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| **INSPECTION TEST AND PLAN Canusa KLON Heat Shrink Sleeve** | |
| **Contractor/Customer:** | **Date of issue:** |
| **Project Title:** | **Prepared By:** |
| **Water Corp Project No.:**  CW | **Job/Contract Number:** |
| **Description and System:**  Application of KLON Wrap in Accordance with WC Specification- L2.1 | |
| **Legend of Inspection Points:**   |  | | --- | | **H = Hold Point** work may not proceed without approval or notification, unless approved by Principal or contractor.  **W = Witness Point.** Work may proceed without the presence of the Principal  **S = Surveillance.** Witness at random, no Formal Notification Required  **V = Verify**  **R/A = Review** Documents & **Accept.**  **(work can proceed if principa**l **cannot attend Hold point inspection within three hours of notified time for attendance)** | | |

* **Technical Specification Verification – DS95**
* **L2.1 - Coating Specification. Heat shrink sleeve**
* **External field joint coatings AS4822:2018**
* **UCC Accredited Trained & Certified Operators**

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| **Steps** | **Activity/Operation** | **Reference Document/**  **Standard** | **Acceptance Criteria** | **Inspection & Verification Points** | | | | | |
| **Sub-**  **Contractor** | **Sign** | **Contractor** | **Sign** | **Principal or nominee** | **Sign** |
| 1 | Submission of qualifications for nominated operators. | - Water Corp DS95-L2.1 | UCC Licensee Applicator | **H** |  | **H** |  | **W** |  |
| 2 | Using a power wire brush or a flapper disc, abrade the pipe to a minimum of St2/ SSPC-SP2. | - Water Corp DS95-L2.1  - UCC Manual | Audit Check Sheet | **V** |  | **S** |  | **S** |  |
| 3 | Ensure that the mainline coating edges are bevelled to 30°. Clean any surface contaminants from the exposed steel and adjacent pipe coating with a solvent cleanser such isopropyl alcohol for oil and grease or clean water as appropriate. | - Water Corp DS95-L2.1  - UCC Manual | Audit Check Sheet | **V** |  | **S** |  | **S** |  |
| 4 | **Pipe OD: ≤600mm (24"): 1 torch**  **Pipe OD: >600mm (24"): 2 torches RECOMMENDED**  **Pipe OD: >900mm (36"): 2 torches MANDATORY**  **Pipe OD: >1830mm (72"): 3 torches MANDATORY**  It is recommended to use a Gas Torch Kit with 50mm Burner Head. | - Canusa KLON installation guide | Audit Check Sheet | **V** |  | **S** |  | **S** |  |
| 5 | Pre-heat the joint area to 40 - 60°C. and using a suitable contact-probe thermometer, ensure that the correct temperature is reached on the steel and at least 150mm (6") on each side of the sleeve.  Where the required 40 - 60°C pre-heat cannot be achieved on charged water mains, the cleaned steel and abraded Sintakote are to be coated with UCC Protek Butyl (Multi) Primer. Primer to be tack dry before sleeve install commences. | - Water Corp DS95-L2.1  - UCC Manual | Audit Check Sheet | **V** |  | **S** |  | **S** |  |
| 6 | Weld beads, convex collar step-downs and other transition points **MUST** be primed and profiled using UCC Butyl Mastic Strip to provide a void-free, profiled contour across the transition. | - Canusa KLON installation guide | Audit Check Sheet | **V** |  | **S** |  | **S** |  |
| 7 | Visually inspect the installed sleeve for the following:   1. Sleeve is in full contact with the steel joint. 2. Adhesive visually required to flow / extrude beyond both sleeve edges. 3. No cracks or holes in sleeve backing. 4. **The applicator is required to write their certification ID on the sleeve** | - Canusa KLON installation guide | UCC Licensee  Applicator | **V** |  | **W** |  | **S** |  |
| 8 | Use a holiday detector with a set voltage of 11kV to test the entire surface of the wrapped joint, checking for holidays or other discontinuities. | - AS 3894.1 | UCC Licensee  Applicator | **H** |  | **H** |  | **W** |  |
| 9 | Repair any recordable defects applying a CRP65 repair patch.  Installation Guide - CRP65 Repair Patch and UCC Butyl Mastic Filler | - CRP65 Procedure  (IG\_NA\_CRP65) | UCC Licensee  Applicator | **H** |  | **W** |  | **S** |  |
| 10 | Perform peel test.   1. The peeling test for ambient temperature shall be performed at 23±3°C. The temperature shall be measured by a steel (adapted) temperature probe on the sleeve surface. 2. To be performed 1 per week or once per 100 joints (whichever is least frequent). 3. The evaluation length of 100 mm shall be completed within 55 s to 65 s. 4. The peel force shall be recorded over a distance of 10 mm every 6 s. 5. Following the peel test, coating repair to effected per Installation Guide - CRP65 Repair Patch and UCC Butyl Mastic Filler. | - AS4822:2018  table 6.1 & Appendix B  - Water Corp DS95-L2.1  - CRP65 Procedure  (IG\_NA\_CRP65) | UCC Licensee  Applicator | **H** |  | **W** |  | **W** |  |
| 11 | Final Inspection and Document Review | - Audit Check Sheet  IRC | Signed ITP | **RA** |  | **RA** |  | **RA** |  |

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| **ITP Reviewed and Accepted for Issue** | | **Name** | **Signature** | **Date** |
| **Sub-Contractor** |  |  |  |  |
| **Contractor/Client** |  |  |  |  |
| **Principal** | Water corporation |  |  |  |