
DMS - 11083
ELECTRICAL SERVICES — TYPE D

EFFECTIVE DATE: JANUARY 2012

11083.1. Description. This specification governs the materials, composition, and quality of Type D electrical services. Comply with the requirements of DMS-11080 in addition to the following requirements.

11083.2. Units of Measurements. The values given in parentheses (if provided) are not standard and may not be exact mathematical conversions. Use each system of units separately. Combining values from the two systems may result in nonconformance with the standard.

11083.3. Material Producer List. The Traffic Operations Division (TRF) maintains the Material Producer List (MPL) of all materials conforming to the requirements of this specification. Electrical services appearing on the MPL, entitled "[Roadway Illumination and Electrical Supplies](#)," need no further sampling or testing unless deemed necessary by the Project Engineer or TRF.

11083.4. Bidders' and Suppliers' Requirements. The Department will purchase or allow on projects only those products listed by manufacturer and product code on the MPL. Use of pre-qualified product does not relieve the contractor of the responsibility to provide products that meet this specification. The Department may inspect or test material at any time and reject any material that does not meet the specifications.

Notify the Department in writing of selected electrical services from the MPL intended for use on each project.

11083.5. Pre-Qualification Procedure. Comply with the pre-qualification requirements of DMS-11080. Pedestal service enclosures must also comply with the requirements of DMS-11085.

11083.6. Material Requirements. Type D electrical services will be 120/240 V three wire systems only. Do not construct 240/480 V Type D electrical service enclosures.

Construct custom-built Type D electrical services as schematically detailed on current Electrical Detail (ED) standards. Provide a single aluminum (AL) or stainless steel (SS) enclosure for Type D electrical service assemblies as required by the electrical service data chart.

Provide a lockable stainless steel door latch handle. Do not provide a remote operating handle. Enclosures, except for PS enclosures, will not exceed 36 in. in height or 16 in. in width unless approved by the Engineer.

Provide UL listed circuit breaker load centers:

- With copper busses,
- With a minimum of six one-pole spaces or as required in the electrical service data chart on plan sheets,
- Suitable for use as service equipment, and
- With full size plug-in type branch circuit breakers designed exclusively for the load center in use.
- Do not use a load center exterior “can” mounted inside another enclosure to meet this requirement.

Provide a thermal-magnetic main circuit breaker.

Provide power distribution blocks rated for 600 V from load side connections of the lighting contactors where more than one circuit breaker is required. Provide properly sized lugs on blocks to accommodate a minimum of four electrical conductors per phase. Place only one electrical conductor under each lug.

11083.7. For Type D electrical services without an enclosure mounted photocell or lighting contactor, an “off-the-shelf” galvanized steel enclosure may be used. Ensure the enclosure is constructed of pre-galvanized steel sheeting, hot-dipped galvanized steel, or powder-coated painted steel. Paint enclosures gray or as directed by the Department. Provide a main circuit breaker, dead front trim, and padlockable outer door.

11083.8. Archived Versions. Refer to the archived version of DMS-11080 effective August 2004–December 2011.