1. General Information

1.1 Data sheets

.1 Submit the data sheets required in accordance with the section 01 33 00 - Documents and samples to be submitted.

1.2 The use of aluminium wire is prohibited at all times, unless otherwise indicated in the plans.

2. Products

2.1 Building wiring

.1 All building wiring will be under conduit.

.2 Conductors: strands if 10 AWG or larger; minimum size: 12 AWG.

.3 Copper conductors of the specified size, cross-linked polyethylene cable insulation, for voltage 600V (up to 240V) and 1000V (up to 600V) and type RW90 XLPE - RWU90 XLPE if underground or external.

.4 Copper conductors: of the specified size, under thermoplastic insulation type TWU, for nominal voltage of 600 V for command circuits.

.5 Each feeder, branch, conduit or wiring device must be connected via an approved gauge green wire.

2.2 Armoured cables

.1 Conductors: insulated, copper, of the indicated size.

.2 Type TECK90 cables.

.3 Metal armour: galvanized steel strip.

.4 Connectors: anti-short circuit connectors.

2.3 Fire alarm system cables

.1 See section 28 31 00.

.1 Securex 2#16AWG CU for circuit detection.

.2 #14AWG CU for signalling circuit.

3. Execution

3.1 On-site quality control

.1 Run the tests using the appropriate methods for local conditions and approved by the Engineer.

.2 Perform the tests before switching on the electrical installation.

3.2 Cable installation - General

.1 Lay cables in trenches in accordance with Section 33 71 73.02 - Power Distribution - Underground Connections.

.2 Make the cable terminations according to section - 0-1000 V connectors for cables and boxes.

.3 Use the cable colour code in accordance with Section 26 05 00 - Electrical - General Requirements for Work Results.

.4 The parallel feeder cables must be the same length.

.5 Attach or clip power feeder cables to distribution centers, pull boxes, and terminations.

.6 Route the cabling in the walls downwards or in vertical loops to facilitate future work. Unless otherwise specified, avoid routing wiring from bottom to top, in addition to horizontally in walls.

.7 Only use two-wire circuits for leads to outlets with surge suppression, as well for permanently connected electronic and computer equipment. Common neutral circuits are forbidden.

.8 Control wiring must be identified by collars with numbers corresponding to the shop drawing legend.

.9 The use of AC90 cable is allowed for the connection of sockets, switches, in addition to and heating and lighting devices. The main branches from the panels must be inside conduits hidden in the ceiling.

.10 Hide and attach cables as much as possible. Visible wiring must be under conduit.

3.3 Armoured cable installation

.1 Group the cables on U-shaped supports as much as possible.

END OF SECTION