

**PLAN NOTES**

1. INSTALLATION SHALL COMPLY WITH 2015 IMC AND 2015 IECC AND ALL APPLICABLE LAWS, CODES AND ORDINANCES.
2. DUCTWORK HAS BEEN COORDINATED WITH THE PROPOSED TRUSS LAYOUT. ACTUAL INSTALLED CONFIGURATION MAY DIFFER FROM ORIGINAL PLANS. COORDINATE WITH THE GENERAL CONTRACTOR AS TRUSSES ARE INSTALLED TO CONFIRM DUCT LAYOUT AS DESIGNED WILL WORK WITH THE INSTALLED TRUSS CONFIGURATION. MINOR MODIFICATIONS IN LOCATIONS MAY BE REQUIRED.
3. THE MECHANICAL CONTRACTOR SHALL PROVIDE ALL OPERATING AND MAINTENANCE MANUALS FOR ALL EQUIPMENT TO THE OWNER AS REQUIRED PER 2009 IECC.
4. THE ENTIRE BUILDING IS CONDITIONED EXCEPT FOR THE COOLER AND FREEZER. TOTAL BUILDING SQUARE FOOTAGE IS 4395. AREA OF COOLER/FREEZER IS 278 SQ. FT. TOTAL CONDITIONED SQUARE FOOTAGE IS 4117 SQ. FT.

**KEYED NOTES:**

- 1 RTU-0A 100% OUTSIDE AIR UNIT WITH 3250 TOTAL CFM, 1250 CFM BALANCE BY PASS TO BLEND WITH 2000 CFM OUTSIDE AIR. EXTEND DUCTS TO RTU-1 AND RTU-2 AS INDICATED.
- 2 EXHAUST DUCTS FROM CEILING EXHAUST FANS TO GREENHECK ROOF EXHAUST VENTILATOR TRANSITION FROM THROAT TO 14x4 FLENUM DUCT AND EXTEND DOWN 12" BELOW JOISTS FOR CONNECTION OF EXHAUST DUCT(S).
- 3 FRV-2 ON ROOF. TRANSITION FROM FAN OPENING TO 12x12 WELDED STEEL EXHAUST DUCT AND EXTEND DOWN TO HOOD EXHAUST OPENING. REFER TO DETAILS FOR ADDITIONAL INFORMATION.
- 4 FRV-3 ON ROOF. TRANSITION FROM FAN OPENING TO 12x12 WELDED STEEL EXHAUST DUCT AND EXTEND DOWN TO HOOD EXHAUST OPENING. REFER TO DETAILS FOR ADDITIONAL INFORMATION.
- 5 EXTEND 4" GALVANIZED SNAP-LOK DRYER VENT FROM DRYER THRU EXTERIOR WALL.
- 6 PROVIDE SURFACE MOUNT FRAME FOR INSTALLATION IN GYP/HARD CEILING.
- 7 UNIT WEIGHTS ARE LISTED FOR COORDINATION. VERIFY EXACT LOCATION WITH GC.
- 8 INSTALL THERMOSTATS FOR RTU-1 & RTU-2 IN MANAGERS OFFICE WITH SENSORS AT INDIVIDUAL ZONES AS INDICATED.
- 9 FLEX CONNECTIONS TO RETURN AIR DOWN DUCT THROUGH TRUSS LIEBBING.
- 10 EXTEND 12" OUTSIDE AIR DUCTS TO EACH RETURN AIR DOWN DUCT FOR RTU-1 & RTU-2, DUE TO SMALL SCALE AND CLARITY OUTSIDE AIR DUCTS ARE NOT SHOWN IN THEIR ENTIRETY.
- 11 TRANSITION FROM RTU-2 RETURN AIR OPENING TO 38x20 AND EXTEND DOWN TO ELEVATION WHICH WILL ALLOW FOR EXTENDING THE 16" FLEX RUNS WITH VOLUME DAMPERS TO RETURN GRILLES AS INDICATED. FIELD COORDINATE PRIOR TO INSTALLATION.
- 12 RIGID CONNECTIONS FOR TYPE F DIFFUSERS ON COOK LINE AND DIFFUSER OVER ICE MACHINE. SEE DETAIL 5 ON SHEET M2.
- 13 STAINLESS STEEL WALL PANEL AT HOOD, FURNISHED AND INSTALLED BY GENERAL CONTRACTOR.
- 14 PROVIDE PLENUM BOX ATTACHED TO RETURN GRILLE FOR TRANSFER AIR FROM OFFICE & UTILITY ROOM.
- 15 FRV-4 ON ROOF. TRANSITION FROM FAN OPENING TO 1x1 SHEET METAL EXHAUST DUCT AND EXTEND DOWN TO HOOD EXHAUST OPENING. REFER TO DETAILS FOR ADDITIONAL INFORMATION.
- 16 PROVIDE INDEPENDENT ON/OFF SWITCH FOR EF-2 ABOVE MOP BASIN.
- 17 FLEX CONNECTION NOT SHOWN DUE TO CLARITY. MAKE 16" FLEX CONNECTION AS NECESSARY.

**OUTSIDE AIR CALCULATION:**

(PER TABLE 6-1, ASHRAE 62.1, 2004)

RESTAURANT DINING ROOM OCCUPANCY:  
 NET OCCUPIABLE SPACE = 2107 SQ. FT.  
 TOTAL PERSONS = 1.5 x .18 x NET SQ. FT. = REQ'D CFM.  
 2107 x .18 x 3.1926 CFM  
 CUSTOMER SEATING: 104 PERSONS  
 STAFF: 22 PERSONS

TOTAL PERSONS x 1.5 x .18 x NET SQ. FT. = REQ'D CFM.  
 (126 x 1.5) x (.18 x 2107) = 132426 CFM REQUIRED.

OUTSIDE AIR PROVIDED:  
 RTU-1 - 1900 CFM  
 RTU-2 - 1900 CFM  
 TOTAL: 3800 CFM - IN COMPLIANCE.

REVISIONS	BY

**HYAC GENERAL NOTES**

1. DUCT SIZES ARE CLEAR INSIDE DIMENSIONS. VERIFY ALL DIMENSIONS AND LOCATIONS PRIOR TO FABRICATION OR INSTALLATION. ALL RECTANGULAR/SQUARE DUCTWORK SHALL BE FINEST QUALITY GALVANIZED SHEET STEEL WITH 2 3/4 LB. DENSITY FOIL FACED EXTERNAL INSULATION WITH AN R-VALUE OF 6.0. COORDINATE DUCTS WITH STRUCTURE PRIOR TO INSTALLATION. ALL DUCT SHALL BE CONSTRUCTED AND INSTALLED PER SMACNA REQUIREMENTS.
2. ALL FLEXIBLE DUCT CONNECTIONS SHALL BE CLASS ONE TYPE. PROVIDE TAB COLLARS AT MAIN DUCT WITH MANUAL VOLUME DAMPER WITH LOCKING QUADRANT.
3. AN IONIZATION PRINCIPLE SMOKE DETECTOR SHALL BE INSTALLED IN THE SUPPLY DUCTWORK OF ALL RTUS AND PROVIDED BY LENNOX WITHIN UNIT. THE DETECTOR SHALL BE WIRED TO APPLICABLE FIRE ALARM SYSTEM BY THE FIRE ALARM CONTRACTOR. PROVIDE L.E.D. AND HORN ALARM STATIONS (DUCT SMOKE DETECTOR'S REMOTE TEST SWITCH) LOCATED IN NORMALLY OCCUPIED AREA MOUNTED AT 48" AFF.
4. ALL ROOF AND WALL PENETRATIONS SHALL BE SEALED BY THE GENERAL CONTRACTOR.
5. CONTRACTOR SHALL COORDINATE WITH STRUCTURAL PLANS PRIOR TO BID TO VERIFY EXISTING CLEARANCES FOR DUCT. COORDINATE WITH THE GENERAL CONTRACTOR PRIOR TO TRUSS ORDER AND AS STRUCTURE IS BEING CONSTRUCTED TO ASSURE ALL CLEARANCES FOR DUCTWORK ARE COORDINATED.
6. DEVIATION FROM MATERIALS, METHODS, OR PROCEDURES SET FORTH HEREIN MUST BE APPROVED IN WRITING BY ENGINEER PRIOR TO SUBMISSION OF BID, ORDER, FABRICATION OR INSTALLATION.
7. ANY AND ALL QUESTIONS AS TO THE INTENT OF OR PROCEDURES SET FORTH IN THESE DRAWINGS MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO SUBMISSION OF A BID. LACK OF KNOWLEDGE OR UNDERSTANDING OF THE PLANS SHALL NOT JUSTIFY ANY CLAIMS OR ADDITIONAL COMPENSATION.
8. INSTALLATION SHALL COMPLY WITH 2010 FBCM AND FBCFC AND ALL APPLICABLE LAWS, CODES AND ORDINANCES.
9. THE HYAC CONTRACTOR SHALL COORDINATE ALL EQUIPMENT, DUCT, PIPING, LOUVERS, DIFFUSERS, ETC. INCLUDING LOCATIONS AND CLEARANCES WITH ALL OTHER TRADES ON PROJECT IN PRE-CONSTRUCTION MEETING, PRIOR TO ANY ORDER, FABRICATION OR INSTALLATION.
10. COORDINATE WITH ELECTRICAL CONTRACTOR AND EQUIPMENT NATIONAL ACCOUNTS ON ALL ELECTRICAL DATA PRIOR TO ORDER.
11. SUPPLY DUCTWORK SHALL BE CONSTRUCTED, FABRICATED AND INSTALLED IN ACCORDANCE WITH SMACNA REQUIREMENTS FOR A 1" POSITIVE PRESSURE CLASSIFICATION.
12. RETURN AND EXHAUST DUCTWORK SHALL BE CONSTRUCTED, FABRICATED AND INSTALLED IN ACCORDANCE WITH SMACNA REQUIREMENTS FOR A 1" NEGATIVE STATIC PRESSURE.
13. ALL EXHAUST FAN DISCHARGES AND PLUMBING VENTS SHALL BE A MINIMUM OF 10'-0" FROM FRESH-AIR INTAKES. COORDINATE WITH PLUMBING PLANS PRIOR TO INSTALLATION.
14. THE MECHANICAL CONTRACTOR SHALL BALANCE ALL SYSTEMS TO WITHIN TEN PERCENT OF DESIGN VALUES SPECIFIED HEREIN.
15. EXTEND CONDENSATE DRAIN LINES FROM RTUS TO ROOF DRAINS AND/OR DOWNSPOUTS WHICH DRAIN TO STORM SEWER. REFER TO DETAILS ON SHEET M2.
16. HOOD EXHAUST DUCT SHALL BE MINIMUM 16 GAUGE GALVANIZED SHEET STEEL WITH ALL SEAMS WELDED LIQUID-TIGHT. PROVIDE 3M FIREMASTER DUCT WRAP FROM HOOD TO TOP OF ROOF CURB.
17. CONTROLS SHALL BE PER LENNOX NATIONAL ACCOUNTS. COORDINATE WITH LENNOX REPRESENTATIVE ON ALL NECESSARY CONTROLS PRIOR TO BID SUBMISSION.
18. THE HYAC CONTRACTOR SHALL ANTICIPATE AND PROVIDE ALL INCIDENTAL AND PERIPHERAL ITEMS WHICH ARE OBVIOUSLY REQUIRED AND NECESSARY TO COMPLETE THE INSTALLATION REGARDLESS IF THESE ITEMS ARE SPECIFIED AND/OR SHOWN ON THE PLANS.

**BUILDING AIR BALANCE SCHEDULE**

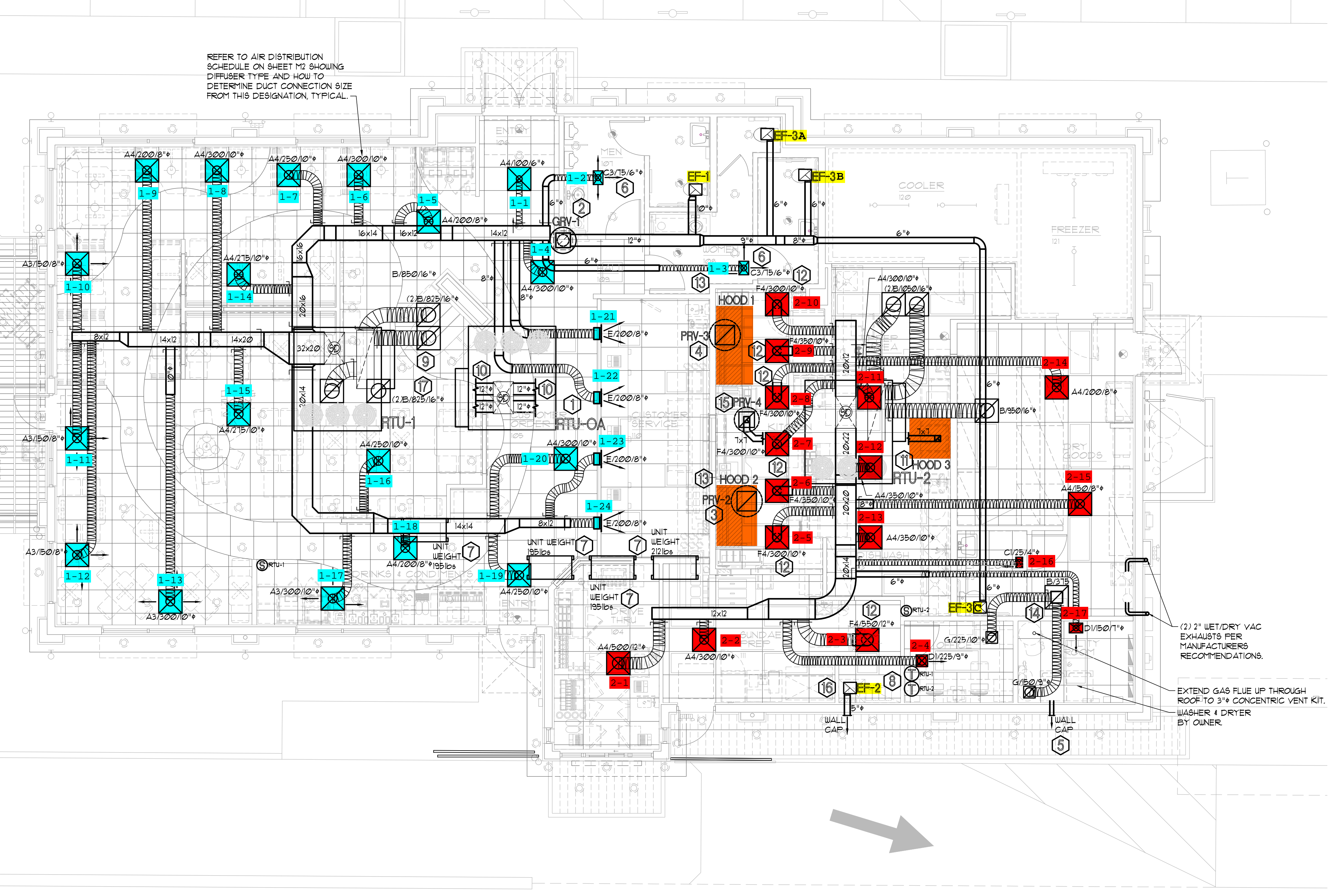
POSITIVE SOURCES:	NEGATIVE SOURCES:
RTU-1 1900 CFM	EF-1 50 CFM
RTU-2 1900 CFM	(3) EF-2 210 CFM
	FRV-2 1500 CFM
	FRV-3 1500 CFM
	FRV-4 350 CFM
<b>TOTAL:</b> 3800 CFM	<b>TOTAL:</b> 3830 CFM

RESULTING TOTAL AIR BALANCE: 20 CFM POSITIVE

**HYAC LEGEND**

CEILING SUPPLY DIFFUSER	☒
CEILING RETURN	☑
CEILING EXHAUST FAN	☒
SENSOR	Ⓢ
THERMOSTAT	Ⓣ
SMOKE DETECTOR	Ⓢ
VOLUME DAMPER	Ⓜ
NEW RIGID DUCT	▬
CLASS 1 FLEXIBLE DUCT	▬

REFER TO AIR DISTRIBUTION SCHEDULE ON SHEET M2 SHOWING DIFFUSER TYPE AND HOW TO DETERMINE DUCT CONNECTION SIZE FROM THIS DESIGNATION, TYPICAL.



### CONTROL NOTES

- RTU-1, RTU-2, 4 RTU-OA WILL SHUT-DOWN UPON ACTIVATION OF FIRE SUPPRESSION SYSTEM.
- RTU-1, RTU-2, 4 RTU-OA WILL SHUT-DOWN ON ACTIVATION OF ANY DUCT DETECTOR.
- OCCUPIED MODE: FANS IN RTU-1 & RTU-2, EXHAUST FANS PRV-2, 3, & 4 TO RUN CONTINUOUSLY. RESTROOM EXHAUST TO BE INTERLOCKED WITH RR LIGHTS.
- UNOCCUPIED MODE: FANS IN RTU-1 & RTU-2 TO RUN ONLY WHEN COOLING OR HEATING IS CALLED FOR.
- RTU-OA SHALL BE INTERLOCKED WITH RTU-1 AND RTU-2 VIA LENNOX CONTROLS TO ASSURE SIMULTANEOUS OPERATION. COORDINATE ALL CONTROLS REQUIREMENTS WITH LENNOX PRIOR TO BID SUBMISSION.

### LENNOX SETTINGS FOR CULVERS

#### Kitchen Unit

Parameter 3.01 HEAT DELAY NEEDS TO BE SET TO "DISABLED". CONTROL PARAMETER 3.01=0 Pg. 92  
ECONOMIZER DIP SWITCHES A56 (EM1) NEED TO BE SET TO "GLOBAL" MODE. 1-ON 2-OFF (Pg. 5 FIG 8)  
ECONOMIZER MIN POSITION POTENTIOMETER NEEDS TO BE DETERMINED AND SET BY AIR BALANCER (Pg. 52 FIG 33)  
BOTH THE THERMOSTAT AND THE HOOD FANS MUST BE TIED INTO TBI TERMINAL 849 FOR OCC/UNOCC CONTROL.  
FRESH AIR TEMPERING (HEATING) CONTROL PARAMETER 6.20=160 "55F" (KITCHEN IS USUALLY IN COOLING MODE)  
(PARAMETER 6.20 Pg. 93 x CHARTS Pg. 103)

#### Dining Room Unit

Parameter 3.01 HEAT DELAY NEEDS TO BE SET TO "DISABLED". CONTROL PARAMETER 3.01=0 Pg. 92  
ECONOMIZER DIP SWITCHES A56 (EM1) NEED TO BE SET TO ECONOMIZER TYPE PURCHASED/INSTALLED. 1=1 2=2  
(Pg. 5 FIGURE 8)  
ECONOMIZER MIN POSITION POTENTIOMETER NEEDS TO BE DETERMINED AND SET BY AIR BALANCER (Pg. 52 FIGURE 33)  
THE THERMOSTAT MUST BE TIED INTO TBI TERMINAL 849 FOR OCC/UNOCC CONTROL.  
FRESH AIR TEMPERING (HEATING) CONTROL PARAMETER 6.20=142 "60F" (ROOM NEUTRAL)  
(PARAMETER 6.20 PAGE 93 x CHARTS PAGE 103)

OTHER PARAMETERS THAT WE DIDN'T SET, BUT ARE PART OF START-UP:

- ROOM SET POINT
- REMOTE SENSOR OPERATION
- TEMP DEADBANDS

CHECK FOR CORRECT OPERATION AND WIRING OF ALL SENSORS.

NOTE: VERIFY ALL COLORS WITH OWNER AND ARCHITECT

### NATIONAL ACCOUNT PROGRAM

#### 1. LENNOX INDUSTRIES, INC. - ROOFTOP HVAC EQUIPMENT

National Accounts Sales: (800) 367-6285 Option #1 lennoxind.com

National Account Technical Support: (800) 367-6285 Option #2 lennoxind.com

#### 2. ACCRUREX/ GREENHECK FAN CORPORATION - KITCHEN HOODS, EXHAUST FANS, ROOF CURBS, ANSUL SYSTEMS, AND ACCESSORIES

CONTACT Patrick Smith @ 1-612-670-2938 OR patrick.smith@accurex.com

#### 3. CARNES COMPANY - DIFFUSERS AND GRILLES

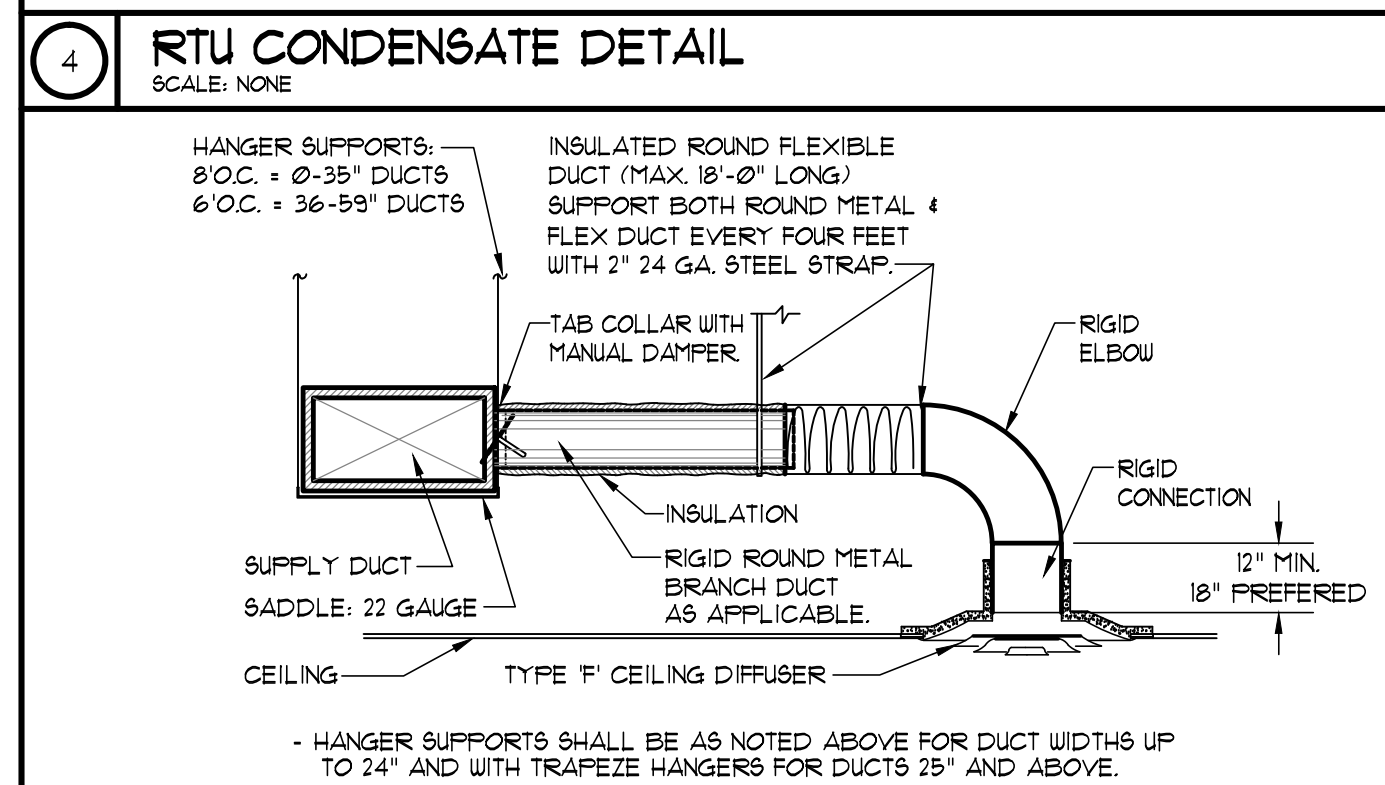
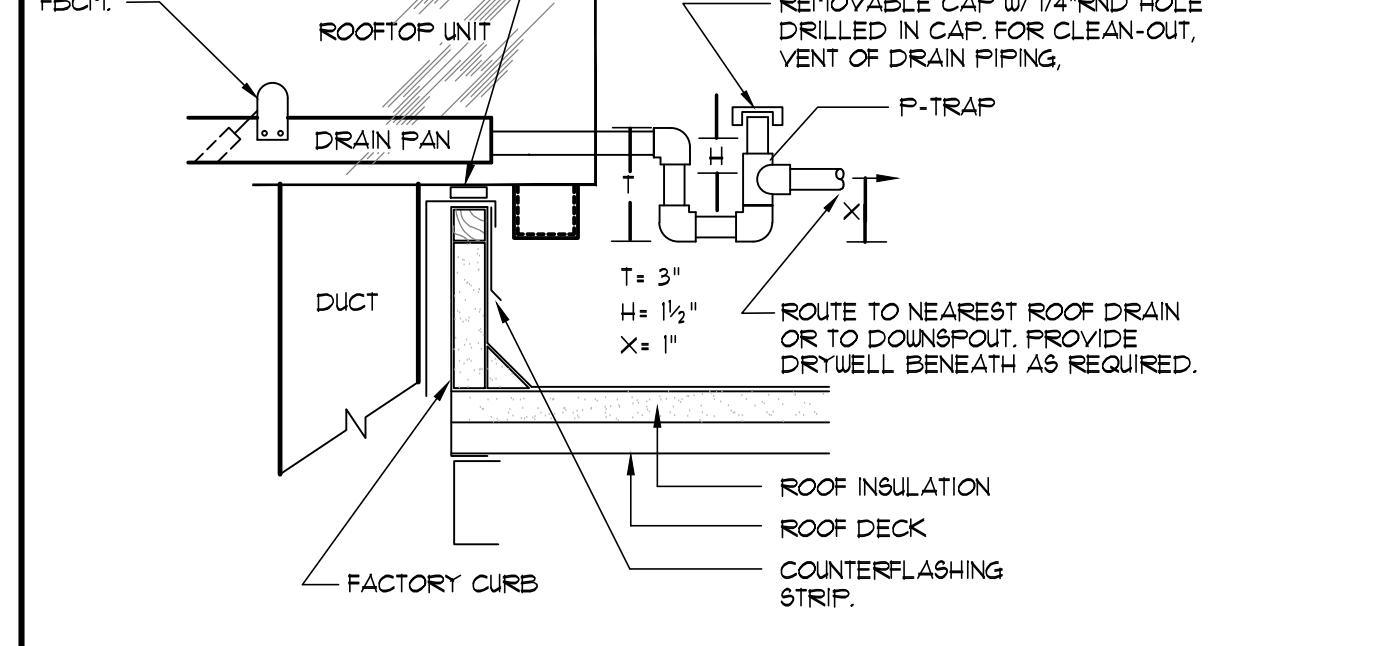
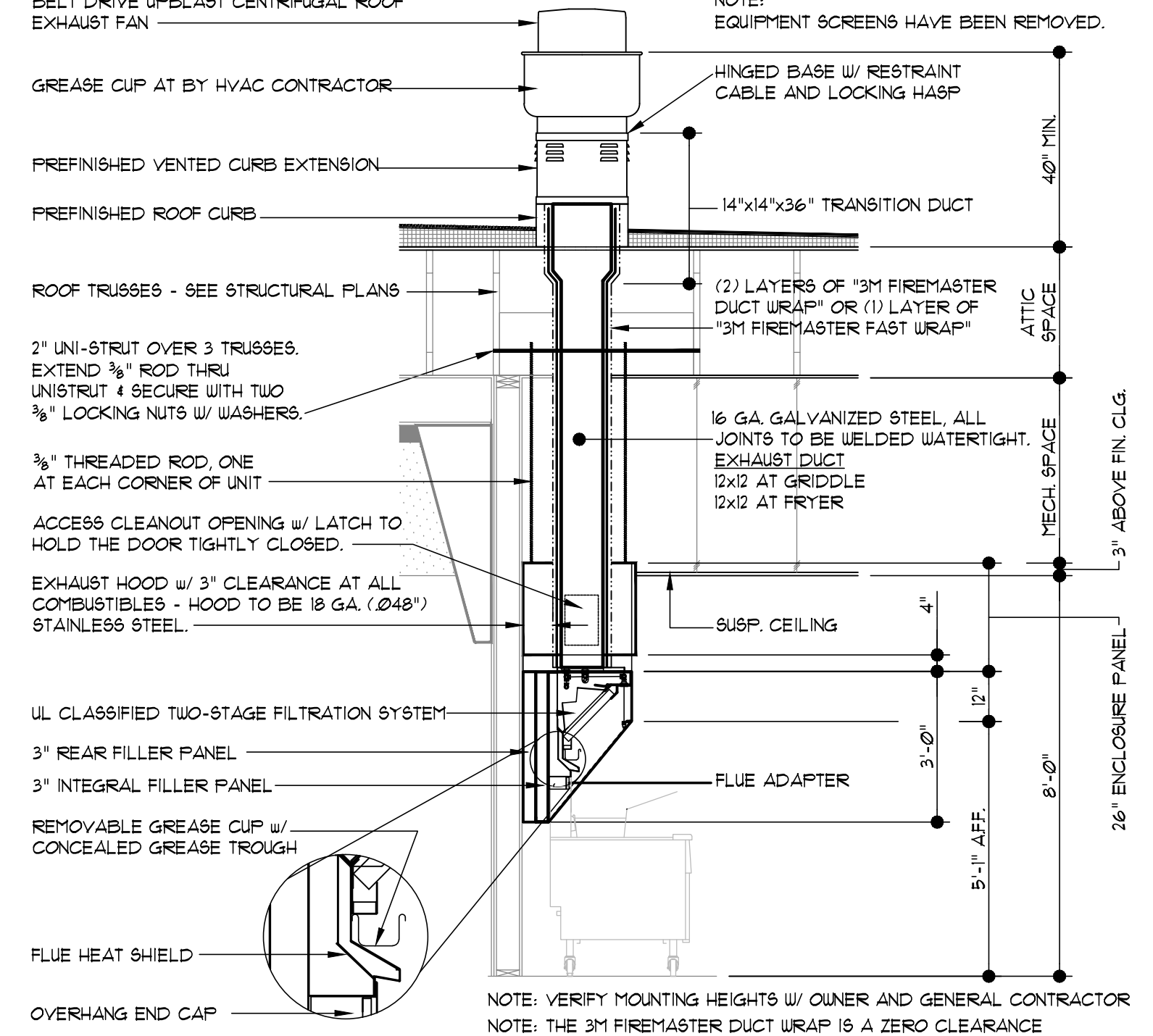
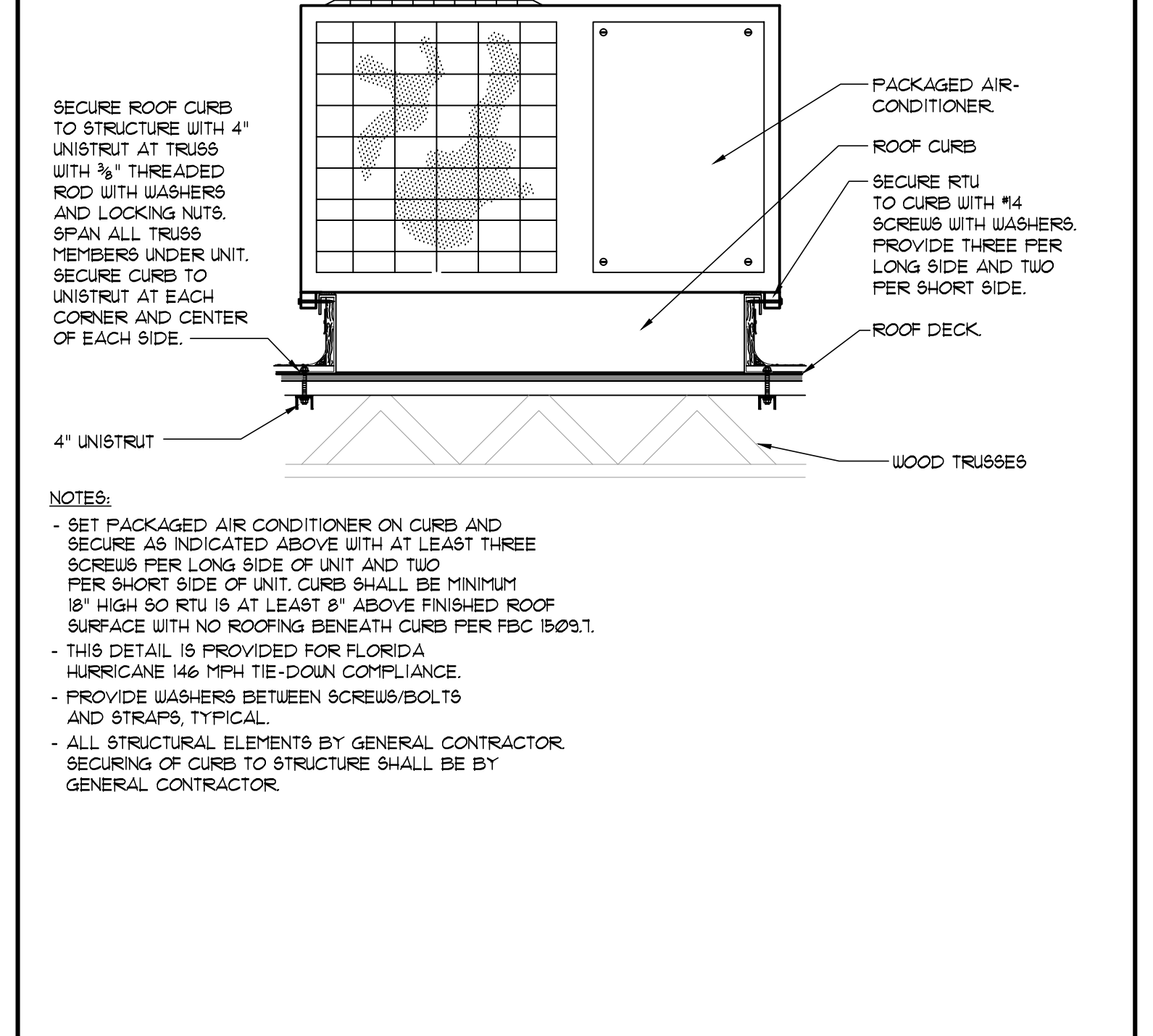
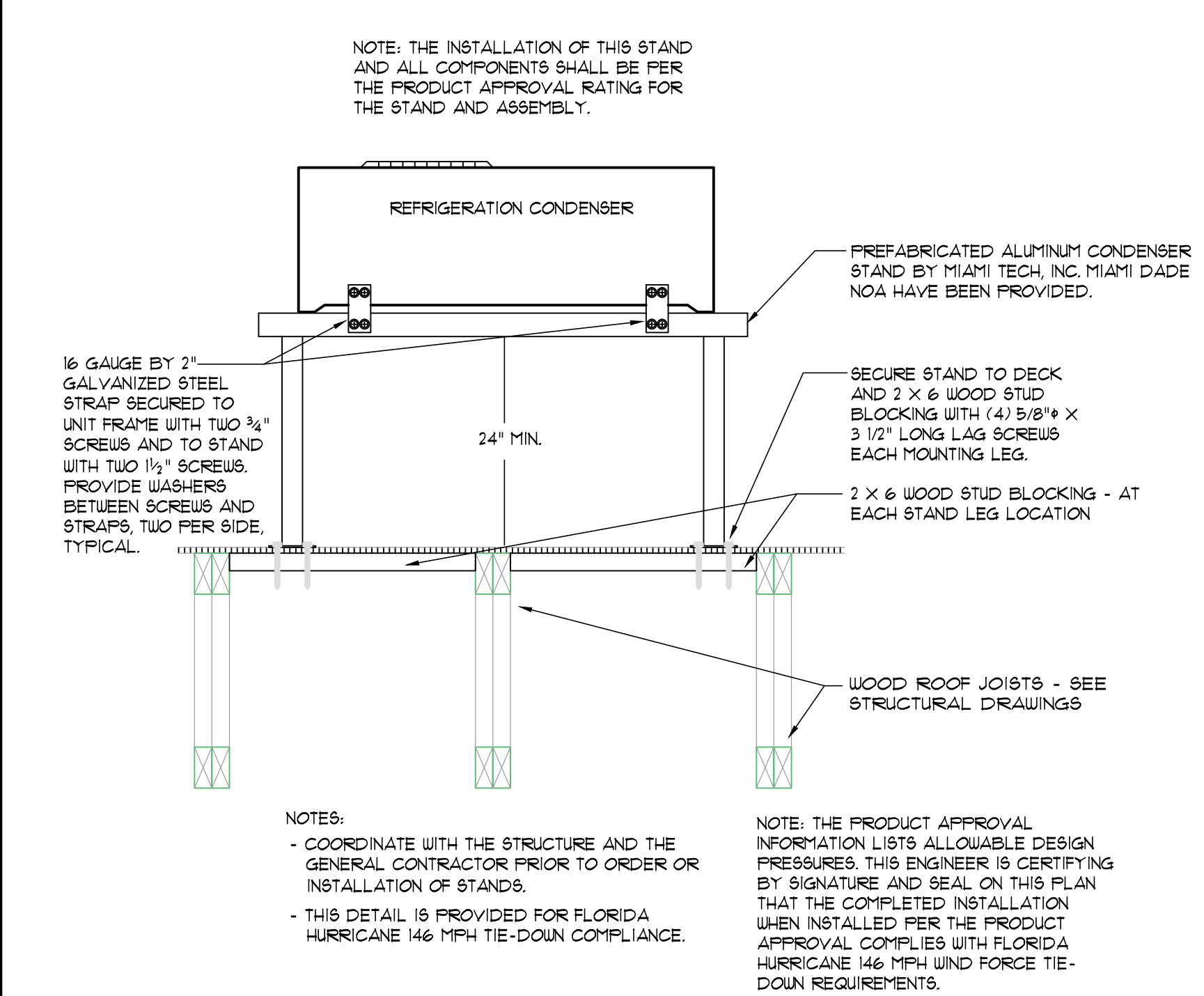
National Accounts Rep: Brian Baker @ (608) 845-6411 bbaker@carnes.com

National Accounts Sales: Chris Stratton @ (608) 845-6411 cstratton@carnes.com

- RTU - 1** **LENNOX LCH-156-H4B** COMBINATION ELECTRIC HEATING AND ELECTRIC COOLING ROOFTOP UNIT w/HUMIDITROL AND FACTORY UNIT MOUNT ELECTRIC 15.0 KW HEATER. UNIT FED 1000 CFM OF PRE-TREATED OUTSIDE AIR FROM RTU-OA. BALANCE RETURNS PER PLANS. **152,000 NET COOLING** CAPACITY, 12.0 EER. 208 / 230 VOLT, 3 PHASE, 70.0 AMPS & DRIVE KIT 1. UNIT WEIGHT IS 2,130lbs. BLOWER MOTOR SET FOR **NOMINAL 5,200 CFM** & FRESH AIR INTAKE DAMPER SET FOR MINIMUM **900 CFM**. PROVIDE MANUFACTURERS' 18" HIGH ROOF CURB, TWO STAGE CONTROL, DUCT DISCHARGE CONTROL, IN-DUCT SMOKE DETECTORS, BELT TENSIONER WITH SPARE BELT, MERV 4 FILTERS, LOOSE SHIPPED CONDENSATE TRAP AND HONEYWELL OR EQUAL T7350 NIGHT SET BACK THERMOSTAT AND DISCONNECT SWITCH. MOTORIZED OUTSIDE AIR INTAKE DAMPER. NO ECONOMIZER. **NO SUBSTITUTIONS.**
- RTU - 2** **LENNOX LCH-156-H4B** COMBINATION ELECTRIC HEATING AND ELECTRIC COOLING ROOFTOP UNIT w/HUMIDITROL AND FACTORY UNIT MOUNT ELECTRIC 15.0 KW HEATER. UNIT FED 1000 CFM OF PRE-TREATED OUTSIDE AIR FROM RTU-OA. BALANCE RETURNS PER PLANS. **152,000 NET COOLING** CAPACITY, 12.0 EER. 208 / 230 VOLT, 3 PHASE, 70.0 AMPS & DRIVE KIT 1. UNIT WEIGHT IS 2,130lbs. BLOWER MOTOR SET FOR **NOMINAL 5,000 CFM** & FRESH AIR INTAKE DAMPER SET FOR MINIMUM **950 CFM**. PROVIDE MANUFACTURERS' 18" HIGH ROOF CURB, TWO STAGE CONTROL, DUCT DISCHARGE CONTROL, IN-DUCT SMOKE DETECTORS, BELT TENSIONER WITH SPARE BELT, MERV 4 FILTERS, LOOSE SHIPPED CONDENSATE TRAP AND HONEYWELL OR EQUAL T7350 NIGHT SET BACK THERMOSTAT AND DISCONNECT SWITCH. MOTORIZED OUTSIDE AIR INTAKE DAMPER. NO ECONOMIZER. **NO SUBSTITUTIONS.**
- RTU - OA** **LENNOX LCH-156-H4B** COMBINATION ELECTRIC HEATING AND ELECTRIC COOLING ROOFTOP UNIT w/HUMIDITROL AND FACTORY UNIT MOUNT ELECTRIC 30.0 KW HEATER. UNIT FEEDS 1000 CFM OF PRE-TREATER OUTSIDE TO RTU-1 AND RTU-2. **152,000 NET COOLING** CAPACITY, 12.0 EER. 208 / 230 VOLT, 3 PHASE, 90.0 AMPS & DRIVE KIT 1. UNIT WEIGHT IS 2,130lbs. BLOWER MOTOR SET FOR SUPPLY FAN TOTAL FLOW 3250 CFM. 1250 CFM BALANCE BYPASS TO BLEND WITH 2000 CFM OUTSIDE AIR. 2000 CFM THEN DELIVERED TO RTU'S. **NOMINAL 2,000 CFM** 100% OA UNIT, PROVIDE MANUFACTURERS' 18" HIGH ROOF CURB, RUSKIN MODEL #50-307-52 BYPASS MIXING BOX. PROVIDE MIXING BOX SUPPORT, CONTROL, DUCT DISCHARGE CONTROL, IN-DUCT SMOKE DETECTORS, BELT TENSIONER WITH SPARE BELT, MERV 4 FILTERS, LOOSE SHIPPED PROVIDE FRESH AIR TEMPERING, MOTORIZED OUTSIDE AIR INTAKE DAMPER. CONDENSATE TRAP & HONEYWELL OR EQUAL DISCHARGE TEMP CONTROLLER AND DISCONNECT SWITCH. INTERLOCK WITH RTU-1 AND RTU-2. **NO SUBSTITUTIONS.**
- GRV - 1** **GREENHECK MODEL FGR** GRAVITY RELIEF VENTILATOR WITH INTEGRAL FACTORY BIRDSCREEN. PROVIDE FACTORY CURB, MINIMUM 12" HIGH, 12"x12" THROAT WITH 12x12 PLENUM DUCT DOWN FOR EXHAUST DUCT CONNECTION. **NO SUBSTITUTIONS.**
- PRV - 2** **ACCUREX MODEL XRUB-161XP-15 KITCHEN FAN** UPBLAST EXHAUST FAN W/CLEAN-OUT PORT, MOUNTED HINGE BASE, & AUTO BELT TENSIONER, SPARE BELT, & ROOF CURB w/VENTED CURB EXTENSION. **1500 CFM AT 2.33" SP, 1.5 HP MOTOR,** 208 VOLTS, THREE PHASE FAN TO RUN CONTINUOUSLY DURING OCCUPIED MODE. **NO SUBSTITUTIONS.**
- PRV - 3** **ACCUREX MODEL XRUB-141-7 KITCHEN FAN** UPBLAST EXHAUST FAN W/CLEAN-OUT PORT, MOUNTED HINGE BASE, & AUTO BELT TENSIONER, SPARE BELT, & ROOF CURB w/VENTED CURB EXTENSION. **1500 CFM AT 1.00" SP, .75 HP MOTOR,** 208 VOLTS, THREE PHASE FAN TO RUN CONTINUOUSLY DURING OCCUPIED MODE. **NO SUBSTITUTIONS.**
- PRV - 4** **ACCUREX MODEL XRED-090-D** CONDENSATE DOWNBLAST EXHAUST FAN WITH ROOF CURB AND BACKDRAFT DAMPER. **350 CFM AT .6" SP, .0667 HP MOTOR,** 115 VOLTS, SINGLE PHASE. FAN TO RUN w/STARTING OF DISHWASHER & FOR ONE MINUTE AFTER THE CYCLE IS COMPLETE. **NO SUBSTITUTIONS.**
- EF - 1** **ACCUREX MODEL XCR-A200** CEILING EXHAUST FAN, BACK DRAFT DAMPER. EXTEND EXHAUST DUCT TO GRAVITY RELIEF VENTILATOR. **220 CFM AT .125" SP,** 115 VOLT, SINGLE PHASE. FAN TO BE INTERLOCKED WITH RESTROOM LIGHTS. NO SUBSTITUTIONS.
- EF - 2** **ACCUREX MODEL XCR-B50** CEILING EXHAUST FAN, BACK DRAFT DAMPER. EXTEND EXHAUST DUCT TO GRAVITY RELIEF VENTILATOR, WALL CAP FOR MOP BASIN FAN. **50 CFM AT .125" SP,** 115 VOLT, SINGLE PHASE. INDEPENDENT SWITCH FOR FAN OVER MOP BASIN. NO SUBSTITUTIONS.
- EF - 3** **ACCUREX MODEL XCR-B70** CEILING EXHAUST FAN, BACK DRAFT DAMPER. EXTEND EXHAUST DUCT TO GRAVITY RELIEF VENTILATOR. **70 CFM AT .100" SP,** 115 VOLT, SINGLE PHASE. FAN TO BE INTERLOCKED WITH RESTROOM LIGHTS. NO SUBSTITUTIONS.
- ITEM #49 (HOOD 2)** **GRIDDLE EXHAUST HOOD - ACCUREX MODEL XGEP-5.33S** 64" X 26" X 36" HIGH, LOW PROXIMITY w/FLUE BYPASS. **1500 CFM AT 1.918" SP, 12" x 12" DUCT COLLAR.** INCLUDES THE 3" INTEGRAL AIR SPACE ON BACK OF HOOD & AN ADDITIONAL 3" REAR FILLER PANEL. STAINLESS STEEL WHERE EXPOSED, w/ **GREASE GRABBER** TWO-STAGE FILTRATION SYSTEM. 26" HIGH ENCLOSURE PANELS, FRONT, LEFT AND RIGHT SIDES. GREASE TROUGH SHALL BE PITCHED TO THE LEFT END OF THE HOOD. APPROVALS SHALL INCLUDE UL LISTING AND THE NSF SEAL. THE VENTILATOR SHALL CONFORM TO THE REQUIREMENTS OF **NFPA-96** & TO ALL PREVAILING LOCAL CODE REQUIREMENTS. **NO SUBSTITUTIONS.**
- ITEM #59 (HOOD 1)** **FRYER EXHAUST HOOD - ACCUREX MODEL XXEP-FB-6.92-S** 83" X 26" X 36" HIGH, LOW PROXIMITY w/FLUE BYPASS. **1500 CFM AT .518" SP, 12" x 12" DUCT COLLAR.** INCLUDES THE 3" INTEGRAL AIR SPACE ON BACK OF HOOD & AN ADDITIONAL 3" REAR FILLER PANEL. STAINLESS STEEL WHERE EXPOSED, w/ **X-TRACTOR STAINLESS STEEL FILTERS** TWO-STAGE FILTRATION SYSTEM. 26" HIGH ENCLOSURE PANELS, FRONT, LEFT AND RIGHT SIDES. GREASE TROUGH SHALL BE PITCHED TO THE LEFT END OF THE HOOD. APPROVALS SHALL INCLUDE UL LISTING AND THE NSF SEAL. THE VENTILATOR SHALL CONFORM TO THE REQUIREMENTS OF **NFPA-96** & TO ALL PREVAILING LOCAL CODE REQUIREMENTS. **NO SUBSTITUTIONS.**
- ITEM #25A (HOOD 3)** **DISHWASHER CONDENSATE HOOD - ACCUREX MODEL XD3-3.5-S** CONDENSATE HOOD w/BAFFLE, 42" X 42" X 24" HIGH, STAINLESS STEEL WHERE EXPOSED. **350 CFM AT .127 SP, 7 X 7 DUCT COLLAR.** COLLAR. APPROVALS SHALL INCLUDE THE NSF SEAL. (UL LABEL NOT REQUIRED FOR NON-GREASE APPLICATION). THE VENTILATOR SHALL CONFORM TO THE REQUIREMENTS OF **NFPA-96** & TO ALL PREVAILING LOCAL CODE REQUIREMENTS. **NO SUBSTITUTIONS.**

### MECHANICAL EQUIPMENT SPECIFICATIONS

SCALE: NONE



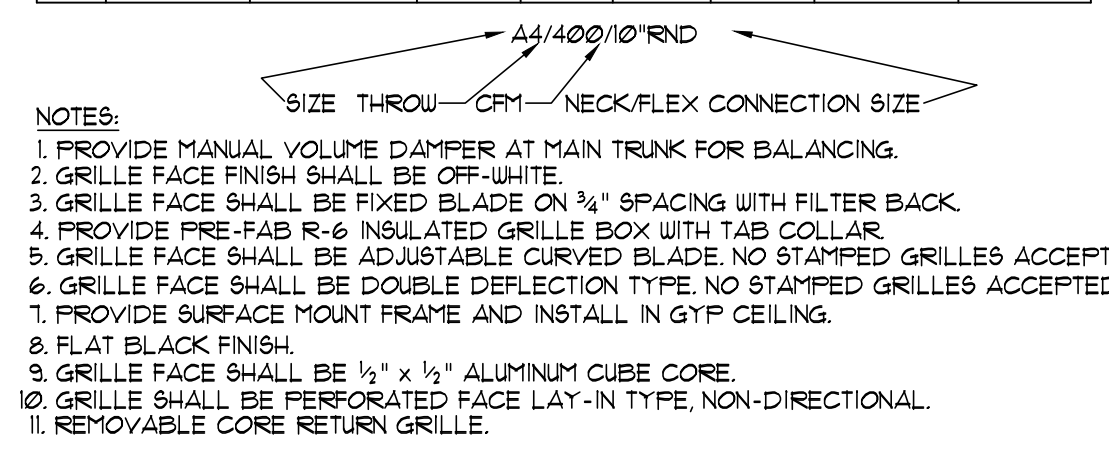
9 REFRIGERATION CONDENSER TIE-DOWN DETAIL SCALE: NONE

8 RTU TIE-DOWN DETAIL SCALE: NONE

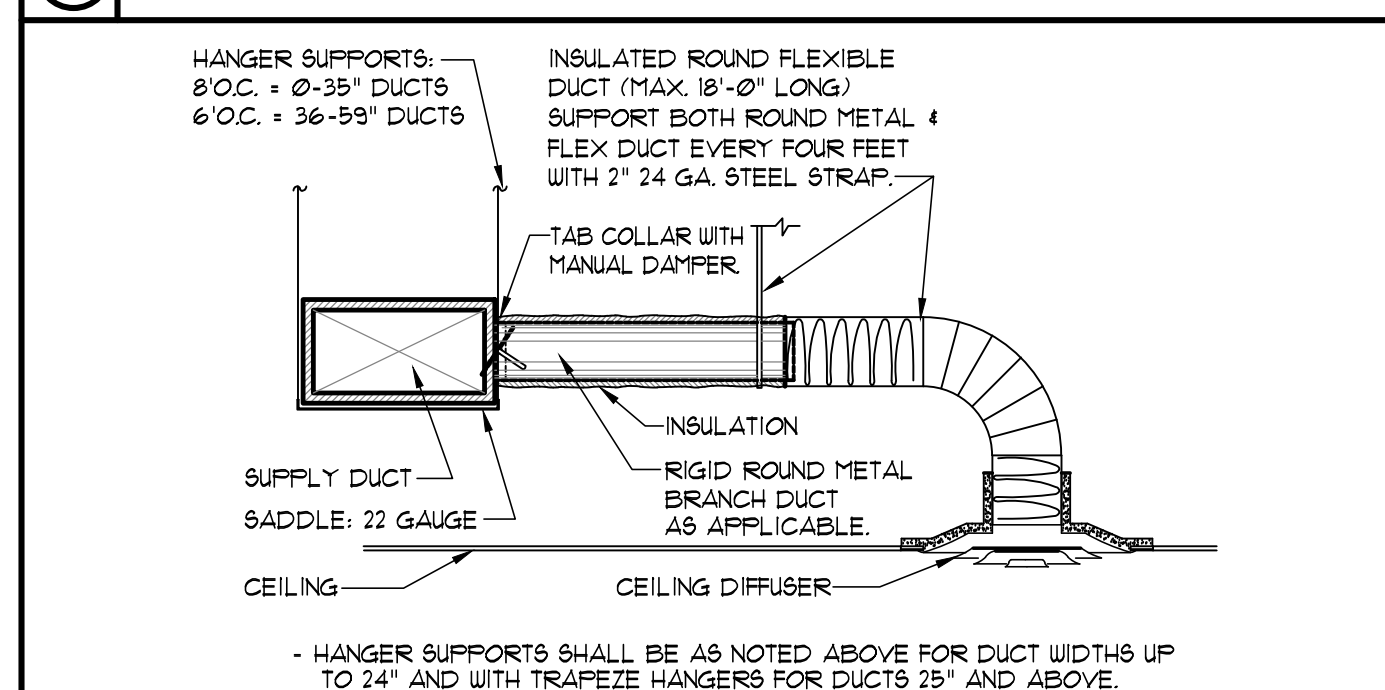
7 KITCHEN HOOD DETAIL SCALE: NONE

5 TYPE 'F' CEILING DIFFUSER RUN-OUT DETAIL SCALE: NONE

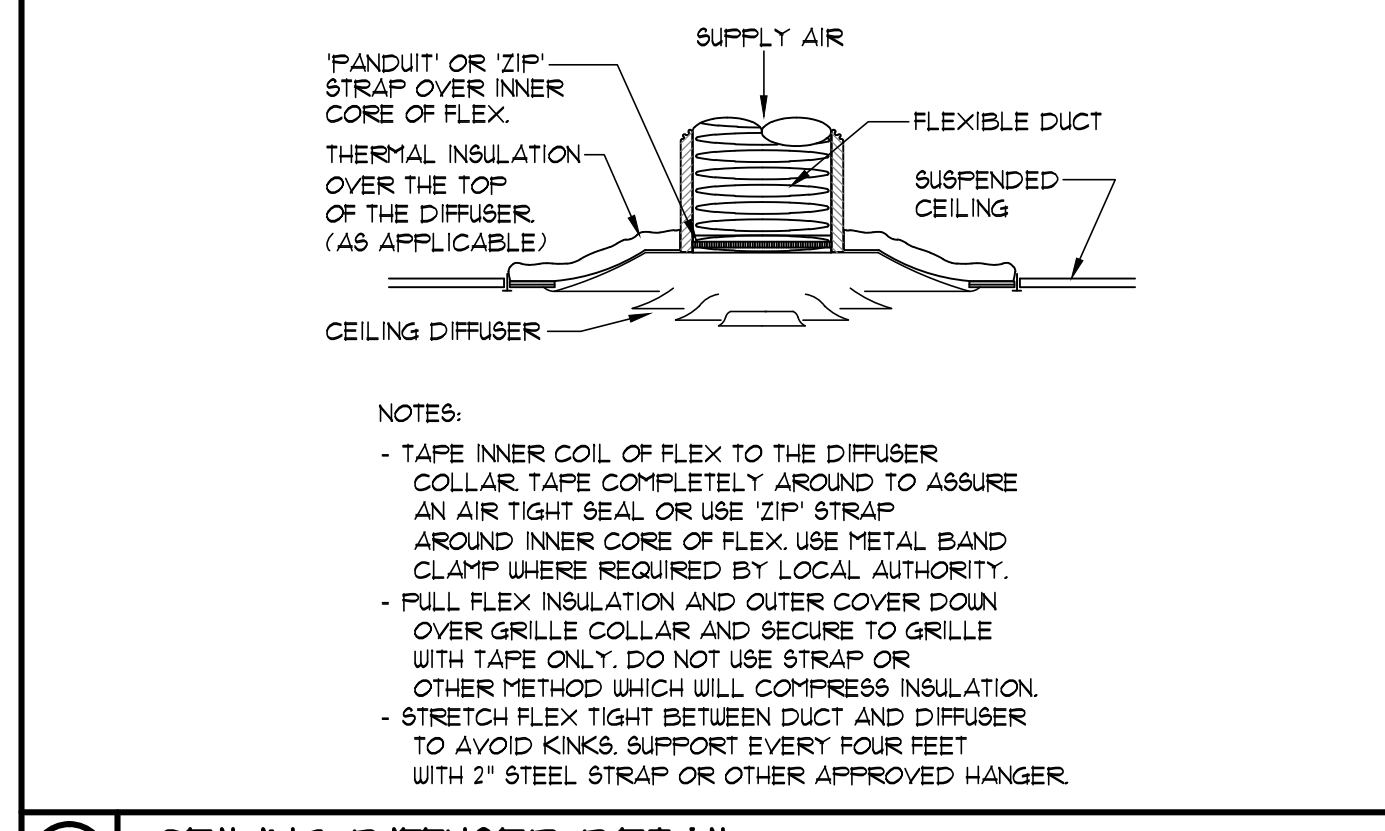
MARK	MANUFACTURER	MODEL NUMBER	SIZE	CFM	NECK	LOCATION	MATERIAL	NOTES:
A	PRICE	ASCD	24 X 24	SEE PLAN	24 X 24	CEILING	ALUMINUM	12
B	CARNES	RAFF	24 X 24	SEE PLAN	24 X 24	CEILING	ALUMINUM	12, 8, 9, 11
C	PRICE	ACVD	10 X 6	SEE PLAN	10 X 6	CEILING	ALUMINUM	12, 4, 5, 7
D	PRICE	ACVD	12 X 8	SEE PLAN	12 X 8	CEILING	ALUMINUM	12, 4, 5
E	PRICE	620	12 X 8	SEE PLAN	12 X 8	CEILING	ALUMINUM	12, 4, 6
F	CARNES	9PRB2240	24 X 24	SEE PLAN	PER PLAN	CEILING	STEEL	12, 10
G	PRICE	630	12 X 12	SEE PLAN	12 X 12	CEILING	ALUMINUM	12
H	CARNES	9PRB2242	24 X 24	SEE PLAN	PER PLAN	CEILING	STEEL	12, 10



1 AIR DISTRIBUTION SCHEDULE SCALE: NONE



2 CEILING DIFFUSER RUN-OUT DETAIL SCALE: NONE



3 CEILING DIFFUSER DETAIL SCALE: NONE

REVISIONS	BY

OLIVER ARCHITECTS  
 1800 9291  
 Member of the American Institute of Architects  
 32792 US Hwy. 19 • Palm Harbor, FL 34684  
 Phone 727.781.7325 • Fax 727.781.6623  
 www.oliverarchitects.com

ALL INFORMATION CONTAINED  
 IN THIS DRAWING IS THE  
 PROPERTY OF  
 OLIVER ARCHITECTS  
 ALL RIGHTS RESERVED.

GARLAND PATTERSON, P.E.  
 FL Lic. No. 14175  
 APR. 1, 2021

MDCI FLORIDA, INC.  
 1616 E. Semoran Boulevard  
 Apopka, Florida 32709  
 Safety Address: Florida 32709  
 Engineering Business No. 9704  
 Safety Address: Florida 32709  
 © Copyright 2021 • Project No. 21005

New Free Standing  
**Cantrab**  
 1616 E. Semoran Boulevard  
 Apopka, Florida  
 Orange County

Date: 04. 01. 21  
 Scale: AS NOTED  
 Project Mgr: DG  
 Drawn: BMD BMD  
 Job: 20-158  
 Sheet

M2

**OLIVERI ARCHITECTS**  
 A 30092901  
 Member of the American Institute of Architects  
 32797 US Hwy. 19 • Palm Harbor, FL 34684  
 Phone 727.781.7325 • Fax 727.781.6623  
 www.oliveriarchitects.com

**GARLAND PATTERSON, P.E.**  
 FL Lic. No. 14175  
 APR 1 2021  
 STATE OF FLORIDA  
 PROFESSIONAL ENGINEER

**MDCI FLORIDA, INC.**  
 Safety & Health  
 4000 W. US Highway 1  
 Ft. Lauderdale, FL 33309  
 © Copyright 2021 • Project No. 20200

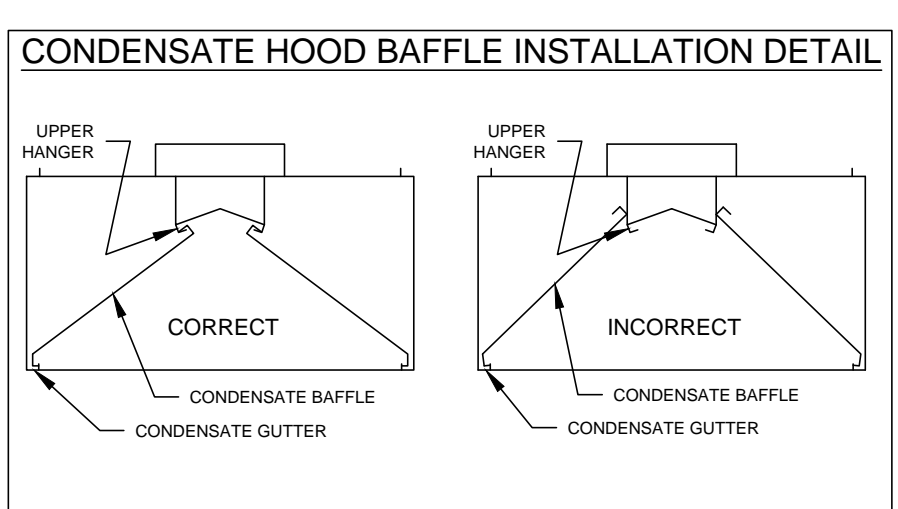
**New Free Standing**  
**Curcio's**  
 1616 E. Samoran Boulevard  
 Apopka, Florida  
 Orange County

Date: 04. 01. 21  
 Scale: AS NOTED  
 Project Mgr: DG  
 Drawn: BMD  
 Job: 20-158  
 Sheet

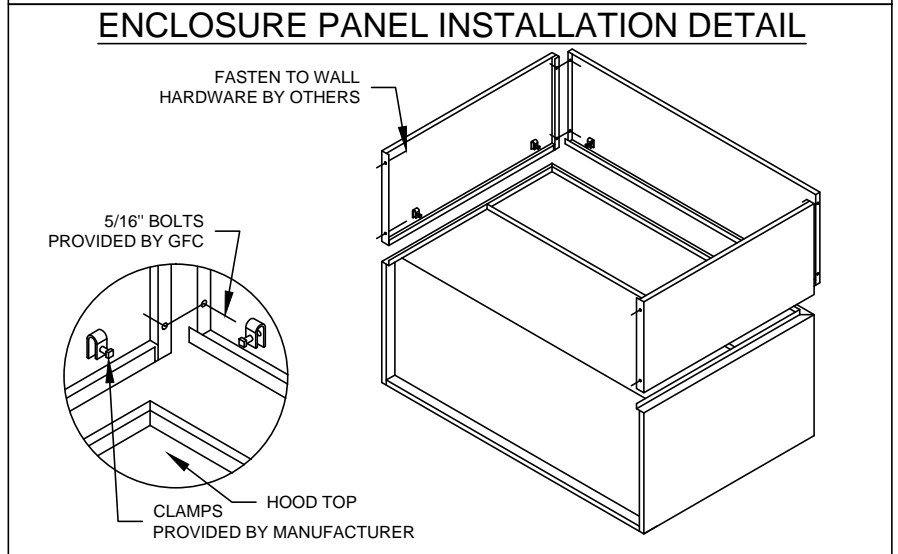
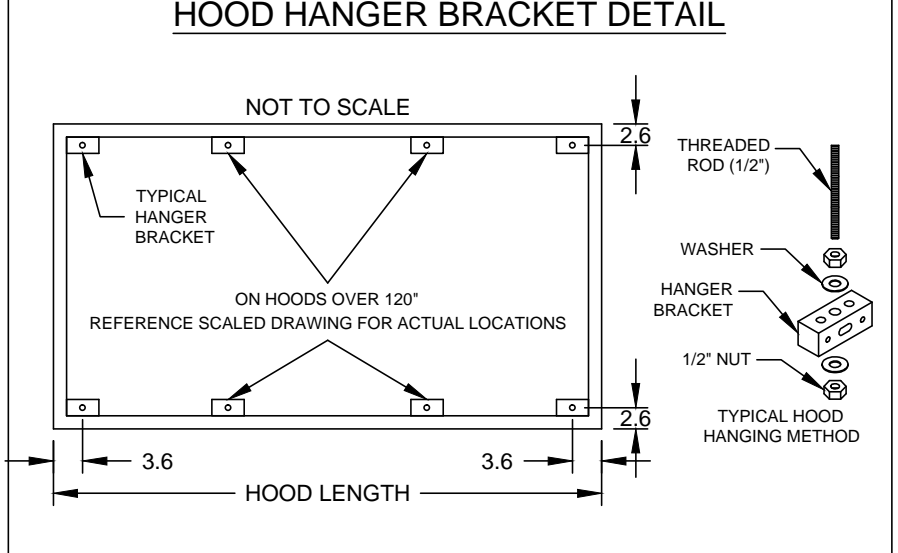
**M3**

EQUIPMENT SCHEDULE										EQUIPMENT SCHEDULE									
TYPE 2 KITCHEN HOOD (HOOD #3)					MARK: ITEM # 25					TYPE 1 KITCHEN HOOD (HOOD #2)					MARK: GRILL HOOD				
HOOD NO.	ACCUREX MODEL STYLE / CONFIGURATION	SECTION LENGTH	WIDTH	HEIGHT	GREASE CUP OR DRAIN	HOOD TEMP. RATING	TOTAL WEIGHT	SECTION LOCATION	HOOD NO.	ACCUREX MODEL STYLE / CONFIGURATION	SECTION LENGTH	WIDTH	HEIGHT	GREASE CUP OR DRAIN	HOOD TEMP. RATING	TOTAL WEIGHT	SECTION LOCATION		
1	XD3-3-S CONDENSATE HOOD - DOUBLE BAFFLE	42.0 IN.	42 IN.	24 IN.	RIGHT	NA	224.0 LBS.	NA	1	XGEP-5-33-S SINGLE WALL EXHAUST ONLY LOW PROXIMITY	64 IN.	TOP 23 IN. FRONT 12 IN. BOT 6 IN. BACK 36 IN.	RIGHT	600 DEG F	136.0 LBS.	SINGLE			

EQUIPMENT SCHEDULE										EQUIPMENT SCHEDULE									
TYPE 1 KITCHEN HOOD (HOOD #1)					MARK: FRYER HOOD					TYPE 1 KITCHEN HOOD (HOOD #2)					MARK: GRILL HOOD				
HOOD NO.	ACCUREX MODEL STYLE / CONFIGURATION	SECTION LENGTH	WIDTH	HEIGHT	GREASE CUP OR DRAIN	HOOD TEMP. RATING	TOTAL WEIGHT	SECTION LOCATION	HOOD NO.	ACCUREX MODEL STYLE / CONFIGURATION	SECTION LENGTH	WIDTH	HEIGHT	GREASE CUP OR DRAIN	HOOD TEMP. RATING	TOTAL WEIGHT	SECTION LOCATION		
1	XXEP-6-92-S SINGLE WALL EXHAUST ONLY LOW PROXIMITY	83 IN.	TOP 23 IN. FRONT 12 IN. BOT 3 IN. BACK 36 IN.	RIGHT	600 DEG F	169.0 LBS.	SINGLE	1	XGEP-5-33-S SINGLE WALL EXHAUST ONLY LOW PROXIMITY	64 IN.	TOP 23 IN. FRONT 12 IN. BOT 6 IN. BACK 36 IN.	RIGHT	600 DEG F	136.0 LBS.	SINGLE				



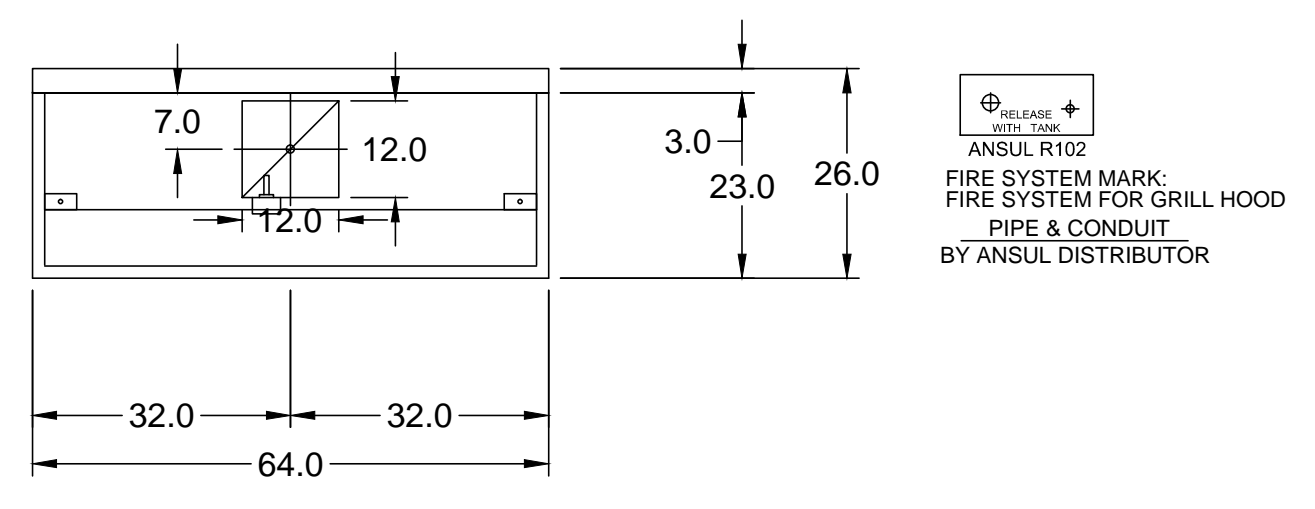
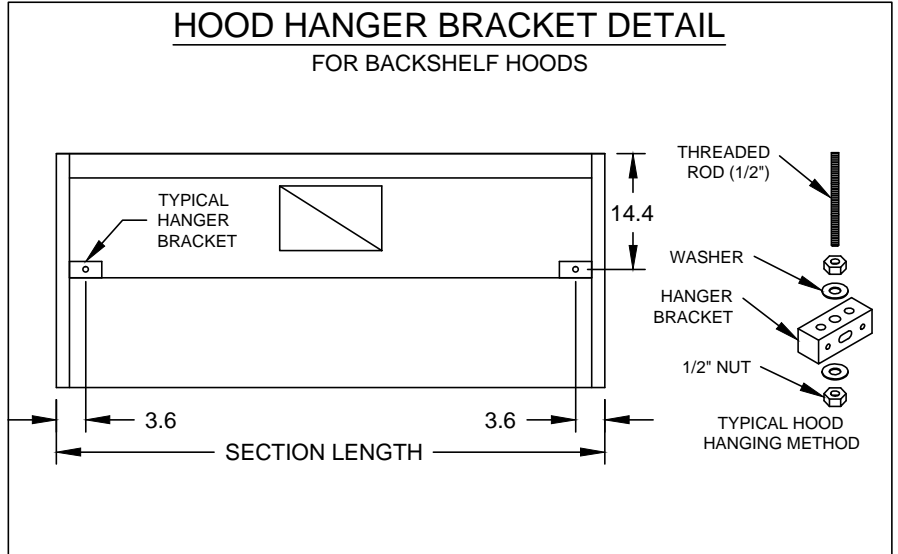
NOTES:  
 1. THE CONDENSATE BAFFLES MUST HOOK ONTO THE UPPER HANGER AND REST IN THE CONDENSATE GUTTER FOR PROPER OPERATION.



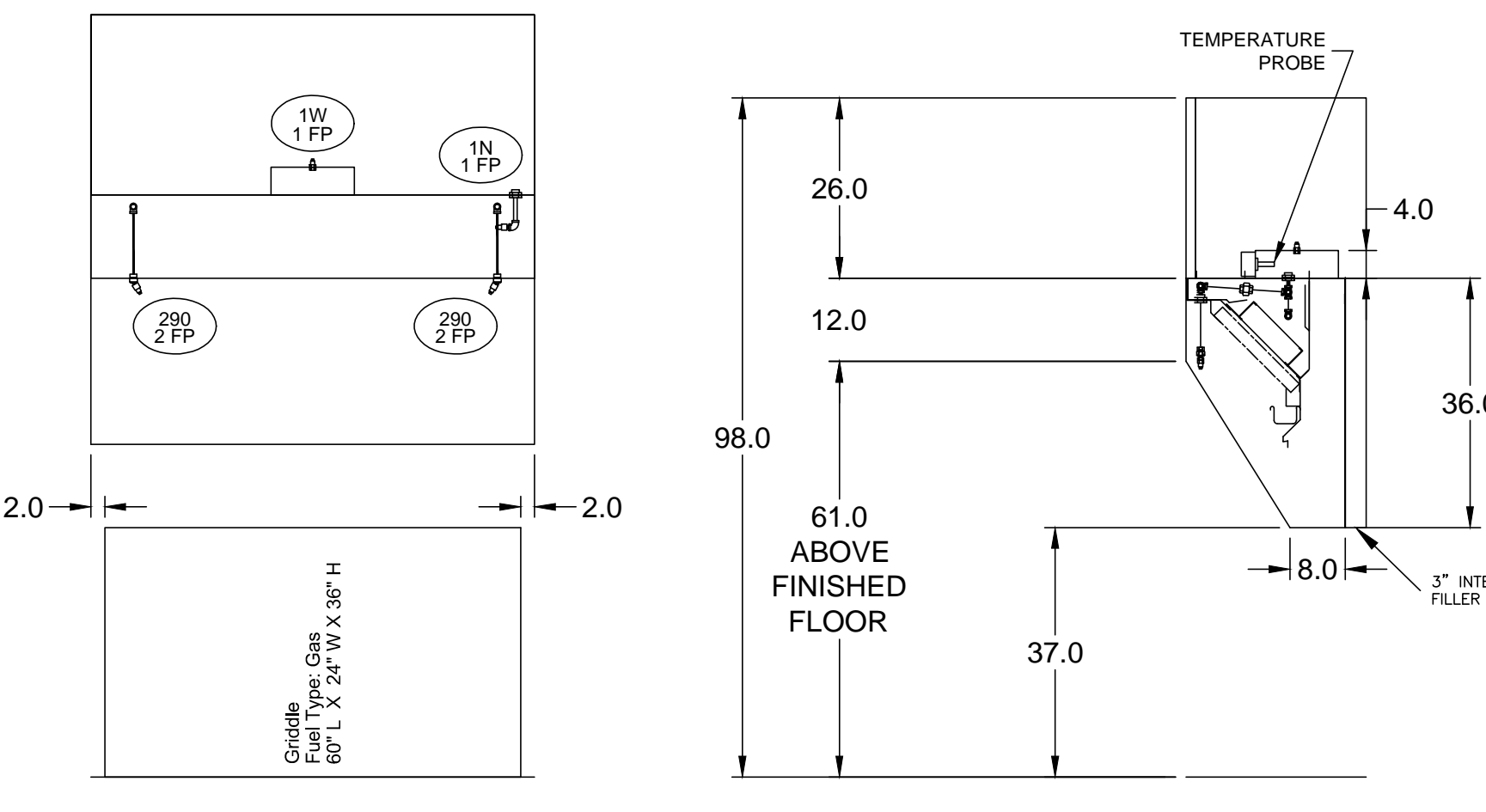
**HOOD HANGING HEIGHT FOR FIRE SYSTEMS**  
 VERIFICATION OF HOOD HANGING HEIGHT ABOVE FINISHED FLOOR (A.F.F.) IS REQUIRED FOR CORRECT PLACEMENT OF FIRE SYSTEM NOZZLES.

RECOMMENDED HANGING HEIGHT = 72" FROM FINISHED FLOOR TO LOWER FRONT EDGE OF HOOD.

OTHER HANGING HEIGHT = \_\_\_\_\_" FROM FINISHED FLOOR TO LOWER EDGE OF HOOD.

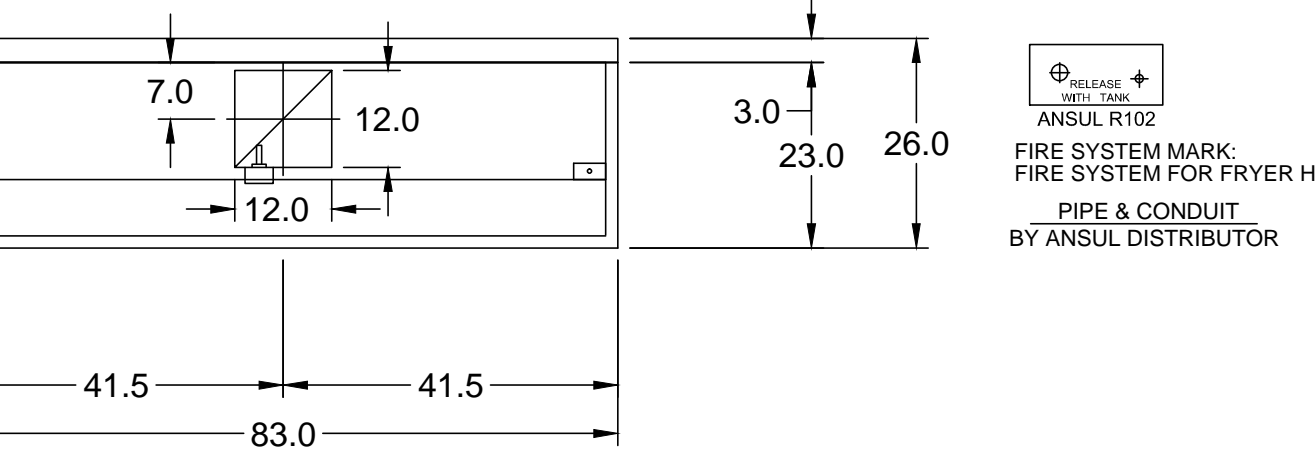


MARK: GRILL HOOD - SECTION 1 PLAN VIEW

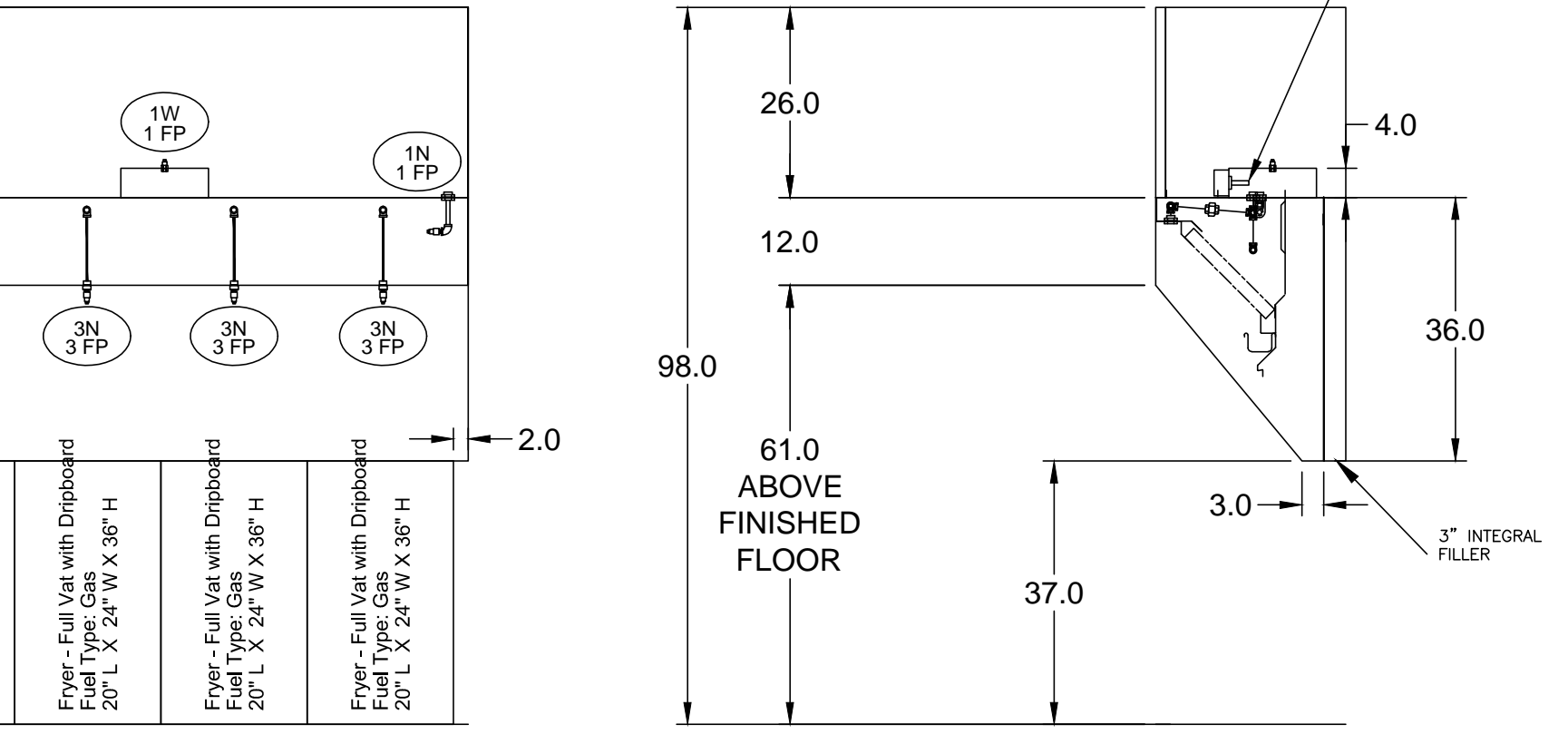


MARK: GRILL HOOD - SECTION 1 ELEVATION VIEW

MARK: GRILL HOOD SECTION VIEW



MARK: FRYER HOOD - SECTION 1 PLAN VIEW



MARK: FRYER HOOD - SECTION 1 ELEVATION VIEW

MARK: FRYER HOOD SECTION VIEW

**ANSUL R102 (WET CHEMICAL) FIRE PROTECTION SYSTEM - MODEL FSSC**

**CONTROL PANEL**

1. STAINLESS STEEL ENCLOSURE
2. AGENT STORAGE TANK
3. EXPULSION GAS CARTRIDGE
4. ANSUL AUTOMAN RELEASE
5. REGULATOR
6. KNOCKOUT FOR WIRING MICROSWITCH

**WIRING DIAGRAMS**  
 W/DPDT MICRO SWITCH

DPDT SWITCHES PROVIDED BY MANUFACTURER MAY BE WIRED PER TYPICAL EXAMPLES SHOWN. VERIFY WITH LOCAL CODES AND EQUIPMENT SUPPLIES AS THE CONNECTION NEEDED FOR YOUR INSTALLATION.

**CONNECTION TO BUILDINGS ALARM**

**CONNECTION TO COOKING EQUIPMENT SHUT DOWN**

**CONNECTION TO FAN SHUT DOWN**

**NOTES:**

Wet chemical fire protection system to be Ansul R-102, designed in compliance with UL 300 requirements.

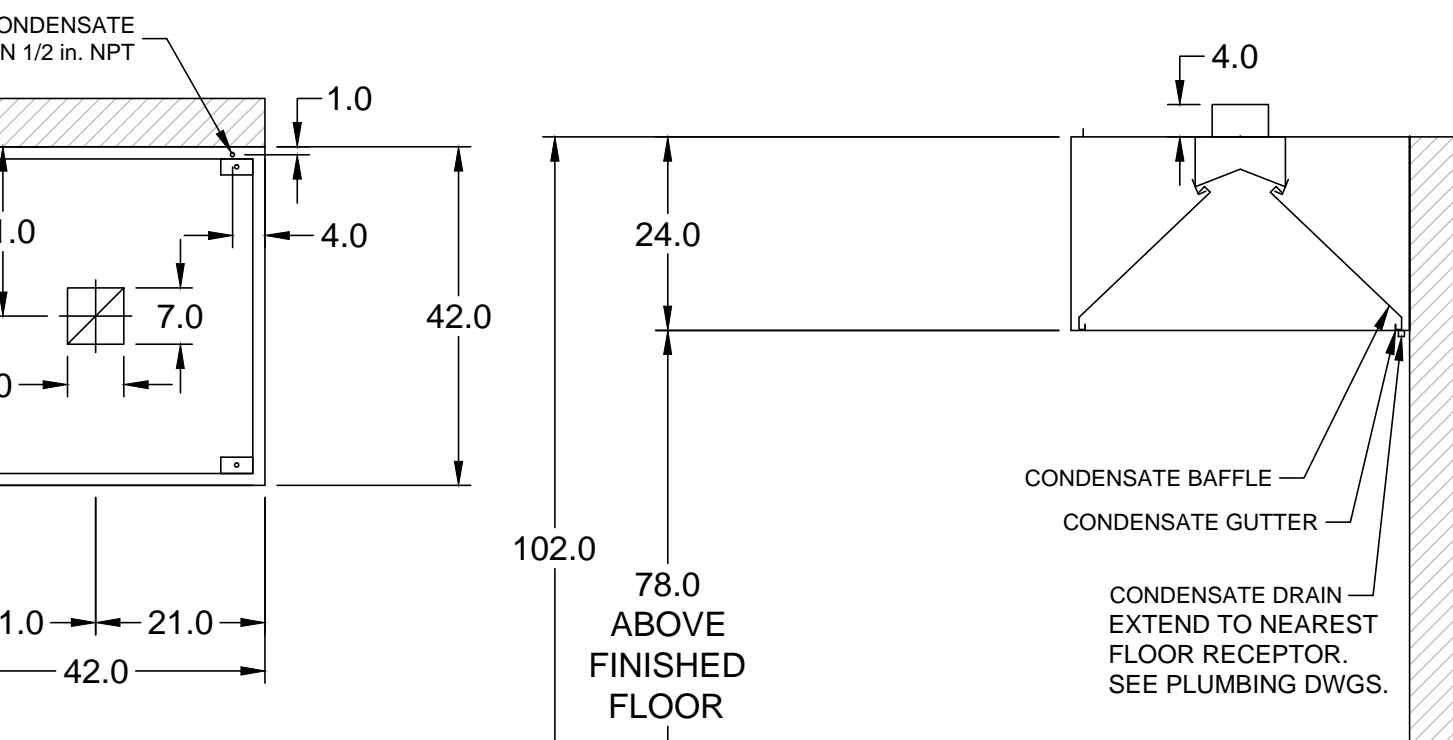
- Verification of all cooking equipment make, model and location required for all fire protection systems.
- All fire system piping is standard to the right end of the hood unless a wall is located on the right end.
- Ansul Automan Release to be located within 60" of hood.

The basic fire system will include the following:

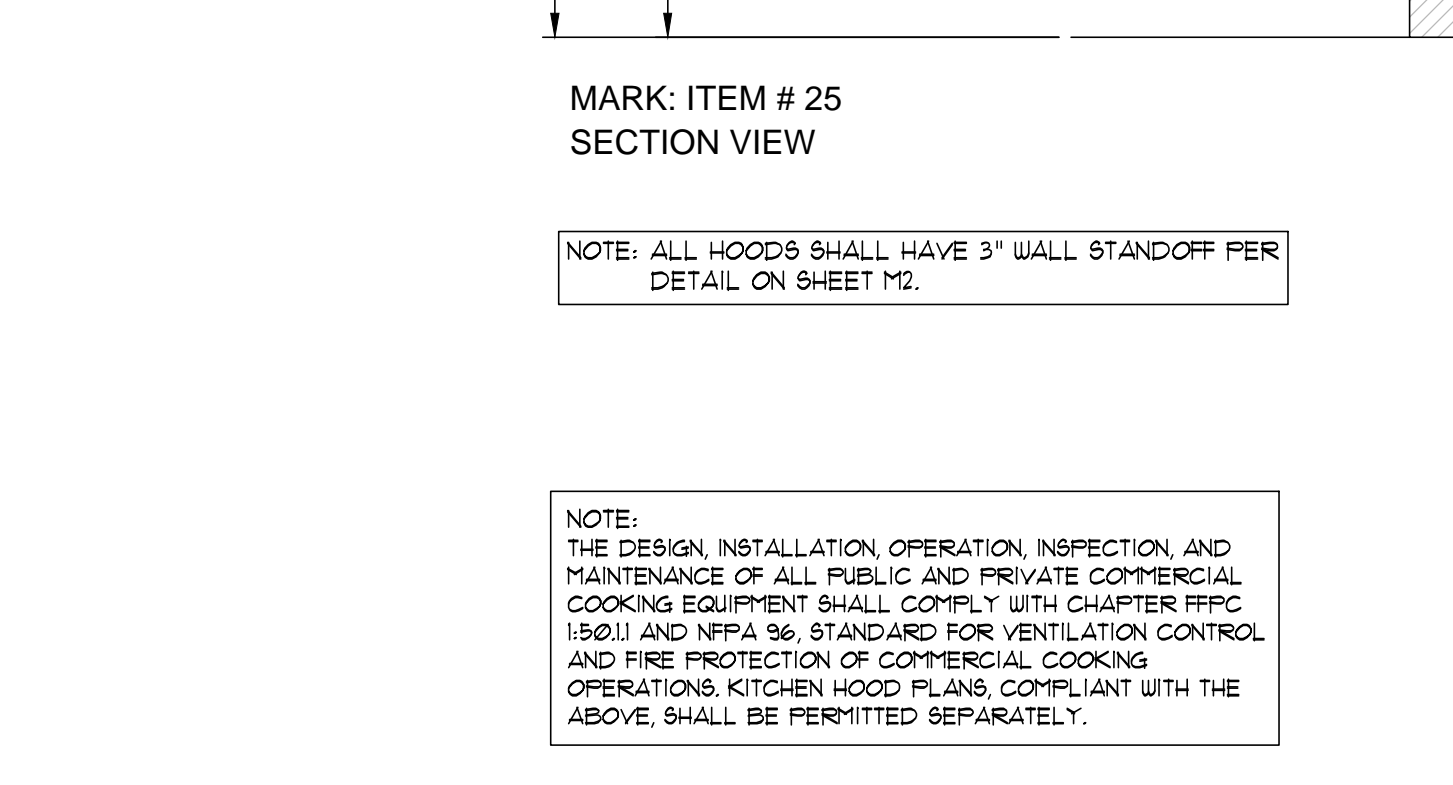
- Gas shut-off valve, if required, to be supplied by Manufacturer (up to 2" diameter as standard), and installed by a licensed plumber.
- Micro switch to be supplied by Manufacturer for connection to, but not limited to, building alarm system(s), exhaust and supply fans and electrical power shut down. Field wiring and connections to be performed by a licensed electrician.

The basic fire system does NOT include the following:

- Full dump test other than what is specified per the installation manual, or to satisfy a state or local code. Permit and testing fees are not included unless noted under the equipment schedule for the fire system.
- More than two trips to the jobsite or special transportation, or overnight lodging requirements in remote areas. Normal travel distance is first 50 mi. (80.5 km) from office.
- Special classes or additional labor for access to security sensitive areas.
- Installation of gas shut-off valve.
- Special drawings required to satisfy state or local code. Plan examination fees, PE or FS Approval Stamp.
- Union labor, Government labor, or Prevailing wages required for final field hook-up.
- Any and all electrical components/connections required to shut down fans, shut off device for electric cooking equipment (shunt trip breaker), or activate an alarm system, etc.
- Any dismantling or reassembly required to gain access to the fire suppression piping located on the top of the hood.
- Rough-in hidden conduit for remote pull station or gas valve (flush mounted pull station).
- Installation of more than (1) remote pull stations or distances greater than 20 ft (6.1M.)
- Parts or labor required to correct piping due to cooking equipment changes or deviation from plans. OR Any charges for missing or additional parts other than those indicated on the Fire Suppression Detail.



MARK: ITEM # 25 - SECTION 1 PLAN VIEW



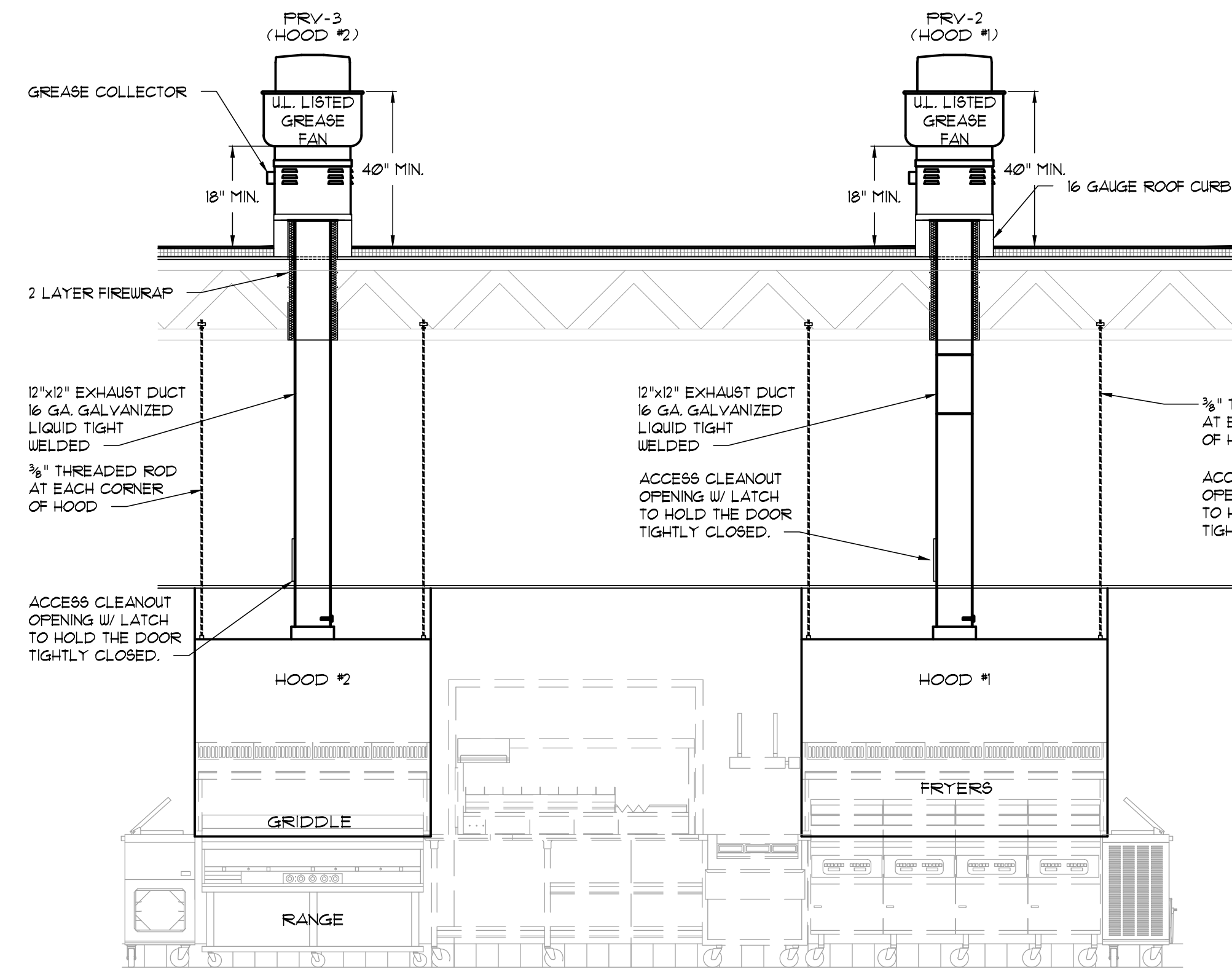
MARK: ITEM # 25 SECTION VIEW

NOTE: COOKING EQUIPMENT SHALL BE INSTALLED AND VENTED IN ACCORDANCE WITH FCIM 4 NFPA 96.

NOTE: ALL HOODS SHALL HAVE 3" WALL STANDOFF PER DETAIL ON SHEET M2.

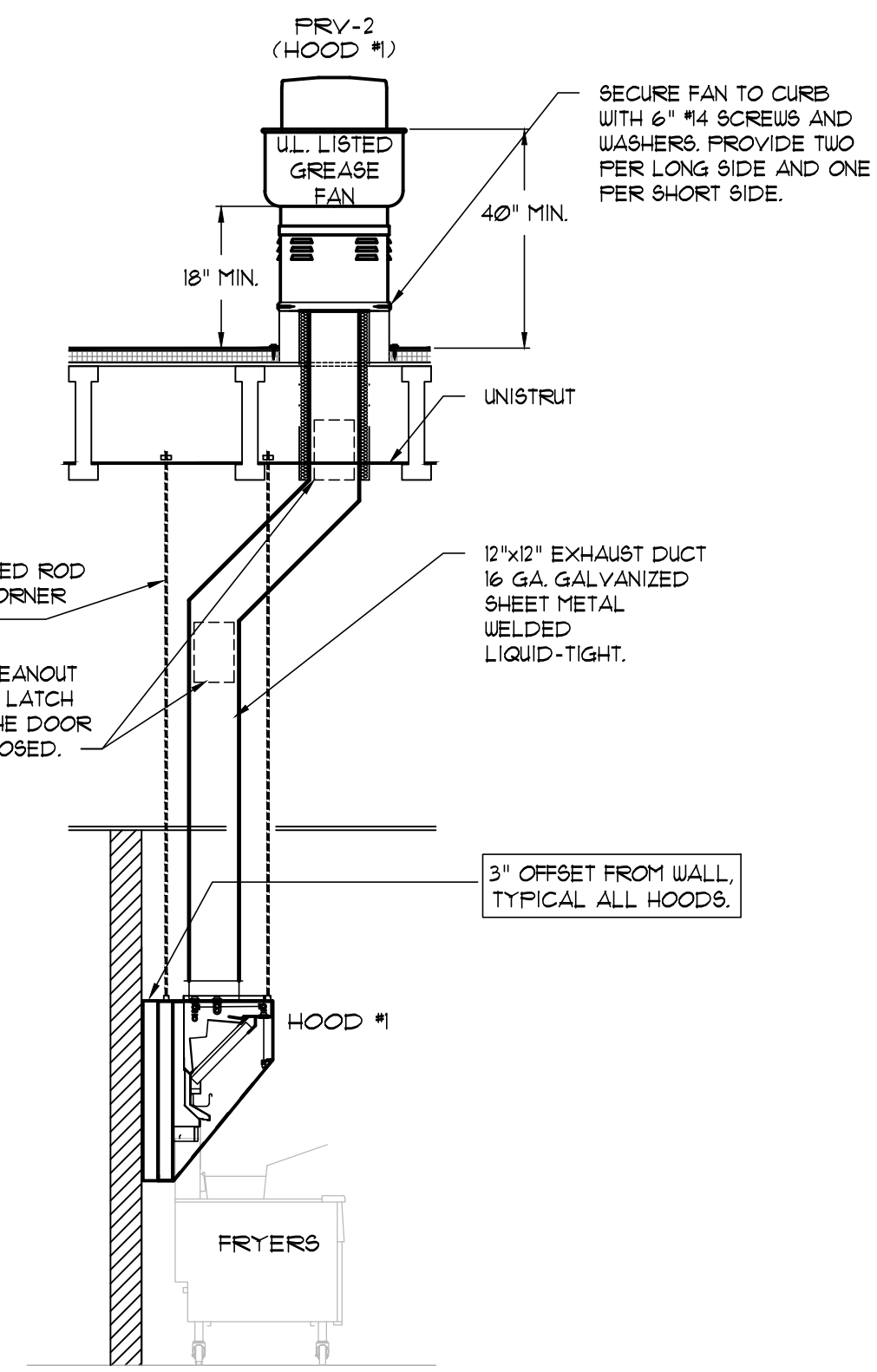
NOTE: THE DESIGN, INSTALLATION, OPERATION, INSPECTION, AND MAINTENANCE OF ALL PUBLIC AND PRIVATE COMMERCIAL COOKING EQUIPMENT SHALL COMPLY WITH CHAPTER FPFC (1501) AND NFPA 96 - STANDARD FOR VENTILATION CONTROL AND FIRE PROTECTION OF COMMERCIAL COOKING OPERATIONS. KITCHEN HOOD PLANS, COMPLIANT WITH THE ABOVE, SHALL BE PERMITTED SEPARATELY.





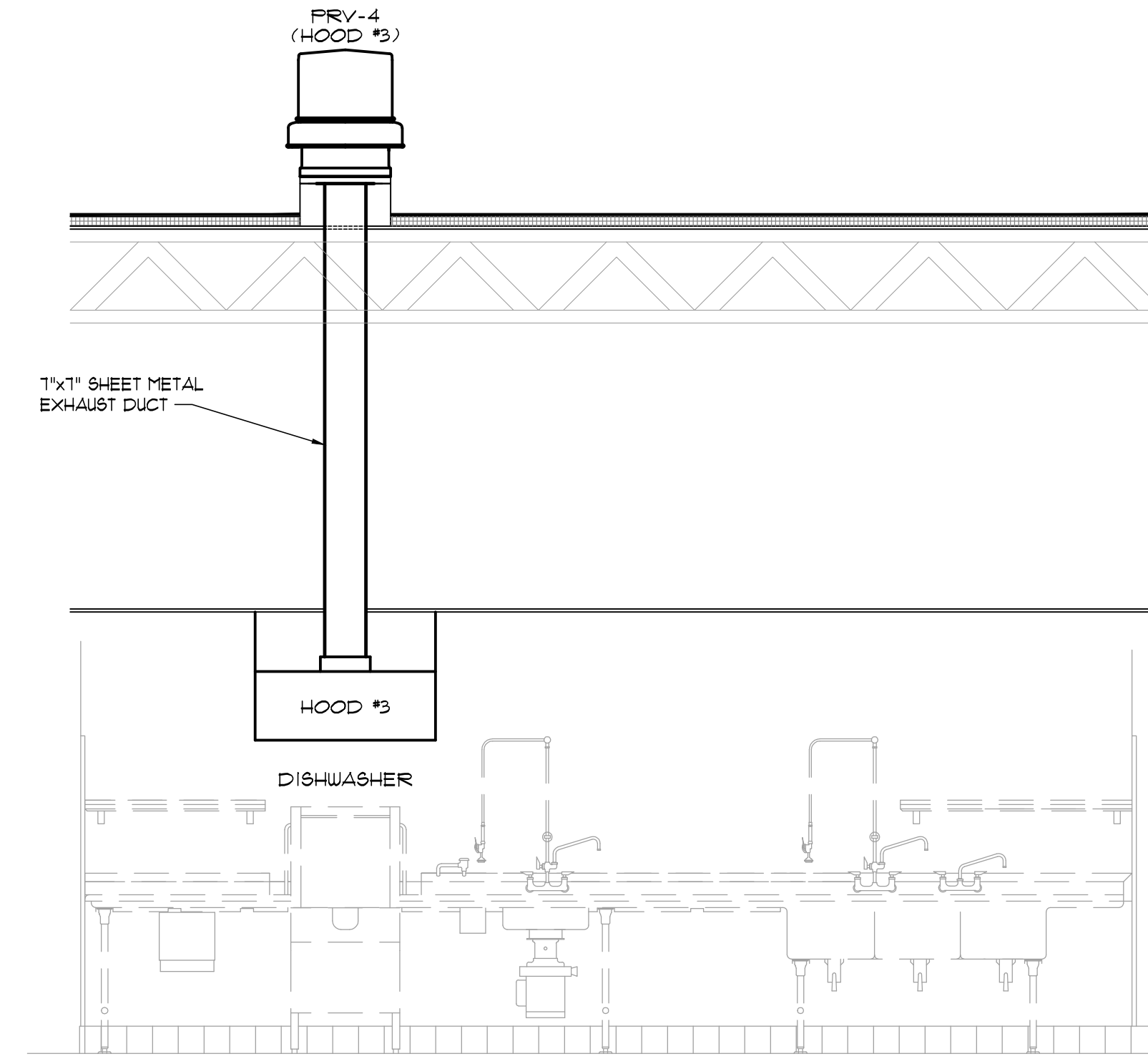
FRONT VIEW

NOT TO SCALE, FOR DIAGRAMMATICAL PURPOSE ONLY



SIDE VIEW

NOT TO SCALE, FOR DIAGRAMMATICAL PURPOSE ONLY



FRONT VIEW

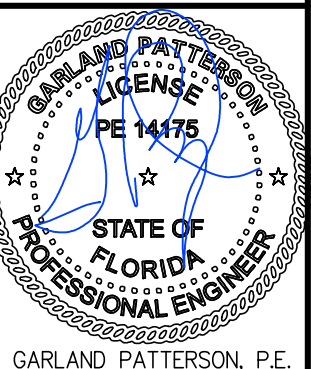
NOT TO SCALE, FOR DIAGRAMMATICAL PURPOSE ONLY

NOTE:  
THE DESIGN, INSTALLATION, OPERATION, INSPECTION, AND MAINTENANCE OF ALL PUBLIC AND PRIVATE COMMERCIAL COOKING EQUIPMENT SHALL COMPLY WITH CHAPTER FPFC 15011 AND NFPA 96, STANDARD FOR VENTILATION CONTROL AND FIRE PROTECTION OF COMMERCIAL COOKING OPERATIONS. KITCHEN HOOD PLANS, COMPLIANT WITH THE ABOVE, SHALL BE PERMITTED SEPARATELY.

REVISIONS	BY

**OLIVERI ARCHITECTS**  
 A 501(c)(3)  
 Member of the American Institute of Architects  
 32707 US Hwy. 19 • Palm Harbor, FL 34684  
 Phone 727.781.7325 • Fax 727.781.6623  
 www.oliveriarchitects.com

© 2021 OLIVERI ARCHITECTS  
 ALL INFORMATION CONTAINED  
 IN THIS DRAWING IS THE  
 SOLE PROPERTY OF  
 OLIVERI ARCHITECTS.  
 ALL RIGHTS RESERVED.



GARLAND PATTERSON, P.E.  
 FL Lic. No.: 14175  
 APR. 1 2021

**MDCI**  
 MDCI FLORIDA, INC.  
 4000 E. Semoran Boulevard, Suite 200  
 Apopka, Florida 32703  
 Engineering Business No. 9204  
 Safety License No. 2005  
 © Copyright 2021 • Project No. 2020

New Free Standing  
**Centra's**  
 1616 E. Semoran Boulevard  
 Apopka, Florida  
 Orange County

Date: 04. 01. 21  
 Scale: AS NOTED  
 Project Mgr: DG  
 Drawn: BMD  
 Job: 20-158  
 Sheet

M5