

Plexco Service Tee Celcon® Polyacetal Caps

On September 6, 2007 the Department of Transportation Pipeline and Hazardous Materials Safety Administration (DOT PHMSA) issued an updated notification on the susceptibility to premature brittle-like cracking of older plastic pipe. Portions of this report regarding Plexco service tee Celcon® polyacetal may be misconstrued and as such we offer the following clarification.

Plexco did use Celcon® polyacetal plastic material in tapping tee cap production. The material itself has not been found to be a problem. There have only been problems associated with caps that were not properly installed. Celcon® caps were designed to be hand tightened only, not tightened with a wrench. Celcon® polyacetal is a thermoset material and as such is less forgiving of overstress in applications than is polyethylene. Those caps that have been over tightened with a wrench could fail (notice wrench marks in photo #1). The over tightening of caps was identified as a problem in the 1995-96 time frame.

Identifying Celcon® Caps

All caps used on tapping tees at Plexco before 1996 were made of a material called Celcon® polyacetal.

Plexco Orange Tapping Tees

All Plexco tapping tees that are orange used Celcon® in producing caps (see photo #2). The original cap had an o-ring seal. Most of the time, the labels on the tapping tee were made of foil. Replacement caps made of polyethylene are available for purchase to replace original caps that may have been over tightened.

Plexco Yellow Tapping Tees

Plexco tapping tees produced in yellow before 1996 used Celcon® in producing caps (see photo #3). After 1996 Plexco started manufacturing polyethylene tapping tee caps. Plexco continued to manufacture some of the Celcon® polyacetal caps through March of 2000, because several customers specifically requested the Celcon® polyacetal caps over the polyethylene caps. No Celcon® polyacetal caps were produced after March 2000. Often the labels on these caps were made of paper. Replacement caps in polyethylene are available for purchase to replace original caps that may have been over tightened.

Other Identifiers

All Plexco labeled standard size tapping tee Celcon® caps used an o-ring seal inside the cap instead of a flat gasket (see photo # 3).

Questions to ask to help determine if you have a Celcon® Cap:

- Who produced the tapping tee? (Only Plexco tap tees are of concern)
- Is the tapping tee a rectangle base? (Only rectangle base tap tees are of concern)
- What color is the tapping tee? (Only yellow or orange tap tees are of concern)
- Does the cap have an o-ring seal? (Standard tap tees with o-ring are of concern)
- When was tapping tee produced? (Before 1996 is likely; before 2000 of concern)
- Is the label on the tapping tee foil or paper? (Before 1996 is likely a concern)
- Does the tapping tee have a shoulder just below the threads? (Two pictures immediately above DO NOT have on stop shoulder after threads – this is a sign the fitting is older and of concern)



Photo #1



Photo #2



Photo #3