CHILLED WATER COIL PIPING DETAIL

(VARIABLE FLOW THROUGH COIL, FAIL TO FULL COOLING)

NOTES FOR DESIGNER:

1. SEE SHEET 9 FOR STACKED COIL PIPING & ADDITIONAL DESIGN NOTES.
2. INSTALL BALANCING VALVE WITH MINIMUM OF 3 STRAIGHT PIPE DIAMETERS UPSTREAM AND 1 STRAIGHT PIPE DIAMETER DOWNSTREAM.
3. PLUG VALVE, ADJUST TO EQUAL GPM THRU COIL AT DESIGN FLOW.
4. MANUAL AIR VENT, 3/8" BALL VALVE (TYP).
5. TEST PLUG (TYP).
6. STRAINER WITH BLOW-OFF VALVE.
7. 1/2" DRAIN VALVE.

KEYED NOTES:

1. INSTALL BALANCING VALVE WITH MINIMUM OF 3 STRAIGHT PIPE DIAMETERS UPSTREAM AND 1 STRAIGHT PIPE DIAMETER DOWNSTREAM.
2. PLUG VALVE, ADJUST TO EQUAL GPM THRU COIL AT DESIGN FLOW.
3. MANUAL AIR VENT, 3/8" BALL VALVE (TYP).
4. TEST PLUG (TYP).
5. STRAINER WITH BLOW-OFF VALVE.
6. 1/2" DRAIN VALVE.

DRAWING DEVELOPED FOR ML-3/ML-4 PROJECTS. FOR ML-1/ML-2, ADDITIONAL REQUIREMENTS AND QA REVIEWS ARE REQUIRED. (REMOVE THIS NOTE WHEN INSERTED INTO A DRAWING PACKAGE).

INSTALL SWING JOINTS AT COIL CONNECTIONS.
CONNECT BRANCH LINES FROM COIL INTO TOP OR SIDE OF SUPPLY AND RETURN MAINS. CONNECTING INTO BOTTOM OF MAIN IS NOT ACCEPTABLE.
INSTALL COIL SO AIR PASSES THROUGH FINS IN PROPER DIRECTION NOTED ON COIL.
INSTALL BALANCING VALVE WITH MINIMUM OF 3 STRAIGHT PIPE DIAMETERS UPSTREAM AND 1 STRAIGHT PIPE DIAMETER DOWNSTREAM.
PLUG VALVE, ADJUST TO EQUAL GPM THRU COIL AT DESIGN FLOW.
MANUAL AIR VENT, 3/8" BALL VALVE (TYP).
TEST PLUG (TYP).
INSTALL SWING JOINTS AT COIL CONNECTIONS.
INSTALL BALANCING VALVE WITH MINIMUM OF 3 STRAIGHT PIPE DIAMETERS UPSTREAM AND 1 STRAIGHT PIPE DIAMETER DOWNSTREAM.
PLUG VALVE, ADJUST TO EQUAL GPM THRU COIL AT DESIGN FLOW.
MANUAL AIR VENT, 3/8" BALL VALVE (TYP).
TEST PLUG (TYP).
INSTALL SWING JOINTS AT COIL CONNECTIONS.
INSTALL BALANCING VALVE WITH MINIMUM OF 3 STRAIGHT PIPE DIAMETERS UPSTREAM AND 1 STRAIGHT PIPE DIAMETER DOWNSTREAM.
PLUG VALVE, ADJUST TO EQUAL GPM THRU COIL AT DESIGN FLOW.
MANUAL AIR VENT, 3/8" BALL VALVE (TYP).
TEST PLUG (TYP).
INSTALL SWING JOINTS AT COIL CONNECTIONS.
INSTALL BALANCING VALVE WITH MINIMUM OF 3 STRAIGHT PIPE DIAMETERS UPSTREAM AND 1 STRAIGHT PIPE DIAMETER DOWNSTREAM.
PLUG VALVE, ADJUST TO EQUAL GPM THRU COIL AT DESIGN FLOW.
MANUAL AIR VENT, 3/8" BALL VALVE (TYP).
TEST PLUG (TYP).
INSTALL SWING JOINTS AT COIL CONNECTIONS.
INSTALL BALANCING VALVE WITH MINIMUM OF 3 STRAIGHT PIPE DIAMETERS UPSTREAM AND 1 STRAIGHT PIPE DIAMETER DOWNSTREAM.
PLUG VALVE, ADJUST TO EQUAL GPM THRU COIL AT DESIGN FLOW.
MANUAL AIR VENT, 3/8" BALL VALVE (TYP).
TEST PLUG (TYP).
INSTALL SWING JOINTS AT COIL CONNECTIONS.
INSTALL BALANCING VALVE WITH MINIMUM OF 3 STRAIGHT PIPE DIAMETERS UPSTREAM AND 1 STRAIGHT PIPE DIAMETER DOWNSTREAM.
PLUG VALVE, ADJUST TO EQUAL GPM THRU COIL AT DESIGN FLOW.
MANUAL AIR VENT, 3/8" BALL VALVE (TYP).
TEST PLUG (TYP).
INSTALL SWING JOINTS AT COIL CONNECTIONS.
INSTALL BALANCING VALVE WITH MINIMUM OF 3 STRAIGHT PIPE DIAMETERS UPSTREAM AND 1 STRAIGHT PIPE DIAMETER DOWNSTREAM.
PLUG VALVE, ADJUST TO EQUAL GPM THRU COIL AT DESIGN FLOW.
MANUAL AIR VENT, 3/8" BALL VALVE (TYP).
TEST PLUG (TYP).
INSTALL SWING JOINTS AT COIL CONNECTIONS.
INSTALL BALANCING VALVE WITH MINIMUM OF 3 STRAIGHT PIPE DIAMETERS UPSTREAM AND 1 STRAIGHT PIPE DIAMETER DOWNSTREAM.
PLUG VALVE, ADJUST TO EQUAL GPM THRU COIL AT DESIGN FLOW.
MANUAL AIR VENT, 3/8" BALL VALVE (TYP).
TEST PLUG (TYP).
INSTALL SWING JOINTS AT COIL CONNECTIONS.
INSTALL BALANCING VALVE WITH MINIMUM OF 3 STRAIGHT PIPE DIAMETERS UPSTREAM AND 1 STRAIGHT PIPE DIAMETER DOWNSTREAM.
PLUG VALVE, ADJUST TO EQUAL GPM THRU COIL AT DESIGN FLOW.
MANUAL AIR VENT, 3/8" BALL VALVE (TYP).
TEST PLUG (TYP).
INSTALL SWING JOINTS AT COIL CONNECTIONS.
INSTALL BALANCING VALVE WITH MINIMUM OF 3 STRAIGHT PIPE DIAMETERS UPSTREAM AND 1 STRAIGHT PIPE DIAMETER DOWNSTREAM.
PLUG VALVE, ADJUST TO EQUAL GPM THRU COIL AT DESIGN FLOW.
MANUAL AIR VENT, 3/8" BALL VALVE (TYP).
TEST PLUG (TYP).
INSTALL SWING JOINTS AT COIL CONNECTIONS.
INSTALL BALANCING VALVE WITH MINIMUM OF 3 STRAIGHT PIPE DIAMETERS UPSTREAM AND 1 STRAIGHT PIPE DIAMETER DOWNSTREAM.
PLUG VALVE, ADJUST TO EQUAL GPM THRU COIL AT DESIGN FLOW.
MANUAL AIR VENT, 3/8" BALL VALVE (TYP).
TEST PLUG (TYP).
INSTALL SWING JOINTS AT COIL CONNECTIONS.
INSTALL BALANCING VALVE WITH MINIMUM OF 3 STRAIGHT PIPE DIAMETERS UPSTREAM AND 1 STRAIGHT PIPE DIAMETER DOWNSTREAM.
PLUG VALVE, ADJUST TO EQUAL GPM THRU COIL AT DESIGN FLOW.
MANUAL AIR VENT, 3/8" BALL VALVE (TYP).
TEST PLUG (TYP).
INSTALL SWING JOINTS AT COIL CONNECTIONS.
INSTALL BALANCING VALVE WITH MINIMUM OF 3 STRAIGHT PIPE DIAMETERS UPSTREAM AND 1 STRAIGHT PIPE DIAMETER DOWNSTREAM.
PLUG VALVE, ADJUST TO EQUAL GPM THRU COIL AT DESIGN FLOW.
MANUAL AIR VENT, 3/8" BALL VALVE (TYP).
TEST PLUG (TYP).
INSTALL SWING JOINTS AT COIL CONNECTIONS.
INSTALL BALANCING VALVE WITH MINIMUM OF 3 STRAIGHT PIPE DIAMETERS UPSTREAM AND 1 STRAIGHT PIPE DIAMETER DOWNSTREAM.
PLUG VALVE, ADJUST TO EQUAL GPM THRU COIL AT DESIGN FLOW.
MANUAL AIR VENT, 3/8" BALL VALVE (TYP).
TEST PLUG (TYP).
INSTALL SWING JOINTS AT COIL CONNECTIONS.
INSTALL BALANCING VALVE WITH MINIMUM OF 3 STRAIGHT PIPE DIAMETERS UPSTREAM AND 1 STRAIGHT PIPE DIAMETER DOWNSTREAM.
PLUG VALVE, ADJUST TO EQUAL GPM THRU COIL AT DESIGN FLOW.
MANUAL AIR VENT, 3/8" BALL VALVE (TYP).
TEST PLUG (TYP).
INSTALL SWING JOINTS AT COIL CONNECTIONS.
INSTALL BALANCING VALVE WITH MINIMUM OF 3 STRAIGHT PIPE DIAMETERS UPSTREAM AND 1 STRAIGHT PIPE DIAMETER DOWNSTEE