

Table 29-2: Cured in Place Liner Properties

Property	Test Method	Value
Flexural strength	ASTM D790	31N/mm ²
Short term flexural modulus	ASTM D790	1724N/mm ²
Long term flexural modulus	ASTM D790	862N/mm ²
Tensile strength	ASTM D638	21N/mm ²

29.2.2 Deformed and Reformed HDPE Pipe Liner

- A. The HDPE liner material shall be designed for use in gravity storm water network and shall be in strict conformance with all applicable sections of ASTM F1533.
- B. The liner shall be made from High Density Polyethylene resins complying with ASTM D1248, Type III, Grade P34 and Cell Classification PE 345434C, D or E per ASTM D3350. The Contractor shall submit to the Engineer for approval certified test results from the liner pipe manufacturer to verify that the resin material used for extrusions of the liner meets the specified requirements, including the quality control records during the liner extrusion process.
- C. At the time of manufacture, each lot of liner shall be inspected for defects with samples being taken in accordance with ASTM D4703 and tested in accordance with ASTM D1693, ASTM D2837 and ASTM F714.
- D. For testing purposes a production lot shall consist of all liner having the same marking number. It shall include all items produced during any given work shift and must be identified accordingly to differentiate it from previous or following production.
- E. Each deformed liner coil in compliance with ASTM F1533 shall be clearly marked by the manufacturer with the following information:
 - i. ASTM F1533 designation.
 - ii. Nominal outside diameter.
 - iii. SDR.
 - iv. Approximate coil length.
 - v. Standard material designation code.
 - vi. Manufacturer's name.
 - vii. Manufacturer's production code from which plant location, machine and date of manufacture can be identified.
 - viii. The project or contract number.