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