

# SURGE GUARD™

10X STRONGER THAN SCHEDULE 80 TEES

LASCO's Surge Guard Fittings are specifically engineered to meet the demanding system requirements of today's golf course and sports turf irrigation applications. Our patented design provides 10x greater surge resistance than standard Schedule 80 fittings.

## FEATURES & BENEFITS

- Surge Guard™ fittings are Class 315 rated (315 psi) in each size
- Independent 3rd party high-stress failure testing, conducted by The Center for Irrigation Technology (CIT) at Fresno State University, proves that Surge GuardTees are 10X stronger than Schedule 80
- NSF® Certified for use in potable water systems
- Lead-free

## APPLICATIONS

Golf Course  
Sports Turf

## PRODUCT SPECIFICATIONS

Maximum Working Pressure: 315 psi @ 73 deg F

ASTM D-1784 – Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds.

ASTM D-2467 – Socket Type Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80.

ASTM F-1970 – Standard Specification for Special Engineered Fittings, Appurtenances or Valves for use in Poly (Vinyl Chloride) (PVC) or Chlorinated Poly (Vinyl Chloride) (CPVC) Systems.

### MATERIALS:

LASCO SurgeGuard™ Fittings are produced from PVC Type 1, Cell Classification 12454- B.

### LISTINGS:

NSF-61



# SURGE GUARD™ 2" - 2½"



| TEE<br>Slip x Slip |                    |         |
|--------------------|--------------------|---------|
| Part No.           | Nom. Size (inches) | CTN QTY |
| 301-020            | 2                  | 10      |
| 301-025            | 2½                 | 10      |
| 301-249            | 2 x 2 x 1          | 10      |
| 301-250            | 2 x 2 x 1¼         | 10      |
| 301-251            | 2 x 2 x 1½         | 10      |
| 301-289            | 2½ x 2½ x 1        | 5       |
| 301-290            | 2½ x 2½ x 1¼       | 5       |
| 301-291            | 2½ x 2½ x 1½       | 5       |
| 301-292            | 2½ x 2½ x 2        | 5       |

NEW SIZE

NEW SIZES



| 90° ELBOW<br>Slip x Slip |                    |         |
|--------------------------|--------------------|---------|
| Part No.                 | Nom. Size (inches) | CTN QTY |
| 306-020                  | 2                  | 25      |
| 306-025                  | 2½                 | 10      |
| 306-249                  | 2 x 2 x 1          | 25      |
| 306-250                  | 2 x 2 x 1¼         | 25      |
| 306-251                  | 2 x 2 x 1½         | 25      |
| 306-289                  | 2½ x 2½ x 1        | 5       |
| 306-290                  | 2½ x 2½ x 1¼       | 5       |
| 306-291                  | 2½ x 2½ x 1½       | 5       |
| 306-292                  | 2½ x 2½ x 2        | 5       |

NEW SIZE

NEW SIZES



| 45° ELBOW<br>Slip x Slip |                    |         |
|--------------------------|--------------------|---------|
| Part No.                 | Nom. Size (inches) | CTN QTY |
| 317-020                  | 2                  | 25      |
| 317-025                  | 2½                 | 10      |

NEW SIZE



| 22½° ELBOW<br>Slip x Slip |                    |         |
|---------------------------|--------------------|---------|
| Part No.                  | Nom. Size (inches) | CTN QTY |
| 365-025                   | 2½                 | 10      |

NEW SIZE

Heat and excessive temperature can play a significant part in performance of any piping system. As with all thermoplastic products, pressure rating reduction is required as temperatures increase. This can apply to primary and secondary heat sources, such as basic ambient temperature and absorbed temperature from solar exposure or solar heated water supply sources. The following table shows applicable Class 315 (315 psi) pressure de-rating as temperatures elevate.

## PVC & CPVC Class 315 Pressure Ratings at Elevated Temperatures, PSI

| Application Temperature | 73°F (23°C) | 90°F (32°C) | 100°F (38°C) | 110°F (43°C) | 120°F (49°C) | 130°F (54°C) | 140°F (60°C) | 150°F (66°C) | 160°F (71°C) |
|-------------------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| PVC                     | 315         | 236         | 195          | 161          | 126          | 98           | 69           | -            | -            |