

## Specifications for OCAL-BLUE PVC Coated Galvanized Conduit and Fittings

1. All conduit prior to coating shall conform to: CSA C22.2 No. 45.1 Federal Specification WW-C-581E, ANSI specification C80.1 and UL 6.
2. The conduit shall be "Hot Dipped" galvanized inside and out with hot dipped galvanized threads. The "Hot Dipped" galvanized threads shall be coated with blue urethane. The zinc coating shall be intact & undisturbed.
3. Conduits shall be investigated by Underwriters Laboratories for both the zinc as the primary coating and the PVC (polyvinyl chloride) as the primary coating ensuring double protection. Conduit shall be labeled with the CSA and UL Label having only one exception requiring the use of threaded fittings. No disclaimer.
4. The interior of the conduit shall have a blue urethane coating of a nominal thickness of .002" (2 mils).
5. The exterior of the conduit shall have PVC coating of a minimum thickness of .040" (40 mils) applied by dipping in liquid plastisol.
6. All coated conduit shall conform to NEMA Standard No. RN-1.
7. The conduit shall be bendable without damage to either interior or exterior coating.
8. A .002" (2 mils) nominal thickness coating of blue urethane shall be applied to the exterior, the interior, and the threads of all fittings.
9. A .040" (40 mils) minimum thickness coating of PVC shall be applied to the exterior of all fittings. The PVC shall be applied using the plastisol method.
10. Strut channel, strut fittings, and sheet metal enclosures. Shall have a thinner coat.
11. The PVC coating on all form 8 fittings shall form a gasket-like flange of at least 5/16" wide and .040" thick covering the top of the fitting around the opening.
12. The PVC coating on all form 8 covers shall form a gasket-like flange of at least 5/16" wide and .040" thick covering the bottom of the cover and mating with the flange of the fitting.
13. Stainless steel encapsulated screws shall be supplied with all form 7 and form 8 fittings.
14. All hubs on fittings and couplings shall have a PVC sleeve extending one pipe diameter or 2 inches, whichever is less. The I.D. of the sleeve to be equal to the O.D. of the uncoated pipe.
15. The bond between the coatings and the metal shall be greater than the tensile strength of the coatings.
16. A loose coupling shall be supplied with each length of conduit. The couplings shall have longitudinal ribs to enhance installation.

17. RA clamps shall have a minimum of 40 mil coating throughout. All nuts for RA clamps and U-bolts shall be encapsulated in a hexagon shape to fit standard sockets.

### General Properties for OCAL-BLUE PVC Coated Galvanized Conduit and Fittings

#### Hardness

85-90 Shore A

#### Dielectric Strength

400 Volts/mil @ 60 Cycles

#### Aging

1,000 hours Atlas Weatherometer

#### Elongation

200%

#### Temperature

The polyvinyl chloride compound shall conform at -10 degrees Fahrenheit temperature to Federal Specifications LP-406b, Method 2051, Amendment 1 of 25 September 1952 (ASTMD-746). OCAL-BLUE is not recommended for use in areas where it will be exposed to sustained temperatures above 200 degrees Fahrenheit or exposed to fire.

#### Flammability

If subjected to sustained flame or sustained heat above 400 degrees Fahrenheit, PVC will burn. PVC is self-extinguishing at room temperature.

#### Toxicity

Prolonged exposure to heat greater than 200 degrees Fahrenheit or exposure to fire may cause the plastic coatings to release harmful emissions posing a potential health hazard to persons subjected to such emissions.

#### Bonding Test

Using a sharp knife make two parallel cuts through the coating 1/2" apart. Make a cut connecting those two cuts and work with a knife underneath the plastic to free a plastic tab. The tab shall be pulled with a pair of pliers away from the pipe. The tab should tear leaving particles of plastic on the metal surface indicating the bond is stronger than the tensile strength of the coating.