

# CLASS I LOCATIONS: Conduit Sealing Requirements

NEC 2023, 501.15

This table is a summary of the conduit sealing requirements in Article 501, Class I Locations, of the *National Electrical Code*, 2023 edition. For the complete requirements, refer to section 501.15.

Classification	Application	Location of Seal
<b>Class I, Division 1</b>	Switch enclosure Circuit breaker enclosure Fuse enclosure Relay enclosure Resistor enclosure Arcing or sparking apparatus High-temperature apparatus	In conduit run within 18 in. of enclosure.
	Explosionproof enclosure containing arcing or sparking contacts that are hermetically sealed against gas or vapor entry Explosionproof enclosure containing arcing or sparking contacts that are immersed in oil, in accordance with 501.115(B)(1)(2)	In conduit runs smaller than trade size 2, no seal is required. If conduit is trade size 2 or larger, in conduit run within 18 in. of enclosure.
	Enclosure containing terminals, splices, or taps; fitting containing terminals, splices, or taps	In conduit runs smaller than trade size 2, no seal is required. If conduit is trade size 2 or larger, in conduit run within 18 in. of enclosure.
	Two explosionproof enclosures with a conduit run between them of 36 in. or less	In conduit run within 18 in. of each enclosure. Permitted to use a single seal in each run as long as the seal is within 18 in. of each enclosure.
	Two explosionproof enclosures with a conduit run between them greater than 36 in.	In conduit run within 18 in. of each enclosure.
	Conduit run leaving Division 1 location	Within 10 ft of either side of boundary. No unions, couplings, boxes, or fittings (other than explosionproof reducers) permitted between the seal fitting and the point where the conduit leaves the Division 1 location.
	Metal conduit containing no unions, couplings, boxes, or fittings that passes completely through a Class I, Division 1 location, with no fittings less than 12 in. beyond each boundary	Not required to be sealed if the termination points of the unbroken conduit are in unclassified locations.
	<b>Class I, Division 2</b>	Enclosure required to be explosionproof
Conduit run leaving Division 2 location		Within 10 ft of either side of boundary. No unions, couplings, boxes, or fittings (other than explosionproof reducers) permitted between the seal fitting and the point where the conduit leaves the Division 2 location. Not required to be explosionproof seal.
Metal conduit containing no unions, couplings, boxes, or fittings that passes completely through a Division 2 location with no fittings less than 12 in. beyond each boundary		Not required to be sealed if the termination points of the unbroken conduit are in unclassified locations.
Conduit systems terminating at an unclassified location where a wiring method transition is made to cable tray, cablebus, ventilated busway, Type MI cable, or open wiring		Not required to be sealed if passing from the Class I, Division 2 location into an outdoor unclassified location or an indoor location if the conduit system is all in one room. The conduits do not terminate at an enclosure containing an ignition source in normal operation.
Conduit leaving a purged enclosure or room that is unclassified due to pressurization and entering a Division 2 location		Not required to be sealed at the boundary.