6.2.2 Overhead Cable Tray and Ladder Racking

Ladder/tray bends shall conform and comply with the minimum bending radius recommended by the cable manufacturer.

Proprietary earth bonding straps shall be installed at all joints of ladder rack/cable tray systems.

The tray shall be of adequate width, perforated with turned edges for extra strength.

Site fabrication bends may be used, for nonstandard bends, the support fixing shall be either side of the bend or in the centre. The bend shall conform and comply with the minimum bending radius recommended by the cable tray manufacturer.

Tray shall be supported at not more than 1m distances unless supported by a mild steel angle section racking. Supports shall be welded to steelwork, prior to painting. No Instrument/ Tray supports shall be welded to vessels or pipework.

Tray shall be fixed with Galvanised nuts, bolts etc.

Individual cable runs near to terminal point e.g. an instrument, may be run in MS angle section only, No conduit shall be used.

All support steelwork shall be painted prior to cables being installed. Painting shall be as per ADWEA Specifications.

All cable trays shall be located to avoid obstructions.

With the exception of pre-wired package units; routing and fixing of all trays, angles, shall be determined on-site by the CONTRACTOR, subject to approval by ADWEA.

6.2.3 Cable Fixing

Cables shall be fixed by performed saddles or by PVC covered stainless steel strapping. Strapping shall not support more than 12 single pair cables, or 5 multipair cables depending on their overall size.

Cable fixing shall not be more than 250mm apart on vertical run tray and 500mm on horizontal run cable tray/ladder.

6.2.4 Cable Transits

Where cables enter buildings which require positive sealing against fire, positive pressures, moisture or gas ingress, then a cable sealing system of approved multicable transits shall be used.

Cables shall be tagged/numbered at both sides of the sealing system.

		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: 17	of: 32