# MECHANICAL SYMBOLS LEGEND

NOTE:THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS, ABBREVIATIONS, ETC. ARE NECESSARILY USED ON THE DRAWINGS.

## ANNOTATION

- X1 — KEYNOTE TAG
- AHU-1 — EQUIPMENT DESIGNATION
- CONNECTION POINT OF NEW WORK TO EXISTING
- EXTENTS OF DEMO (DIRECTIONAL)
- 1 / P1 — DETAIL/SECTION REFERENCE; INDICATES DETAIL NUMBER; INDICATES SHEET NUMBER
- 1 / P1 — SECTION CUT DESIGNATION
- S1 / 500 — GRILLE/REGISTER/DIFFUSER LABEL; -TYPE DESIGNATION; -AIRFLOW (CFM)

## HVAC EQUIPMENT & DUCTWORK

NOTE: ALL DUCT DIMENSIONS SHOWN ON DRAWINGS ARE INSIDE DIMENSIONS. SEE SECTION 15250 OF THE SPECIFICATION FOR DUCTWORK TO RECEIVE INSULATION OR LINER.

- SUPPLY AIR DIFFUSER - ARROWS INDICATE PATTERN. NO PATTERN INDICATES 4-WAY.
- RETURN AIR DIFFUSER
- EXHAUST AIR DIFFUSER
- 12" — ROUND DUCTWORK
- 20"x12" — RECTANGULAR DUCTWORK, FIRST NUMBER IS SIDE SHOWN, NET FREE AREA
- PRE-INSULATED FLEXIBLE DUCT
- EXISTING DUCTWORK OR EQUIPMENT TO REMAIN
- EXISTING DUCTWORK OR EQUIPMENT TO BE REMOVED
- LINEAR SLOT DIFFUSER
- BRANCH DUCT WITH 45~ RECTANGLE-ROUND BRANCH FITTING AND MANUAL VOLUME DAMPER
- ELBOW WITH TURNING VANES
- BRANCH DUCT WITH BELL-MOUTH FITTING & MANUAL VOLUME CONTROL DAMPER
- RETURN DUCT UP
- RETURN DUCT DOWN
- SUPPLY AIR OR OUTSIDE AIR DUCT UP
- SUPPLY AIR OR OUTSIDE AIR DUCT DOWN
- EXHAUST DUCT UP
- EXHAUST DUCT DOWN
- EQUIPMENT WITH FLEXIBLE DUCT CONNECTION
- MANUAL VOLUME DAMPER
- SQUARE TO ROUND TRANSITION
- RD — DUCT MOUNTED SMOKE DETECTOR (SD=SUPPLY/RD=RETURN)
- RISER DESIGNATION

## PIPING

- FOS — FUEL OIL SUPPLY (FOS)
- FOR — FUEL OIL RETURN (FOR)
- FOV — FUEL OIL VENT (FOV)
- HPS — HIGH PRESSURE STEAM SUPPLY (HPS)
- HPC — HIGH PRESSURE STEAM CONDENSATE (HPC)
- MPS — MEDIUM PRESSURE STEAM SUPPLY (MPS)
- MPC — MEDIUM PRESSURE STEAM CONDENSATE (MP
- LPS — LOW PRESSURE STEAM SUPPLY (LPS)
- LPC — LOW PRESSURE STEAM CONDENSATE (LPC)
- PD — CONDENSATE PUMP DISCHARGE (PD)
- HWS — HEATING HOT WATER SUPPLY (HWS)
- HWR — HEATING HOT WATER RETURN (HWR)
- CHWS — CHILLED WATER SUPPLY (CHWS)
- CHWR — CHILLED WATER RETURN (CHWR)
- HCS — HOT/CHILLED WATER SUPPLY (HCS)
- HCR — HOT/CHILLED WATER RETURN (HCR)
- CWS — CONDENSER WATER SUPPLY (CWS)
- CWR — CONDENSER WATER RETURN (CWR)
- HPWS — HEAT PUMP WATER SUPPLY (HPWS)
- HPSR — HEAT PUMP WATER RETURN (HPWR)
- RL — REFRIGERANT LIQUID (RL)
- RD — REFRIGERANT DISCHARGE (HOT GAS) (RD)
- RS — REFRIGERANT SUCTION (RS)
- RDB — REFRIGERANT DISCHARGE BYPASS (RDB)
- RV — REFRIGERANT VENT (RV)
- DIRECTION OF FLOW
- EXISTING PIPING TO BE REMOVED
- EXISTING PIPING TO REMAIN

## PIPE FITTINGS

- UNION
- FLANGE CONNECTION
- ELBOW UP
- ELBOW DOWN
- TEE UP
- TEE DOWN
- CAP
- REDUCER

## DAMPERS AND SENSORS

- FD — FIRE DAMPER
- FSD — FIRE SMOKE DAMPER
- SD — SMOKE DAMPER
- VD — VOLUME DAMPER
- M — MOTORIZED DAMPER
- BD — BACKDRAFT DAMPER
- H — HUMIDISTAT
- T — THERMOSTAT
- F — FIRESTAT
- CO — CARBON MONOXIDE SENSOR
- $CO_2$ — CARBON DIOXIDE SENSOR
- $NO_2$ — NITROGEN DIOXIDE SENSOR
- FS — FLOW SWITCH
- HS — HUMIDITY SENSOR
- PS — PULL STATION
- SP — STATIC PRESSURE SENSOR
- TS — TEMPERATURE SENSOR
- HS — DUCT MOUNTED HUMIDITY SENSOR
- TS — DUCT MOUNTED TEMPERATURE SENSOR

## VALVE AND SPECIALTIES

- CONTROL VALVE
- THREE-WAY CONTROL VALVE
- SHUTOFF VALVE
- CHECK VALVE
- BALANCING VALVE WITH PRESSURE PORTS
- TRIPLE DUTY VALVE WITH PRESSURE PORTS
- WATER METER
- STRAINER
- STRAINER WITH BLOWOFF
- RELIEF/SAFETY VALVE
- PRESSURE REDUCING VALVE
- GAS PRESSURE REGULATOR
- THERMOSTATIC MIXING VALVE
- PIPE ANCHOR / SUPPORT
- EXPANSION JOINT
- PIPE GUIDE
- F & T TRAP
- BUCKET TRAP
- THERMOSTATIC TRAP
- BACKFLOW PREVENTER
- PRESSURE GAUGE
- THERMOMETER
- PRESSURE AND TEMPERATURE TEST PLUG
- VACUUM RELIEF VALVE
- AV — AUTOMATIC AIR VENT
- MV — MANUAL AIR VENT
- A — WATER HAMMER ARRESTER (WHA) WITH PDI SIZES, (A, B, C, D, & E)
- RECIRCULATION PUMP
- GAS COCK
- FLEXIBLE CONNECTION
- THERMOMETER WELL
- BALL VALVE
- BUTTERFLY VALVE
- GATE VALVE
- GLOBE VALVE
- ANGLE GLOBE VALVE
- KNIFE VALVE
- NEEDLE VALVE
- PLUG VALVE
- PINCH VALVE
- PRESSURE REDUCING
- PRESSURE RELIEF
- VEEBALL VALVE
- S — SOLENOID VALVE

| REV # | DATE | DESCRIPTION | APP'D |
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APPROVED — CHIEF ENGINEER
APPROVED — CIVIL ENGINEER

NKAK 22-1076
B718 DORM
LITTLE ROCK AFB

DETAILS (1)

MECHANICAL LEGEND

AIR MOBILITY COMMAND
19TH CIVIL ENGINEER SQUADRON
LITTLE ROCK, ARKANSAS

DATE: JULY 2026
DESIGNED BY: SAH
DRAWN BY: BWHR
BUILDING NO.:
PROJECT NO.:
SHEET REF.: M-001
SHEET NO.: 1 OF XX

STATUS:65% PRELIMINARY DESIGN