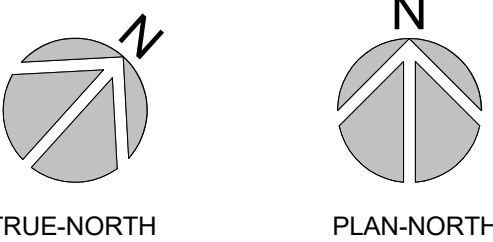


KEYNOTES	
1	TRANSITION TO RTU01 DUCT CONNECTIONS.
2	TRANSITION TO RTU02 DUCT CONNECTIONS.
3	TRANSITION TO RTU03 DUCT CONNECTIONS.
4	TRANSITION TO RTU04 DUCT CONNECTIONS.
5	TRANSITION TO DOAS01 DUCT CONNECTIONS.
6	PROVIDE TURNING VANES IN ALL 90° ELBOWS.

- FLOOR PLAN SHEET NOTES**
1. MAINTAIN MANUFACTURER'S CLEARANCE REQUIREMENTS FOR INDOOR EQUIPMENT.
 2. MECHANICAL CONTRACTOR TO COORDINATE WITH OTHER TRADES PRIOR TO BEGINNING WORK.
 3. REFER TO ARCHITECTURAL DRAWINGS FOR RATED ASSEMBLY UL NUMBERS (WALLS, FLOOR / CEILINGS, ETC.).
 4. COORDINATED CONDENSATE PIPE ROUTING WITH GENERAL CONTRACTOR AND OWNER. TYPICAL. CONCERNING DIFFUSER LAYOUT AND CEILING TYPE, REFER TO ARCHITECTURAL PLANS FOR FURTHER INFORMATION.
 5. IN GENERAL, LOCATE VAV TERMINALS ABOVE DOOR SWING TO ASSURE CONTINUED ACCESS.

PLAN-ORIENTATION



CONSTRUCTION LEGEND

- 1-HR FIRE PARTITION
- 1-HR FIRE BARRIER
- 2-HR FIRE WALL



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Dover, DE 19904
302.734.7950

The Tower at STAR Campus
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302.369.3700

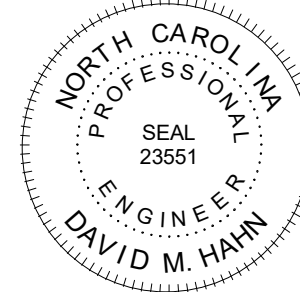
www.beckermorgan.com

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PROJECT TITLE

CFCC Surf City
Bldg SA Addition

621 NC HWY 210E,
HAMPSTEAD, NC

SCO ID# 24-28220-01A

PRELIMINARY

DESIGN CONCEPT ONLY. SUBJECT
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SHEET TITLE

MECHANICAL FLOOR
PLAN - HVAC

ISSUE BLOCK

Mark	Date	Description
1	11.11.2024	GMP RISING

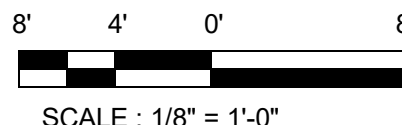
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PROJECT NO:		2024077.00
DATE:		11.26.2024
SCALE:		As indicated
DRAWN BY:		GRM
PROJ MGR:		DMH

MH101

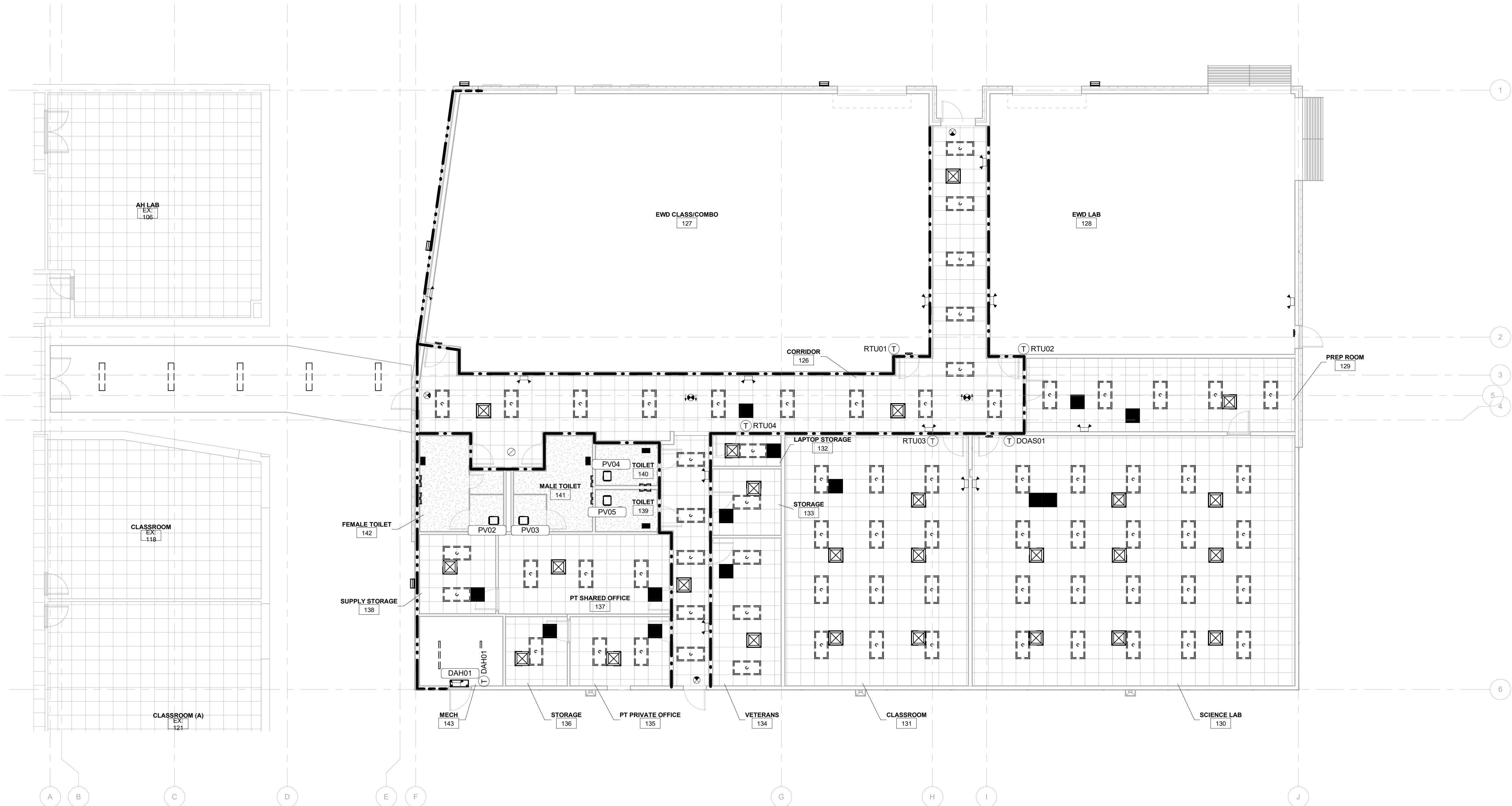
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1 FLOOR PLAN - HVAC

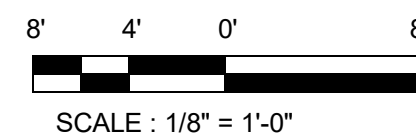
SCALE: 1/8" = 1'-0"



SCALE: 1/8" = 1'-0"



1 RCP AND T-STAT LOCATION
FLOOR PLAN - HVAC
SCALE: 1/8" = 1'-0"



PLAN-ORIENTATION

TRUE-NORTH

PLAN-NORTH

CONSTRUCTION LEGEND

1-HR FIRE PARTITION

1-HR FIRE BARRIER

2-HR FIRE WALL

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CAPE FEAR
COMMUNITY
COLLEGE

PROJECT TITLE

CFCC Surf City
Bldg SA Addition

621 NC HWY 210E,
HAMPSTEAD, NC

SCO ID# 24-28220-01A

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SHEET TITLE

MECHANICAL RCP &
T-STAT LOC. FLOOR
PLAN - HVAC

ISSUE BLOCK

Mark	Date	Description
2	11.26.2024	SCO CONSTRUCTION DOCUMENTS
1	11.11.2024	GMP RISING

PROJECT NO: 2024077.00

DATE: 11.26.2024

SCALE: As indicated

DRAWN BY: GRM PROJ MGR: DMH

MH102

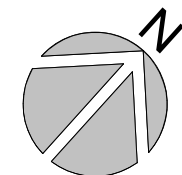
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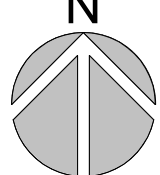
ROOF PLAN SHEET NOTES

1. MAINTAIN MANUFACTURER'S CLEARANCE REQUIREMENTS FOR INDOOR EQUIPMENT.
2. MECHANICAL CONTRACTOR TO COORDINATE WITH OTHER TRADES PRIOR TO BEGINNING WORK.
3. REFER TO ARCHITECTURAL DRAWINGS FOR RATED ASSEMBLY UL NUMBERS (WALLS, FLOOR / CEILINGS, ETC.).
4. COORDINATED CONDENSATE PIPE ROUTING WITH GENERAL CONTRACTOR AND OWNER, TYPICAL.
5. REFER TO STRUCTURAL DRAWINGS FOR EQUIPMENT ROOF MOUNTING CONDITIONS
6. ALL ROOF PENETRATIONS SHALL CONFORM TO ROOF MANUFACTURER'S APPROVED METHODS.
7. MAINTAIN MINIMUM 10 FOOT SEPARATION PLUMBING VENTS AND OUTSIDE AIR INTAKE.

PLAN-ORIENTATION



TRUE-NORTH



PLAN-NORTH

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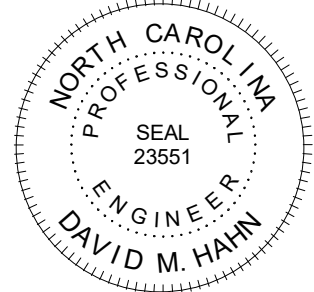
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CAPE FEAR
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Bldg SA Addition

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SHEET TITLE

MECHANICAL ROOF
PLAN - HVAC

ISSUE BLOCK

Mark	Date	Description
2	11.26.2024	SCO CONSTRUCTION DOCUMENTS
1	11.11.2024	GMP RICING

PROJECT NO: 2024077.00

DATE: 11.26.2024

SCALE: As indicated

DRAWN BY: GRM PROJ MGR: DMH

MH103

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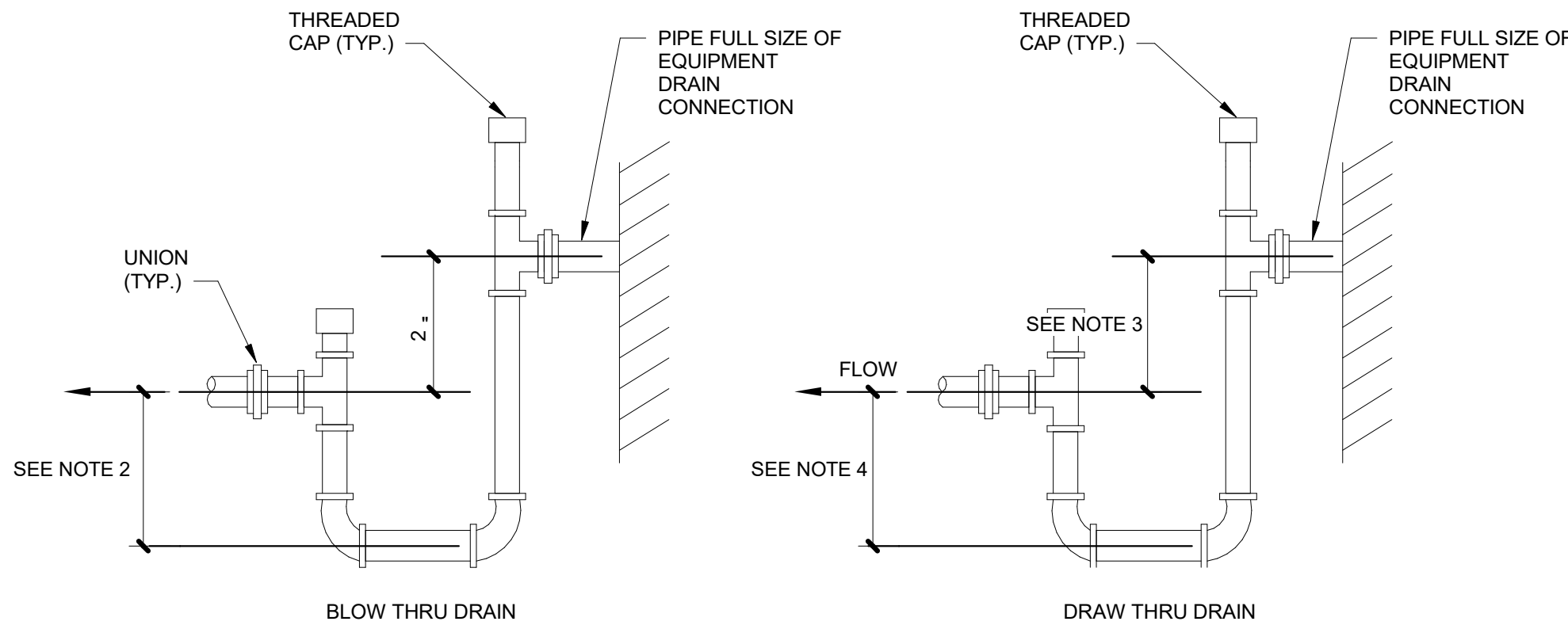
1 ROOF PLAN - HVAC

SCALE: 1/8" = 1'-0"

8' 4' 0' 8'
SCALE : 1/8" = 1'-0"

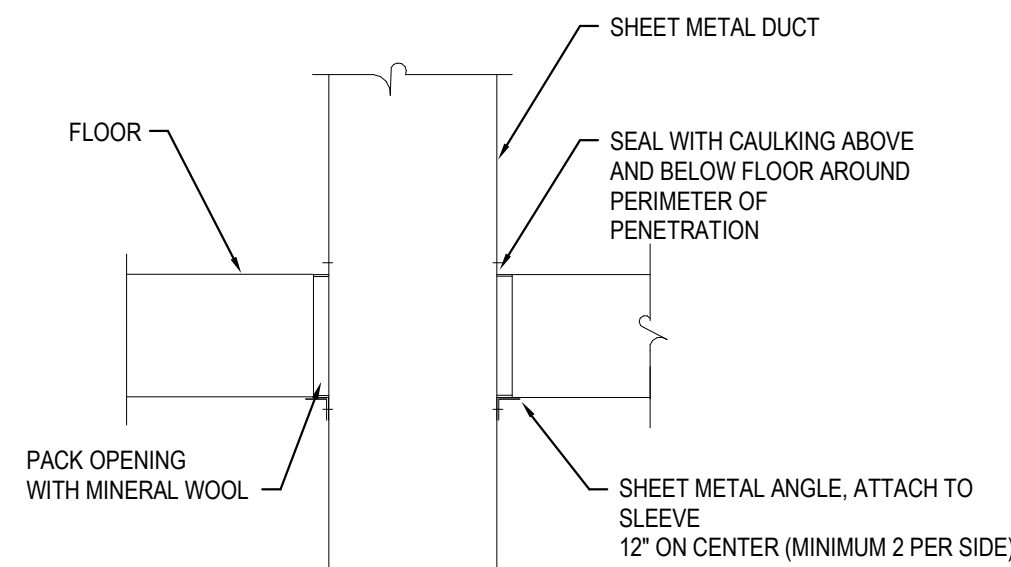
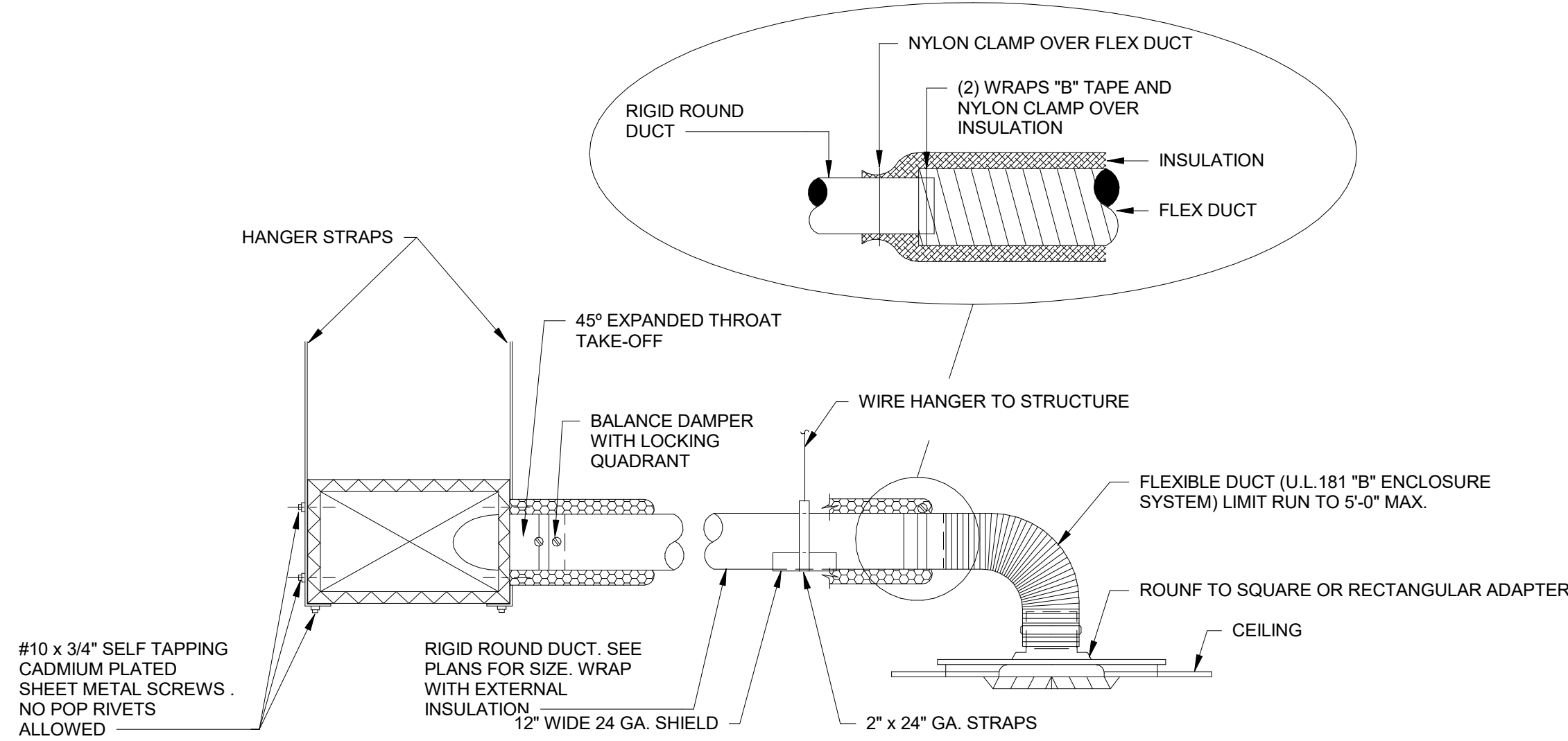
NOTES:

1. LOCATE TRAPS SO AS TO BE ACCESSIBLE FOR CLEANING.
2. HEIGHT SHALL BE EQUAL TO UNIT MAXIMUM TOTAL STATIC PRESSURE PLUS 1/2".
3. HEIGHT SHALL BE EQUAL TO UNIT MAXIMUM NEGATIVE STATIC PRESSURE PLUS 1".
4. HEIGHT SHALL BE 1/2" OF HEIGHT INSTALLED ON NOTE 3.
5. PIPE TO NEAREST DRAIN.
6. TRAP SHALL NOT BLOCK ACCESS TO EQUIPMENT.
7. PROVIDE UNIONS AT INLET AND OUTLET OF TRAP.



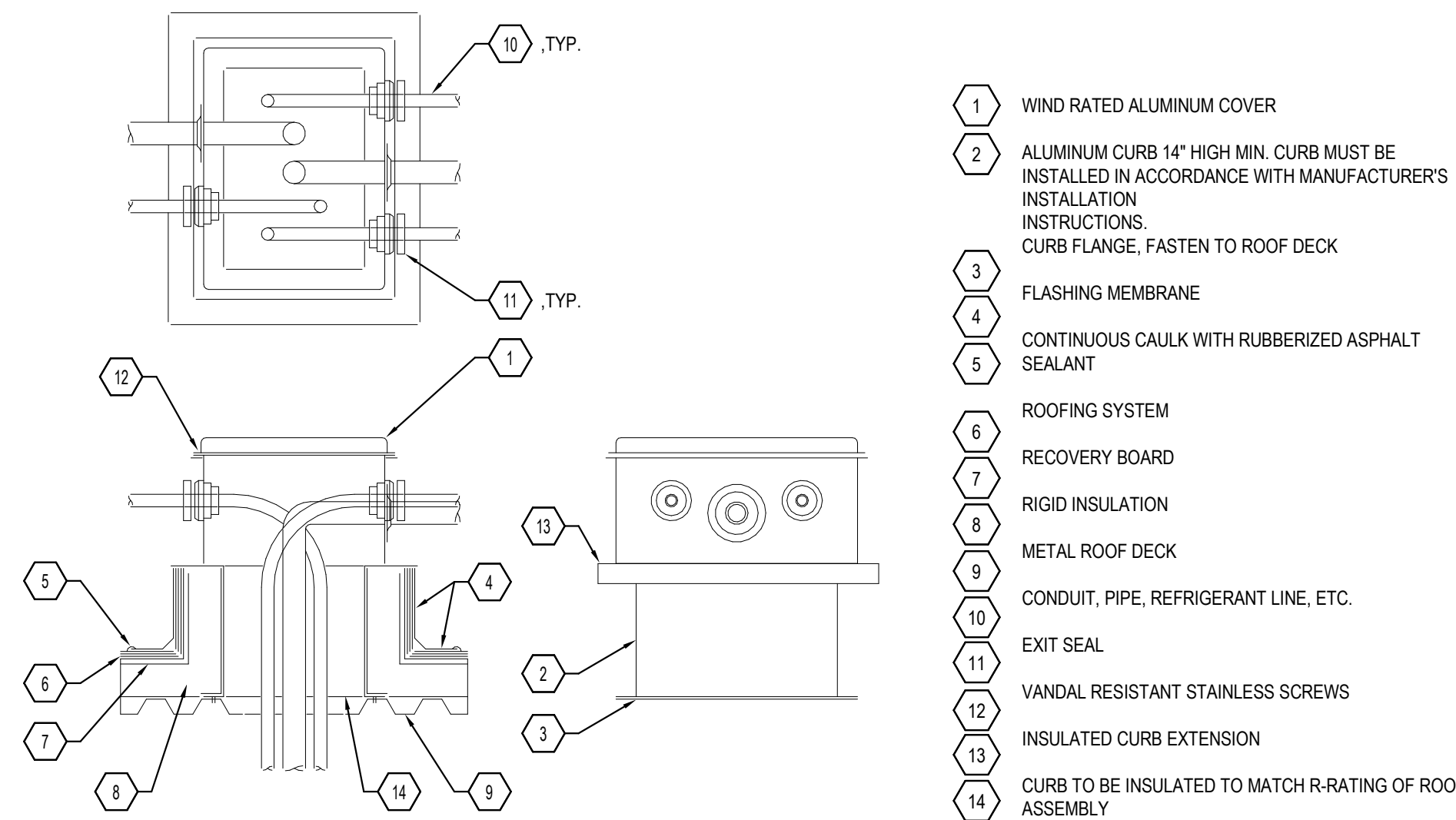
1 TYPICAL EQUIPMENT CONDENSATE DRAIN DETAIL
NO SCALE

2 TYPICAL DIFFUSER CONNECTION DETAIL
NO SCALE



NOTE: EXTERNALLY WRAPPED DUCT INSTALLED SIMILARLY. BLANKET INSULATION SHALL BE INSTALLED OVER ANGLES AND SEALED TO FLOOR BARRIER.

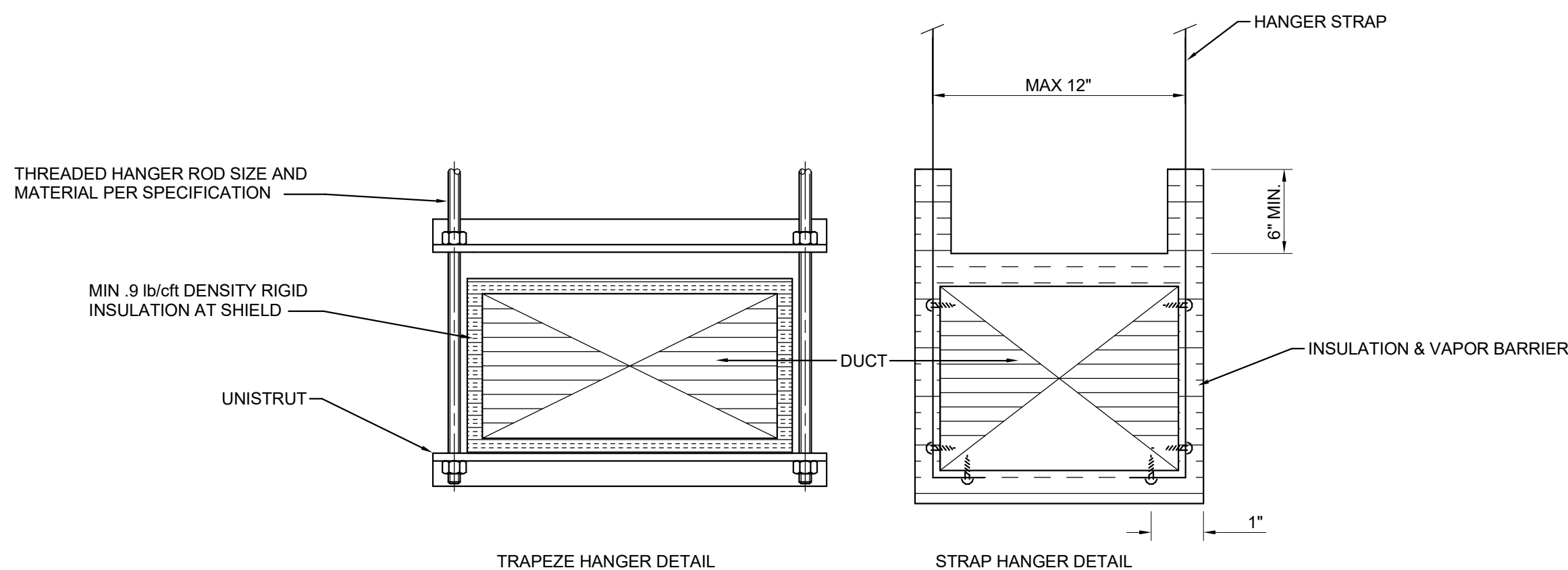
3 TYPICAL DUCT THROUGH NON-RATED WALL
NO SCALE



- NOTE:
1. PROVIDE "PRE-FABRICATED HOUSING" MODEL AWI SERIES OR APPROVED EQUAL.
 2. ANCHOR TO CURB WITH STAINLESS STEEL HARDWARE.

- 1 WIND RATED ALUMINUM COVER
- 2 ALUMINUM CURB 14" HIGH MIN. CURB MUST BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. CURB FLANGE, FASTEN TO ROOF DECK
- 3 FLASHING MEMBRANE
- 4 CONTINUOUS CAULK WITH RUBBERIZED ASPHALT SEALANT
- 5
- 6 ROOFING SYSTEM
- 7 RECOVERY BOARD
- 8 RIGID INSULATION
- 9 METAL ROOF DECK
- 10 CONDUIT, PIPE, REFRIGERANT LINE, ETC.
- 11 EXIT SEAL
- 12 VANDAL RESISTANT STAINLESS SCREWS
- 13 INSULATED CURB EXTENSION
- 14 CURB TO BE INSULATED TO MATCH R-RATING OF ROOF ASSEMBLY

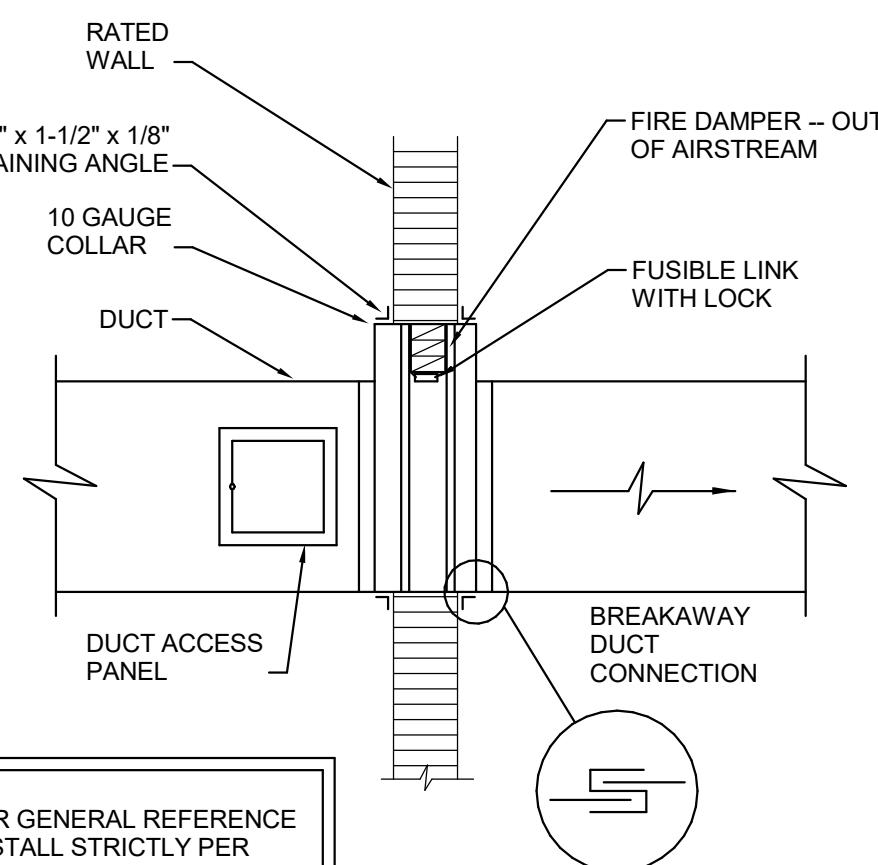
4 TYPICAL ROOF VAULT DETAIL
NO SCALE



NOTES:

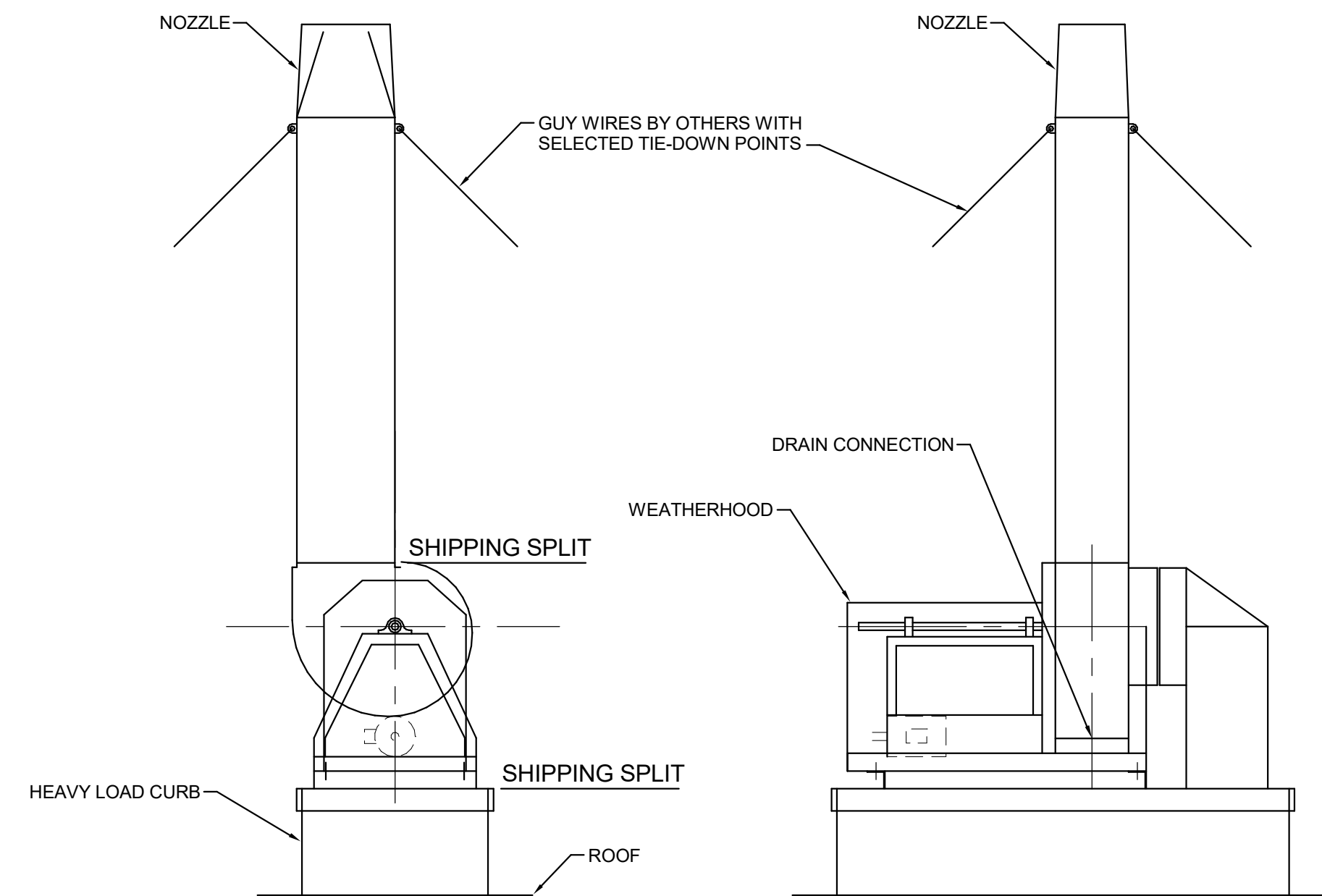
1. TRAPEZE HANGERS SHALL BE PROVIDED FOR ALL DUCT WORK. TRAPEZE HANGERS CANNOT BE USED FOR BRANCH DUCT WORK 12" IN WIDTH AND SHORTER REFER TO STRAP HANGER DETAIL.
2. SUPPORTS SHALL BE SPACED AND SIZED AS PER SPECIFICATIONS.
3. RIGID INSULATION SHALL EXTEND MINIMUM OF 3" BEYOND STRUT ON BOTH SIDES. MAINTAIN VAPOR BARRIER ACROSS STRUT.

6 TYPICAL DUCT SUPPORT DETAIL
NO SCALE



NOTE: FOR GENERAL REFERENCE ONLY. INSTALL STRICTLY PER MANUFACTURERS INSTALLATION INSTRUCTIONS.

7 TYPICAL FIRE DAMPER DETAIL
NO SCALE



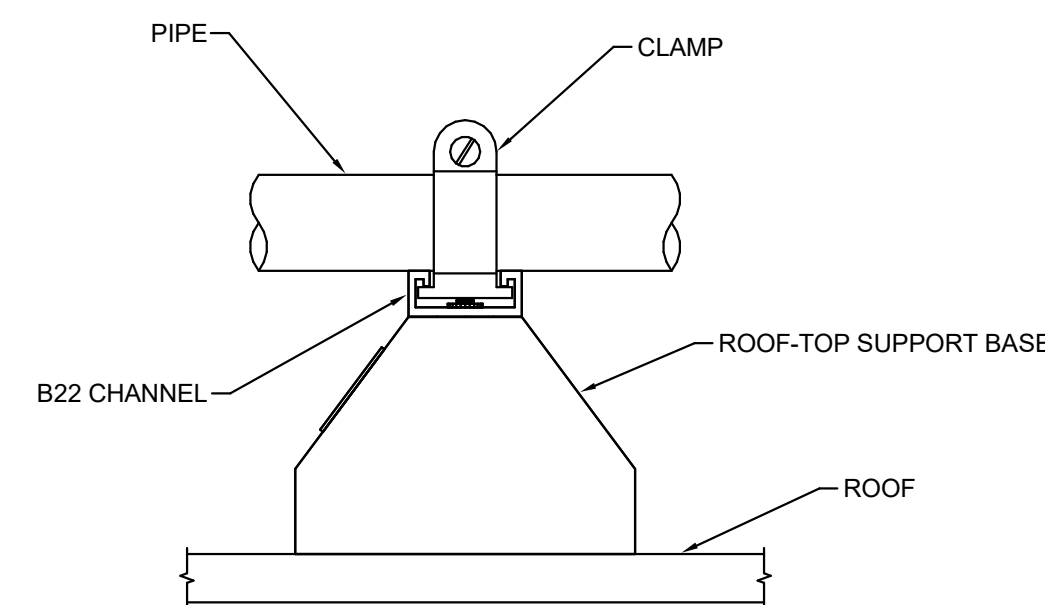
SIDE VIEW

*SIDE VIEW IS VIEWED FROM DRIVE SIDE

*FANS ARE SUBJECT TO ±.125 INCH TOLERANCE

END VIEW

8 LAB FAN EXHAUST DETAIL
NO SCALE



5 TYPICAL ROOF TOP PIPE SUPPORT DETAIL
NO SCALE

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PROJECT TITLE

CFCC Surf City
Bldg SA Addition

621 NC HWY 210E,
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SCO ID# 24-28220-01A

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ISSUED: 11.26.2024

SHEET TITLE

MECHANICAL
DETAILS

ISSUE BLOCK

Mark	Date	Description
1	11.11.2024	GMP RICING
2	11.26.2024	SCO CONSTRUCTION DOCUMENTS

PROJECT NO: 2024077.00

DATE: 11.26.2024

SCALE: 12" = 1'-0"

DRAWN BY: GRM PROJ MGR: DMH

M-501

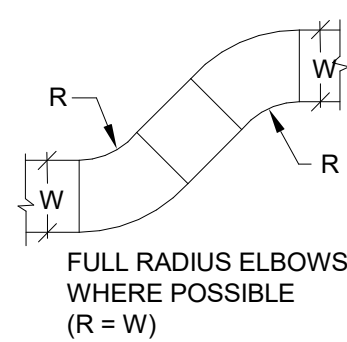
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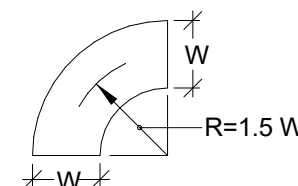
Mark	Date	Description
1	11.11.2024	GMP RICING
2	11.26.2024	SCO CONSTRUCTION DOCUMENTS

PROJECT NO:	2024077.00
DATE:	11.26.2024
SCALE:	12" = 1'-0"

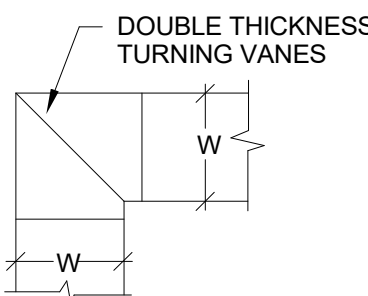
DRAWN BY:	GRM	PROJ MGR:	DMH
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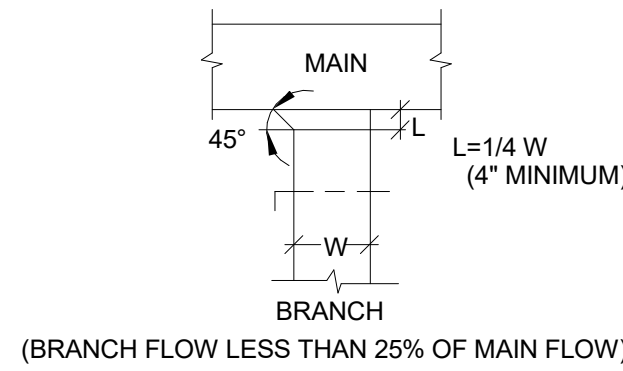
DUCT OFFSETS



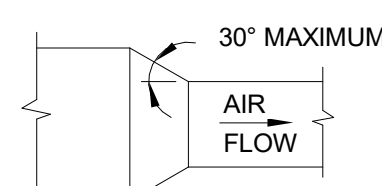
RADIUS ELBOW



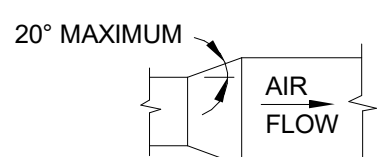
RECTANGULAR ELBOW



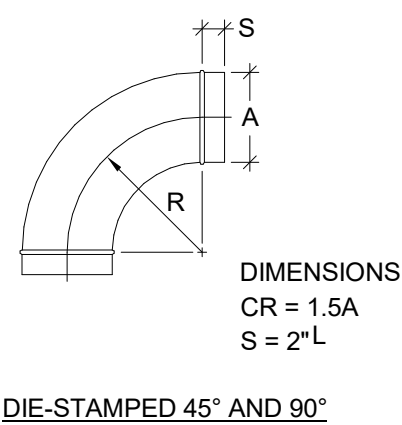
BRANCH TAKE-OFFS



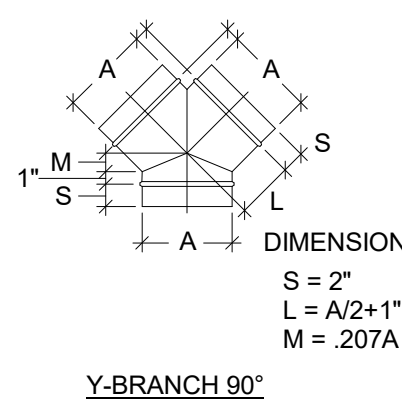
CONVERGING FLOW



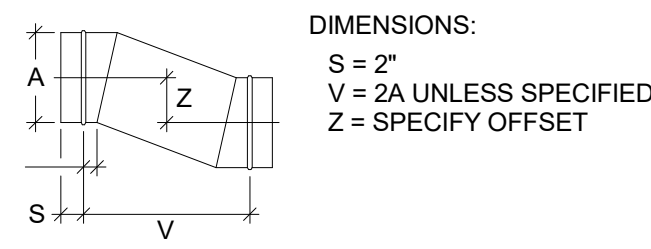
DIVERGING FLOW



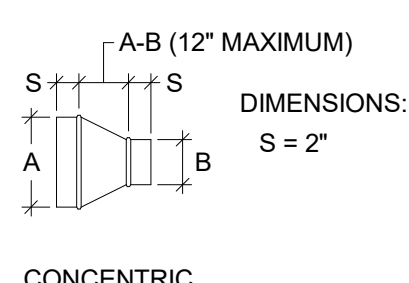
DIE-STAMPED 45° AND 90°



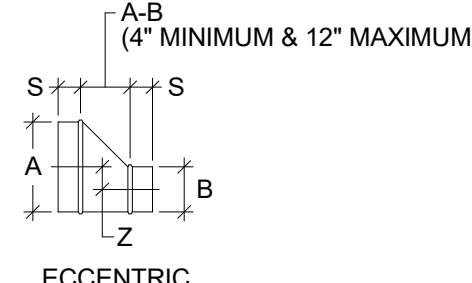
Y-BRANCH 90°



OFFSET

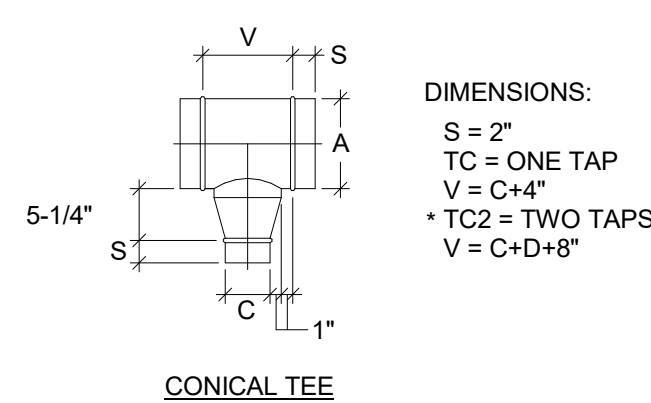


CONCENTRIC

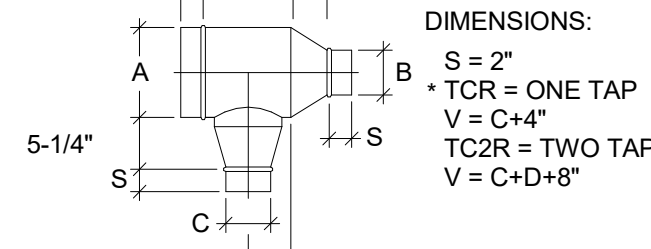


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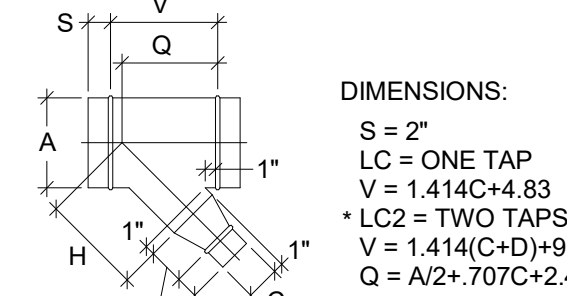
REDUCERS



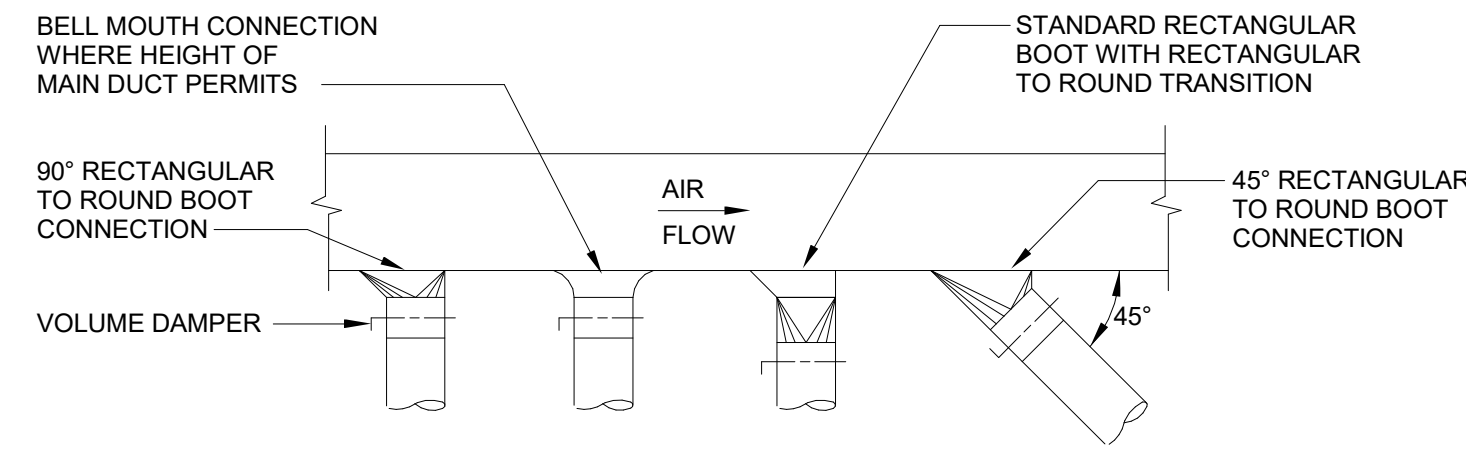
CONICAL TEE



REDUCING CONICAL TEE



CONICAL LATERAL



BELL MOUTH CONNECTION WHERE HEIGHT OF MAIN DUCT PERMITS

STANDARD RECTANGULAR BOOT WITH RECTANGULAR TO ROUND TRANSITION

90° RECTANGULAR TO ROUND BOOT CONNECTION

45° RECTANGULAR TO ROUND BOOT CONNECTION

VOLUME DAMPER

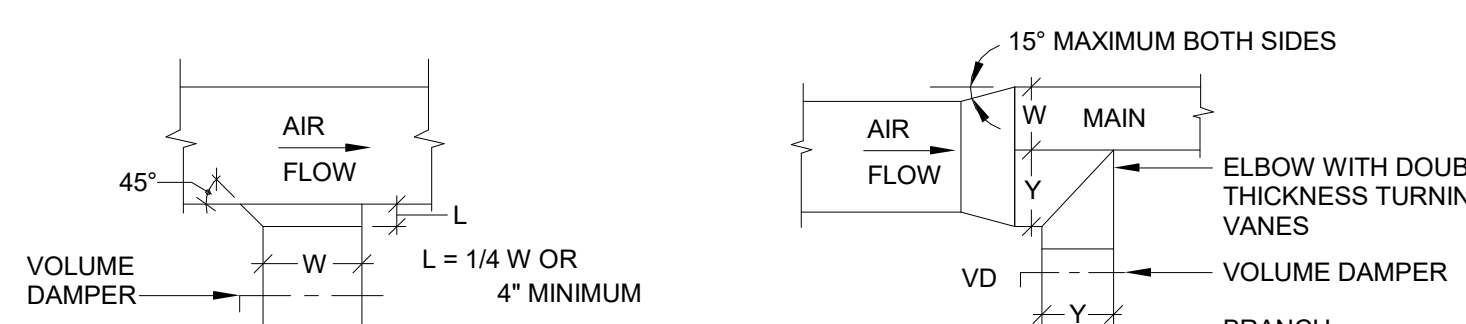
AIR FLOW

45°

ALTERNATE RECTANGULAR TO ROUND

DUCT BRANCH CONNECTIONS

(BRANCH FLOW LESS THEN 25% OF MAIN FLOW)



STANDARD RECTANGULAR DUCT BRANCH TAKE-OFF

(BRANCH FLOW LESS THAN 25% OF MAIN FLOW)

STANDARD RECTANGULAR BRANCH TAKE-OFF

(BRANCH FLOW GREATER THAN 25% OF MAIN FLOW)

1 RECTANGULAR DUCT FITTING DETAILS

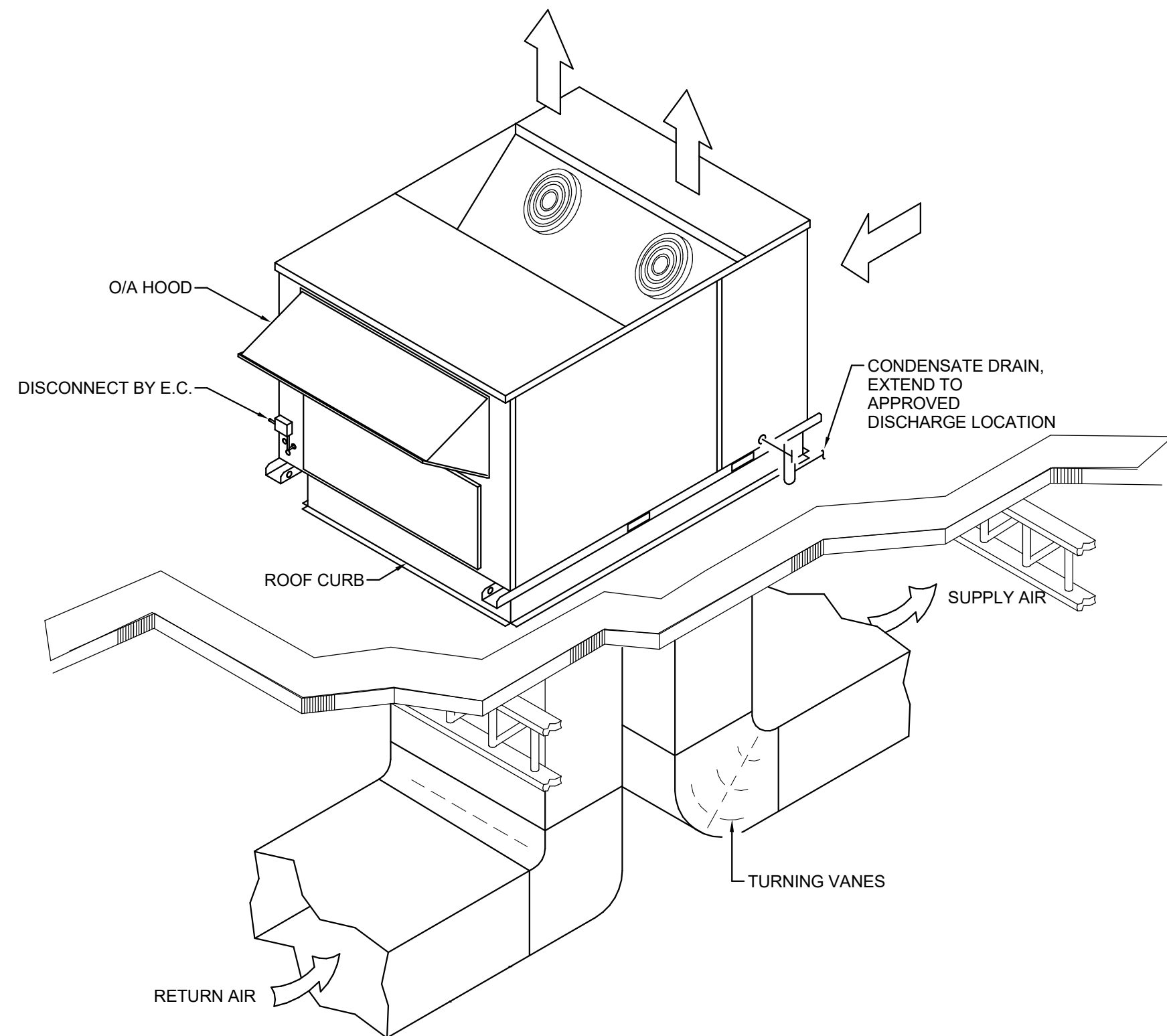
NO SCALE

2 ROUND DUCT FITTING DETAILS

NO SCALE

3 ROUND/RECT. DUCT TAKE-OFF FITTING DETAILS

NO SCALE



4 TYPICAL ROOF MOUNTED HEAT PUMP DETAIL

NO SCALE

PACKAGED UNIT SCHEDULE

DRAWING CODE	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	ALTERNATE APPROVED MANUFACTURERS	SYSTEM TYPE	COOLING (AHRI STANDARD)			HOT GAS REHEAT		HEATING (AHRI STANDARD)			AUXILIARY HEATER	EVAPORATOR FAN	ELECTRICAL			REFRIGERANT TYPE	WEIGHT (LBS.)	NOTES	ACCESSORIES			
					TOTAL (MBH)	SENSIBLE (MBH)	EFFICIENCY	REHEAT CAPACITY (MBH)	COOLING LDB W/ REHEAT (°F)	TOTAL (MBH)	EFFICIENCY (AHRI 47°F)	ELECTRIC (KW)			SUPPLY AIRFLOW (CFM)	OUTSIDE AIRFLOW (CFM)	ESP (IN. WG.)					POWER SUPPLY (V/PH/Hz)	MCA (A)	MOCP (A)
RTU01	AMERICAN STANDARD	WSK060A4	TRANE, DAIKIN	HEAT PUMP	57.5	45.2	EER	12.0	22.5	71.8	53.6	COP	3.5	12.0	2,000	450	1.16	460/3/60	34.0	35	R-454B	900	1.2	A THRU N
RTU02	AMERICAN STANDARD	WSK060A4	TRANE, DAIKIN	HEAT PUMP	57.5	45.2	EER	12.0	22.5	71.8	53.6	COP	3.5	12.0	2,000	370	1.16	460/3/60	34.0	35	R-454B	900	1.2	A THRU N
RTU03	AMERICAN STANDARD	WSK048A4	TRANE, DAIKIN	HEAT PUMP	48.6	37.1	EER	12.0	25.2	68.1	45.6	COP	3.5	12.0	1,600	265	1.16	460/3/60	32.0	35	R-454B	900	1.2	A THRU N
RTU04	AMERICAN STANDARD	WSK048A4	TRANE, DAIKIN	HEAT PUMP	58.6	37.1	EER	12.0	25.2	68.1	45.6	COP	3.5	12.0	1,600	205	1.16	460/3/60	32.0	35	R-454B	900	1.2	A THRU N
NOTES:																								
1 REFER TO SPECIFICATIONS FOR FURTHER INFORMATION.																								
2 IF SUBMITTED EQUIPMENT CHARACTERISTICS DIFFER FROM SCHEDULED, MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE EQUIPMENT WILL FIT AND ELECTRICAL/CONTROLS REQUIREMENTS MATCH PROPOSED EQUIPMENT. MODIFY INSTALLATION AT NO ADDITIONAL COST TO OWNER.																								
ACCESSORIES:																								
A MODULATING HOT GAS REHEAT FOR DEHUM CONTROL																								
B CORROSION COATING ON CONDENSER COIL TO MEET ASTM B117 5,000 HOUR SALT SPRAY RATING																								
C CONDENSATE OVERFLOW SWITCH																								
D STAINLESS STEEL DRAIN PAN																								
E HINGED ACCESS DOORS																								
F MULTI-SPEED INDOOR FAN SYSTEM																								
G TWO-INCH MERV 8 MEDIA FILTERS																								
H BACNET COMMUNICATION INTERFACE (BCI)																								
I PHASE MONITOR																								
J SINGLE POINT POWER																								
K DOWNFLOW LOW LEAK ECONONMIZER (DRYBULB WITH BAROMETRIC RELIEF) OUTSIDE AIR DAMPER																								
L ROOF CURB - STANDARD KNOCKDOWN TYPE																								
M BAYSENS800 THERMOSTAT AND BAYSENS036 HUMIDISTAT OR APPROVED EQUAL																								
N TWO POSITION OUTSIDE AIR DAMPER.																								

MINI-SPLIT SYSTEM SCHEDULE

DRAWING CODE (IDU / ODU)	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL (IDU / ODU)	ALTERNATE APPROVED MANUFACTURERS	INDOOR UNIT CONFIGURATION	SYSTEM TYPE	ARI COOLING 80/67/95		ARI HEATING 70/47	MIN SEER2	MIN HSPF2	INDOOR UNIT			OUTDOOR UNIT			REFRIGERANT			NOTES	ACCESSORIES			
						TOTAL (MBH)	MIN (MBH)	TOTAL (MBH)			FAN	ELECTRICAL	WEIGHT (LBS)	ELECTRICAL			PIPING	TYPE						
														SA MIN-MAX (CFM)	VOLTAGE (V/PH/Hz)	MCA (A)			VOLTAGE (V/PH/Hz)			MCA (A)	MOCp (A)	WEIGHT (LBS)
DAH01 / DHP01	MITSUBISHI	NTXWST09B112 / NTXSST09B112	DAIKIN, LG	WALL MOUNTED	HEAT PUMP	9.0	3.6	10.9	28.4	10.9	135-380	208/1/60	1.0	25	208/1/60	10.0	15	80	65	40	R-410A	1	A,B,C	
NOTES:																								
1 REFER TO SPECIFICATIONS FOR FURTHER INFORMATION.																								
2 ELECTRICAL CONTRACTOR TO PROVIDE CONDUIT AND CONDUCTOR FROM OUTDOOR UNIT TO INDOOR UNIT.																								
ACCESSORIES:																								
A SEACOAST COATING PROTECTION ON OUTDOOR UNIT.																								
B ROOF MOUNTING RAILS AND ACCESSORIES																								
C WIRED WALL-MOUNTED REMOTE CONTROLLER																								

POWER VENTILATOR SCHEDULE

DRAWING CODE	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	ALTERNATE APPROVED MANUFACTURERS	FAN TYPE	SERVICE	DRIVE TYPE	CURB HEIGHT (IN)	DAMPER	MOTOR ENCLOSURE	CAPACITIES				ELECTRICAL							SONES	WEIGHT (LBS.)	NOTES	ACCESSORIES	
										AIRFLOW (CFM)	ESP (IN. WG.)	FAN RPM	MOTOR RPM	MOTOR TYPE	MOTOR SIZE (W)	MOTOR SIZE (HP)	V/PH/Hz	FLA (A)	MCA (A)	MOCp (A)					
PV01	GREENHECK	CUE-090-VG	TWIN CITY, PENNBARRY	CENTRIFUGAL VENTILATORS - ROOF UPBLAST	EXHAUST	DIRECT	12	BACKDRAFT	TENV	400	0.50	1,457	1,725	ECM	-	1/6	208/1/60	1.3	2.0	15	6.8	35	1.3	A,B,C,D	
PV02	GREENHECK	SP-B150	TWIN CITY, PENNBARRY	CEILING-MOUNTED VENTILATORS	EXHAUST	DIRECT	-	BACKDRAFT	ODP	140	0.50	990	-	ECM	128	-	120/1/60	1.8	-	-	3.0	15	1.2	A,B,C,E	
PV03	GREENHECK	SP-B150	TWIN CITY, PENNBARRY	CEILING-MOUNTED VENTILATORS	EXHAUST	DIRECT	-	BACKDRAFT	ODP	140	0.50	990	-	ECM	128	-	120/1/60	1.8	-	-	3.0	15	1.2	A,B,C,E	
PV04	GREENHECK	SP-B110	TWIN CITY, PENNBARRY	CEILING-MOUNTED VENTILATORS	EXHAUST	DIRECT	-	BACKDRAFT	ODP	70	0.50	777	-	ECM	80	-	120/1/60	1.2	-	-	2.0	15	1.2	A,B,C,E	
PV05	GREENHECK	SP-B110	TWIN CITY, PENNBARRY	CEILING-MOUNTED VENTILATORS	EXHAUST	DIRECT	-	BACKDRAFT	ODP	70	0.50	777	-	ECM	80	-	120/1/60	1.2	-	-	2.0	15	1.2	A,B,C,E	
NOTES:	1 REFER TO SPECIFICATIONS FOR FURTHER INFORMATION. 2 CONTROLLED VIA OCCUPANCY SENSOR. REFER TO ELECTRICAL PLANS. 3 CONTROLLED VIA ON/OFF SWITCH (DURING OPERATION OF AUTOCALVE). REFER TO ELECTRICAL PLANS.																								
ACCESSORIES:	A BIRDSCREEN B ROOF CURB W/ SEAL C GRAVITY DAMPER D PERMATECTOR COATING OR APPROVED EQUAL E UNIT MOUNTED SPEED CONTROL																								

LAB EXHAUST FAN SCHEDULE

DRAWING CODE	LOCATION	AREA SERVED	SERVICE	DESIGN BASIS MFR	MODEL	ALTERNATE APPROVED MFRS	FAN EXHAUST			S.P. (IN. H2O)	DISCHARGE EFFECTIVE PLUME HT (FT)	SUPPLY FAN			WEIGHT (TOTAL)	NOTES:	ACCESSORIES		
							MAX (CFM)	BYPASS MAX (CFM)	OUTLET VEL. MIN (FPM)			TIP SPEED (FPM)	MAX RPM	MOTOR H.P.				VOLTAGE	FLA
LEF01	ROOF	130 SCIENCE LAB	PURGE EXH.	GREENHECK	FJI-10-BI-X	TWIN CITY, PENNBARRY	1,000	-	1,946	1.15	11.81	6,172	4,050	1.0	208/3/60	-	290	1.2	A THRU J
LEF02	ROOF	129 PREP ROOM	PURGE EXH.	GREENHECK	FJI-10-BI-X	TWIN CITY, PENNBARRY	1,000	-	1,946	1.15	11.81	6,172	4,050	1.0	208/3/60	-	290	1.2	A THRU J
NOTES:																			
1. REFER TO SPECIFICATIONS FOR FURTHER INFORMATION.																			
2. DELEGATED DESIGN SUBMITTALS: FOR GUY-WIRES INDICATED TO COMPLY WITH PERFORMANCE REQUIREMENTS AND DESIGN CRITERIA, INCLUDING ANALYSIS DATA SIGNED AND SEALED BY THE QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR PREPARATION. PROVIDE DETAIL FABRICATION /ASSEMBLY AND DESIGN CALCULATIONS FOR GUY-WIRES.																			
ACCESSORIES:																			
A. MOTOR VFD RATED WITHOUT SHAFT GROUNDING PROTECTION																			
B. COATED WITH PERMATECTOR, CONCRETE GRAY-RAL 7023, FAN AND ATTACHED ACCESSORIES																			
C. SWITCH - NEMA-3R, TOGGLE																			
D. CURB CAP INLET BOX WITH ACCESS DOOR, DAMPER, PERMATECTOR COATING, DUCT SUPPORT																			
E. ACCESS DOOR - BOLTED																			
F. DAMPER, GRAVITY, ALUMINUM																			
G. DRAIN CONNECTION - 1" PIPE THREAD WITH PLUG																			
H. HEAVY LOAD ROOF CURB																			
I. WEATHERHOOD - STEEL																			
J. UNIT WARRANTY: 1-YEAR STANDARD																			



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PROJECT TITLE

CFCC Surf City
Bldg SA Addition

621 NC HWY 210E,
HAMPSTEAD, NC

SCO ID# 24-28220-01A

PRELIMINARY

DESIGN CONCEPT ONLY. SUBJECT
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CONSTRUCTION NOT FOR
PERMITS.

ISSUED: 11.26.2024

SHEET TITLE

MECHANICAL
SCHEDULES

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2	11.26.2024	SCO CONSTRUCTION DOCUMENTS
1	11.11.2024	GMP RICING
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DEDICATED OUTSIDE AIR UNIT SCHEDULE

DRAWING CODE	DESIGN BASIS MANUFACTURER	MODEL	ALTERNATE APPROVED MFR	SYSTEM TYPE	SA/OA FAN			ESP (IN H2O)	FAN QTY	MOTOR (HP)	1	DX COOLING			HG REHEAT		DX HEATING		ELECTRIC HEAT		ELECTRICAL			REFRIG. TYPE	WEIGHT (LBS)	NOTES	ACCESSORIES				
					SA (CFM)	OA (CFM)	SA LAT (°F/Fwb)					NET TOT CAP...	NET SENS CAP (MBH)	EFFICIENCY	SA LAT (°F)	CAP (MBH)	SA LAT (°F)	TOT CAP (MBH)	EFFICIENCY	SA LAT (°F)	INPUT (KW)	VOLTAGE (V/PH/Hz)	MCA (A)					MOCAP (A)			
DOAS1	AAON	RNA-015-B	TRANE, DAIKIN	HEAT PUMP	1,800	1,800		1.75		1		95.0/75.0	161.9	94.4	EER	10.6	72.0	53.0	84.6	135.2	COP	3.3	98.0	40.0	460/3/60	63.0	70	R-454B	1,962	1,2,3,4	A THRU V
NOTES:																															
1 REFER TO DIVISION 23 SPECIFICATIONS FOR ADDITIONAL INFORMATION.																															
2 VERTICAL DISCHARGE / VERTICAL RETURN.																															
3 ALL COILS TO BE COATED FOR EXPOSURE TO ASTM B117-90 10,000 HOUR SALT SPRAY RESISTANCE TEST WITH NO DEGRADATION.																															
4 EFFICIENCY RATED IN ACCORDANCE WITH ANSI/AHRI STANDARD 340/360.																															
ACCESSORIES:																															
A WARRANTY: 5-YEAR DIGITAL/VARIABLE SPEED/STANDARD SCROLL COMPRESSOR / 25-YEAR HEAT EXCHANGER																															
B REHEAT: FIN & TUBE MODULATING HGRH - ECO-COATED WITH S/S COIL CASING																															
C COMPRESSOR: DIGITAL SCROLL-1ST CIRCUIT ONLY																															
D OUTDOOR COIL TYPE: ASHP FIN & TUBE																															
E CAPACITY CONTROL: R-454B - LOW GWP REFRIGERANT & NO RCC VALVE																															
F HEAT TYPE - PRIMARY: ELECTRIC - SCR MODULATING																															
G UNIT CONTROLS: SPACE CONTROL - UC600																															
H BUILDING INTERFACE: BACNET																															
I FILTER OPTIONS: MERV-8,30%																															
J DAMPER OPTIONS: MODULATING OA & RA DAMPERS W/ECONOMIZER																															
K CORROSIVE ENVIRONMENT PACKAGE: CORROSION RESISTANT PACKAGE																															
L ACTIVE (VFD) HEAD PRESSURE LOW AMBIENT CONTROL																															
M HAILGUARDS																															
N CONTROLS DISPLAY: TD7 FACTORY INSTALLED																															
O COOLING CONTROLS: RELIATEL																															
P THERMOSTAT: THUMBWHEEL THERMOSTAT																															
Q CONDENSATE OVERFLOW SWITCH: CONDENSATE OVERFLOW SWITCH																															
R DAMPER LEAKAGE CLASSIFICATION: CLASS 1A																															
S 2 INCH DOUBLE WALL CONSTRUCTION																															
T STAINLESS STEEL DRIP PAN																															
U BAYSENS074 THERMOSTAT AND BAYSENS036 HUMIDISTAT OR APPROVED EQUAL																															
V ROOF CURB - STANDARD KNOCKDOWN TYPE																															

ROOF HOOD SCHEDULE

DRAWING CODE	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	ALTERNATE APPROVED MANUFACTURERS	TYPE	CONSTRUCTION MATERIAL	ROOF CURB		SCREENING		FINISH	CAPACITIES AND CHARACTERISTICS						NOTES	ACCESSORIES		
						CONFIGURATION	HEIGHT (IN.)	TYPE	MATERIAL		AIRFLOW (CFM)	HEIGHT (IN)	DIAMETER (IN)	BASE (IN)	THROAT AREA (SQ. FT)	AIR VELOCITY (FPM)			PRESSURE DROP (IN. WG.)	
RV01	GREENHECK	GRSR-12	CARNES, LOREN COOK	EXHAUST	ALUMINUM	FLAT		12	BIRD	GALVANIZED	ANODIZED	420	11.75	29	22	0.82	512	0.03	1	A,B,C
NOTES: 1 REFER TO...																				
ACCESSORIES: A GRAVITY BACKDRAFT DAMPER B ROOF CURB C BIRD SCREEN																				

DIFFUSERS, REGISTERS AND GRILLES SCHEDULE

DRAWING CODE	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	ALTERNATE APPROVED MANUFACTURERS	TYPE	SERVICE	NECK SIZE (IN.)	MODULE SIZE (IN.)	MATERIAL	FINISH	MOUNTING	NOTES	ACCESSORIES
S1	GREENHECK	CDS	PRICE, TITUS	SQUARE CEILING DIFFUSER	SUPPLY	6% C	24 X 24	ALUMINUM	WHITE	T-BAR	1,2,3	A
S2	GREENHECK	CDS	PRICE, TITUS	SQUARE CEILING DIFFUSER	SUPPLY	8% C	24 X 24	ALUMINUM	WHITE	T-BAR	1,2,3	A
S3	GREENHECK	CDS	PRICE, TITUS	SQUARE CEILING DIFFUSER	SUPPLY	10% C	24 X 24	ALUMINUM	WHITE	T-BAR	1,2,3	A
S4	GREENHECK	XG-H4004	PRICE, TITUS	LOUVER FACE DIFFUSER, DOUBLE DEFLECTION	SUPPLY	12 X 6	-	ALUMINUM	WHITE	CEILING SURFACE	1,2,3	A
R1	GREENHECK	XG-RH	PRICE, TITUS	FIXED FACE GRILLE	RETURN	20 X 20	24 X 24	ALUMINUM	WHITE	T-BAR	1,2,3	B
E1	GREENHECK	XG-RH	PRICE, TITUS	FIXED FACE GRILLE	EXHAUST	20 X 20	24 X 24	ALUMINUM	WHITE	T-BAR	1,2,3	B
NOTES:												
1 REFER TO SPECIFICATIONS FOR FURTHER INFORMATION.												
2 DUCT BRANCH CONNECTION SIZE TO BE EQUAL TO THE NECK SIZE OF DIFFUSER UNLESS NOTED OTHERWISE ON PLANS.												
3 PAINT ALL VISIBLE DUCTWORK THROUGH GRILLES AND REGISTERS FLAT BLACK.												
ACCESSORIES:												
A VOLUME DAMPER												
B INSULATED PLENUM BOX												



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