**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.

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*