

SECTION 16055 – PANELBOARDS

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General Conditions, any Supplemental Conditions and Division 1 specification sections, govern the work of this section.

1.2 QUALITY ASSURANCE

- A. Equipment shall be listed by Underwriters Laboratories, Inc. or equivalent listing agency.

PART 2 – PRODUCTS

2.1 PANELBOARDS

- A. Panelboards shall be a complete and wired assembly of circuit breakers and bus bars in a code gauge cabinet. The complete assembly shall bear a UL label. The panelboard shall meet all New York City requirements.
- B. Cabinets shall be constructed of code gauge, sheet steel, with a hinged door, a catch and a lock, conforming to NEMA 1 requirements for interior installations, surface or recessed mounted as indicated on the drawings.
 - 1. Cabinet shall be thoroughly cleaned and degreased before painting, then given a prime coat of zinc chromate paint and two finish coats of gray enamel paint conforming to ANSI Z55.1.
 - 2. The hinges shall be continuous piano hinges.
 - 3. Provide lock for panelboard cabinet. Lock shall be of approved cylinder, paracentric type, Yale No. 511S, Key change No. 47. Two keys shall be supplied with each lock
 - 4. Provide an engraved phenolic nameplate on the front cover. The nameplate shall be ¼-inch white lettering on a black background. Nameplates shall be secured with stainless steel screws or rivets.
- C. Main bus bar shall be high conductivity copper rated at 1000 A/sq. in. Provide a full neutral and equipment grounding bus in every panel unless otherwise noted on the drawings.

- D. Circuit breakers shall be thermal magnetic, molded case, bolt-on type, and shall each be readily removable without disturbing adjacent circuit breakers.
 - 1. The minimum interrupting rating of 120/208 volt circuit breakers shall be 10,000 A.I.C.
 - 2. Multi-pole circuit breakers shall have a common handle to trip all phases simultaneously.
- E. Where main circuit breakers are indicated on the Drawings, panelboards shall be designed so they are fully rated. Series rated panelboards will not be accepted.
- F. Provide sufficient gutter space to conform with all applicable codes.
- G. Provide a type-written directory, mounted in a metal frame with a clear plastic cover, to identify the load served by each circuit. The directory shall be type-written on heavy cardboard to state the load served. Directory frames shall be not less than 8" x 8".
- H. Panelboards shall be Square-D type NQOD with type QOB circuit breakers, or equal by GE, Cutler Hammer or Siemens.
- I. All panelboards shall be keyed alike for use with Yale # 47 key. Furnish two keys for each panel.

PART 3 – EXECUTION

3.1 GENERAL

- A. All equipment and materials shall be installed in strict accordance with manufacturer's written installation requirements.
- B. Install equipment and materials according to approved submittal data.
- C. Install equipment and materials level and plumb, parallel and perpendicular to other building systems and components, unless otherwise indicated.
- D. Install equipment and materials to facilitate service, maintenance, and repair or replacement of components. Connect equipment for ease of disconnecting, with minimum interference to other installations.

3.2 PANELBOARD INSTALLATION

- A. Install all panelboards true and plumb using supports as required by building conditions and NEC.

- B. In general, the top of panelboard cabinets shall be 6 feet, 6 inches above the floor. Under no circumstance shall any over-current protective device be installed greater than 6 feet, 6 inches above the floor.
- C. Cables shall be neatly racked and bundled with non-flammable nylon ties, routed and supported within the cabinets or gutters.
- D. Circuits shall be connected to alternate phases to evenly distribute loads among all three phases.
- E. Provide typewritten directories in all panels.
- F. Furnish keys for panelboards and leave at each panel.

END OF SECTION 16055