

EverTUFF® **TURF**[™]



ENGINEERING GUIDE

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Irrigation & Turf Technical EverTUFF_® TURF[™] Overview



Fittings Engineered for Golf Course & Turf Applications. Independent Testing Proves EverTUFF® TURF™ 2X Stronger than Competitor Special "surge" Fittings Patented Design - Lifetime Warranty



Spears® EverTUFF® TURF™ Fittings are specifically engineered to meet the demanding system requirements of today's golf course and sports turf irrigation applications. This patented design provides greater surge resistance than Schedule 80 fittings for the most reliable turf fittings on the market. Produced in a distinct blue color injection molded from specially balanced PVC materials or optional CPVC gray, these performance fittings are Class 315 rated (315 psi) and available in IPS sizes 1" through 6". Mechanical Clamp-On Saddle are rated at 235 psi.

Design Tested

EverTUFF® TURF™ Fittings have been computer engineered through Finite Element Analysis (FEA) studies for optimum material placement, strength and performance. Spears® Research & Development testing has shown the resulting design to best handle proper solvent cementing and correctly applied cyclic conditions of modern sports turf irrigation systems.

Full Class 315 Pressure Rating

The EverTUFF_® TURF[™] Class 315 designation maintains a uniform of 315 psi pressure rating for all fitting sizes, except the Mechanical Clamp-On Saddle, which is 235 psi.

Full Selection of Basic Configurations

EverTUFF_® TURF[™] Fittings are produced in the basic configurations including Tees, Reducing Tees, 90° and 90° Sweep Elbows, 45° Elbows, Couplings, Reducer Bushings, Male Adapters and Special Reinforced (SR) Female Adapters - in sizes 1" through 6", plus Mechanical Clamp-on Transition Saddles sizes 4", 6" and 8".



Irrigation & Turf Technical EverTUFF® TURF™ Overview

Optional CPVC for Higher Temperatures

Where heat and excess temperature can be a major concern, EverTUFF_® TURF[™] Fittings are available in higher temperature CPVC gray material.

NSF® Certified

EverTUFF® TURF™ Fittings are NSF® Certified for use in potable water systems and are naturally lead-free.

The Performance Difference - Patented Design U.S. Patent No. 7.857.357

Spears® EverTUFF® TURF™ Fittings form a class of their own by merging different design parameters for conventional fittings with special PVC material selection to collectively produce a unique, highly surge resistant line of fittings that has been awarded a U.S. Patent.

EverTUFF® TURF™ Proven Over 2X Stronger Than Competitor Special "surge" Fittings

Independent 3rd party high-stress failure testing was conducted by Fresno State International Center for Water Technology. Identical test designed to force fittings to failure subjected Spears® EverTUFF® TURF $^{\text{M}}$ Fittings to 50,000 cycles WITHOUT failure. This is over 2X stronger than competitor's special "surge" fittings.

Product Tested	Cycles
Competitor "surge" Tees	Average Failure at 22,746.00

Performance that is a direct result of Spears® engineering and unparalleled processing capability!

Lifetime Warranty*

We are so confident in this fitting that it carries a Lifetime Warranty!

Selection Guide for Choosing PVC or High Temperature CPVC Materials

Heat 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	Application 73°F 90°F 100°F 110°F 120°F 130°F 140°F 150°F 160°F 170°F 180°F 200°F										200°F	
Temperature	Temperature (23°C) (32°C) (38°C) (43°C) (49°C) (54°C) (60°C) (66°C) (71°C) (77°C) (82°C) (99°C)										(99°C)	
PVC	315	236	195	161	126	95	69		-		-	
CPVC	315	287	258	227	205	180	158	132	126	91	79	62

Maximum Service Temperature: PVC = 140°F; CPVC = 200°F

*See Spears® Limited Lifetime Warranty for additional warranty details.

The information contained in this publication is based on current information and product design at the time of publication and is subject to change without notification. Our ongoing commitment to product improvement may result in some variation. No representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or results to be obtained therefrom. For verification of technical data or additional information not contained herein, please contact Spears® Technical Services Department [West Coast:(818) 364-1611 - East Coast: (678) 985-1263].

General Information

Plastic piping systems should be engineered, installed, operated and maintained in accordance with accepted standards and procedures for plastic piping systems. It is absolutely necessary that all design, installation, operation and maintenance personnel be trained in proper handling, installation requirements and precautions for installation and use of plastic piping systems before starting.

"Lead Free" low lead certification - unless otherwise specified, all Spears® EverTUFF® TURF™ fittings specified here-in are certified by NSF International to ANSI/NSF® Standard 61, Annex G and is in compliance with California's Health & Safety Code Section 116825 (commonly known as AB1953) and Vermont Act 193. Weighted average lead content <=0.25%.

EverTUFF® TURF™ Mechanical Clamp-On Saddles



Designed for HDPE-to-PVC pipe transition to provide HDPE mainline take-off for PVC irrigation laterals and irrigation extensions, but fully suitable for any IPS pipe (metal or plastic) transition to PVC. Eliminates costly and cumbersome HDPE fusion process, which is generally cost prohibitive. Depending on the region and location, it has been found that the installed cost of HDPE laterals can be 25% higher than PVC laterals!

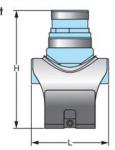
Pilot on lateral connector prevents saddle movement on pipe. Exceptionally strong Special Reinforced (SR) outlet on both Saddle outlet and Pilot Connector socket provide unparalleled strength. Injection molded in distinct blue EverTUFF® PVC proprietary material. Pilot Connectors are replaceable and interchangeable with any size EverTUFF® Mechanical Saddle for greater versatility.

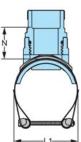
Easy Installation - Clamp saddle to pipe, drill hole, install screw-in Pilot Connector with socket outlet. Available for a variety of mainline sizes and can be easily bushed for reduced lateral take-off sizes or special connections.

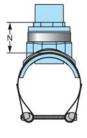


MECHANICAL CLAMP-ON TRANSITION SADDLES

Pipe O.D. x Socket or Spigot For Polyethylene (or any IPS pipe, metal or plastic) -To - PVC Transitions







Part Number	Size	Н		1.1	N	1
Part Number	Size	П	L.	L1	Socket	Spigot
865-419	4x1-1/2	9-3/4	6-1/2	5-1/8	2-9/16	
865-420	4x2	9-3/4	6-1/2	5-1/8	2-9/16	
865S-420	4x2 SPIGOT	9-3/4	6-1/2	5-1/8		2-9/16
865-527	6x1-1/2	11-3/4	7	7-3/8	2-1/2	
865-528	6x2	11-3/4	7	7-3/8	2-1/2	
865S-528	6x2 SPIGOT	11-3/4	7	7-3/8		2-1/2
865-577	8x1-1/2	14	7	9-1/2	2-5/8	
865-578	8x2	14	7	9-1/2	2-5/8	
865S-578	8x2 SPIGOT	14	7	9-1/2		2-5/8



EverTUFF® TURF™ Repair & GripLoc™ Fittings



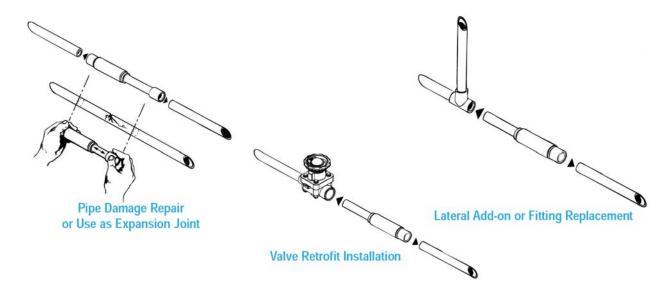
- ✓ Injection molded from Specially Balanced PVC Material in Distinct Blue color
- ✓ Multi-function Telescoping Design
- ✓ Regular and Short Configurations
- √ Socket x Socket Configuration for Pipe Repair or Use as a Short-Stroke Expansion Joint
- √ Sizes 1" through 6"

- √ Spigot x Socket Configuration for Replacing Damaged Fittings
- ✓ Both Configurations can be Easily Modified for Opposite Use
- √ Full Class 315 Pressure Rating
- ✓ Double O-ring Seal in EPDM
- ✓ NSF

 ® Certified for Potable Water Use

Versatile Repair Capability

Spears® Repair Couplings provide a variety of system repair and alteration solutions. Use Socket x Socket configurations for quick pipe damage repair - can also be used as a short-stroke expansion joint to compensate for thermal expansion & contraction. Spigot x Socket configurations are excellent for lateral and riser add-ons, damaged fitting replacement, or for installing valves in existing piping systems. Order the wrong configuration? Simply cut coupling from Socket shaft end to function as a spigot or add a coupling to Spigot shaft end for Socket connections.



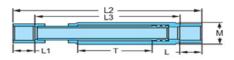
Irrigation & Turf Technical EverTUFF® TURF™ Repair & GripLoc™ Fittings



EverTUFF® **TURF™ PVC Repair**

Coupling - Spigot x Socket

EPDM O-rings
Can be used as a short-stroke
Expansion Joint



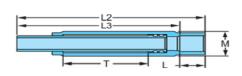
Class 315 Pressure Rating

Part Number	Size	L	L2	L3	М	Т	Approx. Wt. (Lbs.)
S118-10T	1	15/16	8-1/2	7-9/16	2-1/16	4-1/16	.62
S118-12T	1-1/4	1	8-13/16	7-13/16	2-7/16	4-1/16	.87
S118-15T	1-1/2	1-1/8	9-3/16	8-1/16	2-11/16	3-13/16	1.02
S118-20T	2	1-3/16	9-15/16	8-3/4	3-1/4	4-5/16	1.59
S118-25T	2-1/2	1-3/4	13-5/8	11-7/8	3-15/16	5-9/16	3.44
S118-30T	3	1-7/8	13-11/16	11-13/16	4-5/8	5-9/16	4.29
S118-40T	4	2-1/4	14-13/16	12-9/16	5-3/4	6-3/16	6.82
S118-60T	6	3	17-3/16	14-3/16	8-7/16	6-5/8	14.63
nit Must Be Thrust Blo	cked	•	•	•	•	•	

EverTUFF_® TURF™ PVC Repair Coupling -

Socket x Socket

EPDM O-rings Can be used as a short-stroke Expansion Joint



Class 315 Pressure Rating

Part Number	Size	L	L1	L2	L3	М	Т	Approx. Wt. (Lbs.)
S119-10T	1	15/16	1-1/8	9-11/16	7-5/8	2-1/16	4-1/16	.71
S119-12T	1-1/4	1	1-1/4	10-3/16	7-15/16	2-7/16	4-1/16	1.01
S119-15T	1-1/2	1-1/8	1-3/8	10-11/16	8-3/16	2-11/16	3-13/16	1.16
S119-20T	2	1-3/16	1-1/2	11-5/8	8-15/16	3-1/4	4-5/16	1.81
S119-25T	2-1/2	1-3/4	1-3/4	15-9/16	12-1/16	3-15/16	5-9/16	3.82
S119-30T	3	1-7/8	1-7/8	15-3/4	12	4-5/8	5-9/16	5.37
S119-40T	4	2-1/4	2-1/4	17-1/4	12-3/4	5-3/4	6-3/16	7.69
S119-60T	6	3	3	20-1/2	14-1/2	8-7/16	6-5/8	17.65
Unit Must Be Thrust	Blocked					•	•	



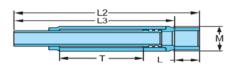




Irrigation & Turf Technical EverTUFF® TURF™ Repair & GripLoc™ Fittings

EverTUFF_® TURF™ PVC Repair Coupling - Short, Spigot x Socket

EPDM O-ring

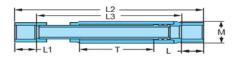


Class 315 Pressure Rating

Part Number	Size	L	L2	L3	M	Т	Approx. Wt. (Lbs.)			
SH118-10T	1	15/16	5-3/4	4-13/16	2-1/16	2	.42			
SH118-12T	1-1/4	1	6-5/8	5-5/8	2-7/16	2-1/2	.60			
SH118-15T	1-1/2	1-1/8	6-15/16	5-13/16	2-11/16	2-1/2	.76			
SH118-20T	2	1-3/16	8-5/16	7-1/8	3-1/4	3	1.19			
Unit Must Be Thrust B	nit Must Be Thrust Blocked									

EverTUFF_® TURF[™] PVC Repair Coupling - Short, Socket x Socket

EPDM O-ring



Class 315 Pressure Rating

Part Number	Size	L	L1	L2	L3	М	Т	Approx. Wt. (Lbs.)
SH119-10T	1	15/16	1-1/8	7	4-15/16	2-1/16	2	.51
SH119-12T	1-1/4	1	1-1/4	8	5-3/4	2-7/16	2-1/2	.74
SH119-15T	1-1/2	1-1/8	1-3/8	8-3/8	5-7/8	2-11/16	2-1/2	.90
SH119-20T	2	1-3/16	1-1/2	10	7-5/16	3-1/4	3	1.41
Unit Must Be Thrus	t Blocked		•	•	•	•	•	







GripLoc[™] Compression Couplings



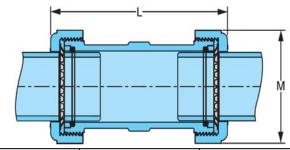


GripLoc™ Compression Coupling

Tightening nut compresses special stainless steel Gripper Ring to firmly grip pipe and prevent potential pull-out. Compressed Gland Ring ensures positive O-ring seal against pipe.

EverTUFF® TURF™ GripLoc™ Compression Coupling

WARNING: DO NOT INSERT FINGERS
For Cold Water Only - EPDM Gasket - Class 315
Hand Tighten ONLY - No Nut Wrenches
Required

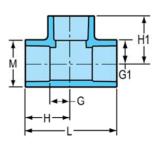


Part Number	Size	L	М	N	Approx. Wt. (Lbs.)
S112-10T	1	5-7/16	2-1/2	1/8	.35
S112-15T	1-1/2	6-11/16	3-5/16	1/8	.90
S112-20T	2	7-5/16	3-7/8	1/8	1.30
S112-30T	3	8-11/16	5-1/2	3/16	3.09
S112-40T	4	11	6-11/16	3/16	5.82



EverTUFF® TURF™ PVC Tee

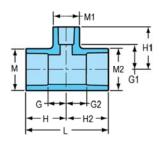
Socket x Socket x Socket Class 315



Part Number	Size	G	G1	Н	Н1	L	М	Approx. Wt. (Lbs.)
401-010T	1	13/16	13/16	1-31/32	1-31/32	3-15/16	1-11/16	.21
401-012T	1-1/4	1	1	2- 9/32	2- 9/32	4-17/32	2- 1/32	.32
401-015T	1-1/2	1-1/8	1-1/8	2-17/32	2-17/32	5-1/32	2-9/32	.41
401-020T	2	1- 3/8	1- 3/8	2- 29/32	2-29/32	5-25/32	2-7/8	.77
401-025T	2-1/2	1-11/16	1-11/16	3- 7/16	3- 7/16	6- 7/8	3- 3/8	1.07
401-030T	3	2- 1/32	2- 1/32	3-29/32	3-29/32	7-13/16	4- 1/16	1.64
401-040T	4	2-19/32	2-19/32	4- 7/8	4- 7/8	9-25/32	5- 7/32	3.38
401-060T	6	3-25/32	3-25/32	6-25/32	6-25/32	13-19/32	7-19/32	10.59

EverTUFF® TURF™ PVC Tee - Reducing

Socket x Socket x Socket Class 315

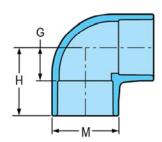


Part Number	Size	G	G1	G2	Н	H1	H2	L	М	M1	M2	Approx. Wt. (Lbs.)
401-168T	1-1/4X1	13/16	1	13/16	2- 3/32	2- 5/32	2- 3/32	4- 5/32	2- 1/32	1-11/16	2- 1/32	.27
401-212T	1-1/2X1-1/4	1	1- 1/8	1	2-13/32	2- 3/8	2-13/32	4-25/32	2-9/32	2- 1/32	2-9/32	.37
401-251T	2X1-1/2	1- 3/8	1- 3/8	1- 3/8	2-21/32	2- 3/4	2-21/32	5- 5/16	2-25/32	2- 5/16	2-25/32	.53
401-292T	2-1/2X2	1- 3/8	1-11/16	1- 3/8	3- 1/8	3- 3/16	3- 1/8	6- 9/32	3-11/32	2-25/32	3-13/32	.88
401-338T	3X2	1- 3/8	2- 1/32	1- 3/8	3- 1/4	3-17/32	3- 1/4	6-17/32	4- 1/16	2-25/32	4- 1/16	1.22
401-422T	4X3	2- 1/32	2-19/32	2- 1/32	4- 9/32	4-15/32	4- 9/32	8- 9/16	5- 7/32	4- 3/32	5- 7/32	2.71

EverTUFF_® TURF™ PVC 90°

Elbow

Socket x Socket Class 315



Part Number	Size	G	н	М	Approx. Wt. (Lbs.)
406-010T	1	29/32	2- 1/32	1-21/32	.16
406-012T	1-1/4	1- 1/32	2- 9/32	2- 1/32	.24
406-015T	1-1/2	1- 5/32	2-17/32	2- 9/32	.31
406-020T	2	1- 3/8	2- 7/8	2-25/32	.45

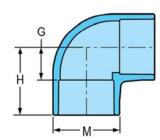
EverTUFF® TURF™ Dimensions & Information



EverTUFF_® TURF™ PVC 90°

Elbow

Socket x Socket Class 315

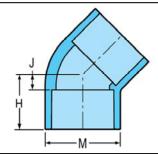


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Part Number	Size	G	Н	M	Approx. Wt. (Lbs.)
406-025T	2-1/2	1-23/32	3-15/32	3- 3/8	.83
406-030T	3	2	3- 7/8	4- 1/16	1.26
406-040T	4	2-11/16	4-15/16	5- 7/32	2.61
406-060T	6	3-3/4	6-3/4	7-19/32	7.50

EverTUFF_® TURF™ PVC 45° Elbow

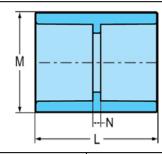
Socket x Socket Class 315



Part Number	Size	н	J	М	Approx. Wt. (Lbs.)
417-010T	1	1- 5/8	15/32	1-11/16	.13
417-012T	1-1/4	1-13/16	9/16	2- 1/32	.20
417-015T	1-1/2	1-31/32	19/32	2- 9/32	.26
417-020T	2	2- 7/32	23/32	2-25/32	.36
417-025T	2-1/2	2- 5/8	7/8	3- 3/8	.66
417-030T	3	2- 7/8	1	4- 1/16	1.00
417-040T	4	3- 9/16	1- 5/16	5- 7/32	2.05
417-060T	6	4-3/4	1-3/4	7-19/32	5.47

EverTUFF_® TURF™ PVC Couplings

Socket x Socket Class 315

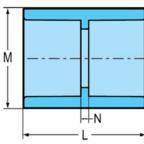


Part Number	Size	L	М	N	Approx. Wt. (Lbs.)
429-010T	1	2-3/32	1-5/8	3/32	.09
429-012T	1-1/4	2-19/32	2- 1/32	3/32	.20
429-015T	1-1/2	2- 7/8	2- 9/32	3/32	.17
429-020T	2	3- 1/8	2-25/32	3/32	.24
429-025T	2-1/2	3-11/16	3- 3/8	3/16	.44
429-030T	3	3-31/32	4- 1/16	3/16	.64



EverTUFF_® TURF™ PVC Couplings

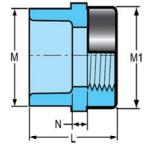
Socket x Socket Class 315



Part Number	Size	L	M	N	Approx. Wt. (Lbs.)
429-040T	4	4-25/32	5- 1/4	1/4	1.25
429-060T	6	6-3/8	7-9/16	1/4	3.34

EverTUFF® TURF™ PVC Female Adapter

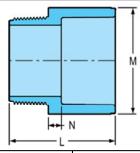
Socket x SR Fipt - Stainless Steel Collar Class 315



Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
435-010SRT	1	2- 5/32	1- 3/16	1-25/32	3/32	.14
435-012SRT	1-1/4	2- 5/16	2- 3/32	2- 1/16	3/32	.18
435-015SRT	1-1/2	2- 7/16	2-13/32	2- 7/16	3/16	.26
435-020SRT	2	2-11/16	3	3- 1/32	9/32	.44
435-025SRT	2-1/2	3- 9/32	3- 9/16	3-19/32	7/32	.68
435-030SRT	3	3- 1/2	4- 1/4	4- 9/32	3/16	.96
435-040SRT	4	3-31/32	5- 7/32	5- 7/32	7/32	1.28
435-060SRT	6	5	7-21/32	7-21/32	1/4	3.31

EverTUFF_® TURF™ PVC Male Adapter

Mipt x Socket Class 315



Part Number	Size	L	М	N	Approx. Wt. (Lbs.)
436-010T	1	1- 1/8	1-11/16	7/32	.15
436-012T	1-1/4	2- 1/2	2	7/32	.14
436-015T	1-1/2	2- 5/8	2- 5/16	7/32	.16
436-020T	2	2-21/32	2-25/32	7/32	.23
436-025T	2-1/2	3-19/32	3-7/16	1/4	.44
436-030T	3	3-13/16	4	5/32	.64
436-040T	4	4-13/32	5- 1/4	13/32	1.19
436-060T	6	5-1/2	7-9/16	1-9/32	2.79

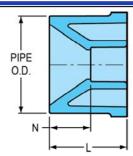
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EverTUFF® TURF™ Dimensions & Information



EverTUFF_® TURF™ PVC **Reducer Bushing** Flush Style

Spigot x Socket Class 315

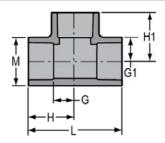


Part Number	Size	L	N	Approx. Wt. (Lbs.)
437-250T	2X1-1/4	1-23/32	7/16	.19
437-251T	2X1-1/2	1-23/32	5/16	.14
437-292T	2-1/2X2	2- 1/16	17/32	.23
437-338T	3X2	2- 7/32	9/16	.46
437-422T	4X3	2-19/32	11/16	.84
437-532T	6X4	3-17/32	1-3/16	2.72

EverTUFF® TURF™ CPVC Tee

Socket x Socket x Socket

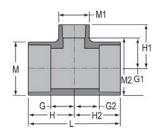
Class 315



Part Number	Size	G	G1	Н	Н1	L	М	Approx. Wt. (Lbs.)
401-010TC	1	13/16	13/16	1-31/32	1-31/32	3-15/16	1-11/16	.29
401-012TC	1-1/4	1	1	2- 9/32	2- 9/32	4-17/32	2- 1/32	.39
401-015TC	1-1/2	1- 1/8	1- 1/8	2-17/32	2-17/32	5- 1/32	2- 9/32	.53
401-020TC	2	1- 3/8	1- 3/8	2- 7/8	2- 7/8	5-25/32	2-25/32	.86
401-025TC	2-1/2	1-11/16	1-11/16	3- 7/16	3- 7/16	6- 7/8	3- 3/8	1.68
401-030TC	3	2- 1/32	2- 1/32	3-29/32	3-29/32	7-13/16	4- 1/16	2.56
401-040TC	4	2-19/32	2-19/32	4- 7/8	4- 7/8	9-25/32	5- 7/32	3.71
401-060TC	6	3-25/32	3-25/32	6-25/32	6-25/32	13-19/32	7-19/32	12.18

EverTUFF® TURF™ CPVC Tee -Reducing

Socket x Socket x Socket Class 315

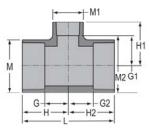


Part Number	Size	G	G1	G2	Н	H1	H2	L	М	M1	M2	Approx. Wt. (Lbs.)
401-168TC	1-1/4X1	13/16	1	13/16	2- 3/32	2- 5/32	2- 3/32	4- 5/32	2- 1/32	1-11/16	2- 1/32	.35
401-212TC	1-1/2X1-1/4	1	1- 1/8	1	2-13/32	2- 3/8	2-13/32	4-25/32	2- 9/32	2- 1/32	2- 9/32	.57
401-251TC	2X1-1/2	1- 3/8	1- 3/8	1- 3/8	2-21/32	2- 3/4	2-21/32	5- 5/16	2-25/32	2- 5/16	2-25/32	.79
401-292TC	2-1/2X2	1- 3/8	1-11/16	1- 3/8	3- 1/8	3- 3/16	3- 1/8	6- 9/32	3-11/32	2-25/32	3-13/32	1.34



EverTUFF_® TURF™ CPVC Tee - Reducing

Socket x Socket x Socket Class 315

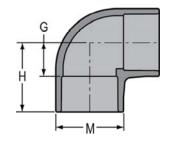


L													
Ī	Part Number	Size	G	G1	G2	н	H1	H2	L	М	M1	M2	Approx. Wt. (Lbs.)
ſ	401-338TC	3X2	1- 3/8	2- 1/32	1- 3/8	3- 1/4	3-17/32	3- 1/4	6-17/32	4- 1/16	2-25/32	4- 1/16	1.73
ſ	401-422TC	4X3	2- 1/32	2-19/32	2- 1/32	4- 9/32	4-15/32	4- 9/32	8- 9/16	5- 7/32	4- 3/32	5- 7/32	3.07

EverTUFF® TURF™ CPVC 90°

Elbow

Socket x Socket Class 315

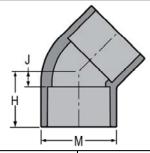


Part Number	Size	G	Н	М	Approx. Wt. (Lbs.)
406-010TC	1	29/32	2- 1/32	1-21/32	.20
406-012TC	1-1/4	1- 1/32	2- 9/32	2- 1/32	.31
406-015TC	1-1/2	1- 5/32	2-17/32	2- 9/32	.41
406-020TC	2	1- 3/8	2- 7/8	2-25/32	.62
406-025TC	2-1/2	1-23/32	3-15/32	3- 3/8	1.14
406-030TC	3	2	3- 7/8	4- 1/16	1.75
406-040TC	4	2-11/16	4-15/16	5- 7/32	2.92
406-060TC	6	3-3/4	6-3/4	7-19/32	7.97

EverTUFF_® TURF™ CPVC 45°

Elbow

Socket x Socket Class 315



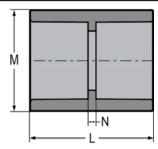
Part Number	Size	н	J	M	Approx. Wt. (Lbs.)
417-010TC	1	1- 5/8	15/32	1-11/16	.14
417-012TC	1-1/4	1-13/16	9/16	2- 1/32	.22
417-015TC	1-1/2	1-31/32	19/32	2- 9/32	.29
417-020TC	2	2- 7/32	23/32	2-25/32	.47
417-025TC	2-1/2	2- 5/8	7/8	3- 3/8	.82
417-030TC	3	2- 7/8	1	4- 1/16	1.21
417-040TC	4	3- 9/16	1- 5/16	5- 7/32	2.14
417-060TC	6	4-3/4	1-3/4	7-19/32	5.58

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EverTUFF® TURF™ CPVC Couplings

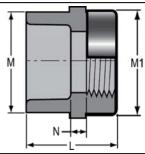
Socket x Socket Class 315



Part Number	Size	L	М	N	Approx. Wt. (Lbs.)
429-010TC	1	2-3/32	1-5/8	3/32	.41
429-012TC	1-1/4	2-19/32	2- 1/32	3/32	.23
429-015TC	1-1/2	2- 7/8	2- 9/32	3/32	.21
429-020TC	2	3- 1/8	2-25/32	3/32	.32
429-025TC	2-1/2	3-11/16	3- 3/8	3/16	.55
429-030TC	3	3-31/32	4- 1/16	3/16	.81
429-040TC	4	4-25/32	5- 1/4	1/4	1.36
429-060TC	6	6-3/8	7-9/16	1/4	3.87

EverTUFF_® TURF™ CPVC Female Adapter - Special Reinforced

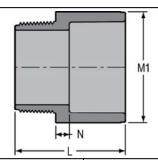
Socket x SR Fipt - Stainless Steel Collar Class 315



Part Number	Size	L	М	M1	N	Approx. Wt. (Lbs.)
435-010SRTC	1	2- 5/32	1- 3/16	1-25/32	3/32	.12
435-012SRTC	1-1/4	2- 5/16	2- 3/32	2- 1/16	3/32	.24
435-015SRTC	1-1/2	2- 7/16	2-13/32	2- 7/16	3/16	.28
435-020SRTC	2	2-11/16	3	3- 1/32	9/32	.45
435-025SRTC	2-1/2	3- 9/32	3- 9/16	3-19/32	7/32	.72
435-030SRTC	3	3- 1/2	4- 1/4	4- 9/32	3/16	1.01
435-040SRTC	4	3-31/32	5- 7/32	5- 7/32	7/32	1.35
435-060SRTC	6	5	7-21/32	7-21/32	1/4	3.16

EverTUFF_® TURF[™] CPVC Male Adapter

Mipt x Socket Class 315

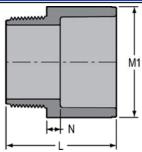


Part Number	Size	L	М	N	Approx. Wt. (Lbs.)
436-010TC	1	1- 1/8	1-11/16	7/32	.10
436-012TC	1-1/4	2- 1/2	2	7/32	.15



EverTUFF_® TURF™ CPVC Male Adapter

Mipt x Socket Class 315

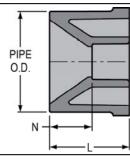


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Part Number	Size	L	M	N	Approx. Wt. (Lbs.)
436-015TC	1-1/2	2- 5/8	2- 5/16	7/32	.38
436-020TC	2	2-21/32	2-25/32	7/32	.30
436-025TC	2-1/2	3-19/32	3-7/16	1/4	.53
436-030TC	3	3-13/16	4	5/32	.77
436-040TC	4	4-13/32	5- 1/4	13/32	1.18
436-060TC	6	5-1/2	7-9/16	1-9/32	3.03

EverTUFF® TURF™ CPVC Reducer Bushing Flush Style

Spigot x Socket
Class 315



Part Number	Size	L	N	Approx. Wt. (Lbs.)
437-250TC	2X1-1/4	1-23/32	7/16	.20
437-251TC	2X1-1/2	1-23/32	5/16	.15
437-292TC	2-1/2X2	2- 1/16	17/32	.59
437-338TC	3X2	2- 7/32	9/16	.63
437-422TC	4X3	2-19/32	11/16	.85
437-532TC	6X4	3-17/32	1-1/4	2.90



