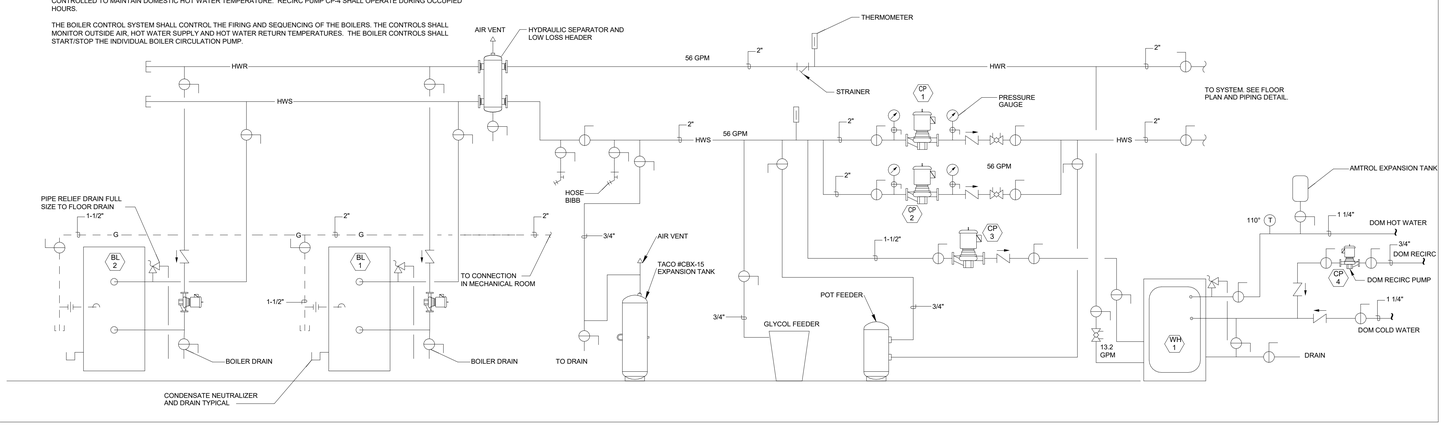
SEQUENCE OF OPERATION:

ON A CALL FOR HEATING FROM ANY ZONE THERMOSTAT, THE SYSTEM PUMP CP-1 OR CP-2 SHALL START AND THE BOILER CONTROL SYSTEM SHALL BE ENABLED TO FIRE AND SEQUENCE THE BOILERS. ON A CALL FOR DOMESTIC HOT WATER, THE BOILER CONTROL SYSTEM SHALL BE ENABLED WITH DOMESTIC HOT WATER PRIORITIZATION. PUMP CP-3 SHALL BE CONTROLLED TO MAINTAIN DOMESTIC HOT WATER TEMPERATURE. RECIRC PUMP CP-4 SHALL OPERATE DURING OCCUPIED HOURS.

THE BOILER CONTROL SYSTEM SHALL CONTROL THE FIRING AND SEQUENCING OF THE BOILERS. THE CONTROLS SHALL MONITOR OUTSIDE AIR, HOT WATER SUPPLY AND HOT WATER RETURN TEMPERATURES. THE BOILER CONTROLS SHALL START/STOP THE INDIVIDUAL BOILER CIRCULATION PUMP.

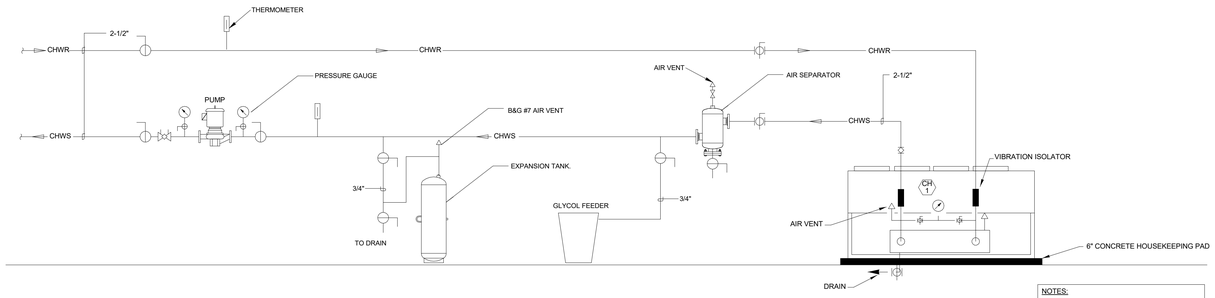


BOILER PIPING SCHEMATIC

SCALE: NTS

NOTES:

FINAL FILL OF SYSTEM SHALL BE WITH A SOLUTION OF 30% PROPYLENE GLYCOL.



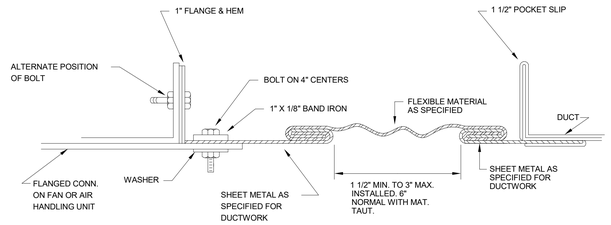
NOTES:

FINAL FILL OF SYSTEM SHALL BE WITH A SOLUTION OF 30% PROPYLENE GLYCOL.

SECURE CHILLER TO HOUSEKEEPING PAD AS RECOMMENDED BY THE MANUFACTURER.

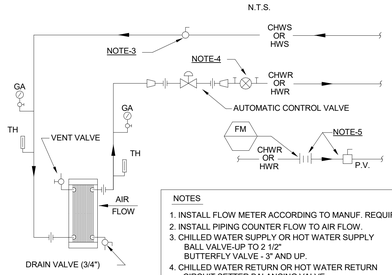
CHILLER PIPING SCHEMATIC

SCALE: NTS



RECTANGULAR FLEXIBLE CONNECTION DETAIL

N.T.S.



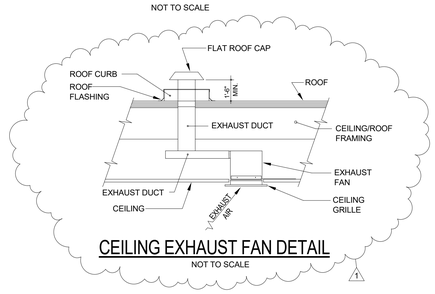
NOTES

1. INSTALL FLOW METER ACCORDING TO MANUF. REQUIREMENTS
2. INSTALL PIPING COUNTER FLOW TO AIR FLOW.
3. CHILLED WATER SUPPLY OR HOT WATER SUPPLY
   BALL VALVE-UP TO 2 1/2"
   BUTTERFLY VALVE - 3" AND UP.
4. CHILLED WATER RETURN OR HOT WATER RETURN
   CIRCUIT SETTER BALANCING VALVE
   WITH POSITIVE SHUT-OFF UP TO 2 1/2"
5. FLOW METER WITH PLUG VALVE - 3" TO 6"
   FLOW METER WITH BUTTERFLY VALVE - 8"AND UP.
6. THERMOMETERS TO BE INSTALLED IN ELBOWS ON PIPE 3" AND SMALLER.
7. GAUGE RANGE TO BE TWO TIMES NORMAL OPERATING PRESSURE
8. THERMOMETER RANGE TO BE TWO TIMES NORMAL OPERATING TEMPERATURE

PIPING ARRANGEMENT-
CHILLED/HOT WATER COIL-AHU MTD.

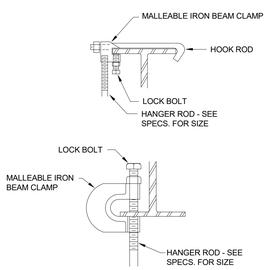
(2-WAY AUTOMATIC CONTROL VALVE)

NOT TO SCALE



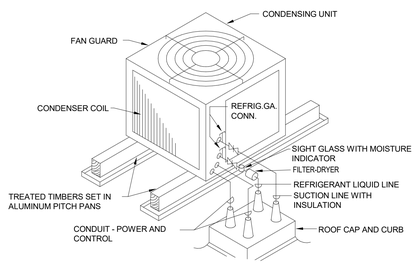
CEILING EXHAUST FAN DETAIL

NOT TO SCALE



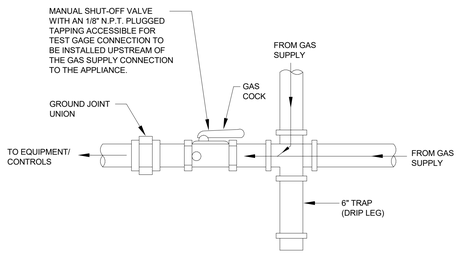
SIDE BEAM CLAMPS FOR EQUIPMENT OR PIPE SUPPORT

NTS



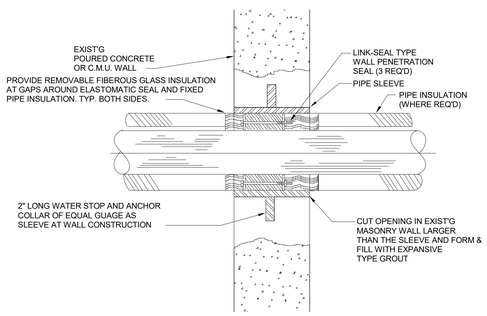
CONDENSING UNIT MOUNTED ON LOW SLOPE ROOF

N.T.S.



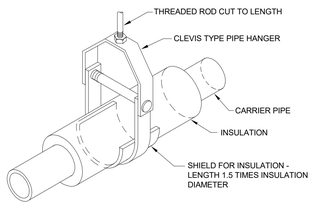
GAS CONNECTION TO EQUIPMENT DETAIL

NOT TO SCALE



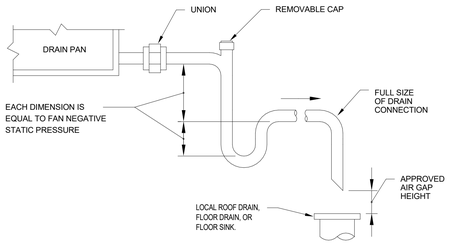
PIPE SLEEVE THROUGH WALL DETAIL

NOT TO SCALE



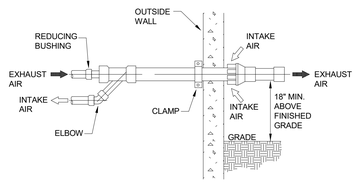
CLEVIS TYPE PIPE HANGER FOR INSULATED PIPE

NTS



CONDENSATE DRAIN DETAIL

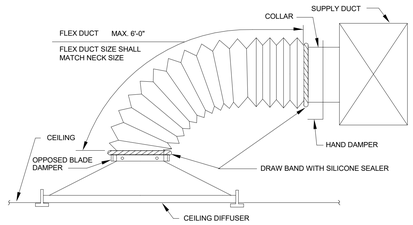
N.T.S.



CONCENTRIC WALL TERMINATION INSTALLATION DETAIL

(TYPICAL FOR HIGH EFFICIENCY GAS FURNACES)

N.T.S.



TYPICAL DIFFUSER CONNECTION

(SIDE OF DUCT CONNECTION)

NOT TO SCALE

Colorado Mountain College

PROJECT DESCRIPTION

Delta	Description	Date Issued
1	ADDENDUM #002	9/8/16

HUMPHRIES POLI ARCHITECTS

All reports, plans, specifications, computer files, field data, notes and other documents and instruments prepared by the Architect as instruments of service shall remain the property of the Architect. The Architect shall retain all common law, statutory and other reserved rights, including copyright thereto.

MECHANICAL DETAILS

BIDDING/PERMIT SET
8/01/2016

PROJECT No.	PROJECT ARCH	PROJECT MNGR	CHECKED BY
16-001	Approver	Designer	Checker

SHEET No.

M3-1

9/9/2016 10:00:12 AM