PT/431/0918 - AS (September 2018)

Assessment Schedule for the Picote Brush Coating™ System as manufactured by Picote Solutions Inc.

independent certification of your products & services

1. SCOPE

This schedule specifies requirements for the Picote Brush Coating™ System as manufactured by Picote Solutions Inc.. It is applicable to all non-potable and wastewater applications for pipe diameters between DN50mm (2") and DN300mm (12") diameter for clay, concrete and cast iron pipes and DN32mm (1 ¼") and DN300mm (12") for copper, steel and PVC pipes.

2. PRODUCT DESCRIPTION

2.1 Introduction

The system comprises of a two part 100% solids epoxy resin (Dual Coat 1000E) that is applied to the inside wall of deteriorated pipes. The resin is transported into the pipe using the Picote range of coating pumps and then applied to the pipe wall by the Picote Miller which powers the Picote brushes. The two part resin is supplied in cartridges to the correct component mix ratio. Wall thicknesses up to 7mm (9/32") can be achieved by multiple passes of the system.

2.2 Relevant standards

Performance: There are no standards applicable to this renovation technique.

2.3 Approval History

This is the first WRc Approved certification for the Picote Brush Coating™ System.

3. TESTING AND REQUIREMENTS

3.1 Type Testing

The Picote Brush Coating™ System shall comply with the following test requirements:

Appearance: The internal surface of the coating shall be smooth, clean and free from scoring, cavities and other surface defects that would prevent the Picote Brush Coating™ System from meeting the general fitness for purpose requirement.

Mechanical Characteristics Testing: The mechanical testing requirements are listed below:

Characteristic	Standard Test method	Declared value
Short-term flexural modulus	ASTM D790(1)	2800 MPa (406 ksi)
Long-term flexural modulus	BS EN ISO 11296-4(2) Annex C	Due March 2020
Temperature of deflection under load	ASTM D648(3) Method B	44°C (111°F)

Resistance to high pressure water jetting

When tested in accordance with the test method and requirements of WIS 4-35-01(4) Issue 2, October 2008, Appendix B the Picote Brush Coating™ System shall resist a jetting pressure of 180 bar (2610 psi).

Resistance to Abrasion

When tested in accordance with EN 295-3(5) section 15 the Picote Brush Coating™ System shall have a maximum depth of abrasion of 0.5mm (0.02").

3.2 Product design

The Picote Brush Coating™ System shall be designed in accordance with the WRc Sewerage Rehabilitation Manual(6) Type II structural design procedure.

Contact: WRc, Frankland Rd, Blagrove, Swindon SN5 8YF
Tel: 01793 865000 Web: www.wrcapproved.com, E-Mail: wrcapproved@wrcplc.co.uk

3.3 Manufacture

To ensure the quality and performance of Picote Brush Coating™ System the manufacturing process shall include appropriate systems for:

- Verification that component materials received are to specification.
- Handling and storage of all component materials and finished items.
- All records for the Picote Brush Coating™ System.
- Inspection and maintenance of the Picote Brush Coating™ System manufacturing equipment.
- Quality of workmanship.

The production of the Picote Brush Coating™ System and related Quality Control procedures shall comply with requirements to ensure the stated performance of the product is reliably achieved.

3.4 Installation

When installed in accordance with the installation documentation(7), the installation shall be practicable and suitable for conditions that could reasonably be expected on site.

4. APPROVAL

The Picote Brush Coating™ System has been audited and successfully met all the requirements stated within this assessment schedule.
Signed:

K A Adams

Valid until 31st March 2020

5. REFERENCES

1. ASTM D790-15e2, Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.

2. BS EN ISO 11296-4-2018, Plastics piping systems for renovation of underground non-pressure drainage and sewerage networks -- Part 4: Lining with cured-in-place pipes.

3. ASTM D648 – 18, Standard Test Method for Deflection Temperature of Plastics Under Flexural Load in the Edgewise Position.

4. WIS 4-35-01 Issue 2, Specification for thermoplastics structured wall pipe - supplementary test requirements, October 2008, Appendix B.

5. EN 295-3:2012, Vitrified clay pipe systems for drains and sewers. Test methods.

6. WRc Sewerage Rehabilitation Manual.

7. Picote installation documentation.

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