

450 PRECAST PRESTRESSED CONCRETE CONSTRUCTION.
(REV 12-16-13) (FA 1-28-14) (7-14)

SUBARTICLE 450-3.1 is deleted and the following substituted:

450-3.1 General: Meet the following requirements:

Concrete	Section 346
Steel Strands*.....	Section 933
Steel Bars	Section 933
Steel Accessories	Section 933
Reinforcing Steel and Metal Welded Wire Reinforcement**	Sections 415 and 931
Embedded Duct Enclosures	Section 462
Membrane Curing compounds***	Section 925
Epoxy Resin Compounds.....	Section 926
Burlap.....	Section 925
Curing Blanket	400-16
Penetrant sealer***	Section 413
Methacrylate	Section 413
Epoxy Injection of Cracks	Section 411

* Do not use strands from more than one source in any individual prestressed element, with the exception of the partially tensioned strands (dormant strands).

** The steel spirals for reinforcing in concrete piling may be manufactured from stock meeting the requirements of any grade of reinforcing steel, as shown in ASTM A615 for steel bars, or ASTM A1064 for steel wire.

*** Use membrane curing compounds and sealers that are compatible with coating or other materials that are applied to concrete surface.

Use inserts in accordance with the recommendations of the manufacturers and within their certified capacities and application qualifications. Do not use aluminum inserts.

Use draped strand devices of sufficient rigidity having adequate support to retain the position of the strand unchanged under the induced load. Do not allow the devices to induce friction to the tendons such that the required jacking force and elongation cannot be attained.

SUBARTICLE 450-12.5.3 is expanded by the following:

450-12.5.3.7: Pretensioned Concrete Poles:

Longitudinal cracks: The length of each crack must be less than twice the base width of the pole.

Transverse or diagonal cracks: Cracks perpendicular to or at an inclined angle to the longitudinal direction of the pole. The length of each crack must be less than two-thirds of the base width of the pole.

Edge cracks: Cracks exhibiting at the edge and extending across one or two adjacent planes of a square pole. The total length of each crack must be less than 2.0 inches.

