

## **DIVISION 16 - ELECTRICAL**

### **Section 16485 - Lighting Controls and Contactors**

#### **Introduction**

The goal is to provide a standard Lighting Control system with ease of installation and maintenance. The removal of line voltage at the user level is also a safety consideration. The system should be able to continue to operate in the event that the control panel has a failure without impacting the operation of the building users. In addition, the controls shall be networked to allow for offsite access and control without the use of proprietary software and hardware. The system shall also interface with the building automating system (BMS) and be Backnet protocol compatible.

#### **Part 1 - General**

- Basis of design shall be the Wattstopper DLM series Controls. Designers shall provide submittals for approval for other systems.
- Manufactures Commissioning Agent shall provide access usernames and passwords to access the program and shall provide a back-up media for restoring the control programming to its original state in the event of complete loss of the programming.

#### **Part 2 - Products**

- All controller shall have manual override switches.
- Control Architecture shall be a "Buttom Up" type where the individual rooms shall be autonomously controlled and report status back to the controller.
- All relays, contactors and control power backs shall be rated for the overcurrent device protecting the circuit and the load that is being controlled.
- All controls shall be compatible with the lighting ballasts, drivers etc. that are being controlled and shall be coordinated during design.
- All lighting controllers shall be compatible with the Building Management Systems and shall communicate with the network without external translators.
- No system shall be designed that requires proprietary software or offsite Tech support for any reprogramming or systems diagnosis.

#### **Part 3 - Execution**

- Lighting control design shall be kept as simple as possible such that a failure of a component does not disable the entire system.

#### **End of Section 16485**