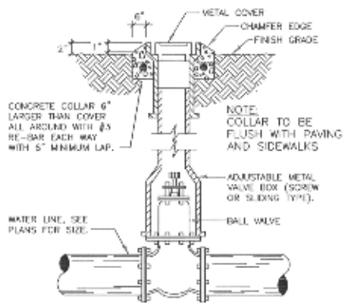
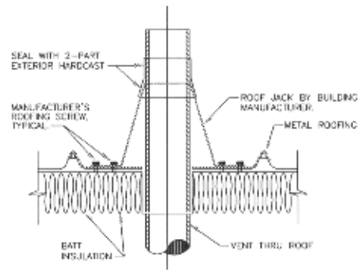


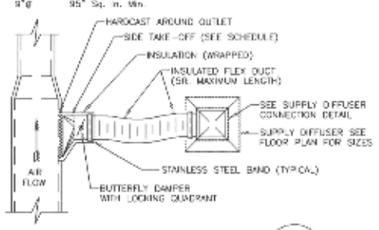
VALVE IN BOX DETAIL (1 / M1)
SCALE: NONE



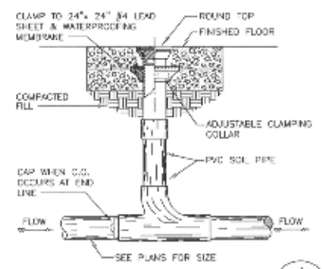
VENT THRU ROOF DETAIL (2 / M1)
SCALE: NONE

TAKE-OFF SIZE SCHEDULE

SIZE	TAKE-OFF SIZE	SIZE	TAKE-OFF SIZE
6"Ø	43" Sq. in. Min	10"Ø	118" Sq. in. Min.
7"Ø	58" Sq. in. Min	12"Ø	170" Sq. in. Min.
8"Ø	76" Sq. in. Min	14"Ø	230" Sq. in. Min.
9"Ø	95" Sq. in. Min		



DUCT TAKE-OFF DETAIL (3 / M1)
SCALE: NONE



FLOOR CLEANOUT DETAIL (4 / M1)
SCALE: NONE

EQUIPMENT SCHEDULE

SYMBOL	DESCRIPTION
AC-1	AIR CONDITIONER: HORIZONTAL DISCHARGE, RAIL MOUNTED, ELECTRIC COOLING/ELECTRIC STRIP HEAT, SINGLE STAGE COOLING PACKAGED, OUTDOOR UNIT WITH NOMINAL 2 TON COOLING CAPACITY, 12 SEER, 1 COMPRESSOR, SINGLE REFRIGERATION CIRCUIT, 3.75 KW ELECTRIC HEATER, SIDE DISCHARGE, 900 CFM @ 0.4" ESP, 208 VOLT, 1 PHASE, 25 AMP, 1" FILTERS, COIL GUARD, SMOKE SHUT DOWN IN RETURN AIR, PROGRAMMABLE THERMOSTAT, ANTI CYCLE TIME DELAY, MANUAL OUTDOOR AIR DAMPER, AND A RECTANGULAR DUCT FLANGE, CARRIER MODEL 50SX-024-3-01-AA WITH ELECTRIC HEAT KIT MODEL 50SS-900001, YORK, LENNOX, TRANE, OR APPROVED EQUAL.
CE-1	CEILING EXHAUSTER: Ceiling mounted super-quiet exhaust fan with neoprene mounted low rpm motor, dynamically balanced centrifugal blower, steel housing with 1/2" acoustical insulation, clatterproof automatic backdraft damper, and ceiling grille. Power is 120 Volt/1 Phase. Model numbers are Greenheck. Capacities are for 4,100 ft. elevation.
D-1	DIFFUSER: Price SVD series diffuser with frame style 36 suitable for Lay-in Tee-bar ceiling installation. Diffuser shall be of welded steel construction with a factory applied white baked enamel finish. Furnish complete with opposed blade damper adjustable through face and removable core. Pattern and size as indicated on drawings.
D-2	DIFFUSER: Price SVD series diffuser with frame style 1 suitable for Surface installation. Diffuser shall be of welded steel construction with a factory applied white baked enamel finish. Furnish complete with opposed blade damper adjustable through face and removable core. Pattern and size as indicated on drawings.
RG-1	RETURN GRILLE: Price series 80 with frame T suitable for surface mounting installation. Grille shall be all aluminum construction with a fixed core of 1/2"x 1/2"x 1/2" deep squares. Furnish with a factory applied white baked enamel finish. Neck size as indicated on drawings.

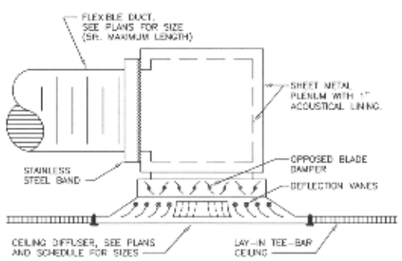
Symbol	Model	CFM	ESP	Watts
CE-1	SP-224	150	0.25	83

FIXTURE SCHEDULE

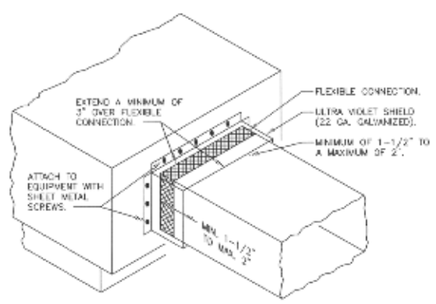
SYMBOL	DESCRIPTION
WC	WATER CLOSET: TO MEET ADA REQUIREMENTS, FLOOR MOUNT, TANK TYPE, 1.6 GPF WHITE, VITREOUS CHINA, ELONGATED BOWL KOHLER K3427. OPEN FRONT SEAT WITH UD, K4650, CAST BRASS SERVICE STOP, OR APPROVED EQUIVALENT.
LAV	LAVATORY: TO MEET ADA REQUIREMENTS, WALL HUNG, BACK, 4" CENTERS, WHITE, VITREOUS CHINA, SIZE 21" X 18", KOHLER K2005. SINGLE LEVER FAUCET W/ GRID DRAIN K15597-5, OFFSET DRAIN K13885, OR APPROVED EQUIVALENT, INSULATION KIT, CHAIR CARRIER, CAST BRASS SERVICE STOPS
WH-1	WATER HEATER: ELECTRIC, 15 GALLON TANK, 1500 WATT 120 VOLT ELEMENT, T & P RELIEF, VALVE, A.O. SMITH FSLF-15 OR APPROVED EQUIVALENT.
MB	MOP BASIN: SIZE 24"X24"X10", MOLDED STONE, SERVICE FAUCET, HOSE AND BRACKET, MOP HANGER, BUMPER GUARD, S.S. WALL GUARD. FIAT MSB2424, OR APPROVED EQUIVALENT.
ACM-1	AIR COMPRESSOR: SIMPLEX 120 GAL., 3/4" INLET, 3/4" OUTLET, ASME RATED FOR 200 PSI, DEVILBISS MODEL T-486, OR APPROVED EQUIVALENT, INCLUDE ELECTRICAL 208V/3# HOOK-UP.
PRA	PRESSURE REGULATOR/FILTER ASSEMBLY: 1/2" SIZE, GAUGE, PIGGYBACK COMBINATION, GRAINGER 3JV19, FURNISH QUICK HOSE DISCONNECT COUPLER 3KD28, BALL VALVE 2P281, OR APPROVED EQUIVALENT. DISCONNECT MOUNTING HEIGHT SHALL BE 48" AFF.

SYMBOL LEGEND

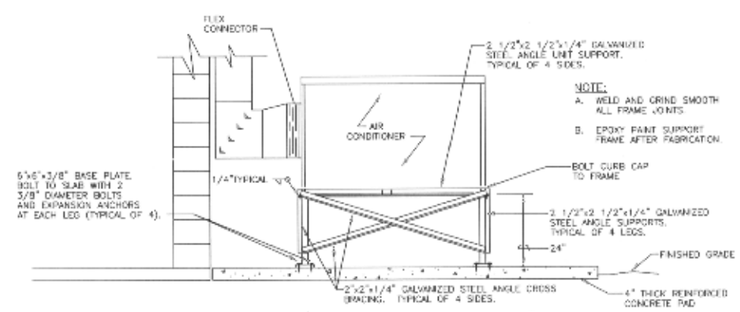
SYMBOL	DESCRIPTION
— - —	COLD WATER LINE
— - - —	HOT WATER LINE
—W—	WATER LINE (EXTERIOR)
—FP—	FIRE PROTECTION LINE
—S—	SOIL LINE
—S—	SOIL LINE (EXISTING)
———	VENT PIPING
—D—	DRAIN LINE
———	EXISTING CONSTRUCTION
———	NEW CONSTRUCTION
VTR	VENT THRU ROOF
CFM	CUBIC FEET PER MINUTE
ESP	EXTERNAL STATIC PRESSURE
	BALANCING DAMPER
DUCT UNIT	FLEX CONNECTION
	FLEXIBLE DUCTWORK (MAX. 5')
	SUPPLY DUCT SECTION
	RETURN OR EXHAUST DUCT SECTION
	TURNING VANES
	LAY-IN TEE-BAR SUPPLY GRILLE
	LAY-IN TEE-BAR RETURN OR EXHAUST GRILLE
	SURFACE MOUNTED SUPPLY GRILLE
	SURFACE MOUNTED RETURN OR EXHAUST GRILLE
T	ELECTRIC THERMOSTAT
	BALL VALVE
	UNION
	FLEXIBLE PIPE CONNECTION
	RISE IN PIPING
	DROP IN PIPING
	VALVE IN RISE OR DROP



SUPPLY DIFFUSER CONNECTION (5 / M1)
SCALE: NONE



ULTRA VIOLET SHIELD DETAIL (6 / M1)
SCALE: NONE



EQUIPMENT SUPPORT FRAME DETAIL (7 / M1)
SCALE: NONE

FOR INFORMATION ONLY AMENDMENT 3

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NRTF Target Preparation Building - Main Site
White Sands Missile Range, NM
Drawings prepared by Cottonwood Engineering, Alamogordo, New Mexico

PROJECT NO:
DATE: 11/15/01
DRAWN BY: LAM
REVISIONS:

SHEET M2 OF 2