

- c. Valves with electronic instruments shall be stored indoors. Valves without electronic instruments may be stored outside on platforms or blocks at least 150mm above grade and covered with tarpaulins to protect them from the weather. Valves shall be stroked (operated) periodically in accordance with manufacturer's instructions.
- d. Ends of cable and air connections shall be completely sealed to prevent entry of moisture.
- e. All batteries shall be stored indoors in a dry environment. Batteries shall be visually inspected for cracks when they are received at the site. Batteries with crack damage shall not be installed. Batteries shall be covered or protected by other means to prevent accidental short circuits across terminals.
- f. All electronic instruments and panels containing electronic instruments shall be stored in an enclosed and environmentally controlled location.
- g. Protective finishes that have sustained damage during storage or installation shall be properly repaired. The material used and method of application shall be compatible with the original equipment manufacturer's finish.

5.3 Installation Instructions

Each instrument equipment shall be provided with a three-ply phenolic nameplate (white/black/white) showing its identity and service. This nameplate shall be supplied and mounted by the CONTRACTOR unless otherwise supplied.

Any proposal to deviate from the recommended installation methods, or from the project engineering documents and drawings shall be submitted to ADWEA/ENGINEER for approval. The approved documentation and procedures of the project shall be used, as reference, to authorize all such changes.

The CONTRACTOR shall verify the exact locations for cable trays, panels, boxes, fixtures, pipes, branches, fittings, supports, etc., and shall be responsible to avoid interferences with each other and also with existing equipments/piping.

The CONTRACTOR shall install any and all supplementary supports, brackets, hangers, etc., (in addition to those shown on the contract drawings) as required to complete the installation.

Supports, brackets, hangers, etc., for equipment and materials shall be installed so as not to weaken the structure to which they are to be attached.

Fastening hardware (bolts, nuts, screws, washers) shall be stainless steel. Supports for instrument pipe, conduit and equipment shall be hot-dipped galvanised steel.

Conduits, fittings and angle shall have all burrs and foreign materials removed before installation.

All unused conduit entries in fittings, junction boxes and equipment shall be plugged using manufactured threaded plugs or caps.

	Client	ADWEA				
	Project:	STANDARD SPECIFICATIONS FOR WATER WORKS				
	Title:	SPECIFICATION FOR INSTRUMENTATION & CONTROL SYSTEMS INSTALLATIONS				
tender:	project:	document: W-I-SS-008	rev: 0	sheet: 10	of: 32	