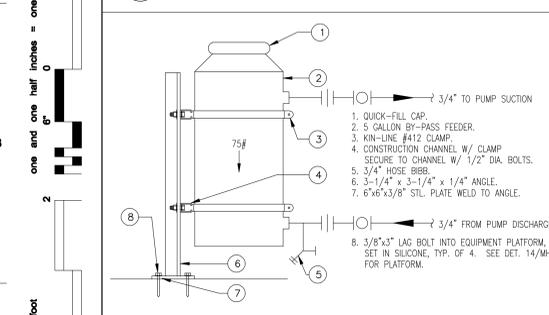
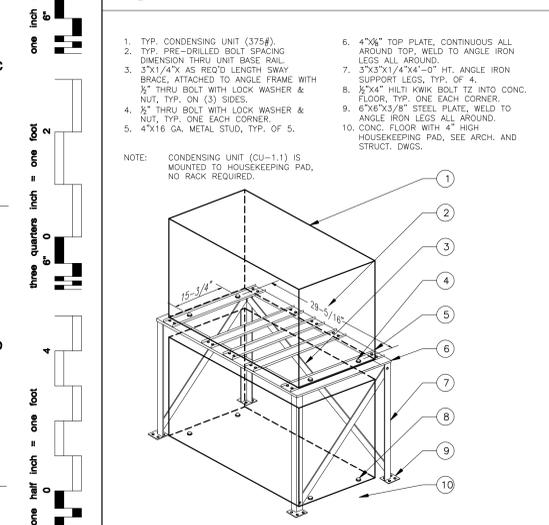


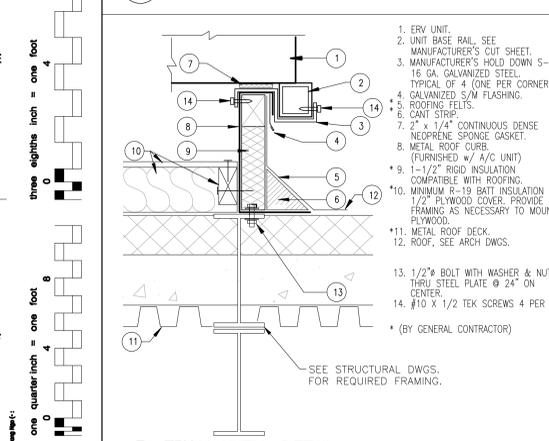
22 CW MAKE-UP AND TANK PIPING/ MTG. NTS



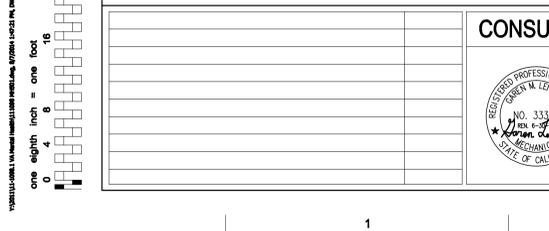
23 CLOSED SYSTEM BYPASS FEEDER NTS



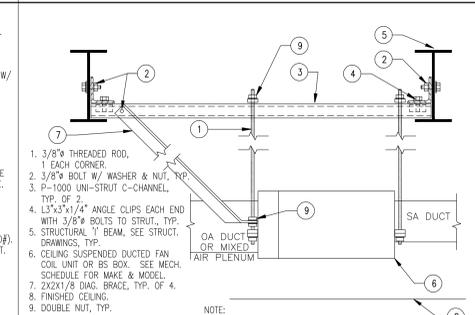
24 WATER COOLED CU STACKING NTS



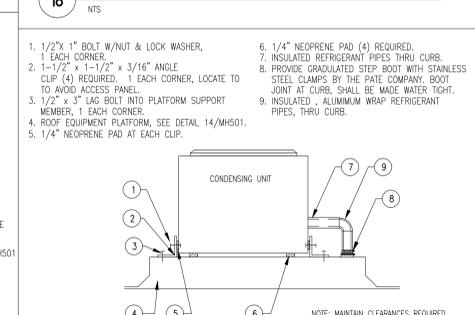
25 ERV MOUNTING DETAIL NTS



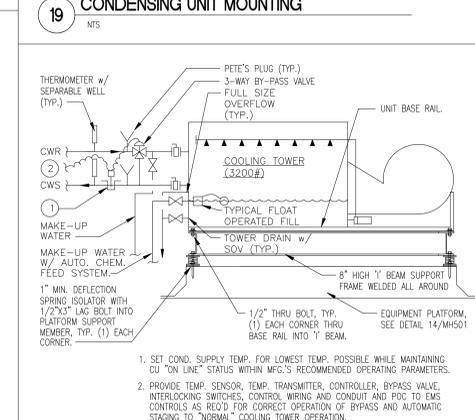
18 FAN COIL UNIT/ BS BOX MOUNTING NTS



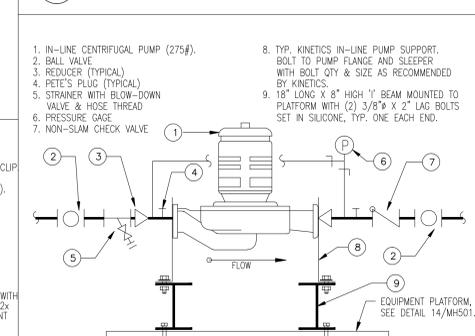
19 CONDENSING UNIT MOUNTING NTS



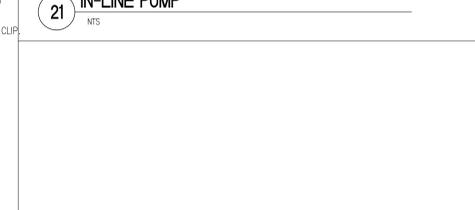
14 ROOF EQUIPMENT PLATFORM NTS



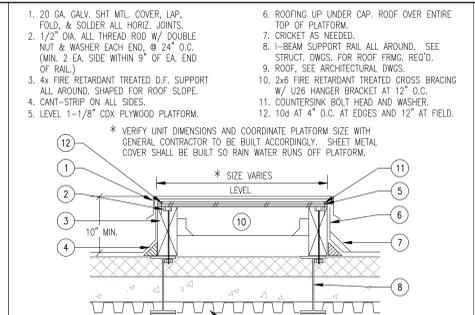
20 COOLING TOWER PIPING NTS



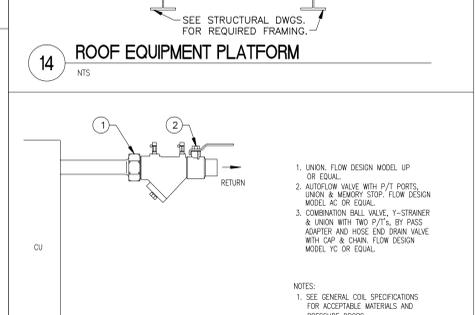
21 IN-LINE PUMP NTS



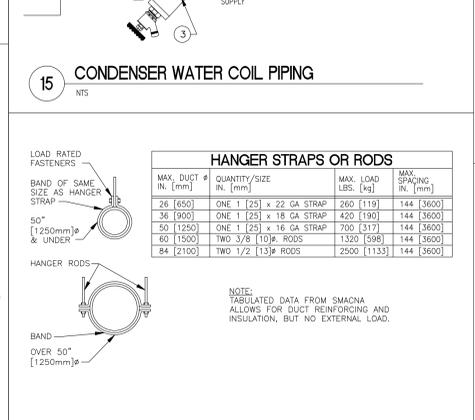
17 PIPE HANGERS NTS



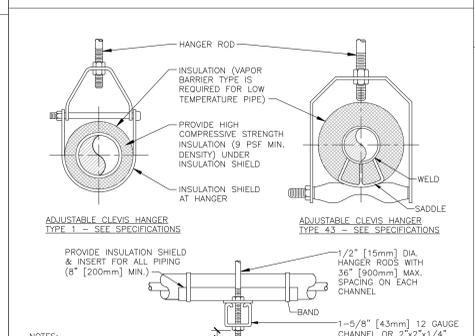
10 ACCESS SECTION FOR ROUND/OVAL DUCT NTS



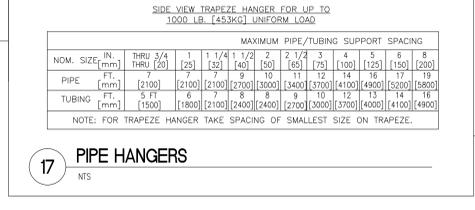
11 FLEXIBLE DUCT CONNECTIONS NTS



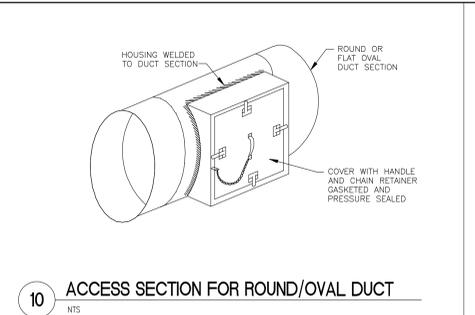
15 CONDENSER WATER COIL PIPING NTS



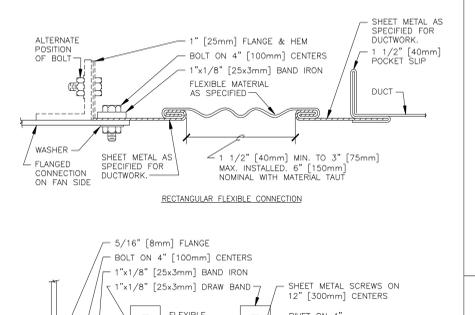
12 FLEXIBLE AIR DUCT CONNECTOR NTS



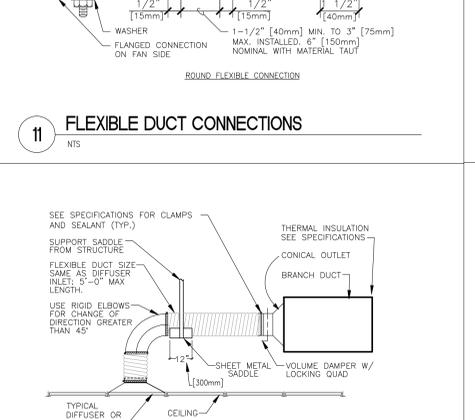
13 FAN COIL CEILING MOUNTING NTS



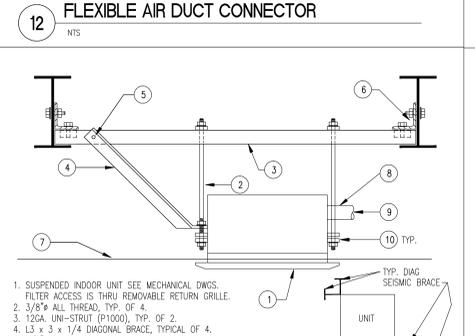
5 SUPPLY DUCT TAKEOFF - AIR TERMINAL UNIT NTS



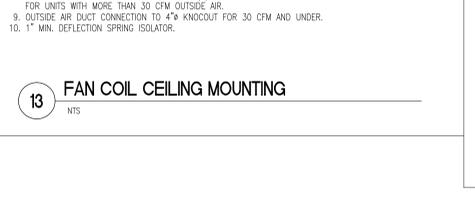
6 ALTERNATE SUPPLY DUCT TAKEOFF - AIR TERMINAL UNITS NTS



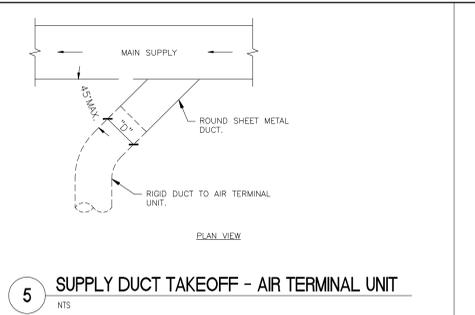
7 EXHAUST OR RETURN BRANCH DUCTWORK NTS



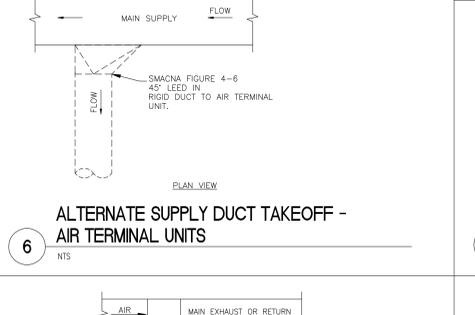
8 VOLUME DAMPER DETAIL NTS



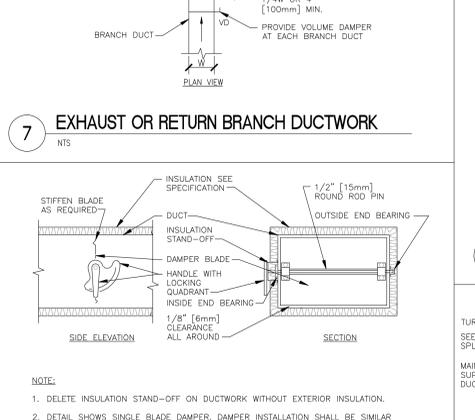
9 ACCESS PANEL AND DOOR DETAIL NTS



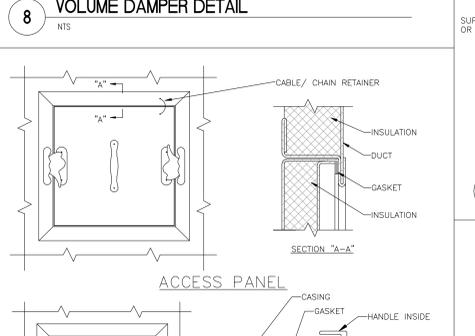
1 DUCTWORK SQUARE VANE ELBOWS NTS



2 DUCTWORK RADIUS ELBOWS NTS



3 DUCTWORK TRANSITIONS NTS



4 SUPPLY DUCTWORK TAKE-OFFS NTS



18 MECHANICAL DETAILS SCALE: NTS

1. BALL VALVE BY PLUMB. CONTR. BACKFLOW PREVENTER-FEEDS #60 OR COUL. BALL VALVE (TYP.). COMBINATION REDUCING VALVE W/ STRAINER & RELIEF VALVE. PIPE TO 6" ADV GRADE. GLOBE VALVE. UNION (TYP.). LOCK SHIELD GATE VALVE. P.O.C. BY HVAC CONTRACTOR. MAKE-UP WATER-SEE TP SHEETS. CLOSED SYSTEM: 125 PSI CODE EXPANSION TANK W/MTG. BASE. ARMSTRONG #BX-10V, 5 GAL. ACCEPTANCE (75#). OPEN SYSTEM: 35 GAL. DRUM CHEM. TANK W/MTG. BASE AND IN-LINE AUTO FEED PUMP (500#). EQUIPMENT PLATFORM, SEE DET. 14/MH501. 1/2" DIA. X 3" LAG BOLTS (TYP. OF 3). TO SYSTEM RETURN LINE. CLOSE TO PUMP SUCTION.

1. 3/8" THREADED ROD, 1 EACH CORNER. 3/8" BOLT W/ WASHER & NUT, TYP. P-1000 UNI-STRUT C-CHANNEL, TYP. OF 2. 1.5"x3.5"x1/4" ANGLE CLIPS EACH END WITH 3/8" BOLTS TO STRUT, TYP. STRUCTURAL 1" BEAM, SEE STRUCT. DRAWINGS, TYP. CEILING SUSPENDED DUCTED FAN COIL UNIT OR BS BOX. SEE MECH. SCHEDULE FOR MAKE & MODEL. 2X2X1/8" DIAG. BRACE, TYP. OF 4. FINISHED CEILING. DOUBLE NUT, TYP. NOTE: SEE PLANS FOR DAMPER LOCATIONS.

1. UNON. FLOW DESIGN MODEL UP OR DOWN. AUTOFLOW VALVE WITH P/T PORTS, UNON & MEMORY STOP. FLOW DESIGN MODEL, 6" OR 8". COMBINATION BALL VALVE, Y-STRAINER & INON WITH TWO 9/16" BY PASS ADAPTER AND HOSE END DRAIN VALVE WITH CAP & CHAIN. FLOW DESIGN MODEL, 10" OR 12". NOTE: 1. SEE GENERAL COIL SPECIFICATIONS FOR ACCEPTABLE MATERIALS AND PRESSURE DROPS. 2. ALL FACTORY MODULES MUST BE LEAK TESTED AT 100 PSI AIR UNDER WATER.

1. TYP. CONDENSING UNIT (375#). PRE-DRILLED BOLT SPACING DIMENSION THRU UNIT BASE RAIL. 3/8"x1/4"x5 AS REQD LENGTH S-WAY BRACE, ATTACHED TO ANGLE FRAME WITH 5/8" THRU BOLT WITH LOCK WASHER & NUT, TYP. ON (3) SIDES. 5/8" THRU BOLT WITH LOCK WASHER & NUT, TYP. ONE EACH CORNER. 4"x16" GA. METAL STUD, TYP. OF 5. NOTE: CONDENSING UNIT (CU-1) IS MOUNTED TO HOUSEKEEPING PAD, NO RACK REQUIRED.

1. ALL VANE ELBOWS SHALL BE CONSTRUCTED AND INSTALLED AS DETAILED BY SMACNA. WHEN W1 DOES NOT EQUAL W2, VANE SHALL BE SINGLE THICKNESS VANE TYPE REGARDLESS OF W DIMENSION. ALL SINGLE THICKNESS VANES SHALL HAVE A 2" [50mm] RADIUS, 1 1/2" [40mm] MAXIMUM SPACE BETWEEN VANES AND A 3/4" [20mm] TRAILING EDGE. WHEN W EQUALS W2 AND W1 IS GREATER THAN 20" [500mm] VANES SHALL BE DOUBLE VANE TYPE.

1. THE INTERIOR SURFACE OF ALL RADIUS ELBOWS SHALL BE MADE ROUND. ALL STANDARD RADIUS ELBOWS CAN BE SUBSTITUTED WITH SHORT RADIUS ELBOWS. ALL SHORT RADIUS ELBOWS SHALL HAVE VANES. VANES SHALL BE CONSTRUCTED, SUPPORTED AND FASTENED AS RECOMMENDED BY SMACNA.

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ARCHITECT/ENGINEERS: HMC Architects 1827 E. Fir Avenue / Studio 103 / Fresno, CA 93720

Table with 4 columns: NOM. SIZE IN., THRU, MAXIMUM PIPE/TUBING SUPPORT SPACING, and a list of sizes from 1/2" to 24" in increments of 1/2" and 3/4".

Drawing Title: MECHANICAL DETAILS. Approved: Project Director. Location: 2615 E. CLINTON AVE, FRESNO, CA 93703. Date: 8/11/2014. Checked: KK, GL. Drawn: DN.

Project Title: Mental Health Psychosocial Rehab Recovery and Health Care for Homeless Veteran Center. Project Number: 570-217. Building Number: 37. Drawing Number: MH501. Dwg. of: 18.

Office of Construction and Facilities Management. Department of Veterans Affairs.