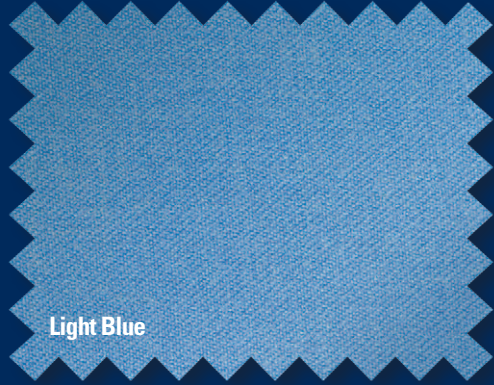




Tecasafe® plus



Light Blue

Unbeatable Electric Arc Protection.

TenCate Tecasafe® Plus is a comfortable, light-weight fabric with inherent heat and flame resistant properties. NFPA 70E HRC 2 compliant, it provides durable and affordable electric arc protection to electricians, electrical contractors, and other professionals with potential exposure to electric arc flash. Below, you will see how this inherently flame-resistant fabric provides superior protection and outperforms the competition.

There's also Tecasafe Plus Hi-Vis yellow. No need to wear a separate Hi-Vis vest over your flame resistant shirt.

One of the bigger risks electrical workers encounter when working with live circuits is electric arc. An electric arc is created through an accidental short circuit. The duration of the arc is short, but the effects can be devastating. The electric arc acts like a powerful explosion, sending out a shockwave, molten metal and high-intensity radiant heat. This combination of elements can cause a worker's clothing to ignite, melt instantly or cause the clothing to break open, resulting in severe skin burns.

Tecasafe Plus will protect the worker from the thermal hazards associated with electric arc incidents and minimize or completely prevent skin burns. The fabric will provide thermal insulation between the body and the heat source. It will not ignite, melt, or break open.

- **Inherently flame resistant** – FR properties are built in, and won't wash or wear out. Exceeds NFPA 70E HRC 2 and NFPA 2112 performance standards.
- **Comfortable to wear** – Soft and breathable. Superior moisture management because of special cellulosic fiber content.
- **Exceptional durability** – Outstanding abrasion resistance and better strength retention after multiple commercial washes.
- **Outstanding laundered appearance** – Fabric retains its like-new look and maintains permanent pressed appearance better than other protective fabrics.
- **Excellent value** – Long life cycle and competitive price means lowest cost.



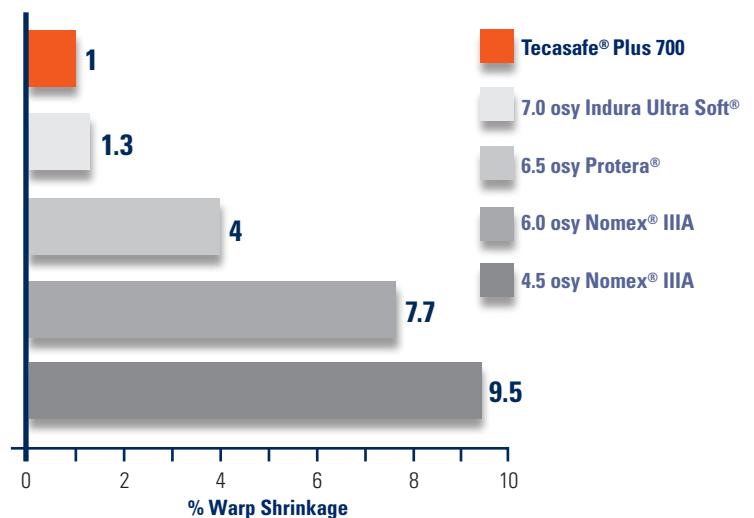
TABER ABRASION TEST RESULTS

	TECASAFE® PLUS 700	INDURA® ULTRA SOFT®	PROTERA®	NOMEX® IIIA
150 CYCLES				
250 CYCLES				



RESISTANCE TO THERMAL SHRINKAGE

NFPA 2112 TPP Thermal Shrinkage Test





Tecasafe® plus

● Khaki ● Light Blue ● Gray ● Royal Blue ● Red ● Yellow ● Orange¹ ● Hi-Vis Yellow² ● Navy

PHYSICAL PROPERTIES	NEW! Tecasafe® Plus 580	Tecasafe® Plus 700	Tecasafe® Plus 700-A	Tecasafe® Plus 850-A	NFPA 70E Requirement		NFPA 2112 Requirement
					HRC 1	HRC 2	
Weight (±5%) oz (sq yd) grams (sq meter)	5.8 oz 197 g	7.0 oz 238 g	7.0 oz 238 g	8.5 oz 288 g			
Fiber Blend	48% fr-modacrylic 37% lyocell 15% aramid	48% fr-modacrylic 37% lyocell 15% aramid	45% fr-modacrylic 35% lyocell 20% aramid	45% fr-modacrylic 35% lyocell 20% aramid			
Standard Colors (other colors available upon request)	● ● ●	● ● ● ● ● ●	●	●			
Arc Thermal Performance Value (ATPV) (cal/cm²) ASTM F 1959	6.5	9.0	10.1	10.2	5.0 min	8.0 min	
Flame Resistance ASTM D 6413 Char Length (inches [warp x fill]) After Flame (seconds [warp x fill])	<4.0 x <4.0 0.0 x 0.0	<4.0 x <4.0 0.0 x 0.0	<4.0 x <4.0 0.0 x 0.0	<4.0 x <4.0 0.0 x 0.0	6.0 max	6.0 max	4.0 max 2.0 max
Thermal Protective Performance (cal/cm²) with spacer without spacer	9.6 6.6	12.3 10.9	10.0 7.5	10.0 8.0			6.0 min 3.0 min
Flash Fire Exposure (Manikin Test) ASTM F 1930 (% body burn [2 cal/cm ² /sec] @ 3 sec)	23%	15%	23.5%	19%			50.0 max
Tensile Strength (lbs [warp x fill]) ASTM D 5034	114 x 85	135 x 85	135 x 85	145 x 90			
Elmendorf Tear Strength (lbs [warp x fill]) ASTM D 1424	11 x 10	8.0 x 7.0	8.0 x 7.0	12.0 x 10.0			
Dimensional Stability AATCC 135 (% [5x] 120°F)	<3.0	<3.0	<3.0	<3.0			
Wicking 1" strip, tap water (seconds)	0.5 inches 1.0 inches 1.5 inches 2.0 inches	3.5 13.0 29.0 61.0	3.5 13.0 29.0 61.0	3.5 13.0 29.0 61.0			
Pilling Resistance ASTM D 3512 30-120 minutes	*5	*5	*4-5	*4-5			
Thermal Shrinkage Resistance (% [500°F, 5 minutes])	<5.0	<1.0	<4.0	<3.0			10.0 max

Ratings: *5—Best, *3—Acceptable, *1—Poor

1. Tecasafe plus Orange meets Canadian high-visibility safety standard CSA Z96-2009.
2. Tecasafe plus Hi-Vis Yellow meets high-visibility safety standards ANSI 107 and CSA Z96-2009.



6501 Mall Blvd. • P.O. Box 289
Union City, GA 30291
Phone: 770.969.1000 • Fax: 770.969.6846
Toll Free: 800.241.8630
www.TenCateProtectiveFabrics.com

Laundering: Garments made with Tecasafe® Plus fabrics are easily maintained by home or industrial laundering. For detailed laundering specifications, please contact TenCate at (800) 241-8630.

Sunlight/UV Exposure Advisory: Like other natural and synthetic textile materials, Tecasafe Plus may be impacted by prolonged exposure to ultra violet radiation (UV) from both sunlight and artificial light sources. Dyed fabrics may change color or fade after prolonged exposures, but UV exposure does not impact flame resistant properties. Similar to other natural and synthetic textile materials, color change or fading is not necessarily indicative of fiber degradation. Extended exposure to UV radiation can also cause loss of mechanical properties depending on wave length, exposure time and radiation intensity. Our tests indicate that Tecasafe Plus maintains higher tensile strength after extended UV exposure than equivalent weights of 100% aramid and 88/12 FR cotton/ nylon blend fabrics. TenCate Protective Fabrics offers no warranties, implied or otherwise, for color change or fabric damage due to UV exposure.

All listed test data and ranges represent typical values. All test data and ranges are the result of multiple tests unless otherwise stated. To the best of our knowledge, the information contained herein is accurate. However, TenCate Protective Fabrics assumes no liability whatsoever for the accuracy or completeness of the information contained herein. Users of any substance must satisfy themselves by independent investigation that the material can be used safely. We have described certain hazards, but we cannot guarantee that these are the only hazards.

©2010 TenCate Protective Fabrics. TenCate is a trademark of Royal Ten Cate. Tecasafe is a trademark of TenCate Protective Fabrics.



Finishing and Non-woven are ISO-9001 Certified Facilities.