## SECTION 22 05 19

## METERS AND GAUGES FOR PLUMBING PIPINGMETERS AND GAUGES FOR PLUMBING PIPING

This document is intended to note the Owners Design Requirements (ODR) for the titled specification section. Design professional to review and integrate ODR into the project's technical specifications. This ODR document should not be viewed as a standalone technical specification.

PART 1 - GENERAL REQUIREMENTS N/A

PART 2 - PRODUCTS AND MATERIALS

- Thermometers, general
  - Accuracy: Plus or minus 1 percent of range span or plus or minus one scale division to maximum of 1.5 percent of range span.
  - Scale range: Temperature ranges for services listed as follows:
    - Domestic Hot Water: 30 to 240 deg with 2-degree scale divisions.
    - Domestic Cold Water: 0 to 100 deg F with 2-degree scale divisions.
  - Case: Cast aluminum or stainless steel case, glass lens, 4-1/2-inches diameter.
- Pressure gauges
  - Scale Range: 0 100 psi
  - Case: Cast aluminum or stainless steel case, glass lens, 4-1/2-inches diameter.

## PART 3 - EXECUTION

- Thermometers installation
  - Install in the following locations and elsewhere as indicated:
    - At inlet and outlet of each domestic water heater.
  - Thermometer Wells: Install in piping tee where thermometers are indicated, in vertical position. Fill well with oil or graphite and secure cap.
  - Install shut-off valves before and after thermometers.
- Test plug installation
  - Install test plugs in piping tees where indicated, located on pipe at most readable position.
- Installation of pressure gauges
  - Install in the following locations, and elsewhere as indicated:
    - Provide liquid-filled gauge at suction and discharge of each pump.
    - At discharge of each pressure-reducing valve.
    - At building water service entrance.
- Adjusting and cleaning
  - Calibrate meters according to manufacturer's written instructions, after installation.
  - Adjusting: Adjust faces of meters and gages to proper angle for best visibility.
  - Cleaning: Clean windows of meters and gages and factory-finished surfaces. Replace cracked and broken windows and repair scratched and marred surfaces with manufacturer's touchup paint.

END OF SECTION 22 05 19