



**NSF International**  
Special Engineered Specification  
NSF SE 10990

Rehabilitation by Point Repair  
of Existing Pipe

The Public  
Health and Safety  
Company.™



## NSF SE 10990 SPECIFICATIONS FOR A SPECIAL ENGINEERED (SE) PRODUCT

### Rehabilitation by Point Repair of Existing Pipe

#### 1. Purpose:

This specification defines the product specific requirements for testing, marking, in-plant quality control (QC) for Cured-In-Place Pipe (CIPP) Point Repair Systems which fall outside the scope of ASTM F1216.

#### 2. Scope of Specification:

This specification covers the required initial testing, marking, in-plant QC, and annual testing requirements for CIPP Systems used for the reconstruction of plastic pipelines and conduits (4 to 108-in. diameter), whose construction, installation, and application fall outside the scope of ASTM F1216.

#### 3. Application:

CIPP products certified against the requirements of this specification are authorized for use in non-pressure applications such as Drain-Waste-Vent (DWV), Sanitary Sewer, and Storm Sewer Rehabilitation.

#### 4. Reference Documents:

ASTM F1216 – Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube

NSF/ANSI Standard 14 – Plastic Piping System Components and Related Materials

#### 5. Materials:

5.1 – The CIPP System shall meet the minimum structural properties given in ASTM F1216 Table 1, when determined in accordance with ASTM F1216 Section 8.

#### 6. Testing Requirements:

6.1 – Gravity Pipe Leakage Testing – CIPP Systems shall comply with the testing requirements of ASTM F1216 Section 8.2.

6.1.2 – Non-plastic Piping Materials (non-mandatory) – CIPP Systems also designed for use with secondary (non-plastic) piping materials shall comply with the Gravity Pipe Leakage Testing requirements of section 6.1 for each piping material for which the point repair is authorized. These may include concrete, clay, ductile iron, cast iron, and copper pipe.

6.2 – Delamination Test (non-mandatory) – CIPP Systems shall comply with the requirements of ASTM F1216 Section 8.4.

6.3 – Chemical Resistance Test (non-mandatory) – CIPP Systems shall comply with the requirements of ASTM F1216 Appendix X2.

#### 7. Product Marking:

Marking on the CIPP System packaging shall be legible and permanent, and shall include the following:

- The manufacturer's name or trademark.
- Certification mark of the agency making the evaluation.
- Batch number identifying the day, month, and year of manufacture. In instances where the manufacturer has more than one plant location or produces for other suppliers or distributors, an identifying symbol shall be used.



**8. Code Compliance:**

The 2015 Uniform Plumbing Code allows for the approval of products via alternate materials and methods of construction equivalency within section 301.3. This specification establishes requirements based on ASTM F1216 and NSF/ANSI 14 for drain, waste and vent applications. Both standards are referenced within Table 1701.1 of the Uniform Plumbing Code.

Section 715.3 allows for use of materials for building sewer installed in accordance with ASTM F1216.

CIPP products certified against the requirements of this specification are in compliance with the 2015 International Plumbing Code based on evaluation as an alternative materials, methods and equipment section 105.2.

**9. In-plant Q.C. Requirements:**

<b>Conformance Criteria</b>	<b>Reference</b>
Flexural strength, Flexural modulus, and Gravity Pipe Leakage. These tests shall be performed four times annually.	ASTM F1216 (Sections 5.2 and 8.2)