

Part 1 General**1.1 REFERENCES**

- .1 American Society of Mechanical Engineers (ASME).
 - .1 ASME B40.100-2013, Pressure Gauges and Gauge Attachments.
 - .2 ASME B40.200-2008, Thermometers, Direct Reading and Remote Reading.
- .2 Canadian General Standards Board (CGSB).
 - .1 CAN/CGSB-14.4-M88, Thermometers, Liquid-in-Glass, Self Indicating, Commercial/Industrial Type.
 - .2 CAN/CGSB-14.5-M88, Thermometers, Bimetallic, Self-Indicating, Commercial/Industrial Type.

1.2 SUBMITTALS

- .1 Submit shop drawings and product data in accordance with Section 01 00 10 – General Instructions.
- .2 Submit manufacturer's product data for following items:
 - .1 Thermometers.
 - .2 Pressure gauges.
 - .3 Stop cocks.
 - .4 Syphons.
 - .5 Wells.

1.3 WASTE MANAGEMENT AND DISPOSAL

- .1 Collect, separate and place in designated containers for reuse and recycling paper, plastic, polystyrene, corrugated cardboard and packaging in accordance with Waste Management Plan.
- .2 Fold up metal banding, flatten and place in designated area for recycling.
- .3 Place materials defined as hazardous or toxic waste in designated containers.
- .4 Ensure emptied containers are sealed, labelled and stored safely for disposal away from children.

Part 2 Products**2.1 GENERAL**

- .1 Design point to be at mid-point of scale or range.

2.2 DIRECT READING THERMOMETERS

- .1 Industrial, variable angle type, liquid filled, 125 mm scale length: to CAN/CGSB14.4.

2.3 THERMOMETER WELLS

- .1 Steel pipe: brass or stainless steel.

2.4 PRESSURE GAUGES

- .1 112 mm, dial type: to ASME B40.100, Grade 2A, stainless steel bourdon tube having 0.5% accuracy full scale unless otherwise specified.
- .2 Provide:
 - .1 Snubber for pulsating operation.
 - .2 Diaphragm assembly for corrosive service.
 - .3 Bronze stop cock.

Part 3 Execution**3.1 GENERAL**

- .1 Install so they can be easily read from floor or platform.
- .2 Install between equipment and first fitting or valve.

3.2 THERMOMETERS

- .1 Install in wells on piping. Provide heat conductive material inside well.
- .2 Install in locations as indicated and on inlet and outlet of:
 - .1 Heating and cooling coils.
 - .2 Water boilers.
 - .3 Chillers.
 - .4 DHW tanks.
- .3 Use extensions where thermometers are installed through insulation.

3.3 PRESSURE GAUGES

- .1 Install in following locations:
 - .1 Suction and discharge of pumps.
 - .2 Upstream and downstream of control valves.
 - .3 Inlet and outlet of coils.
 - .4 Inlet and outlet of chillers.
 - .5 In other locations as indicated on hydraulic diagrams.
- .2 Install gauge cocks for balancing purposes, elsewhere as indicated.
- .3 Use extensions where pressure gauges are installed through insulation.

END OF SECTION