

Evaluation Table

736 Highway and Sign Lighting

736 Load Center Cabinet

ADOT Standard Specification: 736-2.07

ADOT Standard Drawing: T.S. 3-0 through 3-3, 3-5, 3-10

Responsible Section: Traffic Group

Product Property	Specification/ Test Method	Requirement
Load Center Cabinets, Details	736-2.07 T.S. 3-0	Load Center cabinets, including pole mounted cabinets shall have photoelectric controls and shall also include a concrete foundation, conduit stub-outs, meter socket, rigid metal conduit riser, cabinet housing, panel, breakers, contactor, selection switch, fuses, dry transformer, internal wiring and other incidentals in accordance with the project plans and these specifications. Shall be a free standing and self-supporting NEMA Standard 250 "Enclosure for Electrical / Equipment (1,000 Volt Maximum)" or UL50 "Enclosures for Electrical Equipment" NEMA 3, 3R, or 4 rated load center cabinet Type II or IV.
Weather Resistance, Listed Housing	736-2.07 T.S. 3-0	The load center cabinet housing shall be of NEMA 3R weather resistant construction and UL 508 listed. Shall be a free standing and self-supporting NEMA Standard 250 "Enclosure for Electrical / Equipment (1,000 Volt Maximum)" or UL50 "Enclosures for Electrical Equipment" NEMA 3, 3R, or 4 rated load center cabinet Type II or IV.
Fabrication	736-2.07 T.S. 3-0	The cabinet and doors shall be made from 1/8 inch thick, 5052-H32 aluminum with mill finish. The cabinet and doors shall be made of 5052-H32 sheet aluminum alloy, thickness 0.125 inch. The inside and outside edges of cabinet shall be free of burrs and provide a smooth, uniform, and natural aluminum finish.
Cabinet Details	736-2.07	The cabinet top shall be sloped to prevent water accumulation; and shall be constructed to allow proper ventilation and be equipped with a washable or replaceable air filter.
Door Details	736-2.07	Doors shall be attached using continuous hinges, equipped Corbin locks, and keyed #2 with two keys.

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Door Details	736-2.07	Doors shall also be equipped with two position door stops, three-point door latch with rollers for top and bottom strikes and pad-lockable handles.
	T.S. 3-0	See T.S. 3-9 (1 of 3) Note 11 for minimum 2-position door stop details
Circuit Breakers	736-2.07	Circuit breakers shall be molded case, thermal magnetic, bolt-on or plug-in type and shall be U.L. listed.
	T.S. 3-0	Bolt-On circuit breakers shall be used.
Dead Front Panel	736-2.07	Load center cabinets shall have a dead front panel to isolate all live electrical circuitry.
Dead Front Panel Fabrication	736-2.07	The panel shall be fabricated from aluminum sheeting and shall be painted the same as the cabinet.
Dead Front Panel Hinges	736-2.07	The dead front panels shall be hinged on one side and securely fastened on the other with bolts.
Dead Front Panel Openings	736-2.07	Switches, breakers and other components shall have openings to operate from the front panel.
Door Flange	T.S. 3-0	The cabinet door openings shall be double flanged on all 4 sides to increase strength around the openings and to prevent any liquid or dirt from entering the enclosure when the door is opened.
Door Gasketing	T.S. 3-0	Gasketing shall be provided on all door panels to provide a weather tight seal that conforms to the applicable requirements of UL 508 Table 21.2, or equivalent lab test method.
Hinge Hardware	T.S. 3-0	300 series stainless steel ¼-20 carriage bolts and 300 series stainless steel locknuts shall be used to bolt hinges to the cabinet and door.
Hinges	T.S. 3-0	The hinges shall be made of 075-14 guages 300 series stainless steel. The hinge pins are to be welded at the top and bottom to render them tamper-proof.
Bolt Holes	T.S. 3-0	Bolt holes shall be gasketed in manner which meet or exceed the requirement of the cabinets NEMA and UL or other independent lab rating.
Type II Cabinet	T.S. 3-1	Meet the requirements of T.S. 3-1
Type IV Cabinet	T.S. 3-2	Meet the requirements of T.S. 3-2
Meter Pedestal Cabinet	T.S. 3-5 (1 of 2) T.S. 3-5 (2 of 2)	Meet the requirements of T.S. 3-5 (1 of 2) and T.S. 3-5 (2 of 2)

Product Property	Specification/ Test Method	Requirement
Type II Cabinet Extension	T.S. 3-10	Shall meet the requirements of T.S. 3-10