landing\comcheck\2021\Capital Project 1483.cck

Report date: 10/25/21
Page 2 of 20

Quantity System Type & Description

Cooling: 1 each - Single Package DX Unit, Capacity = 114 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 11.50 EER, Required Efficiency: 11.00 EER + 12.7 IEER
Fan System: FAN SYSTEM 5 - Compliance (Motor nameplate HP method) : Passes

Fans:
FAN 6 Supply, Constant Volume, 4000 CFM, 2.8 motor nameplate hp, 0.0 fan efficiency grade

1 GH-1 (Single Zone)
Heating: 1 each - Unit Heater, Gas, Capacity = 45 kBtu/h
Proposed Efficiency = 82.00% EI, Required Efficiency: 80.00 % EI
Fan System: FAN SYSTEM 6 - Compliance (Motor nameplate HP method