

HOW DO WE TEST OUR HIGH-VISIBILITY GARMENTS TO EN ISO 20471 AND RIS-3279-TOM?



A Retroreflectometer is used to check the performance of retroreflective tape. Every roll of tape is tested to ensure it meets and exceeds the standard requirements. The retroreflectometer measures the coefficient of two rotating angles. EN ISO 20471 states the reading should not be below 330 (cd/lx.m²) however at Portwest we insist on a reading of 400 (cd/lx.m²) plus.



A spectrophotometer is used to check the chromaticity – “colour intensity” – of fabric. We use this to ensure every roll of fabric meets the requirements of EN ISO 20471 and RIS-3279-TOM.



RIS imposes a higher concentration for high visibility orange fabric for railway workers. This increases the conspicuous nature of the fabric and ensures that the rail worker is more visible.

DO YOU KNOW 7

PORTWEST®

THAT EN ISO 20471 HAS 3 PERFORMANCE LEVELS:



THE 3 CLASSES

- Class 3: Highest Level
- Class 2: Intermediate Level
- Class 1: Minimum Level



CLASS 3: HIGHEST LEVEL

Highest level of protection - required for any persons working on or near motorways, dual-carriage ways or airports. Must incorporate a minimum of 0.80m² of background material and 0.20m² of retro-reflective materials. (4 metres of 5cm wide reflective tape)



CLASS 2: INTERMEDIATE LEVEL

Required for any persons working on or near A and B class roads, also for delivery drivers. Must incorporate a minimum of 0.50m² of background material and 0.13m² of retro-reflective material. (2.60 metres of 5cm wide reflective tape)



CLASS 1: MINIMUM LEVEL

Minimum level of protection required for any persons working on a private road or to be used in conjunction with a higher classed garment. Must incorporate a minimum of 0.14m² of background material and 0.10m² of retroreflective material. (2 metres of 5cm wide reflective tape)

WHAT IS RIS-3279-TOM ISSUE 1?

THIS IS A RAILWAY GROUP STANDARD THAT SPECIFIES THE MINIMUM SPECIFICATION FOR HIGH-VISIBILITY WARNING CLOTHING IN THE UK RAIL INDUSTRY ENSURING WORKERS ARE CONSPICUOUS WHEN ON OR NEAR RAILWAY LINES



S590

RIS-3279-TOM

Is based on the European standard EN ISO 20471. It defines the minimum areas of high-visibility orange background materials to be used within a garment and the minimum level of photometric performance criteria for the reflective tape. The standard requires a reflective tape reading of ≥ 330 (cd/ lx.m²) however at Portwest we insist on a reading of ≥ 400 (cd/ lx.m²).

RIS-3279-TOM

Imposes a higher concentration for high-visibility orange fabric for railway workers. This increases the conspicuous nature of the fabric and ensures the rail worker is more visible. A spectrophotometer is used to check the chromaticity (colour intensity) of the orange high-visibility fabric. Portwest check every roll of fabric to ensure the fabric meets the requirements of RIS-3279-TOM.



RT60

S590

RT20

RT26