**Certa-Flo® PVC Gravity Sewer Pipe Certification**

To Whom It May Concern:

Certa-Flo PVC Gravity Sewer Pipe (sizes 4" through 8"; SDR 21; and 10" and 12", SDR 26), provided by NAPCO, is manufactured in accordance with the dimensions, materials, quality control, and marking specifications found in **ASTM D2241***.*The PVC material conforms to a minimum cell classification of 12454 as defined by **ASTM D1784.** The standard pipe laying length is 10 or 20 feet and is green in color.

The Certa-Lok® pipe system used in our Certa-Flo products provides a restrained joint by utilizing precision-machined grooves on the pipe spigot and inside the pipe bell. When assembled, a spline is inserted through an entry hole in the pipe bell, resulting in a continuous circumferential restrained joint that locks the segments of pipe together. A flexible elastomeric gasket located in a groove in the pipe bell provides a hydraulic seal.

Certa-Flo joints meet the requirements of **ASTM D3212.** All products are supplied with either acrylonitrile butadiene rubber (NBR) or isoprene/styrene-butadiene rubber blend (IR/SBR) gaskets which meet **ASTM F477**.

These products provide a minimum pipe stiffness of 115 psi (SDR 26) or 224 psi (SDR 21) as defined by **ASTM D2412**.

Certifications are based on the applicable edition of the referenced standard in effect on the date of manufacture. If we may be of further assistance, please contact Technical Services at [technical@napcopipe.com](mailto:technical@northamericanpipe.com).

Sincerely,

**NAPCO**

Reference Standards:

* **ASTM D1784** *Standard Specification for Rigid Poly(Vinyl Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl Chloride) (CPVC) Compounds*
* **ASTM D2241** *Standard Specification for Poly(Vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR Series)*
* **ASTM D2412***Standard Test Method for Determination of External Loading Characteristics of Plastic Pipe by Parallel-Plate Loading*
* **ASTM D3212** *Standard Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals*
* **ASTM F477** *Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe*