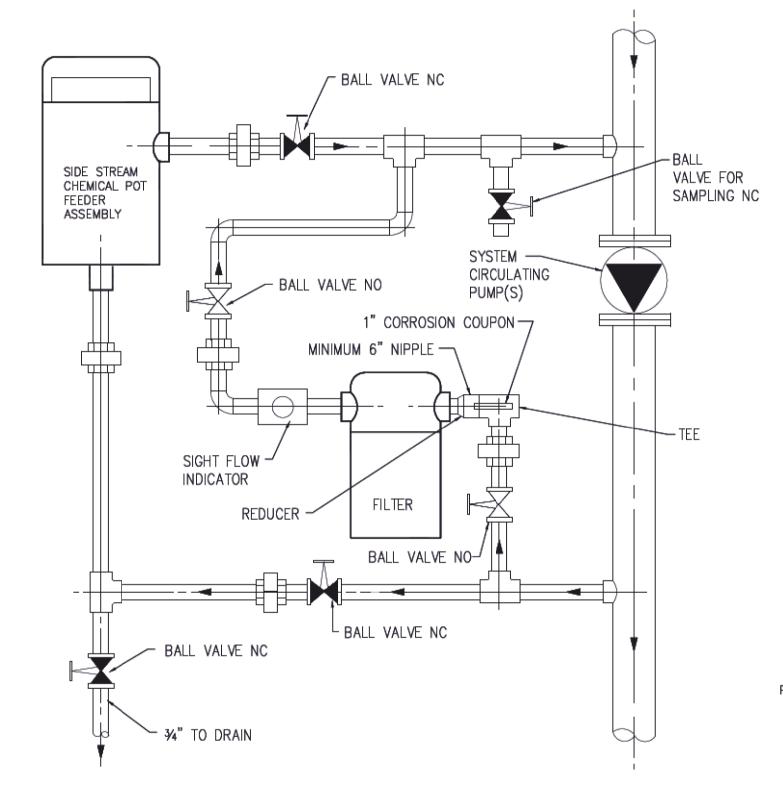
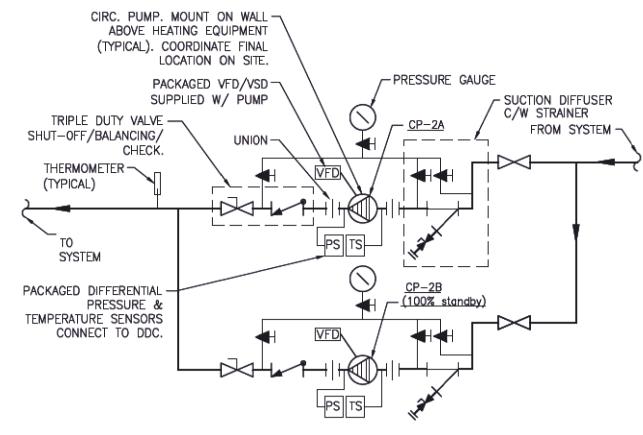
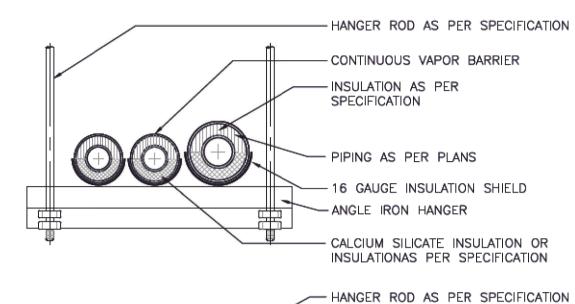


(CP-1A and CP-1B) DETAIL

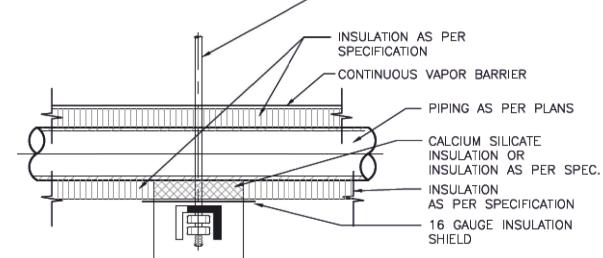




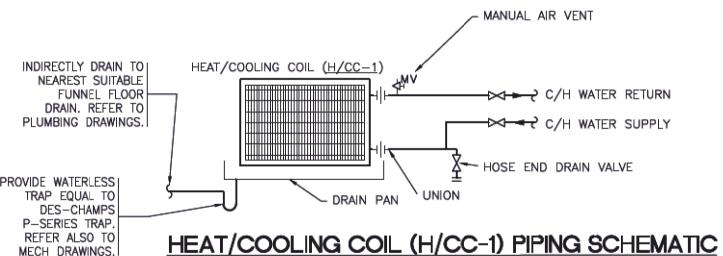
DUPLEX CIRCULATION PUMPS (CP-2A/2B and CP-3A/3B) DETAIL



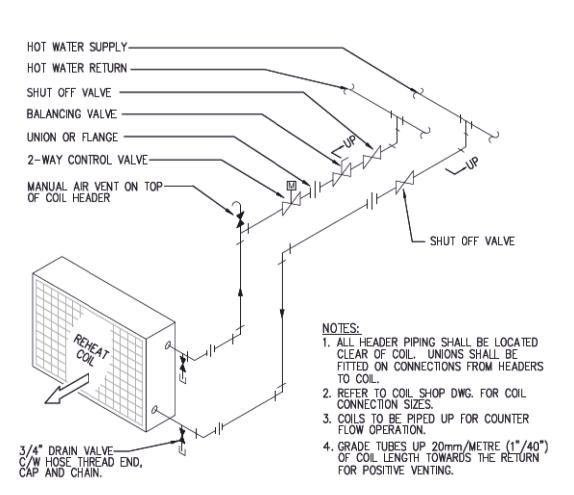
SCALE: N.T.S.



TRAPEZE HANGER DETAIL SCALE: N.T.S.

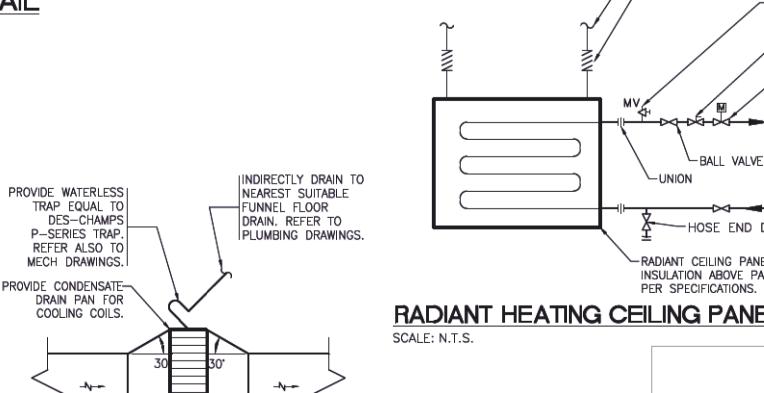


CHEMICAL POT FEEDER and FILTER DETAIL



SCALE: N.T.S.

DUCT MOUNTED HOT WATER RE-HEAT OR COOLING COIL AND 2-WAY CONTROL (TYPICAL)



BRASS UNION & BRASS

REFER TO DUCT MOUNTED

DETAIL FOR FURTHER INFO

RE-HEAT/COOLING COIL

NIPPLE MIN 6" LONG

MECH DRAWINGS.

ACCESS DOOR-

(RHC/CC-xx)

DUCT MOUNTED RE-HEAT OR

COOLING COIL (TYPICAL)

SCALE: N.T.S.

REHEAT/COOLING COIL-

-BALANCING VALVE -MOTORIZED CONTROL VALVE - HEATING RETURN BRANCH TO MAIN - HEATING SUPPLY BRANCH FROM MAIN -HOSE END DRAIN VALVE -RADIANT CEILING PANEL. PROVIDE INSULATION ABOVE PANEL AS RADIANT HEATING CEILING PANEL DETAIL

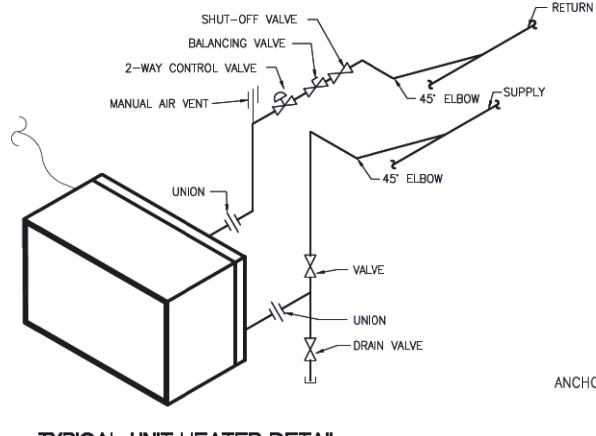
SUSPEND FROM STRUCTURE.

- VIBRATION ISOLATORS

MANUAL AIR VENT

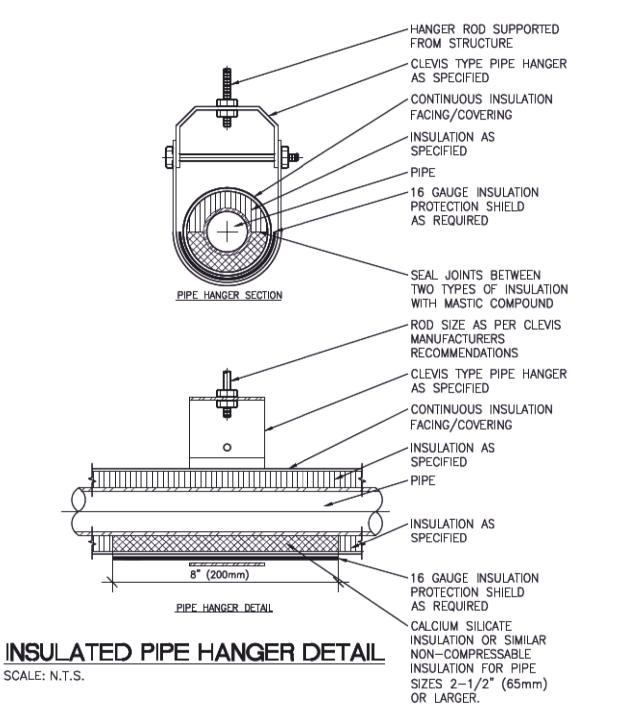
TOWER PROJECT NO.: 181335 TOWER ENGINEERING GROUP UNIT 1-1140 WAVERLEY ST. WINNIPEG, MB R3T 0P4 TEL: (204) 925-1150 FAX: (204) 925-1155 WINNIPEG

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TYPICAL UNIT HEATER DETAIL

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Issued For Construction

July 16, 2019

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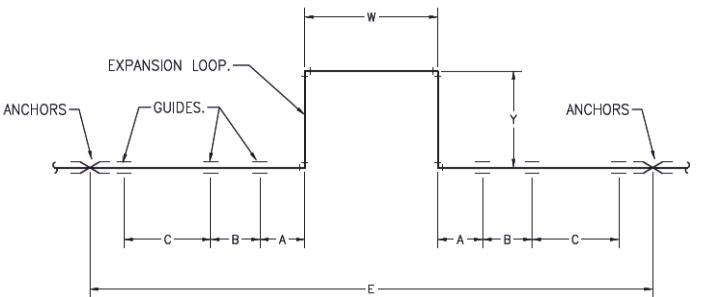
July 08, 2019

Printing Date:

Drawn By: JChimko

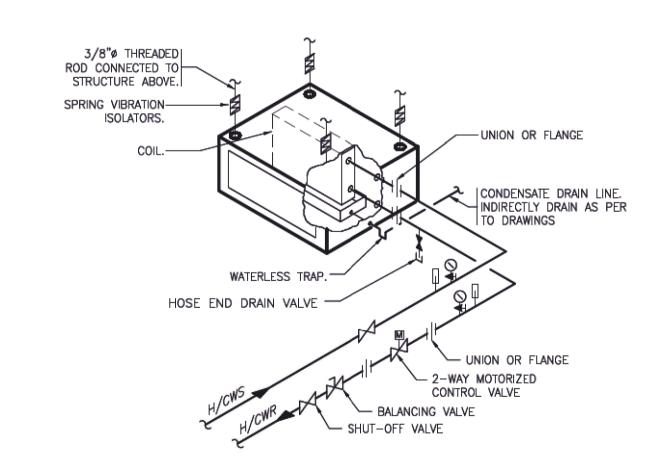
EXPANSION LOOP SIZE DATA:

- 1. USE THESE FORMULAS FOR TEMPERATURE DIFFERENCES NOT EXCEEDING 200°F. FOR OTHER CONDITIONS USE THE ASHRAE GUIDE DATA BOOK.
- 2. LENGTH OF PIPE IN LOOP. "L" (FEET) = 2y + w.
- FOR LENGTH "L" USE FOLLOWING FORMULAS:
- A: STEEL PIPE L = .796 \sqrt{DxE} B: COPPER PIPE L = .915 \sqrt{DxE}
- D = DIAMETER IN INCHES.
- 5. E = DISTANCE BETWEEN ANCHORS IN FEET.



ACTURAL DIA. INCHES	PIPE SIZE (IN.) NOMINAL	MAXIMUM DISTANCE		MAX. SPACING BETWEEN GUIDES
D		Α	В	С
1.3	1	0'-8"	2'	10'
1.7	1 1/4	0'-8"	2'	10'
1.9	1 1/2	0'-8"	3'	15'
2.4	2	0'-8"	3'	15'
2.9	2 1/2	0'-10"	4'	20'
3.5	3	1'-0"	4'	20'
4.5	4	1'-4"	5'	30'
6.6	6	2'-0"	10'	35'
8.6	8	2'-8"	10'	45'
10.8	10	3'-4"	12'	60'
12.8	12	4'-0"	12'	70'
14.0	14	4'-8"	12'	70'
16.0	16	5'-4"	15'	80'
18.0	18	6'-0"	15'	85'
20.0	20	6'-8"	20'	90'
20.0	24	8'-0"	20'	105'

PIPE LOOP AND GUIDE DETAIL



HORIZONTAL FANCOIL UNIT DETAIL

SCALE: N.T.S.

Bill and Helen Norrie Library

Project No.: 2017-082 Tender No.: 542-2019

Address: 15 Poseidon Bay, Winnipeg, MB.

MECHANICAL HYDRONIC

DETAILS & SCHEMATIC be made without the permission of the architects, and when made, must bear their

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CHIMKO