

8.5 Junction Box Requirements

A junction box is equipment designated/approved by the Company where the Customer's service terminals are joined to the Company's cables.

Junction boxes are not normally required or accepted for 120/208/240volt self-contained single meter installations or residential services unless a main disconnect is required ahead of the meter.

When the Customer provides, owns, installs & maintains the secondary wire to the Company's transformer, a Junction box is not required. Consult the Company for the requirements in your area.

A Customer Supplied Company approved Junction box is required when Company owned Underground conductors feed the Underground Service and:

- A main disconnect is required (e.g. 480 volt service, etc.);
- multiple services are joined together; or
- transformer rated services exist;

Consult the Company.

The Customer supplied junction box shall:

- Have a rain-tight (NEMA 3R) weather proof front cover that is hinged to the side(s)
- Have a locking mechanism to secure it suitable for a Company padlock
- Be UL listed or a UL listed Company approved alternative

Junction boxes used for various situations are shown in Drawings D9-7, D9-9, and D9-10.

The customer shall supply UL listed connectors inside, which will be the point of common coupling between Company and Customer. These connectors shall be sized no less than 125% of continuous load, plus 100% of the non-continuous load. Connectors shall be suitable for both copper and aluminum. Insulated multi connector block or buss bar type shall be used. Buss bar or bare multi connector block(s) type shall be fastened properly to the back of junction box. Insulated multi connector block(s) shall not be fastened.

A durable marking for color or word coding shall be installed. The neutral conductor shall have a white marking or a suitable identifying mark. The next section of the terminals shall have color suitable for applicable voltage. Plastic anchors are not allowed.

The customer supplied connector should be located in the center of the junction box four feet from grade or lower (normally should be low enough that the lineman can work on without a ladder).

Without prior Company approval, a junction box may only serve one meter, one main, or one weatherproof wire way.

Table 8.5: Guideline for Junction Box Use with Multiple Circuits

Total Customer Conduits (4" min)	Maximum Customer Conductor Size	Minimum Dimensions		
		Depth	Width	Height
1	600 kcmil	12"	24"	24"
2-4	600 kcmil	12"	36"	36"
5-6	500 kcmil	12"	48"	48"

Company conductors shall enter from the bottom

For larger sizes consult the Company.