

**SYMBOL LEGEND**

- 2 HEAD EMERGENCY FLOOD LIGHT WITH BATTERY BACK-UP BY BEGHILLI MODAL FEH-AT
- NEW COMBO EMERGENCY/EXIT LIGHT WITH BATTERY BACK-UP BY BEGHILLI MODAL FCH-G-AT
- INDICATES HE WILLIAMS MODAL GL-4-54TSH-WD-HUB/HOOK MT-EB4 4' T5 HIGH OUTPUT 4 LAMP FIXTURE
- FIBERGLASS RETURN DUCT WORK
- FIBERGLASS SUPPLY DUCT WORK
- SMOKE DETECTOR
- INDICATES ELECTRICAL PANEL
- TYPICAL SPRINKLER HEAD
- CEILING MOUNTED SHOW WINDOW RECEPTACLE
- INDICATES THERMOSTAT -MOUNT BOTTOM AT 48"
- INDICATES 80 CFM EXHAUST FAN
- SUPPLY AIR DIFFUSER
- FLEXIBLE SUPPLY AIR DUCT
- TEST AND RESET SWITCH

**OUTSIDE AIR CALCULATIONS**

THE FOLLOWING IS BASED ON FLORIDA MECHANICAL CODE 2014 TABLE 403.3

OCCUPANCY CLASSIFICATION	ESTIMATED OUTSIDE AIR REQUIRED (CFM)
RETAIL AREA: (RTU 1, RTU2, RTU3)	9,110 SF/1000 SF = 9.110 X 15 PEOPLE = 137 PEOPLE X 7.5 CFM = 1021.5 CFM
RETAIL STORES (SALES)	REQUIRED MAKEUP AIR = 1028 CFM
RECEIVING AREA: (RTU 4, RTU 5)	4,998 SF X .12 CFM/SF = 599.76 CFM
RETAIL STORES (SALES)	REQUIRED MAKEUP AIR = 600 CFM
ZONE 3: (RTU 6)	882 SF/1000 SF = .882 X 5 PEOPLE = 5 PEOPLE X 5 CFM = 25 CFM
OFFICES	REQUIRED MAKEUP AIR = 25 CFM
<b>GRAND TOTAL OF REQUIRED MAKE UP AIR FOR RTU #1 THRU RTU #6 = 1653 CFM</b>	

**HVAC DESIGN REQUIREMENTS:**

	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

**NEW ROOF TOP UNIT SCHEDULE**

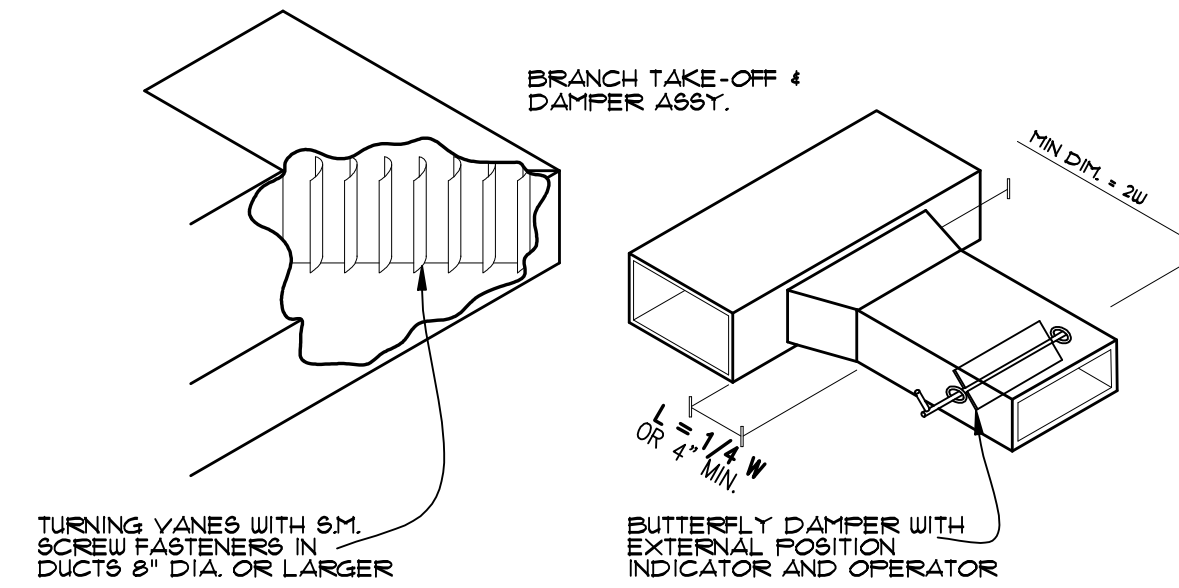
UNIT DESIG. RTU/HP	ROOF TOP PACKAGE UNIT DATA										COOLING CAPACITY			FILTER DATA	
	MANUFACTURER & MODEL #	NOM. TONS	MIN. O.A. CFM	TOTAL CFM	FAN RPM	FAN HP	FAN VOLT/PH	VOLT/PH	MCA	MAX FUSE	POWER KW	GROSS CAPACITY	EER/SEER	SIZE	TYPE
NEW RTU-1	TRANE #YHC0902F3	7.5	343	3,000	1100	0.75	208/3	208-230/60/3	53.6	60	10.2 KW	92,000	12.6	(4) 28x26x2	THROWAWAY
NEW RTU-2	TRANE #YHC0902F3	7.5	343	3,000	1100	0.75	208/3	208-230/60/3	53.6	60	10.2 KW	92,000	12.6	(4) 28x26x2	THROWAWAY
NEW RTU-3	TRANE #YHC0902F3	7.5	343	3,000	1100	0.75	208/3	208-230/60/3	53.6	60	10.2 KW	92,000	12.6	(4) 20x25x2	THROWAWAY
NEW RTU-4	TRANE #YHC0902F3	7.5	300	3,000	1100	0.75	208/3	208-230/60/3	53.6	60	10.2 KW	92,000	12.6	(4) 20x25x2	THROWAWAY
NEW RTU-5	TRANE #YHC0902F3	7.5	300	3,000	1100	0.75	208/3	208-230/60/3	53.6	60	10.2 KW	92,000	12.6	(4) 20x25x2	THROWAWAY
NEW RTU-6	TRANE #YHC048E3	4.0	25	1,600	800	0.75	208/3	208-230/60/3	53.6	60	10.2 KW	48,000	14.2	(4) 20x25x2	THROWAWAY

**SUPPLY DIFFUSER SCHEDULE**

DESIGNATES CFM QUANTITY FOR DIFFUSER		ALL DIFFUSERS ARE TO BE PROVIDED WITH OPPOSED BLADE DAMPERS UNLESS OTHERWISE SPECIFIED ON PLANS.				
DESIGNATES LABEL FOR DIFFUSER TYPE		LABEL	MANUFACTURER & MODEL NO.	NECK SIZE	CFM RANGE	REMARKS
A	TITUS TMS-AA OR EQUIVALENT	6"	100	24"x24" LOUVERED FACE		
B	TITUS TMS-AA OR EQUIVALENT	8"	200	24"x24" LOUVERED FACE		

**EXHAUST FAN SCHEDULE**

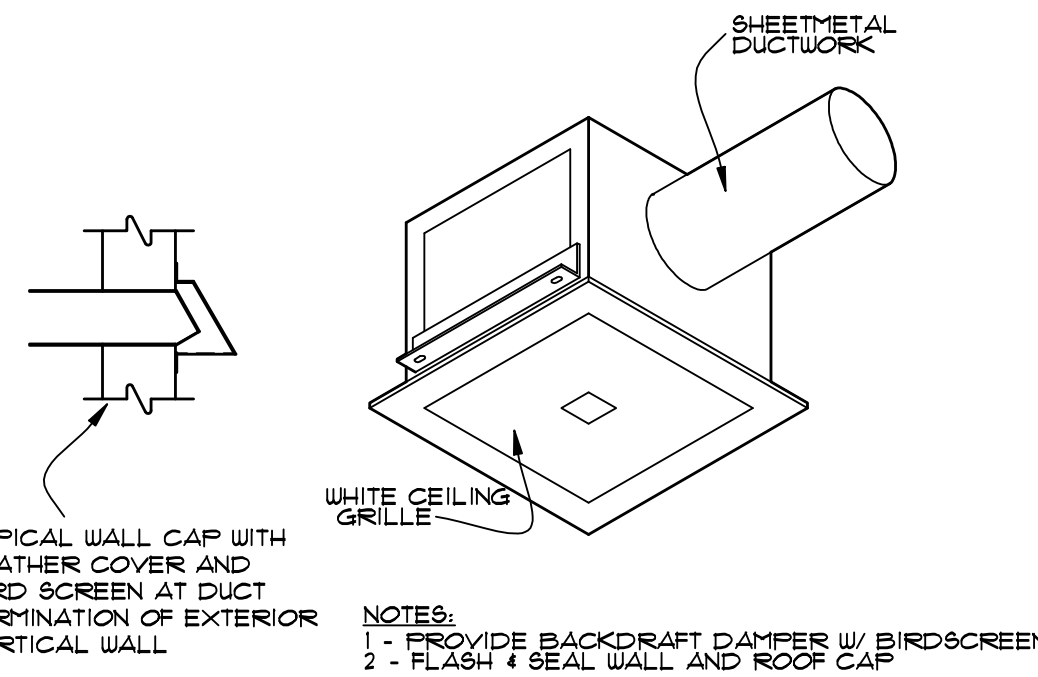
LABEL	MANUFACTURER AND MODEL NUMBER	CFM	MOUNTING	HP	DRIVE
EF-1	BROAN 684 EXHAUST FAN	100	CEILING	---	DIRECT
EF-2	BROAN 684 EXHAUST FAN	200	CEILING	---	DIRECT



**TYPICAL DUCT DETAIL**

SCALE: NOT TO SCALE

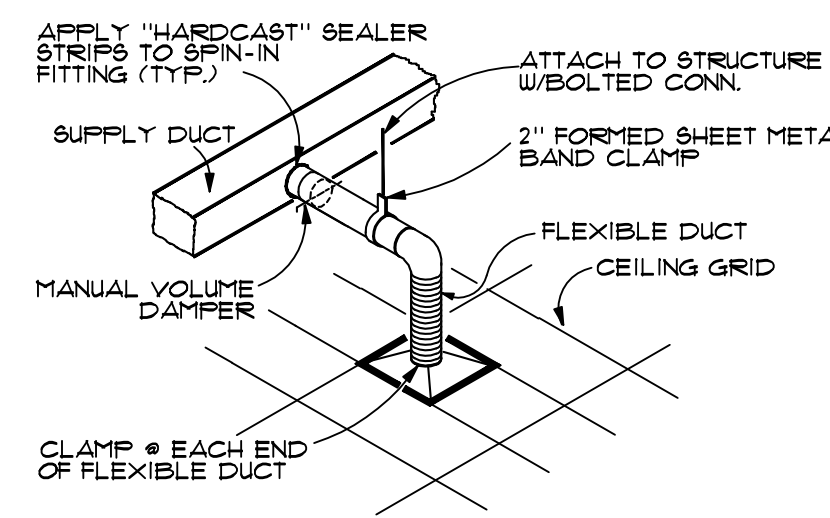
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**EXHAUST FAN DETAIL**

SCALE: NOT TO SCALE

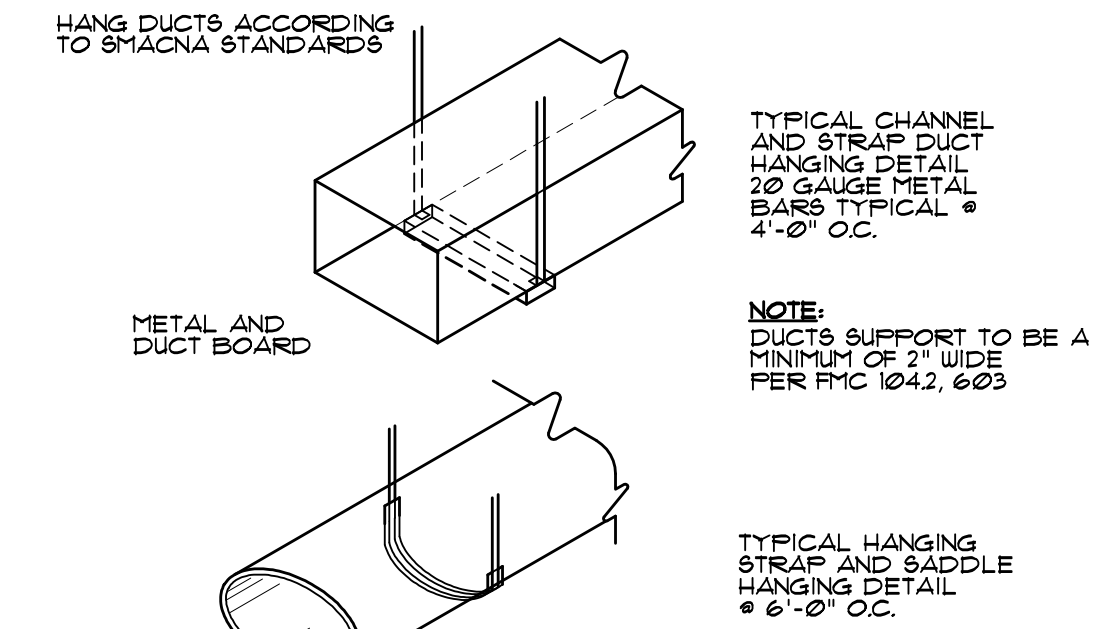
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**DIFFUSER RUN OUT DETAIL**

SCALE: NOT TO SCALE

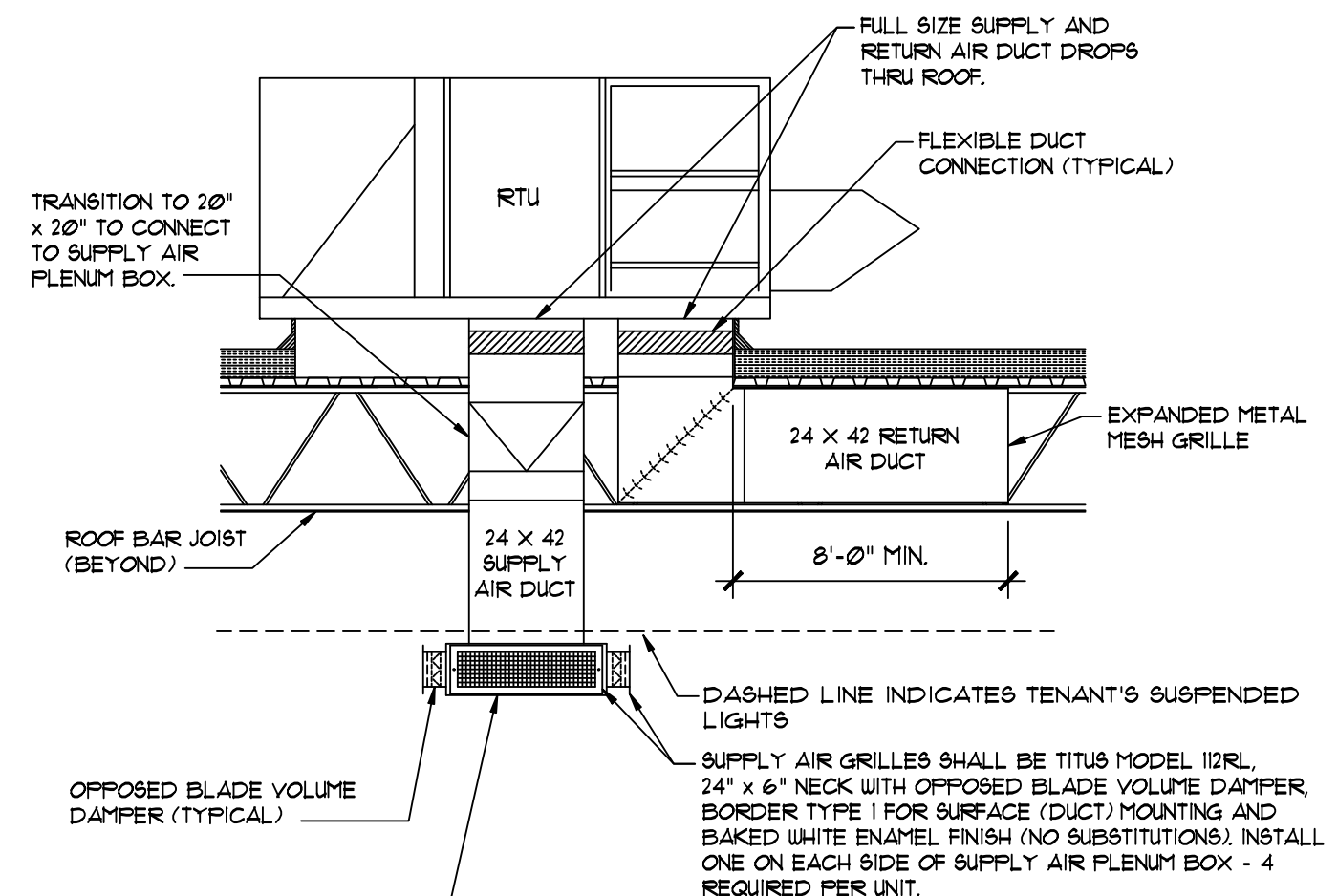
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**DUCT SUSPENSION DETAIL**

SCALE: NOT TO SCALE

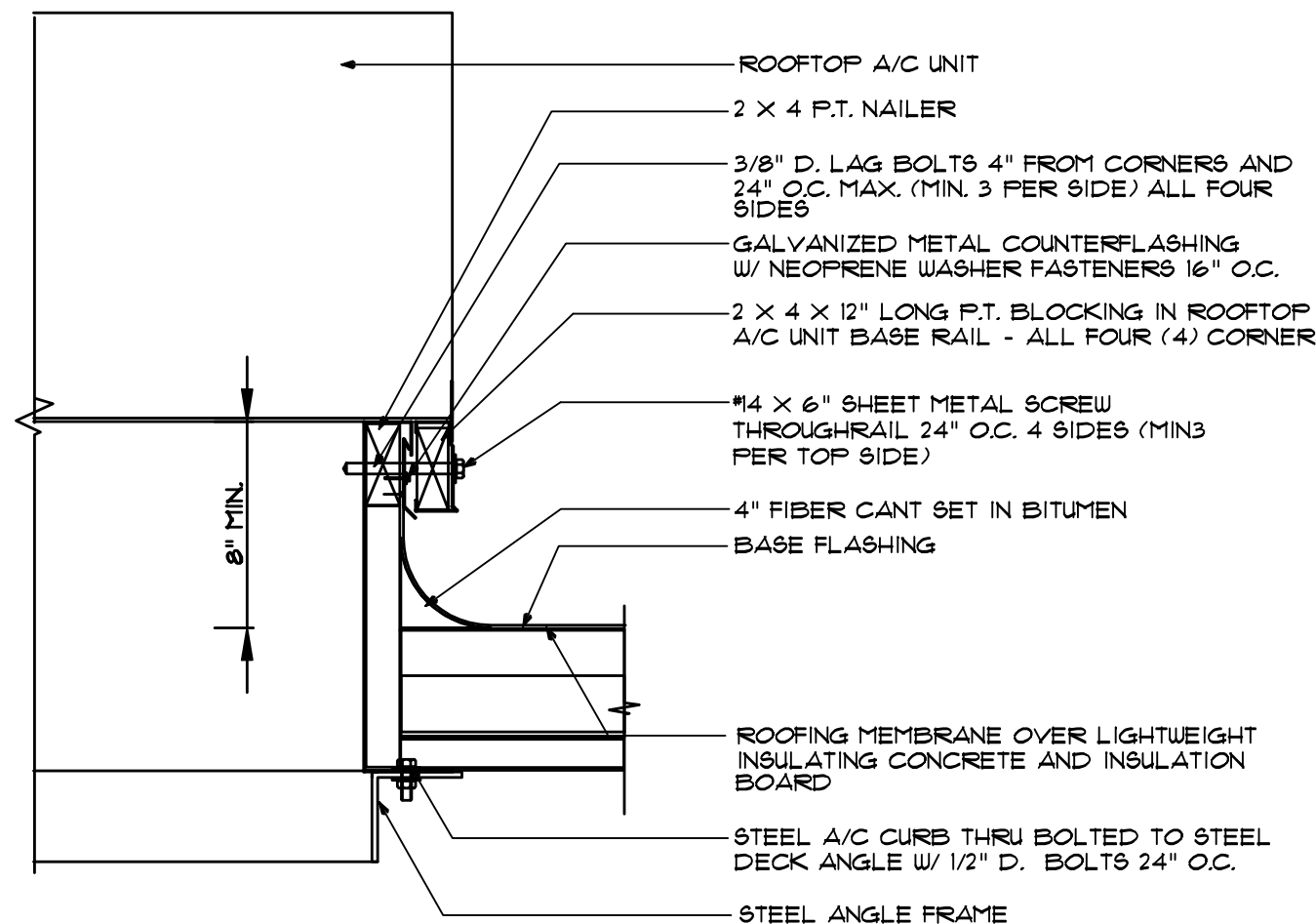
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**RTU DUCT INSTALLATION DETAIL**

SCALE: NOT TO SCALE

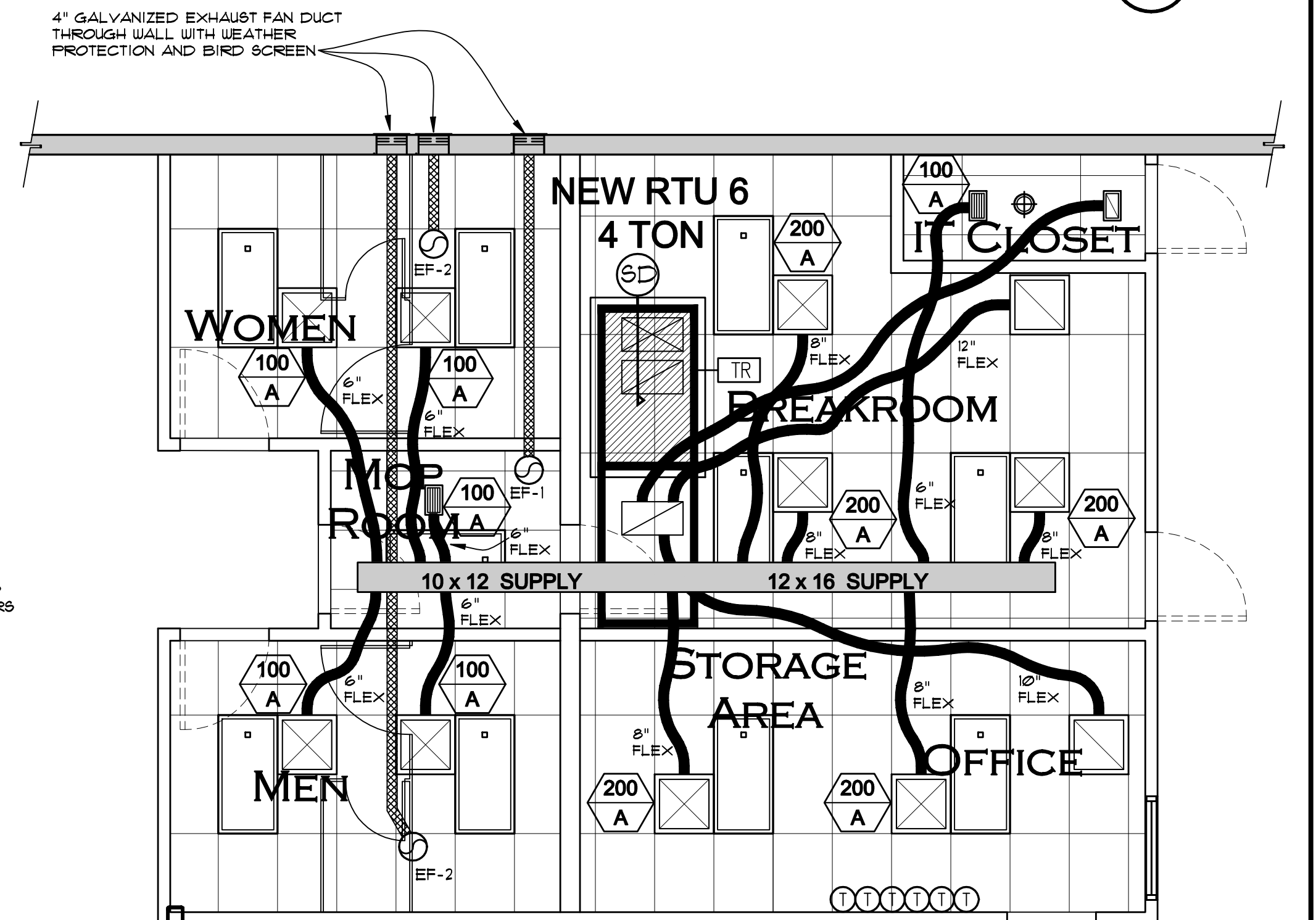
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**ROOF CURB DETAIL**

SCALE: NOT TO SCALE

3  
M-2



**OFFICE MECHANICAL PLAN**

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

1  
M-2

Revisions:

- 1
- 2
- 3
- 4
- 5

Project Number  
**160412**

**1066 U.S. HIGHWAY 1**  
**NEW RETAIL BUILDING - GOODWILL**  
**1066 U.S. HIGHWAY 1**  
**VERO BEACH, FLORIDA**

Project Name  
**NEW RETAIL BUILDING**

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**AS ISSUED FOR PERMIT 7-29-16 (NOT FOR CONSTRUCTION)**

Drawn By: **RSS**  
 Checked By: **STB**

Scale: **SHOWN**  
 Date: **7-29-16**

Project Number  
**160412**

Sheet:

**M-2**