

Galvanized Steel Duct 18" X 12" 45 LF

Galvanized Steel Duct 22" X 12" 8 LF

Galvanized Steel Duct 14" X 12" 50 LF

Galvanized Steel Duct 26" X 12" 47 LF

Galvanized Steel Duct 28" X 16" 19 LF

Galvanized Steel Duct 18" X 16" 25 LF

Galvanized Steel Duct 14" X 10" 27 LF

Galvanized Steel Duct 20" X 16" 50 LF

Galvanized Steel Duct 12" X 12" 67 LF

Galvanized Steel Duct 14" X 12" 7 LF

Galvanized Steel Duct 12" X 12" 4 LF

Galvanized Steel Duct 10" X 6" 12 LF

Galvanized Steel Duct 10" X 10" 14 LF

Galvanized Steel Duct 8" X 12" 12 LF

Galvanized Steel Duct 12" X 10" 22 LF

Galvanized Steel Duct 10" X 8" 46 LF

Galvanized Steel Duct 10" X 4" 12 LF

Galvanized Steel Duct 8" X 8" 24 LF

Galvanized Steel Duct 20" X 12" 49 LF

Galvanized Steel Duct 8" X 4" 35 LF

Galvanized Steel Duct 10" X 12" 68 LF

Galvanized Steel Duct 46" X 16" 9 LF

Galvanized Steel Duct 8" X 6" 5 LF

Galvanized Steel Duct 6" X 10" 11 LF

Galvanized Steel Duct 26" X 10" 4 LF

Galvanized Steel Duct 26" X 6" 4 LF

Galvanized Steel Duct 26" X 8" 17 LF

Galvanized Steel Round Duct Dia 6" 147 LF

Galvanized Steel Round Duct Dia 8" 130 LF

Galvanized Steel Round Duct Dia 12" 11 LF

Diffuser_3-Way_160 CFM_9 X 9 SAD_8" Dia Neck Size 5 EA

Diffuser_2-Way_160 CFM_9 X 9 SAD_8" Dia Neck Size 3 EA

Diffuser_3-Way_165 CFM_9 X 9 SAD_8" Dia Neck Size 3 EA

Diffuser_2-Way_165 CFM_9 X 9 SAD_8" Dia Neck Size 1 EA

Diffuser_4-Way_190 CFM_9 X 9 SAD_8" Dia Neck Size 7 EA

Diffuser_4-Way_135 CFM_9 X 9 SAD_6" Dia Neck Size 2 EA

Diffuser_2-Way_235 CFM_12 X 12 SAD_12" Dia Neck Size 1 EA

Diffuser_2-Way_110 CFM_9 X 9 SAD_6" Dia Neck Size 1 EA

Diffuser_3-Way_385 CFM_12 X 12 SAD_12" Dia Neck Size 1 EA

Diffuser_3-Way_380 CFM_12 X 12 SAD_12" Dia Neck Size 2 EA

Diffuser_3-Way_390 CFM_12 X 12 SAD_12" Dia Neck Size 1 EA

Grill_700 CFM_24" X 24" RAR 1 EA

Grill_1240 CFM_24" X 24" RAR 1 EA

Grill_540 CFM_24" X 24" RAR 1 EA

Linear Diffuser_175 CFM_3" 4 EA

Diffuser_60 CFM_2-Way_6 X 6 SAR 2 EA

Linear Diffuser_155 CFM_6" 2 EA

Grill_1035 CFM_18" X 18" RAR 1 EA

Grill_250 CFM_12" X 12" RAR 1 EA

Grill_50 CFM_6" X 6" RAR 2 EA

Grill_205 CFM_12" X 12" RAR 1 EA

Grill_100 CFM_8" X 8" RAR 1 EA

Diffuser_3-Way_120 CFM_8 X 8 SAR 1 EA

Grill_90 CFM_8" X 8" RAR 1 EA

Grill_150 CFM_10" X 10" RAR 2 EA

Grill_135 CFM_14" X 6" RAR 1 EA

Diffuser_4-Way_200 CFM_8 X 8 SAR 2 EA

Linear Diffuser_260 CFM_6" 1 EA

Linear Diffuser_275 CFM_6" 1 EA

Linear Diffuser_50 CFM_2" 2 EA

Diffuser_2-Way_50 CFM_6 X 6 SAR 1 EA

Linear Diffuser_100 CFM_3" 1 EA

Grill_235 CFM_12" X 12" RAR 1 EA

8" X 8" Exhaust Wall Cap. Transition Duct to Wall Cap. 58 LF

10" X 10" Exhaust Wall Cap. Transition Duct to Wall Cap. 6 LF

UH_Unit Heater 4 EA

EF_Exhaust Fan 2 EA

VAV_Variable Air Volume 11 EA

FCU_Fan Coil Unit 1 EA

SSAC-1_Indoor Unit_Split System Air Conditioner 1 EA

SSAC-2_Indoor Unit_Split System Air Conditioner 1 EA

SSAC-1_Outdoor Unit_Split System Air Conditioner 1 EA

SSAC-2_Outdoor Unit_Split System Air Conditioner 1 EA

3/4" Condensate to Condensate Pump 139 LF

End Cap 22" X 12" 1 EA

End Cap 14" X 12" 3 EA

End Cap 10" X 12" 1 EA

End Cap 18" X 12" 2 EA

End Cap 18 X 6 2 EA

End Cap 6" X 10" 6 EA

End Cap 14" X 6" 1 EA

End Cap 12" X 12" 1 EA

End Cap 12" X 12" 1 EA

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End Cap 12" X 12" 1 EA

DRAWING NOTES (APPLY TO DRAWING M1.1):

- PROPOSED EQUIPMENT SERVICE AREA. NO PIPING, CONDUITS, DUCTWORK ETC SHALL BE ROUTED IN THIS AREA.
- RL AND RS TO INDOOR UNIT. SIZE RL AND RS PER MANUFACTURER'S REQUIREMENTS.
- PROVIDE PREFABRICATED EQUIPMENT PAD.
- LINEAR SLOT DIFFUSER. CONTINUOUS, ACTIVE AND NON-ACTIVE AREAS. BLANK OFF NON ACTIVE AREAS.
- SSAC-1 (INDOOR UNIT); ROUTE 3/4" CONDENSATE TO CONDENSATE PUMP #1 LOCATED BELOW SSAC-1. ROUTE CONDENSATE FROM CONDENSATE PUMP #1 TO THE OUTSIDE. DISCHARGE VIA AIR GAP ONTO SPLASHBOCK.
- RL AND RS TO OUTDOOR UNIT. SIZE RL AND RS PER MANUFACTURER'S REQUIREMENTS.
- PROPOSED EQUIPMENT CLEARANCE. (SHOWN FOR COORDINATION ONLY).
- PROVIDE SLEEVE FOR REFRIGERANT PIPING FROM SSAC-2 (APPROXIMATELY 6"). CONFIRM SLEEVE DIAMETER PRIOR TO ORDERING AND INSTALLATION. SLEEVE SHALL BE LOCATED UNDER SLAB.
- 160 CFM; 9x9 SAD; 8" NECK SIZE; 2-WAY.
- 160 CFM; 9x9 SAD; 8" NECK SIZE; 3-WAY.
- 165 CFM; 9x9 SAD; 8" NECK SIZE; 3-WAY.
- 165 CFM; 9x9 SAD; 8" NECK SIZE; 2-WAY.
- 385 CFM; 12x12 SAD; 12" NECK SIZE; 3-WAY.
- 380 CFM; 12x12 SAD; 12" NECK SIZE; 3-WAY.
- 175 CFM; 3'-0" LINEAR SLOT.
- 60 CFM; 6x6 SAR; 2-WAY.
- 1,240 CFM; 24x24 RAR.
- 540 CFM; 24x24 RAR.
- 155 CFM; 6'-0" LINEAR DIFFUSER.
- 260 CFM; 6'-0" LINEAR DIFFUSER.
- 1,035 CFM; 16x18 RAR.
- 250 CFM; 12x12 RAR.
- 50 CFM; 6x6 SAR.
- 130 CFM; 9x9 SAD; 6" NECK SIZE; 4-WAY.
- 135 CFM; 9x9 SAD; 6" NECK SIZE; 4-WAY.
- 235 CFM; 12x12 SAD; 8" NECK SIZE; 2-WAY.
- 110 CFM; 9x9 SAD; 6" NECK SIZE; 2-WAY.
- 100 CFM; 3'-0" LINEAR DIFFUSER.
- 200 CFM; 8x8 SAR; 4-WAY.
- 8"x8" EXHAUST WALL CAP. TRANSITION DUCT TO WALL CAP.
- 10"x10" EXHAUST WALL CAP. TRANSITION DUCT TO WALL CAP.
- 390 CFM; 12x12 SAD; 12" NECK SIZE; 3-WAY.
- 235 CFM; 12x12 RAR.
- 150 CFM; 10x10 RAR.
- 700 CFM; 24x24 RAR.
- 90 CFM; 8x8 RAR.
- 205 CFM; 12x12 RAR.
- 50 CFM; 2'-0" CONTINUOUS LINEAR DIFFUSER. PLENUM WITH SIDE TAP SHALL BE ABOVE ACTIVE LENGTH.
- SPLASHBLOCK LOCATION FOR CONDENSATE FROM CONDENSATE PUMP #1.
- RL AND RS PIPING ABOVE GRADE. SIZE PER MANUFACTURER'S REQUIREMENTS.
- 190 CFM; 9x9 SAD; 8" NECK SIZE; 4-WAY.
- 160 CFM; 8x6 SAR; 4-WAY.
- SPLASHBLOCK LOCATION FOR CONDENSATE FROM SSAC-2.
- SSAC-2 (INDOOR UNIT); ROUTE 3/4" CONDENSATE TO THE OUTSIDE. DISCHARGE VIA AIR GAP ONTO SPLASHBOCK.
- 100 CFM; 8x8 RAR.
- 120 CFM; 8x8 SAR; 3-WAY.
- 135 CFM; 14x6 RAR.
- 505 CFM; 18x18 RAR.
- PIPING SHALL BE ROUTED BELOW GRADE.
- 275 CFM; 6'-0" LINEAR REGISTER.
- PROVIDE A FULL SIZE PLENUM BEHIND AIR DEVICE.
- VERIFY AND COORDINATE DUCT CONNECTIONS AND SIZES PRIOR TO DUCT FABRICATION AND INSTALLATION. DRYER (PROVIDED BY OTHERS) SHALL BE ABLE TO EXHAUST FOR A MINIMUM LENGTH OF 3 (90 DEGREES) ELBOWS AND 32 LINEAR FEET.
- PROVIDE CLOTHES WASHER BOX.
- 50 CFM; 6x6 SAR; 2-WAY.

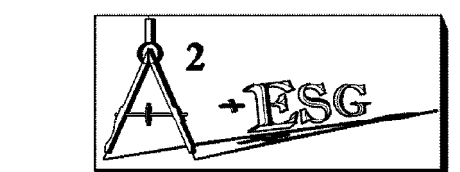
GENERAL NOTES (PROVIDED UNDER DIVISION 22 AND 23):

- WORK SHALL CONFORM TO THE REQUIREMENTS OF THE CODES, LAW AND ORDINANCES OF HARFORD COUNTY, MARYLAND, NATIONAL FIRE PROTECTION ASSOCIATION, AMERICAN SOCIETY OF MECHANICAL ENGINEERS, STANDARD PRACTICES AND OTHER AUTHORITIES HAVING JURISDICTION.
- THE DRAWINGS ARE GENERALLY INDICATIVE OF THE WORK TO BE INSTALLED, BUT THEY DO NOT SHOW ALL OFFSETS, FITTINGS AND SIMILAR DETAILS REQUIRED, WHICH SHALL BE PROVIDED TO MEET THE JOB CONDITIONS. IN AREAS WHERE WORK IS INSTALLED IN CLOSE PROXIMITY TO WORK OF OTHER TRADES OR WITHIN TRADES, PREPARE LARGER SCALE DRAWINGS CONSISTING OF PLANS AND SECTIONS TO SHOW HOW WORK IS TO BE INSTALLED IN RELATION TO WORK OF OTHER TRADES.
- COMPLY WITH THE STANDARDS OF GOOD PRACTICE AS OUTLINED IN THE ASHRAE GUIDE, THE SHEET METAL AND AIR CONDITIONING CONTRACTOR'S ASSOCIATION'S "DUCT MANUAL", AND THE APPRENTICE TRAINING MANUAL OF THE STEAM FITTERS UNION.
- PROVIDE MANUAL DAMPERS TO EACH DUCT SERVING ONE SUPPLY AIR DEVICE.
- VERIFY LOCATION OF THERMOSTAT WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION.
- PROVIDE WATER TEMPERATURE LIMITING DEVICES ON LAVATORIES AND SINKS.
- SANITARY PIPING SLOPE IS 2% UNLESS OTHERWISE NOTED.
- SANITARY PIPING SHALL HAVE LONG RADIUS ELBOWS.
- SUPPLY AIR DIFFUSERS (SAD) SHALL BE 4-WAY UNLESS OTHERWISE NOTED.
- REFER TO ARCHITECTURAL DRAWINGS FOR LOUVER AND WALL CAP LOCATIONS.
- ALL FLOOR DRAINS SHALL BE PROVIDED WITH TRAP REMOVALS.

DRAWING LIST

M1.1	FIRST FLOOR PLAN - HVAC
M1.2	SECOND FLOOR PLAN - HVAC
M1.3	MEZZANINE FLOOR PLAN - HVAC
M1.4	FIRST FLOOR PLAN - PLUMBING
M1.5	SECOND FLOOR PLAN - PLUMBING
M1.6	FIRST FLOOR PLAN - HEATING WATER
M1.7	SECOND FLOOR PLAN - HEATING WATER
M1.8	PART PLANS
M1.9	PART PLANS
M2.1	RISER DIAGRAMS
M2.2	RISER DIAGRAMS
M2.3	SCHEMATICS
M3.1	DETAILS
M4.1	SCHEDULES
M4.2	SCHEDULES
M4.3	LEGEND

PROFESSIONAL CERTIFICATION:
I HEREBY CERTIFY THAT THESE
DOCUMENTS WERE PREPARED OR
APPROVED BY ME AND THAT I
AM A DULY LICENSED
PROFESSIONAL ENGINEER UNDER
THE LAWS OF THE STATE OF
MARYLAND, LICENSE NO. 36773,
EXPIRATION DATE: 01-18-15



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FIRST FLOOR PLAN - HVAC
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MARYLAND 21078

NO.	DESCRIPTION	DATE

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13-026
PROJECT SET:
NO SET
DATE ISSUED:
7.23.14

DRAWING TITLE:
FIRST FLOOR PLAN -
HVAC

SHEET NUMBER:
M1.1

