

PART 1 - GENERAL

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| <u>1.1 DELIVERY,
STORAGE AND
HANDLING</u> | .1 | Packaging Waste Management: remove for reuse or return of pallets, crates, padding, banding, and packaging materials as specified in Construction Waste Management Plan in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal and Section 01 35 21 - LEED Requirements. |
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PART 2 - PRODUCTS

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| <u>2.1 BUILDING WIRES</u> | .1 | Conductors: stranded for 8 AWG and larger. Minimum size: 12 AWG. All conductors to be 100% copper. |
| | .2 | Copper conductors: size as indicated, with 600 V insulation of cross-linked thermosetting polyethylene material rated RW90 XLPE and RWU90 XLPE. |
| <u>2.2 TECK 90 CABLE</u> | .1 | Cable: in accordance with Section 26 05 00 - Common Work Results for Electrical. |
| | .2 | Conductors:
.1 Grounding conductor: copper.
.2 Circuit conductors: copper, size as indicated. |
| | .3 | Insulation:
.1 Cross-linked polyethylene XLPE.
.2 Rating: 600 V. |
| | .4 | Inner jacket: polyvinyl chloride material. |
| | .5 | Armour: interlocking aluminum. |
| | .6 | Overall covering: thermoplastic polyvinyl chloride, |
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- 2.2 TECK 90 CABLE (Cont'd) .7 Fastenings:
- .1 One hole aluminum straps to secure surface cables 53 mm and smaller. Two hole steel straps for cables larger than 53 mm.
 - .2 Channel type supports for two or more cables at 1200 mm centers.
 - .3 Threaded rods: 6 mm diameter to support suspended channels.
- .8 Connectors:
- .1 Watertight, approved for TECK cable.
- 2.3 ARMOURED CABLES .1 Conductors: insulated, copper, size as indicated.
- .2 Type: AC90.
 - .3 Armour: interlocking type fabricated from galvanized steel strip.
 - .4 Connectors: anti short connectors.
- 2.4 CONTROL CABLES .1 Type: LVT: 2 soft annealed copper conductors, sized as indicated:
- .1 Insulation: thermoplastic.
 - .2 Sheath : thermoplastic jacket.
- .2 Type: low energy 300 V control cable: stranded annealed copper conductors sized as indicated LVT.
- .1 Insulation: PVC TW 40 degrees C TWH.
 - .2 Shielding: tape coated with paramagnetic material over conductors.
 - .3 Overall covering: PVC jackets.
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PART 3 - EXECUTION

- 3.1 FIELD QUALITY CONTROL
- .1 Perform tests in accordance with Section 26 05 00 - Common Work Results for Electrical.
 - .2 Perform tests using method appropriate to site conditions and to approval of Departmental Representative and local authority having jurisdiction over installation.
 - .3 Perform tests before energizing electrical system.
- 3.2 GENERAL CABLE INSTALLATION
- .1 Cable Colour Coding: to Section 26 05 00 - Common Work Results for Electrical.
 - .2 Wiring in walls: typically drop or loop vertically from above to better facilitate future renovations. Generally wiring from below and horizontal wiring in walls to be avoided unless indicated.
 - .3 Provide numbered wire collars for control wiring. Numbers to correspond to control shop drawing legend. Obtain wiring diagram for control wiring.
- 3.3 INSTALLATION OF BUILDING WIRES
- .1 Install wiring as follows:
 - .1 In conduit systems in accordance with Section 26 05 34 - Conduits, Conduit Fastenings and Conduit Fittings.
- 3.4 INSTALLATION OF TECK90 CABLE (0 -1000 V)
- .1 Group cables wherever possible on channels.
 - .2 Install cable exposed, securely supported by straps.
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3.5 INSTALLATION OF .1 Group cables wherever possible on channels.
ARMoured CABLES

3.6 INSTALLATION OF .1 Install control cables in conduit.
CONTROL CABLES .2 Ground control cable shield.