

# CERTA-LOK™ YELOMINE™

## Restrained Joint PVC Pressure Piping System

Certa-Lok™ Yelomine™ is a restrained joint PVC temporary bypass piping system featuring high impact strength and ultraviolet protection for above-ground use. When designing and selecting a temporary bypass system, many factors must be taken into consideration – size, flow rate, impact strength, UV exposure, color coding, ease of assembly and disassembly, initial cost, system quality, etc. This fact sheet has been designed to assist in the development of your temporary bypass product specification.

### SPECIFICATION FOR HIGH IMPACT, UV PROTECTED, COLOR CODED TEMPORARY BYPASS SYSTEM

#### Scope

This specification covers IPS Polyvinyl Chloride (PVC) pipe, in nominal sizes 2"-16" in accordance with ASTM D2241 and the requirements of NSF-14. Pipe is intended for use as a pressurized above-ground temporary bypass potable water delivery system.

#### Reference Documents on Certa-Lok Yelomine

American Society for Testing and Materials (ASTM). Product shall meet or exceed the referenced specifications.



**Above:** Assembling a Certa-Lok Yelomine restrained joint. **Top Right:** Certa-Lok Yelomine's high impact strength and ultraviolet protection make it especially suitable for above-ground applications.



#### Certa-Lok Yelomine System Characteristics

**1. Impact Production Specs** — Pipe and coupling manufacturer must certify that formulations will contain sufficient impact modifier to demonstrate at least twice the impact level of conventional white pressure pipe. Independent laboratory test data must be made available upon request. Pipe production impact specifications are as follows:

Nominal Size	SDR 32.5 Ft.-Lbs.	SDR 26 Ft.-Lbs.	SDR 21 Ft.-Lbs.	SDR 17 Ft.-Lbs.	NSF ALL SDR's Ft.-Lbs.
2"	-	-	-	170	30
3"	-	-	-	245	60
4"	-	210	255	320	90
6"	250	305	380	470	120
8"	300	400	495	610	160
10"	235	500	530	-	160
12"	400	500	530	-	160

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### Certa-Lok Yelomine System Characteristics

(continued)

**2. Approvals** — PVC pipe shall meet all the requirements of ASTM D2241, "Standard Specification for Polyvinyl Chloride (PVC) Pressure Rated Pipe (SDR Series)." The pipe and couplings must provide a restrained joint by utilizing machined grooves on the pipe and in the coupling which, when aligned, allow a spline to be inserted, resulting in a circumferential restrained joint that locks the pipe and coupling together. The restraining spline must be made from Nylon 6/6.



All pipe, couplings and fittings must have Potable Water Service Certification and must be performance tested in accordance with NSF-14 (National Sanitation Foundation), "Standard for Plastic Piping System Components and Related Materials."

**3. Materials** — Pipe and coupling manufacturer must certify that formulations will contain a minimum of 5 parts high purity TiO<sub>2</sub> to prevent discoloration and to provide long term UV protection against impact strength degradation. Independent laboratory test data must be made available upon request.

**4. Color** — Pipe and couplings must be color coded bright yellow to signify above-ground temporary potable water line. The bright yellow color will not only provide high visibility for safety to pedestrians and motorists, but also eliminate confusion with green colored sewer pipe and blue colored potable water lines for buried applications, which are both commonly found in municipalities' and contractors' inventories.

### Physical Properties

NOMINAL PROPERTY VALUES		
Pipe Property	Test Method	Value (Lbs./In.)
Izod Impact	ASTM D 256	1.15 ft. lbs./in.
Tensile Strength	ASTM D 638	7,000 PSI
Modulus of Elasticity	ASTM D 638	400,000 PSI
Deflection Temperature	ASTM D 648	158° F
Chemical Resistance	ASTM D 543	B
Elongation	ASTM D 638	150 %
Flammability	ASTM D 635	Self-Extinguishing

**Top Right:** Application of cold asphalt to allow traffic to cross pipeline. **Bottom Right:** Service connections are easily made with a CertainTeed tapped coupling



**CertainTeed** 