

Section 839—Corrugated Polyethylene Underdrain Pipe

839.1 General Description

This section includes the requirements for corrugated polyethylene underdrain pipe and fittings used primarily as highway underdrain and temporary slope drains.

839.1.01 Related References

A. Standard Specifications

General Provisions 101 through 150.

B. Referenced Documents

AASHTO M 252

839.2 Materials

839.2.01 Corrugated Polyethylene Underdrain Pipe

A. Requirements

1. Type

Use corrugated polyethylene underdrain pipe and fittings that meet the requirements of AASHTO M 252, with the following exceptions:

- A maximum elongation of 10 percent
- A gage length to determine percent elongation of 3 ft, $\pm 1/8$ in (900 mm, ± 3 mm)

2. Obtain pipe from an approved source or follow the acceptance process described in [Subsection 839.2.01.C](#), “Acceptance” below.

3. Unless specified otherwise, pipe must be supplied in individual lengths not shorter than 10 ft. (3 m) Coils are not permitted for pipe 6 in (150 mm) or larger in diameter.

B. Fabrication

General Provisions 101 through 150.

C. Acceptance

1. You may use pipe in construction supplied from plants operating on certified acceptance status without prior evaluation by lots.

2. Test any approved or untested material prior to use that has been directly exposed to sunlight for more than 6 months.

3. Pipe lengths that have developed bends that cannot be sufficiently straightened will be rejected.

- a. Straightening of individual pipe lengths by force will be permitted provided that no stress cracking occurs in the process.
- b. Any pipe length that develops stress cracks will be rejected.

4. Certification Process

a. To qualify as an approved source, the manufacturer must present the following:

- 1) Evidence that the manufacturer has an acceptable quality control procedure for raw materials and manufacturing processes
- 2) A yearly notarized certification stating that all pipe furnished is manufactured to meet this Specification

b. The Department will conduct random plant inspections and take random samples at the plant or at the project site for testing.

c. The Department will remove plants from certified acceptance status when, at any time, they demonstrate inadequate quality control or non-compliance of the pipe material specifications.

D. Materials Warranty

1. Store and use polyethylene tubing properly. It will melt and burn when exposed to flame.

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2. This product is flexible, thin-walled, and will temporarily weaken when heated. Be careful to avoid crushing or stretching the pipe on hot days with bright sunlight.