



# **Key Terminology**

#### Fluorescent material

- Materials that use special pigments to appear brighter than other colors and enhance daytime visibility, especially in low light such as cloud cover, dusk, dawn, etc.
- ANSI/ISEA 107-2015 specifies minimum performance characteristics for fluorescent lime, orange and red background materials

#### Retroreflective tape

- Tape that reflects light in the direction of the light's source, so that it appears bright to a driver or machine operator when illuminated by a vehicle's headlights or other source of light

### Combined-performance materials

- Tape that is retro-reflective and also fluorescent

### Photometric performance

- How well a material reflects light

High-visibility apparel improves worker visibility during the day, in low-light conditions, and at night. Construction, maintenance, utility, emergency responders, airport personnel and many other off-road workers are routinely exposed to potential injury from low visibility on the job. High-visibility apparel helps keep them safe.

High-visibility standards are set forth by the American National Standard for High Visibility Safety Apparel and Accessories (ANSI/ISEA 107-2015). They were established by the American National Standards Institute. The ANSI 107-2015 standard focuses on the following elements:

### **Garment Design**

There are three designated color options for background material to be considered high visibility: fluorescent lime, fluorescent orange, and fluorescent red. The goal is for you to choose the option that provides the greatest degree of contrast between your body and your surroundings. When selecting the most conspicuous color, take into consideration your environment: Will you be working in an urban or rural environment? In heavy foliage or in a desert? Are the work zone devices lime or orange?

The ANSI 107-2015 standard breaks Hi-Viz apparel into three garment types – types O, R and P – and into three performance classes – classes 1, 2 & 3. Types and classes are not discrete, they are co-dependent. Apparel must be designated with both a type and a class.



**MESH/SOLID** 



**SOLID** 









**ZIPPER** 

### **Garment Types**

**Type O Garments**: Intended for occupational workers who are not required by the Manual on Uniform Traffic Control Devices 2009 (MUTCD 2009) to wear high-visibility safety apparel, but who may still work in an environment with moving equipment/vehicles and accompanying struck-by hazards, and where visibility is a concern.

**Type R Garments**: Intended for occupational workers who are exposed to roadway traffic and who work in an environment with moving equipment/vehicles. Protective apparel with Type R designations fulfill the federal mandate for workers required to wear high-visibility apparel by the Manual on Uniform Traffic Control Devices 2009 (MUTCD 2009).

**Type P Garments**: Intended for fire, police and EMS personnel who have other potential hazards that require them to access equipment on their person. Type P garments differ from type R garments mainly in the requirements for background material.

#### **Performance Classes**

The three performance classes of high-visibility safety apparel help the user to choose the proper garments based on expected risks in the work environment. The classes identify the minimum amount of background and retroreflective material required, and specify the placement of the retroreflective material on the garment.

PERFORMANCE CLASS	CLASS I	CLASS II	CLASS III
Garment Type	0	R, P	R, P
Degree of Visibility	180°	360°	360°
Tape Requirements	1" wide tape	2" wide tape	2" wide tape
Background Fabric Requirements	217 in <sup>2</sup> of hi-vis background	775 in <sup>2</sup> of hi-vis background	1,240 in² of hi-vis background
Sleeve Type	Short-Sleeve Shirt/ Sleeveless Vest	Short-Sleeve Shirt/ Sleeveless Vest	Long- or Short-Sleeve Shirt/ Short-Sleeve Vest
Application	Non-roadway (i.e. parking lot attendant)	Roadway, Public Safety (i.e. construction worker, EMS)	Public Safety, Roadway, Highway, Industrial (i.e. Roadway machinery operator, Traffic cop)

<sup>\*</sup> Type R, Class 2 garments can have the smallest size in the size range compliant to the standard with a minimum of 540 in 2 in background material to accommodate smaller workers. All larger sizes must have a minimum of 775 in 2. No reduction in retro reflectivity is allowed, and 201 in 2 is still the required minimum.

### **Photometric and Physical Performance Requirements for Retroreflective Materials**

- Background and Combined-Performance material needs to be tested for chromaticity/color and luminance and/ or brightness.
- If the garment is intended to provide protection during rainfall, background materials also need to be tested as water repellent, water resistant, or waterproof.

<sup>\*\*</sup> Type R, Class 3 garments can have the smallest size in the size range compliant to the standard with a minimum of 1000 in<sup>2</sup> in the background material to accommodate smaller workers. All larger sizes must have a minimum of 1,240 in<sup>2</sup>. No reduction in retro reflectivity is allowed and 310 in<sup>2</sup> is still the required minimum.

# ANSI CLASS 3 VESTS



# **47300 / 47301**Hi-Viz Economy Safety Vest - Mesh

- 2 Interior oversized pockets
- Exterior chest pocket
- Hook & loop closure
- Mesh fabric

# **47302 / 47303**Hi-Viz Classic Safety Vest - Mesh

- Mic tabs on both shoulders
- 2 Interior oversized pockets
- Exterior double chest pocket with pen-slot pocket
- Zipper closure
- Mesh fabric





## ANSI CLASS 3 VESTS

## 47306 /47307

# Hi-Viz Two-Tone Surveyor's Safety Vest - Mesh/Solid

- Two-toned contrast tape, silver with colored border
- Mic tabs on both shoulders
- D-ring slot
- Exterior phone pocket with sealable flap
- 2 Exterior oversized pockets
- Pen-slot pocket on chest
- Zipper closure
- Solid tricot knit fabric front/Mesh fabric back













### 47308 /47309 Hi-Viz Self-Extinguishing Safety Vest - Mesh

- Treated mesh fabric self-extinguishes when exposed to flame
- 2 Interior oversized pockets
- Exterior patch pocket on chest
- Hook & loop closure
- Mesh fabric
- ASTM D6413 Tested

STYLE NUMBER	PERFORMANCE CLASS / GARMENT TYPE	SLEEVE	FABRIC	CLOSURE	POCKETS	COLOR	REFLECTIVE TAPE	SIZES
47300	Class 3 / Type R	Short Sleeved	Mesh	Hook & Loop	3	Lime	2" Tape, H-Shaped Back	M-4XL
47301	Class 3 / Type R	Short Sleeved	Mesh	Hook & Loop	3	Orange	2" Tape, H-Shaped Back	M-4XL
47302	Class 3 / Type R	Short Sleeved	Mesh	Zipper	4	Lime	2" Tape, H-Shaped Back	M-4XL
47303	Class 3 / Type R	Short Sleeved	Mesh	Zipper	4	Orange	2" Tape, H-Shaped Back	M-4XL
47306	Class 3 / Type R	Short Sleeved	Solid Front / Mesh Back	Zipper	6	Lime	2" Two-Toned Tape, H-Shaped Back	M-4XL
47307	Class 3 / Type R	Short Sleeved	Solid Front / Mesh Back	Zipper	6	Orange	2" Two-Toned Tape, H-Shaped Back	M-4XL
47308	Class 3 / Type R	Short Sleeved	Mesh	Hook & Loop	3	Lime	2" Tape, H-Shaped Back	M-4XL
47309	Class 3 / Type R	Short Sleeved	Mesh	Hook & Loop	3	Orange	2" Tape, H-Shaped Back	M-4XL

# ANSI CLASS 2 VESTS











- Interior oversized pocket
- Exterior patch pocket on chest
- Hook & loop closure
- Mesh fabric













# **47203 / 47204**Hi-Viz Economy Safety Vest - Solid

- Mic tab on left shoulder
- 2 Interior oversized pockets
- Exterior phone pocket with sealable flap
- Interior pen-slot pocket
- Hook & loop closure
- Solid tricot knit fabric

## ANSI CLASS 2 VESTS





# **47209 / 47210**Hi-Viz Classic Safety Vest - Mesh

- Mic tabs on both shoulders
- 2 Interior oversized pockets
- Exterior phone pocket with sealable flap
- Zipper closure
- Mesh fabric

# **47200 / 47201**Hi-Viz Breakaway Safety Vest - Mesh

- 5-point breakaway
- Adjustable straps at waist
- 2 Interior oversized pockets
- Interior square pocket on chest
- Hook & loop closure
- Mesh fabric





## ANSI CLASS 2 VESTS



# 47213/47214

### Hi-Viz Two-Tone Breakaway Safety Vest - Mesh

- 5-point breakaway
- Two-toned contrast tape, silver with colored border
- D-ring slot
- 2 Exterior patch pockets on chest
- Exterior square pocket
- Hook & loop closure
- Mesh fabric



# **47211 /47212**Hi-Viz Color Block Surveyor's Safety Vest - Solid

- Color-block black bottoms hide dirt and grime
- Mic tabs on both shoulders
- Double pockets on chest with two compartments for storage
- Exterior sealable phone pocket
- 2 Exterior oversized pockets
- Pen-slot pocket on chest
- Zipper closure
- Solid Tricot knit fabric

## ANSI CLASS 2 VESTS

## 47215 /47216

### Hi-Viz Two-Tone Surveyor's Safety Vest - Mesh/Solid

- Two-toned contrast tape, silver with colored border
- D-ring slot
- Mic tabs on both shoulders
- Exterior phone pocket with sealable flap
- 2 Exterior oversized pockets
- Pen-slot pocket on chest
- Zipper closure
- Solid tricot knit fabric front / Mesh fabric back













# 47217 /47218 Hi-Viz Self-Extinguishing Safety Vest - Mesh

- Treated mesh fabric self extinguishes when exposed to flame
- 2 Interior oversized pockets
- Exterior sealable phone pocket
- Hook & loop closure
- Mesh fabric
- ASTM D6413 tested

## 47304 /47305 Hi-Viz Color Block Surveyor's Safety Vest - Solid

- Color-block black bottoms hide dirt and grime
- Mic tabs on both shoulders
- Double pockets on chest with two compartments for storage
- Exterior sealable phone pocket
- 2 Exterior oversized pockets
- Pen-slot pocket on chest
- Zipper closure
- Solid Tricot knit fabric











# ANSI CLASS 2 VESTS











# **47207 /47208**Hi-Viz Ladies Fitted Safety Vest - Mesh

- Drawstring on the interior waistband provides a custom fit
- 2 Exterior square pockets
- Hook & loop closure
- Mesh fabric

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STYLE NUMBER	PERFORMANCE CLASS / GARMENT TYPE	SLEEVE	FABRIC	CLOSURE	POCKETS	COLOR	REFLECTIVE TAPE	SIZES
47205	Class 2 / Type R	Sleeveless	Mesh	Hook & Loop		Lime	2" Tape, H-Shaped Back	M-4XL
47206	Class 2 / Type R	Sleeveless	Mesh	Hook & Loop	2	Orange	2" Tape, H-Shaped Back	M-4XL
47203	Class 2 / Type R	Sleeveless	Solid	Hook & Loop	4	Lime	2" Tape, H-Shaped Back	M-4XL
47204	Class 2 / Type R	Sleeveless	Solid	Hook & Loop	4	Orange	2" Tape, H-Shaped Back	M-4XL
47209	Class 2 / Type R	Sleeveless	Mesh	Zipper	3	Lime	2" Tape, H-Shaped Back	M-4XL
47210	Class 2 / Type R	Sleeveless	Mesh	Zipper	3	Orange	2" Tape, H-Shaped Back	M-4XL
47200	Class 2 / Type R	Sleeveless	Mesh	Hook & Loop	2	Lime	2" Tape, X-Shaped Back One	Size Fits Most
47201	Class 2 / Type R	Sleeveless	Mesh	Hook & Loop	2	Orange	2" Tape, X-Shaped Back One	Size Fits Mos
47213	Class 2 / Type R	Sleeveless	Mesh	Hook & Loop	3	Lime	2" Two-Toned Tape, X-Shaped Back	M-4XL
47214	Class 2 / Type R	Sleeveless	Mesh	Hook & Loop	3	Orange	2" Two-Toned Tape, X-Shaped Back	M-4XL
47211	Class 2 / Type R	Sleeveless	Solid	Zipper	5	Lime	2" Tape, H-Shaped Back	M-4XL
47212	Class 2 / Type R	Sleeveless	Solid	Zipper	5	Orange	2" Tape, H-Shaped Back	M-4XL
47215	Class 2 / Type R	Sleeveless	Solid Front / Mesh Back	Zipper	6	Lime	2" Two-Toned Tape, H-Shaped Back	M-4XL
47216	Class 2 / Type R	Sleeveless	Solid Front / Mesh Back	Zipper	6	Orange	2" Two-Toned Tape, H-Shaped Back	M-4XL
47217	Class 2 / Type R	Sleeveless	Mesh	Hook & Loop	3	Lime	2" Tape, H-Shaped Back	M-4XL
47218	Class 2 / Type R	Sleeveless	Mesh	Hook & Loop	3	Orange	2" Tape, H-Shaped Back	M-4XL
47304	Class 2 / Type R	Short Sleeved	Solid	Zipper	5	Lime	2" Tape, H-Shaped Back	M-4XL
47305	Class 2 / Type R	Short Sleeved	Solid	Zipper	5	Orange	2" Tape, H-Shaped Back	M-4XL
47207	Class 2 / Type R	Sleeveless	Mesh	Hook & Loop	2	Lime	2" Tape, H-Shaped Back	M-4XL
47208	Class 2 / Type R	Sleeveless	Mesh	Hook & Loop	2	Orange	2" Tape, H-Shaped Back	SM & LXL

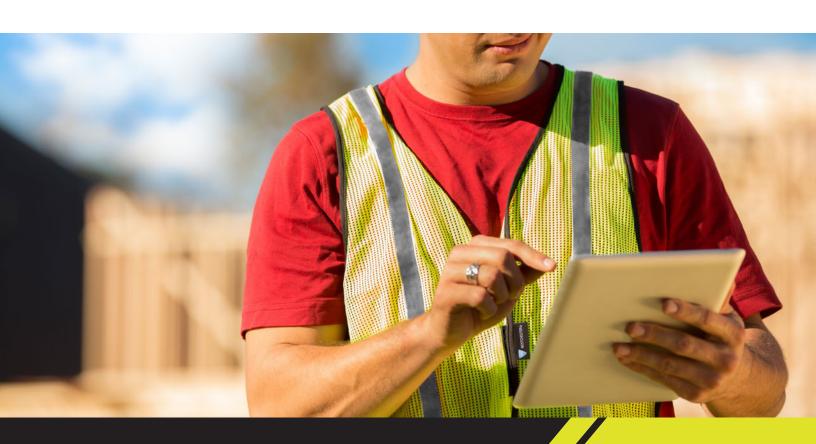
# GENERAL USE VESTS

# **47100 /47101**Hi-Viz General Use Safety Vest - Mesh

- Adjustable straps at waist
- Interior phone pocket on chest
- Hook & loop closure
- 1" reflective tape
- Mesh fabric



STYLE NUMBER	PERFORMANCE CLASS / GARMENT TYPE	SLEEVE	FABRIC	CLOSURE	POCKETS	COLOR	SIZES
47100	Non-Rated	Sleeveless	Mesh	Hook & Loop	1	Lime	One Size Fits Most
47101	Non-Rated	Sleeveless	Mesh	Hook & Loop	1	Orange	One Size Fits Most



# T-SHIRTS



# 47400/47401 Hi-Viz Economy Safety Shirt - Short Sleeved

- Short sleeves keep you cool in the heat
- Wider neck opening for comfort and breathability
- Exterior chest pocket
- Performance wicking material

# 47402/47403 Hi-Viz Standard Safety Shirt - Short Sleeved

- Short sleeves keep you cool in the heat
- Wider neck opening for comfort and breathability
- Exterior chest pocket
- Breaks in reflective tape at side seams allow for extra stretch
- Performance wicking material
- ANSI / ISFA 107-2015 Class 2





## 47404/47405

### Hi-Viz Color Block Safety Shirt - Short Sleeved

- Color block black bottom hides dirt and grime
- Short sleeves keep you cool in the heat
- Wider neck opening for comfort and breathability
- Exterior chest pocket
- Breaks in reflective tape at side seams allow for extra stretch
- Performance wicking material
- ANSI / ISEA 107-2015 Class 2





### 47406/47407 Hi-Viz Economy Safety Shirt - Long Sleeved

- Long sleeves for greater visibility and warmth
- Wider neck opening for comfort and breathability
- Exterior chest pocket
- Performance wicking material

# **47408/47409**Hi-Viz Standard Safety Shirt - Long Sleeved

- Long sleeves for greater visibility and warmth
- Wider neck opening for comfort and breathability
- Exterior chest pocket
- Breaks in reflective tape at side seams allow for extra stretch
- Performance wicking material
- ANSI / ISEA 107-2015 Class 3



## T-SHIRTS









## Hi-Viz Color Block Safety Shirt - Long Sleeved

- Color block black bottom hides dirt and grime
- Long sleeves for greater visibility and warmth
- Wider neck opening for comfort and breathability
- Exterior chest pocket
- Breaks in reflective tape at side seams allow for extra stretch
- Performance wicking material
- ANSI / ISEA 107-2015 Class 3



STYLE NUMBER	PERFORMANCE CLASS / GARMENT TYPE	SLEEVE	POCKETS	COLOR	REFLECTIVE TAPE	SIZES
47400	Non-ANSI	Short	1	Lime	N/A	M-4XL
47401	Non-ANSI	Short	1	Orange	N/A	M-4XL
47402	Class 2 / Type R	Short	1	Lime	2" Tape, H-Shaped Back	M-4XL
47403	Class 2 / Type R	Short	1	Orange	2" Tape, H-Shaped Back	M-4XL
47404	Class 2 / Type R	Short	1	Lime	2" Tape, H-Shaped Back	M-4XL
47405	Class 2 / Type R	Short	1	Orange	2" Tape, H-Shaped Back	M-4XL
47406	Non-ANSI	Long	1	Lime	N/A	M-4XL
47407	Non-ANSI	Long	1	Orange	N/A	M-4XL
47408	Class 3 / Type R	Long	1	Lime	2" Tape, H-Shaped Back	M-4XL
47409	Class 3 / Type R	Long	1	Orange	2" Tape, H-Shaped Back	M-4XL
47410	Class 3 / Type R	Long	1	Lime	2" Tape, H-Shaped Back	M-4XL
47411	Class 3 / Type R	Long	1	Orange	2" Tape, H-Shaped Back	M-4XL

## OUTERWEAR

# **47500**Color Block Zip Up Hooded Sweatshirt

- Heavyweight fleece with brushed interior is warm and wicking
- Oversized front pockets provide storage and a warm place to keep hands
- Color block black bottom hides dirt and grime
- Toggle drawstring allows hood to be drawn tight for added insulation
- Rib knit cuffs fit snug to keep out dirt and retain warmth
- ANSI / ISEA 107-2015 Class 3













# **47502**Color Block Bomber Jacket

- Heavy duty oxford exterior resists abrasion
- Insulated Positherm® lining for warmth
- Mic tabs on both shoulders
- Oversized front pockets provide storage and a warm place to keep hands, while blocking out wind and rain
- Interior zipper pocket with mesh insert provides two compartments for storage
- Interior oversized chest pocket
- Exterior phone pocket with sealable flap
- ANSI / ISEA 107-2015 Class 3

STYLE NUMBER	PERFORMANCE CLASS / GARMENT TYPE	FABRIC	CLOSURE	POCKETS	COLOR	REFLECTIVE TAPE	SIZES
47500	Class 3 / Type R	Brushed Fleece	Zipper	2	Lime	2" Tape, H-Shaped Back	M-4XL
47502	Class 3 / Type R	Heavy Duty Oxford / Quilted Thermal	Zipper	6	Lime	2" Tape, H-Shaped Back	M-4XL

## RAINWEAR











# **4338**Safety Yellow Rain Suit

- Jacket: 2 front pockets; Zipper pocket inside storm flap on chest; Vented cape back for breathability; Drawstring on bottom of jacket helps keep out wet conditions
- Bibs: Elastic waist; Adjustable elastic suspenders with quick-release buckles; Pocket with hook & loop closure on bib center front; Button fly
- Hood: Removable hood with 4 snaps; Visor; Drawstring hood
- Adjustable snap closures on wrist and ankles
- 1" Reflective tape for enhanced visibility

# **4031**Hi-Viz ANSI Class 1 Rain Suit

- Jacket: 2 flap front pockets with snap closures; Vented cape back for breathability
- Bibs: Adjustable elastic suspenders with quick-release buckles; Single snap fly
- Hood: Removable hood with 4 snaps and chin strap for secure fit
- 1" Reflective tape for enhanced visibility













# 4033/WW4033P/WW4033J

Hi-Viz ANSI Class 3 Rain Suit

- Jacket: 2 flap front pockets with snap closures; Corduroy collar for comfort
- Bibs: Adjustable elastic suspenders with quick-release buckles; Single Snap fly
- Hood: Removable hood with 4 snaps and chin strap for secure fit
- 2" Reflective tape
- ANSI / ISEA 107-2004 Class 3
- Bibs: ANSI / ISEA 107-2004 Class E

### RAINWEAR

# 4530/4530SE

#### Hi-Viz Color Block Rain Suit

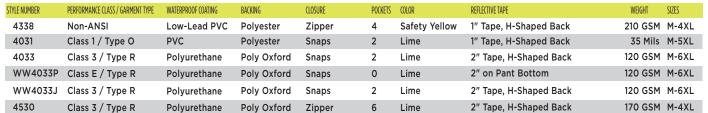
- Jacket: 2 front flap pockets with hook & loop closures; Hidden phone pocket on chest under storm flap
- Bibs: Adjustable elastic suspenders with quick-release buckles; Single Snap fly
- Hood: Removable hood with 4 snaps and chin strap for secure fit
- Sewn and taped seams for water resistance
- SE version self extinguishes when exposed to flame; ASTM D6413 tested
- 6 Pockets total
- ANSI / ISEA 107-2015 Class 3
- Bibs: ANSI / ISEA 107-2015 Class E

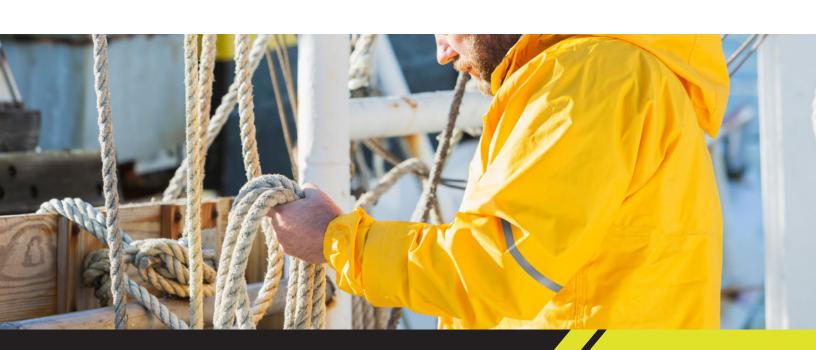












# **Your Hi-Viz, Your Way - Customizable**

Don't settle for standard. Get your hi-viz apparel the way you want it. Promote your company name by adding your logo. Mark each vest with its owner's name. The choice is yours. Our in-house customization shop will customize your apparel within 7 to 10 business days to get you moving quickly. Viz up and stand out – your way.



<sup>\*</sup> Dashed outlined boxes represent avaliable space for customization

## **Customization Options**

### Logoing

Promote your business with your logo on your hi-viz apparel. It's a great way to endorse a positive and professional image, plus generate leads and new business. It's also a great way to encourage team spirit in the workplace.

### **Printing (Screen Print or Heat Transfer)**

We recommend printing your logo in black to best stand out against a hi-viz background, however we can handle any color combination you want. If your logo is 1 to 4 colors, we will screen print your logo onto your apparel. If your logo is 5+ colors, or if you request, we will use heat transfer technology to print a detailed and brilliant image of your logo. The heat transfer is a vinyl material that is pressed on with heat. Both options resist fading, and both will outlast the recommended lifetime of the hi-viz apparel. They are fully machine washable.

### **Embroidery**

A higher-end option, embroidered logos make a statement because of the enduring quality and textured feel of the stitching. We will digitize your logo for embroidery.

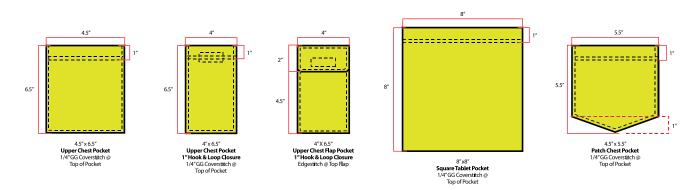
### Personalized Name/Title/Wording

Add your name, your tagline or any other wording onto your hi-viz apparel to personalize it. We will add your personalized copy using a vinyl heat transfer so that it will stand out.

#### Add a Pocket / Mic Tab

Need more storage? No problem. We offer five pocket styles that you can add to any of our hi-viz apparel. The pockets will match the color and fabric of your apparel and can be stitched onto the interior or exterior of your apparel.

Mic tabs are heavy duty nylon webbing tape that is sewn onto the front chest and are used to hook onto radios, microphones and other electronics. We can add mic tabs to one or both shoulders.



### **Artwork Requirements**

For the best quality, we require vector artwork because it is scalable, meaning that it can be enlarged without losing quality. Acceptable file formats are AI (Adobe Illustrator), EPS, or PDF files that were created from vector art. Photocopies, business cards, and drawings are not considered print-ready artwork.

We have a number of stock colors for you to choose from. If you don't choose a color, we will match the color of the original artwork as close as possible. If your logo requires a specific color, we can print a custom color with a PMS match. We will mix the color to specifications, however exact color matching cannot be guaranteed when printing on a colored fabric.

Custom Artwork: If you would like help in designing or recreating your logo, we have a full in-house graphic design team that can design custom artwork.



