

ROOFTOP AIR CONDITIONING UNIT SCHEDULE

NO.	MAKE AND MODEL	FAN			COOLING			HEATING			ELECTRICAL					
		TOTAL - CFM	MIN. O.A. CFM	EXT. S.P.	ENT. AIR TEMP. OF FCB	OUTSIDE AIR TEMP. OF FCB	TOTAL CAPACITY MBH	SENS. CAPACITY MBH	AUX. ELEC. KW	VOLTS/PH	MCA	MOCOP	FINISH			
RTU-1	CARRIER 50HJ-014	5000	450	.8	3.88	78/62	94/73	126	9.6/-	31.8	2	208/3	129	150	STEEL	WHITE
RTU-2	CARRIER 50HJ-014	2000	200	.8	1.27	78/63	94/73	60	13/-	16	2	208/3	62	70	STEEL	WHITE
RTU-3	CARRIER 50HJ-014	4400	400	.8	2.5	81/66	94/73	145	9.8/-	31.8	2	208/3	129	150	STEEL	WHITE
RTU-4	CARRIER 50HJ-014	5000	520	.9	3.5	76/62	94/73	139	9.8/-	31.8	2	208/3	129	150	ALUMINUM	WHITE
RTU-5	CARRIER 50HJ-009	3600	120	.9	1.64	75/60	94/73	100	11.8/-	24	2	208/3	92	100	ALUMINUM	WHITE
RTU-6	CARRIER 50HJ-006	2000	120	.8	1.27	76/62	94/73	57	-/13	16	2	208/3	62	70	STEEL	WHITE

- NOTES:
1. PROVIDE 1/4" HIGH ROOF CURBS FOR EACH CURB TO MATCH ROOF SLOPE.
 2. PROVIDE THREE SETS OF SIX FILTERS FOR EACH RTU.
 3. PROVIDE 1/2" THICK INSULATED AND SLOPED SUCH THAT FLOW IS AWAY FROM UNIT. PROVIDE WEIGHTED PLASTIC BRUSH BLOCK TO SPILL CONDENSATE OUTSIDE OF DIRECTION. MINIMUM CONDENSATE PAN "E" COEFFICIENT SUPPORTS TO BE LOCATED 1 FOOT ON EACH SIDE OF CHANGE IN DIRECTION AND 5" ON CENTER. PROVIDE CLEANOUT AT EACH CHANGE OF DIRECTION. MINIMUM CONDENSATE LINE SIZE TO BE 1-1/4" DIAMETER.
 4. PROVIDE ECONOMIZERS FOR EACH RTU. COND. UTILITY CONNECTIONS SHALL BE MADE THROUGH THE BASE OF THE UNIT.
 5. UNIT MANUFACTURER SHALL PROVIDE INITIAL START-UP AND FIRST YEAR LABOR WARRANTY, AS WELL AS AN ADDITIONAL 4 YEAR PARTS WARRANTY ON COMPRESSORS.
 6. UNIT MANUFACTURER SHALL PROVIDE INITIAL START-UP AND FIRST YEAR LABOR WARRANTY, AS WELL AS AN ADDITIONAL 4 YEAR PARTS WARRANTY ON COMPRESSORS.
 7. PROVIDE SMOKE DETECTORS IN THE RETURN AIR DUCTWORK OF EACH RTU. SMOKE DETECTORS TO BE PROVIDED AND WIRED BY THE ELECTRICAL CONTRACTOR.
 8. AND INSIDE THE DUCTWORK BEHIND THE MECHANICAL CONTROLLER. GEAR-DRIVEN DAMPER ASSEMBLY, DAMPER ACTUATOR, SUPPLY AND OUTDOOR AIR SENSORS W/ CO2 SENSOR COMPATIBILITY.
 9. PROVIDE RTU-1, RTU-3 & RTU-4 WITH MANUFACTURERS CO2 SENSOR. INSTALL SENSOR IN R.A. DUCT OF UNIT.
 10. PROVIDE ALL RTUS WITH MANUFACTURERS AUTO CHANGEOVER 7-DAY PROGRAMMABLE THERMOSTATS.

FAN SCHEDULE

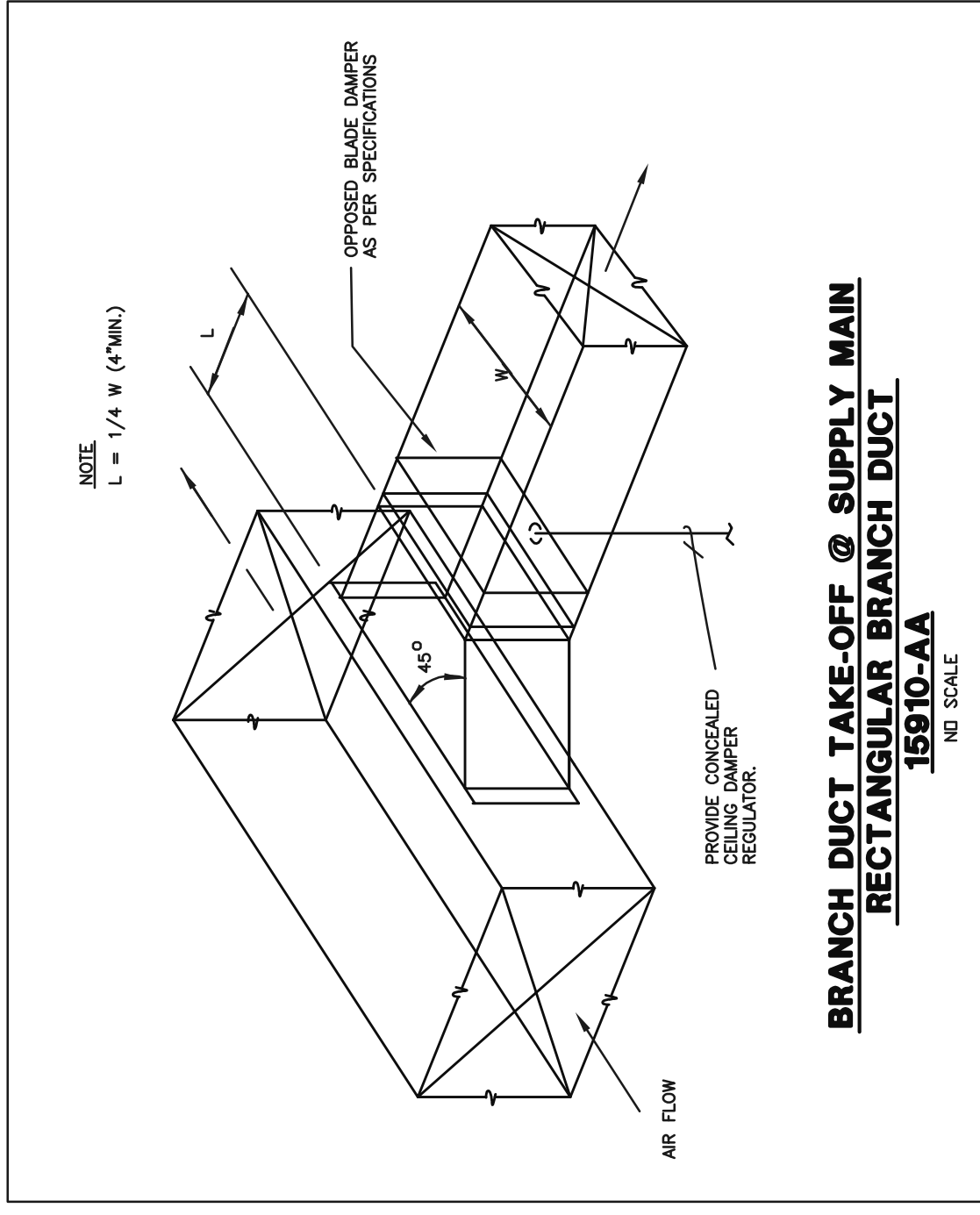
DESIG.	MFR.	TYPE	MODEL #	CFM	BHP	HP	OPER. WATTS	PPM	SONE LEVEL	ELECTRICAL VOLTS/PH.	STAT. PRES.
EF-1	GREENHECK	DIRECT DRIVE ROOF CENT.	G-080-D	600	---	1/15	---	1500	7	115/1	.25
EF-2	GREENHECK	DIRECT DRIVE ROOF CENT.	G-085-D	460	---	1/20	---	1548	7.4	115/1	.25
EF-3	GREENHECK	INLINE CABINET	CSP-B150	150	---	---	129	1050	2.7	115/1	.125

1. PROVIDE SPEED CONTROLLERS FOR ALL EXHAUST FANS. MOUNT SPEED CONTROLLERS IN HANDY BOX WITHIN CEILING SPACE ADJACENT TO FAN.
2. PROVIDE SLOPED 1/4" HIGH CURBS FOR EF-1 AND EF-2.

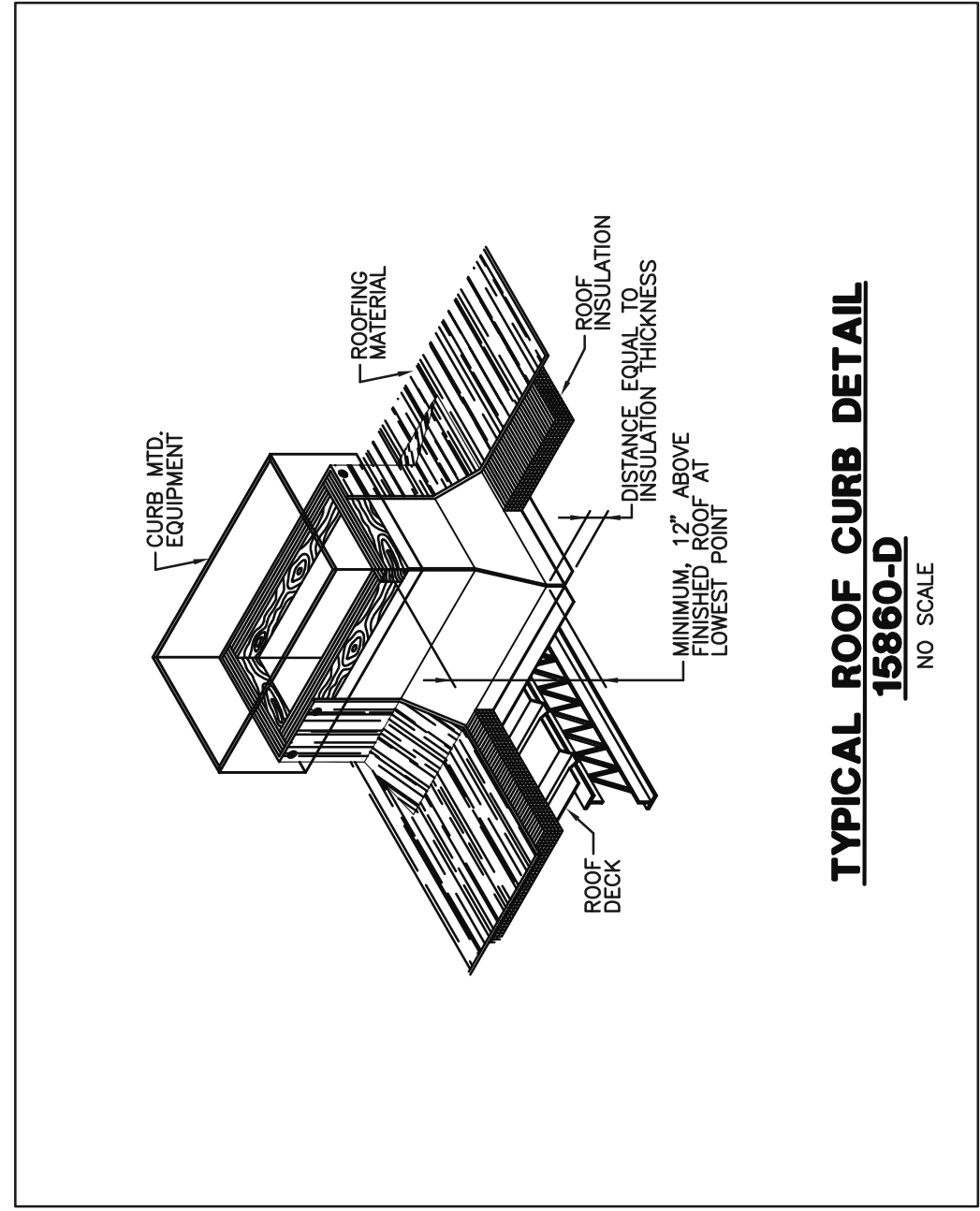
DUCT FREE MINI SPLIT- NO HEAT

MARK	INDOOR FAN			COOLING (MBH)			OUTDOOR UNIT ELEC.			MODEL NUMBER			
	CFM-TOTAL	E.A.D.B.	E.A.W.B.	AMB.	AMB.	AMB.	MCA	MOCOP	VOLTS/PH	MOCOP	AIR HANDLER	CONDENSING UNIT	
AC-7 & ACCU-7	915	24.0	80	67	95	208-230/1	16.8	25	208-230/1	15	CARRIER	40QKB036	38H00024

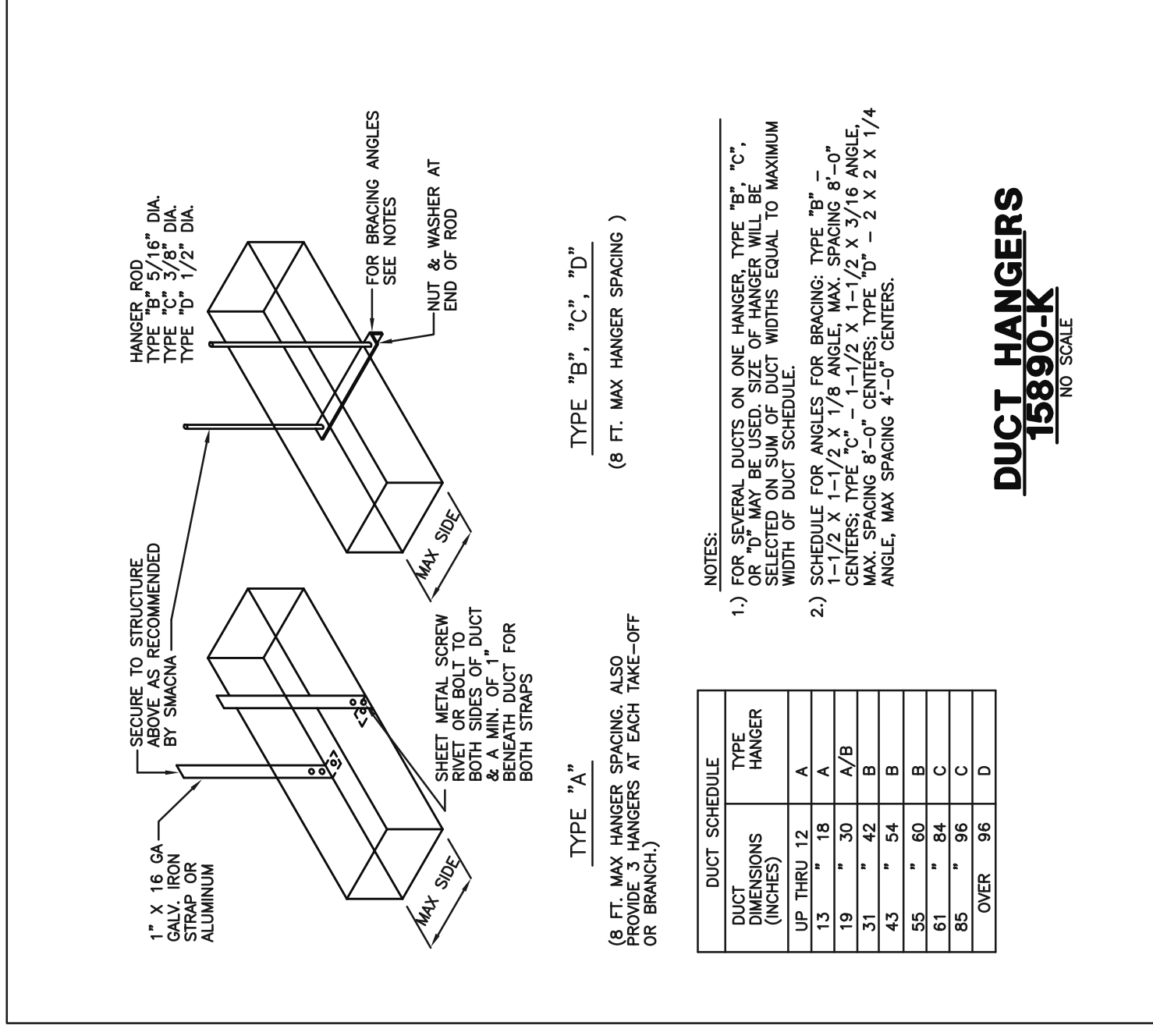
1. AC-7 TO HAVE INTEGRAL THERMOSTAT.
2. INSTALL P-TAP HALF WAY UP IN SLOPED RISER OF AC-7 CONDENSING UNIT CONNECTION SIZE.
3. PROVIDE ACCU-7 WITH MANUFACTURERS LOW AMBIENT KIT AND HARD START KIT.
4. PROVIDE FULL SIZE AUXILIARY CONDENSATE PAN BENEATH AC-1 THRU AC-4. CONDENSATE LINES TO BE A MINIMUM OF 1-1/4" DIA.
5. PROVIDE FACTORY INSTALLED CONDENSATE PUMPS FOR AC-7.



**BRANCH DUCT TAKE-OFF @ SUPPLY MAIN
RECTANGULAR BRANCH DUCT
15910-AA**
NO SCALE



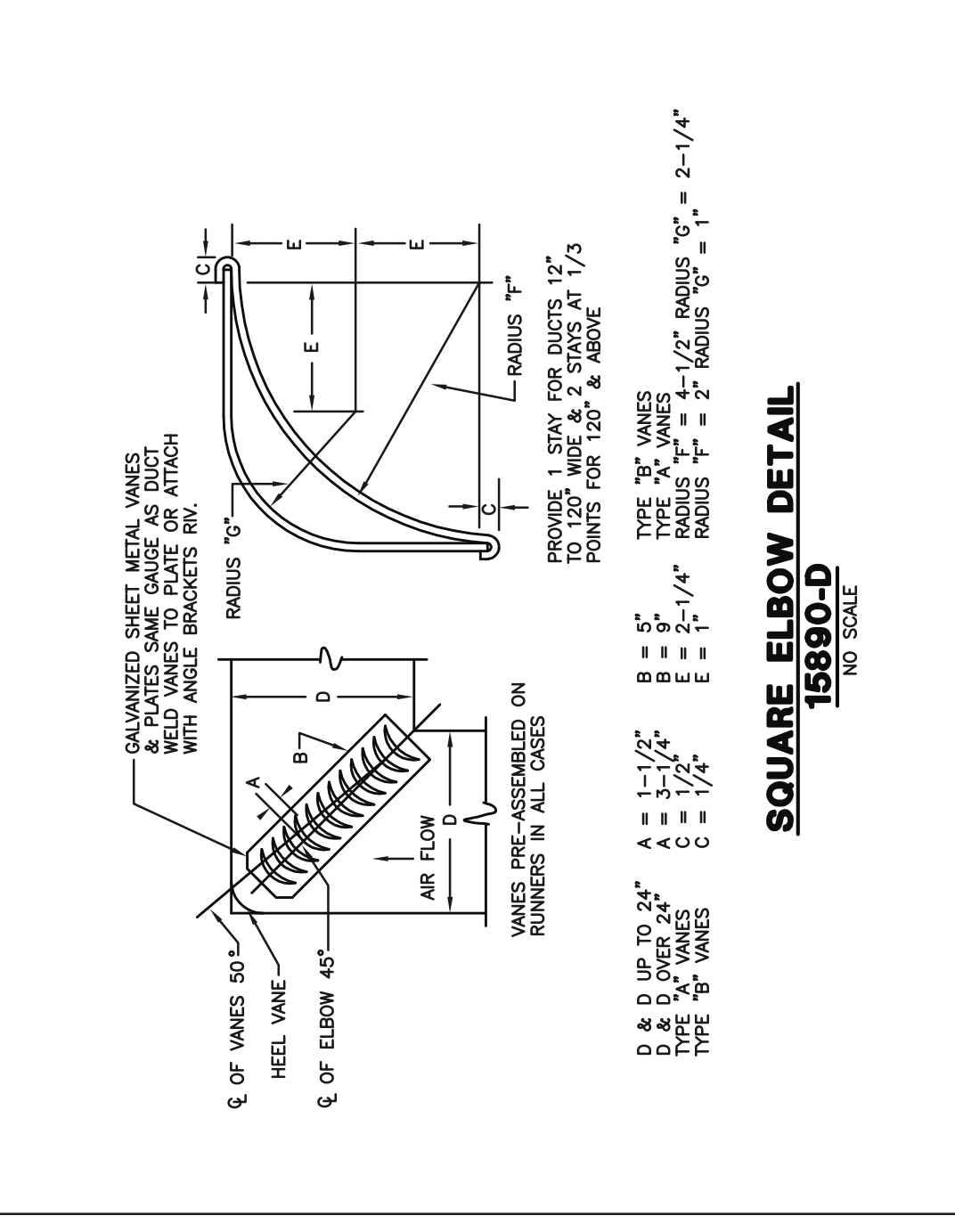
**TYPICAL ROOF CURB DETAIL
15960-D**
NO SCALE



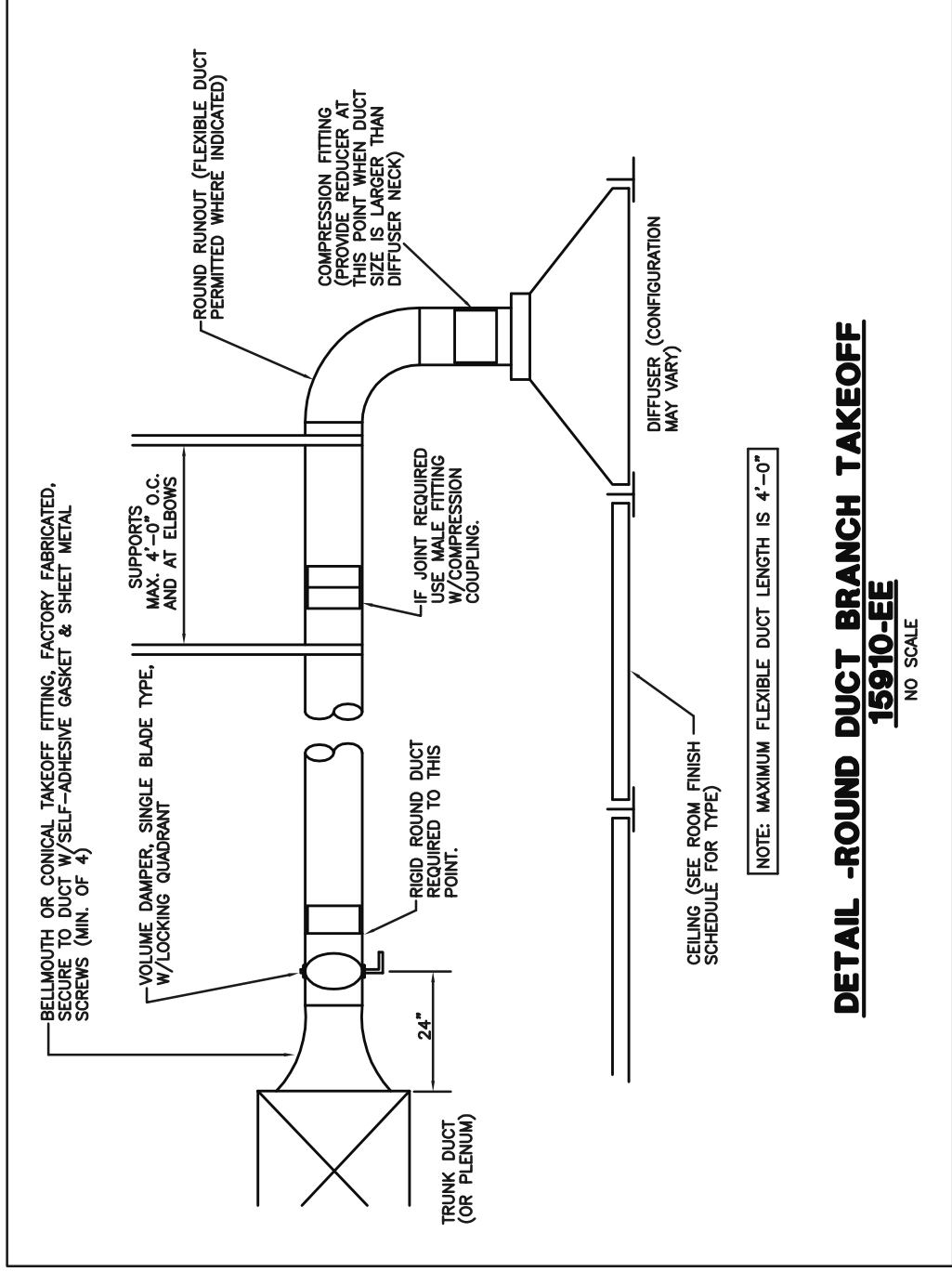
**DUCT HANGERS
15890-K**
NO SCALE

- NOTES:
- 1) FOR SEVERAL DUCTS ON ONE HANGER, TYPE "B", "C", OR "D" HANGERS SHALL BE USED. HANGER SPACING SHALL BE SELECTED ON SUM OF DUCT WIDTHS EQUAL TO MAXIMUM WIDTH OF DUCT SCHEDULE.
 - 2) SCHEDULE FOR ANGLES FOR HANGERS, TYPE "A", "B", "C", OR "D" SHALL BE AS FOLLOWS: TYPE "A" - 2 X 2 X 1/4 ANGLE, MAX SPACING 4'-0" CENTERS. TYPE "B" - 1-1/2 X 1-1/2 X 3/16 ANGLE, MAX SPACING 4'-0" CENTERS. TYPE "C" - 2 X 2 X 1/4 ANGLE, MAX SPACING 4'-0" CENTERS.

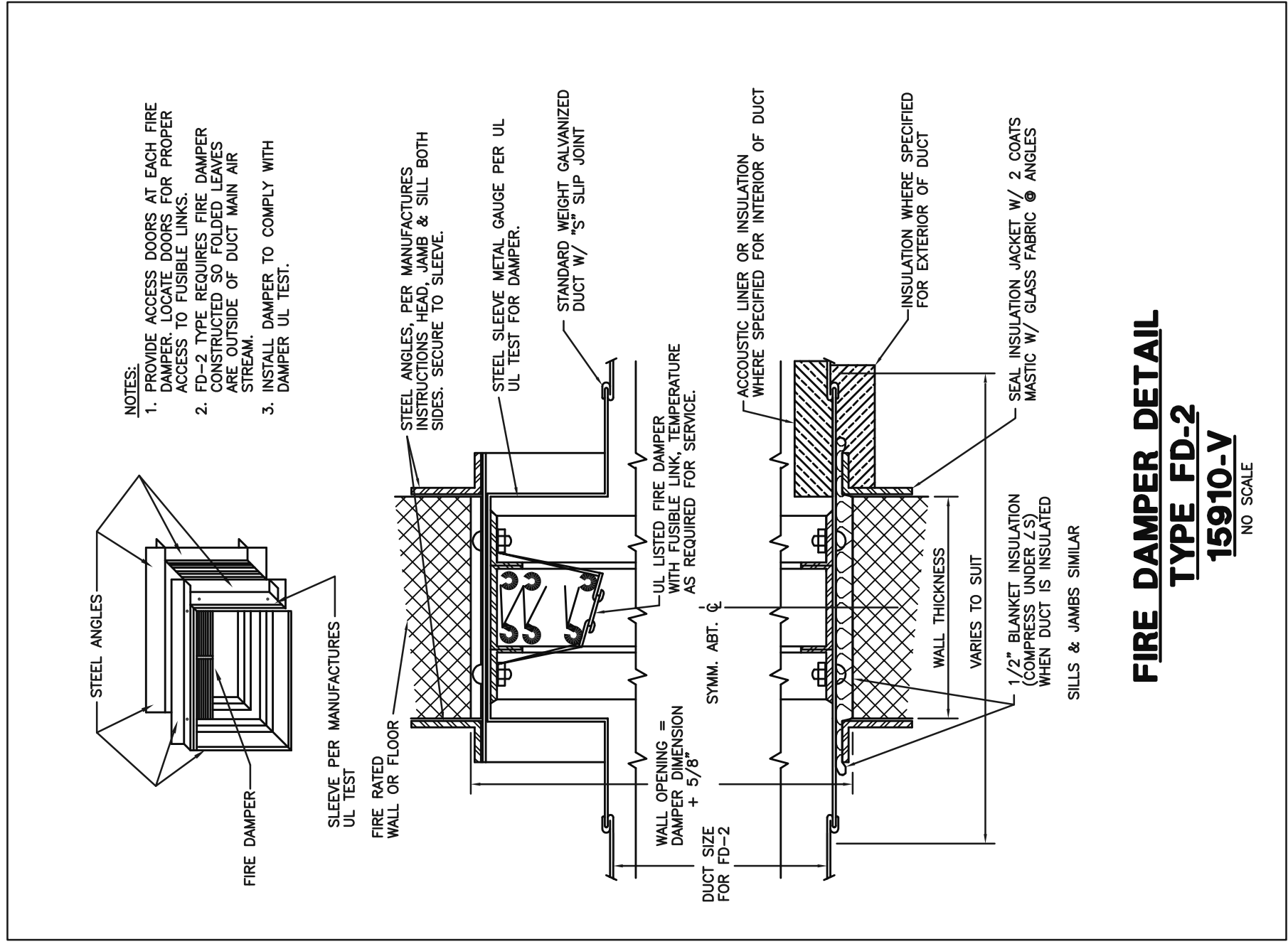
DUCT SCHEDULE	TYPE NUMBER
13 THRU 12	A
13 - 18	A
19 - 30	A/B
31 - 42	A/B
43 - 54	B
55 - 60	B
61 - 84	C
85 - 96	C
OVER 96	D



**SQUARE ELBOW DETAIL
15890-D**
NO SCALE



**DETAIL - ROUND DUCT BRANCH TAKEOFF
15910-EE**
NO SCALE



**FIRE DAMPER DETAIL
TYPE FD-2
15910-Y**
NO SCALE

NO.	MFR. AND MODEL	DESCRIPTION	AIR CONTROL	MATERIAL	FINISH
Ⓐ	TITUS PAS	PERF S.A./ LAYIN	NONE	STEEL	WHITE
Ⓑ	TITUS PAR	PERF R.A. & EKH/ LAYIN	NONE	STEEL	WHITE
Ⓒ	TITUS 272 RL	DOUBLE DEFL. SIDEWALL SUPPLY	NONE	STEEL	WHITE
Ⓓ	TITUS 50FF	FILTER GRILLE/ LAYIN	NONE	ALUMINUM	WHITE
Ⓔ	TITUS T-700L	DOOR GRILLE	NONE	ALUMINUM	WHITE
Ⓛ	TITUS 60F	HEAVY DUTY R.A. GRILLE	NONE	ALUMINUM	WHITE
Ⓜ	TITUS 23RL	SIDEWALL R.A. & EKH/ 45° DEF/ 3/4\"/>			
Ⓢ	TITUS PMC	PERF SUPPLY/ MODULAR CORE 1,2,3 OR 4-WAY BLOW	NONE	ALUMINUM	WHITE
Ⓣ	TITUS PMC	PERF SUPPLY/ MODULAR CORE 1,2,3 OR 4-WAY BLOW	MODULAR CORE	STEEL	WHITE

1. PROVIDE LAYIN CLG MOUNTED GRILLES WITH BORDER TYPE 3 FOR LAYIN CEILING.
2. PROVIDE Ⓢ WITH AUXILIARY DOOR FRAME.

SPLIT SYSTEM A/C UNIT SCHEDULE

MARK	INDOOR FAN			COOLING (MBH)			ELECTRIC HEATING			OUTDOOR UNIT ELEC.			INDOOR UNIT ELEC.			AIR HANDLER			CONDENSING UNIT			EER/ SEER		
	CFM-TOTAL	ESP	O.A.	TOTAL	E.A.D.B.	E.A.W.B.	AMB.	KW	STAGE	MCA	MOCOP	VOLTS/PH	MOCOP	VOLTS/PH	MOCOP	MANUFAC.	MODEL NUMBER	CONDENSING UNIT	EER/ SEER					
AC-1/ACCU-1	4000	.8	400	109	93	76	62	95	35	2	208/3	51	60	208/3	110	CARRIER	40RM012	38ARZ012	10.3/-					
AC-2/ACCU-2	2000	.8	180	56	42	76	62	95	6	2	208/3	21	30	208/3	50	CARRIER	FC4D060	244BR360	11.5/-					
AC-3/ACCU-3	3000	1.0	200	86	72	76	62	95	25	2	208/3	35	60	208/3	80	CARRIER	40RM008	38ARZ008	10.6/-					
AC-4/ACCU-4	3100	.7	230	86	71	75	62	95	25	2	208/3	35	60	208/3	80	CARRIER	40RM008	38ARZ008	10.6/-					
AC-5/ACCU-5	4000	1.2	300	120	105	81	63	95	35	2	208/3	51	60	208/3	110	CARRIER	40RM012	38ARZ012	10.3/-					
AC-6/ACCU-6	2000	.8	80	51	47	80	62	95	6	2	208/3	21	30	208/3	50	CARRIER	FC4D060	244BR360	11.5/-					

1. PROVIDE LOW AMBIENT CONTROL, HALL GUARDS, HIGH/LOW SAFETY SWITCHES AND MANUFACTURERS AUTO CHANGEOVER 7-DAY PROGRAMMABLE THERM FOR EACH SYSTEM.
2. ELECTRICAL CONTRACTOR TO PROVIDE AND WIRE SMOKE DETECTORS IN R.A. DUCT OF EACH UNIT. MECHANICAL CONTRACTOR TO INSTALL SMOKE DETECTOR IN DUCT ONLY.
3. PROVIDE 3-SETS OF FILTERS FOR EACH UNIT. PROVIDE 1/2" THICK INSULATED AND SLOPED SUCH THAT FLOW IS AWAY FROM UNIT. PROVIDE WEIGHTED PLASTIC BRUSH BLOCK TO SPILL CONDENSATE OUTSIDE OF DIRECTION. MINIMUM CONDENSATE LINE SIZE TO BE 1-1/4" DIAMETER.
4. PROVIDE ECONOMIZERS FOR EACH RTU. COND. UTILITY CONNECTIONS SHALL BE MADE THROUGH THE BASE OF THE UNIT.
5. UNIT MANUFACTURER SHALL PROVIDE INITIAL START-UP AND FIRST YEAR LABOR WARRANTY, AS WELL AS AN ADDITIONAL 4 YEAR PARTS WARRANTY ON COMPRESSORS.
6. PROVIDE SMOKE DETECTORS IN THE RETURN AIR DUCTWORK OF EACH RTU. SMOKE DETECTORS TO BE PROVIDED AND WIRED BY THE ELECTRICAL CONTRACTOR.
7. PROVIDE FULL SIZE AUXILIARY CONDENSATE PAN BENEATH AC-1 THRU AC-4. CONDENSATE LINES TO BE A MINIMUM OF 1-1/4" DIA.
8. PROVIDE FULL SIZE AUXILIARY CONDENSATE PAN BENEATH AC-5 THRU AC-6. EXTEND R.A. DUCT FROM BOTTOM OF UNIT OPEN ENDED WITH M.V.D.. CONNECT SMOKE DETECTOR AND O.A. DUCT TO STUB-DOWN.
9. PROVIDE 30" HIGH ANGLE IRON STAND BENEATH AC-6.

REV	DATE	DESCRIPTION

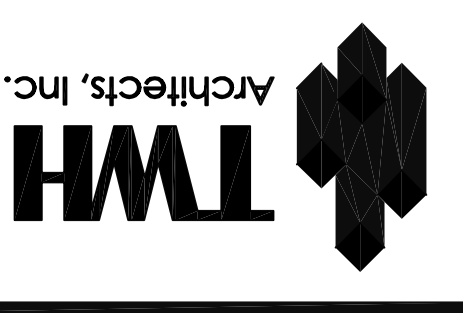
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