

## Recommended Minimum Standards for Torso Reflectivity

The [Rules for Riders](#) state that riders must display "significant reflective material" on their torsos. In that "significant" is a subjective word, the following standards have been written to guide riders in their selection of appropriately reflective gear.

It is highly recommended that riders display at least 30 square inches of rear-facing reflectivity and 27 square inches of forward-facing and shoulder reflectivity. There are many ways a rider can achieve this level of reflectivity, including the following examples, which riders may select according to their personal preferences.

- a. By wearing an ANSI/ISEA 107 (US standard) or EN 1150 (European standard) certified vest. Such vests are available through the RUSA store. Info on the ANSI/ISEA 107 standard can be found here: <https://www.safetysupply.com/c/std107-2010.cfm>. More info on EN1150 vests can be found here: [www.rusa.org/reflectivity/Reflectivity-EN1150.pdf](http://www.rusa.org/reflectivity/Reflectivity-EN1150.pdf).
- b. By wearing sash & belt or mesh-style devices commonly available for cyclists and runners online.
- c. By applying sew-on or iron-on reflective strips to jerseys, jackets, vests or other garments which will be the rider's outer-most layer during low light or night riding hours. The [RUSA Store](#) has 3M Scotchlite reflective tape for sale as 12" x 1" strips and 12" x 2" strips. Each member can also request two 12" x 1" strips gratis (except for shipping).

How can you be sure your torso reflectivity meets these standards? Please read through our Frequently Asked Questions below. If you have other questions, send them to the [RUSA President](#), and we'll add the answers to this list.

### What is an ANSI/ISEA 107 or EN1150 certified vest?

ANSI/ISEA 107 is an American national standard for high visibility safety apparel and headwear. This is a workplace standard intended "to protect workers against hazards of low visibility, and to enhance the visibility of workers who are exposed to struck-by hazards." Garments that meet this standard have both fluorescent and retroreflective materials. Info on the ANSI/ISEA 107 standard can be found here: <https://www.safetysupply.com/c/std107-2010.cfm>

EN1150 is a European reflectivity / high visibility standard approved for non-workplace use for traffic-related activities such as road cycling. The EN1150 standard specifies a minimum area of coverage and placement of highly conspicuous background materials as well as retro-reflective materials. EN1150 certified products are intended to make cyclists conspicuous during the day through the use of highly visible background materials. An EN1150 vest also makes cyclists visible at night by illumination from vehicle headlights of retro-reflective materials.

### What does an ANSI/ISEA 107 or EN1150 certified vest look like & where can I get one?

The [RUSA Store](#) sells several vests that meet these certification standards, including inexpensive "construction-style" vests as well as more costly but highly functional cycling-specific wind vests. Construction style ANSI/ISEA 107 vests are readily available elsewhere as well, including safety supply stores. Available online (from primarily international vendors) are cycling specific EN1150 vests from brands such as Gore, Mavic, B-Twin and others.

### May I use a garment that is not ANSI/ISEA 107 or EN1150 certified?

Yes, absolutely! Guideline option c permits you to apply sew-on or iron-on reflectivity to any garment that will be your outermost layer, be that a jersey, vest, jacket, etc. We still recommend that you apply enough of this material to display at least 30 square inches of rear-facing reflectivity and 27 square inches of forward-facing and shoulder reflectivity.

### I live in a warmer climate and don't want to wear a vest. What are my options?

Refer to options b & c of the Reflectivity Guidelines (above). Regardless of whether you choose a sash/belt, a mesh-style device, or apply reflectivity directly to your favorite lightweight jersey, we still recommend that you apply enough of this material to display at least 30 square inches of rear-facing reflectivity and 27 square inches of forward-facing and shoulder reflectivity. When using a sash/belt style device, care must be taken to ensure the device is well-fitting and properly positioned to avoid sagging and to maintain optimal visibility.

### I ride a recumbent and my torso cannot be seen when I'm riding. Why do I need to wear torso reflectivity?

Torso reflectivity also serves the purpose of making you visible when you're standing beside your bike at night, perhaps while attending to a flat tire or taking a nature break. [Article 10 of the Rules For Riders](#), encourages recumbent riders, given their unusual seating position, to modify their reflective torso devices as necessary to show better from the front and rear.

### What other reflective gear should I consider?

In addition to the **required** reflective ankle bands (see [Article 10 of Rulers for Riders](#)), you may consider adding reflective material to the bike or body, such as 3M strips on fenders, helmets, wheels, shoes, etc. to enhance visibility and attract motorist attention.

### Does the RBA (or ride organizer) need to approve my reflective torso device?

For any randonneuring event that is likely to start in the darkness or extend into nighttime hours and low light conditions, RBAs may conduct a safety inspection of your lights and reflective gear. If the RBA deems your lights or reflective gear to be inadequate, he or she has the discretion to delay your start in instances of a nighttime start or even prevent you from riding entirely. RUSA trusts its RBAs and fully supports them in making informed decisions about rider safety at their events.

As stated in [Article 10 of Rules for Riders](#), regardless of whether or not an RBA or ride organizer conducts a gear/equipment inspection at the start of a ride, failure to have and display appropriate reflective gear and required lighting may result in an immediate disqualification.