

DECLARATION OF PERFORMANCE

Construction Products Regulation 305/2011

No. 7501-1613

Prismatic Retroreflective Sheeting:

T-7500B Series
T-7500B Series with OL-2000 Transparent EC Film
T-7500B Series with 4930 Screen Ink
T-7500B Series with UVTS Screen Ink
T-7500B Series with 3801 Traffic Film Black
T-7500B Series with TrafficJet Ecosolvent Ink & Clear Overlay
T-7500B Series with TrafficJet UV Ink & Clear Overlay



T-7500B Series is a high-quality, 10-year durable, microprismatic retroreflective material with a pressure sensitive adhesive. This product is intended for use on permanent or temporary highway safety devices that require robust Class 3 retroreflective performance.



Manufactured by: Avery Dennison, Reflective Solutions

Willem Einthovenstraat 11, 2342 BH
Oegstgeest, The Netherlands

902 Feehanville Rd.
Mt. Prospect, IL 60056 USA

Avery Dennison performed factory product control and product sampling per assessment and verification of constancy of performance under System 1. Silniční vývoj - ZDZ spol. s r. o. Notified Body 1388 performed initial type testing, inspection of manufacturing facilities and factory products controls under system 1. Tzus, 060-045345 issued **ETA 15/0888** dated 18/09/2017 & **ETA 18/0544** dated 15/10/2018 & **ETA 20/0687**, **ETA 20/0882** dated 18/01/2021. Anti-Dew OL1200 included in ETA's 22/0240 & 22/0241 dated 22/08/2022

| Essential Characteristics | | Performance | Assessment Document |
|---|------------------------------------|---|--------------------------------------|
| Daylight Chromaticity | | Per Table 3 | EAD 12000-01-0106, September 2016 |
| Luminance Factor | | Per Table 3 | |
| Coefficient of retro-reflection, Rotational Symmetry | | Per Tables 4 & 5, Rotational Variation < 10% | |
| Impact Resistance | | No Effect | |
| Visibility after Weathering, Natural & Accelerated Artificial | Retroreflection | 80% of Initial Requirement | |
| | Chromaticity & Luminance Factor | Per Table 2 Below | |
| Adhesion | | Peel < 50mm | |

The performance of T-7500B Series is in conformance with declarations herein when evaluated per EAD 120001-01-0106. This declaration of performance is issued for performance clarity under the sole discretion of Avery Dennison.

Signed for on behalf of Avery Dennison by: Erika Shang, Quality Manager

Date: 16 November, 2022, Illinois, USA

Classification: Avery Dennison - Internal

Table 2: Daytime Chromaticity and Luminance Factors^A CR1

| Colour | | Colour Box Coordinates | | | | Luminance Factor β |
|-----------------------------|---|------------------------|-------|-------|-------|-----------------------------|
| | | 1 | 2 | 3 | 4 | |
| White | x | 0,355 | 0,305 | 0,285 | 0,335 | $\geq 0,27$ |
| | y | 0,355 | 0,305 | 0,325 | 0,375 | |
| Yellow | x | 0,545 | 0,487 | 0,427 | 0,465 | $\geq 0,16$ |
| | y | 0,454 | 0,423 | 0,483 | 0,534 | |
| Red | x | 0,735 | 0,674 | 0,569 | 0,655 | $\geq 0,03$ |
| | y | 0,265 | 0,236 | 0,341 | 0,345 | |
| Orange | x | 0,610 | 0,535 | 0,506 | 0,570 | $\geq 0,14$ |
| | y | 0,390 | 0,375 | 0,404 | 0,429 | |
| Green | x | 0,007 | 0,248 | 0,177 | 0,026 | $\geq 0,03$ |
| | y | 0,703 | 0,409 | 0,362 | 0,399 | |
| Green 2 (Worboy Green) | x | 0,313 | 0,313 | 0,248 | 0,127 | $0,01 \leq \beta \leq 0,07$ |
| | y | 0,682 | 0,453 | 0,409 | 0,557 | |
| Brown | x | 0,455 | 0,523 | 0,479 | 0,558 | $0,03 \leq \beta \leq 0,09$ |
| | y | 0,397 | 0,429 | 0,373 | 0,394 | |
| Blue | x | 0,078 | 0,150 | 0,210 | 0,137 | $\geq 0,01$ |
| | y | 0,171 | 0,220 | 0,160 | 0,038 | |
| Grey | x | 0,355 | 0,305 | 0,285 | 0,335 | $0,12 \leq \beta \leq 0,18$ |
| | y | 0,355 | 0,305 | 0,325 | 0,375 | |
| Fluorescent Yellow | x | 0,521 | 0,557 | 0,479 | 0,454 | $\geq 0,38$ |
| | y | 0,424 | 0,442 | 0,520 | 0,491 | |
| Fluorescent Orange | x | 0,595 | 0,645 | 0,570 | 0,531 | $\geq 0,20$ |
| | y | 0,351 | 0,355 | 0,429 | 0,414 | |
| Fluorescent Yellow/Green | x | 0,387 | 0,460 | 0,438 | 0,376 | $\geq 0,50$ |
| | y | 0,610 | 0,540 | 0,508 | 0,568 | |
| Black | x | 0,385 | 0,275 | 0,235 | 0,345 | $\leq 0,03$ |
| | y | 0,355 | 0,250 | 0,290 | 0,395 | |

Notes: A – When material is sampled, processed and tested per Avery Dennison Product Data Bulletins, Instructional Bulletins, and EAD 120001-01-0106, Section 2.2.1.

Table 3: Daytime Chromaticity and Luminance Factors^A CR2

| Colour | | Colour Box Coordinates | | | | Luminance Factor β |
|--------------------------|---|------------------------|-------|-------|-------|-----------------------------|
| | | 1 | 2 | 3 | 4 | |
| White | x | 0,305 | 0,335 | 0,325 | 0,295 | $\geq 0,27$ |
| | y | 0,315 | 0,345 | 0,355 | 0,325 | |
| Yellow | x | 0,494 | 0,470 | 0,513 | 0,545 | $\geq 0,16$ |
| | y | 0,505 | 0,480 | 0,437 | 0,454 | |
| Red | x | 0,735 | 0,700 | 0,610 | 0,660 | $\geq 0,03$ |
| | y | 0,265 | 0,250 | 0,340 | 0,340 | |
| Orange | x | 0,631 | 0,560 | 0,506 | 0,570 | $\geq 0,14$ |
| | y | 0,369 | 0,360 | 0,404 | 0,429 | |
| Green | x | 0,110 | 0,170 | 0,170 | 0,110 | $\geq 0,03$ |
| | y | 0,415 | 0,415 | 0,500 | 0,500 | |
| Green 2 | x | 0,313 | 0,313 | 0,248 | 0,127 | $0,01 \leq \beta \leq 0,07$ |
| | y | 0,682 | 0,453 | 0,409 | 0,557 | |
| Brown | x | 0,455 | 0,523 | 0,479 | 0,558 | $0,03 \leq \beta \leq 0,09$ |
| | y | 0,397 | 0,429 | 0,373 | 0,394 | |
| Blue | x | 0,130 | 0,160 | 0,160 | 0,130 | $\geq 0,01$ |
| | y | 0,090 | 0,090 | 0,140 | 0,140 | |
| Black | x | 0,385 | 0,300 | 0,260 | 0,345 | $\leq 0,03$ |
| | y | 0,355 | 0,270 | 0,310 | 0,395 | |
| Fluorescent Yellow | x | 0,521 | 0,557 | 0,479 | 0,454 | $\geq 0,38$ |
| | y | 0,424 | 0,442 | 0,520 | 0,491 | |
| Fluorescent Orange | x | 0,595 | 0,645 | 0,570 | 0,531 | $\geq 0,20$ |
| | y | 0,351 | 0,355 | 0,429 | 0,414 | |
| Fluorescent Yellow-Green | x | 0,387 | 0,460 | 0,438 | 0,376 | $\geq 0,60$ |
| | y | 0,610 | 0,540 | 0,508 | 0,568 | |

Notes: ^A – When material is sampled, processed and tested per Avery Dennison Product Data Bulletins, Instructional Bulletins, and EAD 120001-01-0106, Section 2.2.1.

Table 4: Coefficients of Retroreflection¹, R_A (cd/lux/m²)
(Includes Spain 3ZB & BEL R3B)

| Entrance Angle (β_1 , $\beta_2=0^\circ$) | Observation Angle (α) | R _A | | | | | | |
|--|--------------------------------|----------------|--------|-------|-----|------|--------------------------|--------------------|
| | | White | Yellow | Green | Red | Blue | Fluorescent Yellow-Green | Fluorescent Yellow |
| 5° | 0.2° | - | - | - | - | - | 375 | - |
| 30° | | - | - | - | - | - | 200 | - |
| 40° | | - | - | - | - | - | 36 | - |
| 5° | 0.33° | 300 | 210 | 30 | 60 | 19 | 270 | 195 |
| 15° | | 240 | 168 | 24 | 48 | 16 | - | - |
| 30° | | 165 | 115 | 17 | 33 | 11 | 140 | 110 |
| 40° | | - | - | - | - | - | 24 | 20 |
| 5° | 0.5° | 250 | 175 | 25 | 50 | 16 | - | - |
| 15° | | 150 | 105 | 15 | 30 | 10 | - | - |
| 30° | | 100 | 70 | 10 | 20 | 6 | - | - |
| 5° | 1.0° | 35 | 24 | 3.5 | 7 | 2.5 | 70 | 23 |
| 15° | | 25 | 17 | 2.5 | 5 | 1.5 | - | - |
| 30° | | 15 | 10 | 1.5 | 3 | 1 | 43 | 13 |
| 40° | | - | - | - | - | - | 9 | 2 |

Notes: 1 – When material is sampled, processed and tested per Avery Dennison Product Data Bulletins, Instructional Bulletins, and EAD 120001-01-0106, Section 2.2.3 $\epsilon=0$ only.

Table 5: Coefficients of Retroreflection¹, R_A (cd/lux/m²)
(Includes DIN 3B, R3B-UK & Czech Rep RA3)

| Entrance Angle (β_1 , $\beta_2=0^\circ$) | Obs Angle (α) | R _A | | | | | | | | | | | |
|--|------------------------|----------------|--------|--------|-------|-----|------|-------|--------------|-------------|-----------|-----------|------|
| | | White | Yellow | Orange | Green | Red | Blue | Brown | Worboy Green | FL Yell-Grn | FL Yellow | FL Orange | Grey |
| 5° | 0.33° | 300 | 195 | 150 | 30 | 60 | 19 | 9 | 24 | 240 | 195 | 90 | 150 |
| 20° | | 240 | 155 | 120 | 24 | 48 | 16 | 7.2 | 19 | 190 | 155 | 72 | 120 |
| 30° | | 165 | 110 | 83 | 17 | 33 | 11 | 5 | 13 | 130 | 110 | 49 | 82 |
| 40° | | 30 | 20 | 15 | 3 | 6 | 2 | - | 2.4 | 24 | 20 | 9 | 15 |
| 5° | 1.0° | 35 | 23 | 18 | 3.5 | 7 | 2.5 | 1.1 | 2.8 | 28 | 23 | 10 | 17 |
| 20° | | 30 | 20 | 15 | 3 | 6 | 2 | - | 2.4 | 24 | 20 | 9 | 15 |
| 30° | | 20 | 13 | 10 | 2 | 4 | 1.5 | - | 1.6 | 16 | 13 | 6 | 10 |
| 40° | | 3.5 | 2 | 2 | 0 | 1 | 0 | - | - | 2.5 | 2 | 1 | 1.8 |
| 5° | 1.5° | 15 | 10 | 7.5 | 1.5 | 3 | 1 | - | 1.2 | 12 | 10 | 4 | 7.5 |
| 20° | | 13 | 8 | 6.5 | 1 | 2.5 | 0 | - | 1 | 10 | 8 | 3 | 6.5 |
| 30° | | 9 | 6 | 4.5 | 0 | 2 | 0 | - | - | 7 | 6 | 2 | 4.5 |
| 40° | | 1.5 | 1 | 1 | 0 | 0 | 0 | - | - | 1 | 1 | - | - |

Notes: 1 – When material is sampled, processed and tested per Avery Dennison Product Data Bulletins, Instructional Bulletins, and EAD 120001-01-0106, Section 2.2.3 $\epsilon=0$ only.

Table 6: Specific Signing Combination Performance Declarations

| Signing Component | Product Name | Colors and Product Number | Declared Retroreflective Detail |
|--|---|--|---------------------------------|
| Native Sheeting | T-7500B Series | T-7500B White T-7501B Yellow T-7505B Blue T-7507B Green T-7508B Red T-7511B Fluorescent Yellow T-7513B Fluorescent Yellow-Green | Per Tables 4 & 5 |
| Electronic Cuttable Overlay [#] | OL-1000 OL-2000 OL-1200 EC Film & 3801 Black | OL-2000/1000/1200 Clear applied to White & Yellow Native Sheeting OL-2001 Yellow ^a OL-2005 Blue ^a OL-2007 Green ^a OL-2008 Red ^a OL-2008 Red applied to T-7501B Yellow ⁺ OL-2009 Brown ^a 3801 Black [^] | 70% of Tables 4 & 5 |
| ^Standard Avery Dennison product code is 801, the prefix 3(801) denotes special watermark print for Germany only | | | |
| Solvent Screen Ink [#] | 4930 Series | Blue ^{*,a} Red [*] Red onto T-7501B Yellow ⁺ | 70% of Tables 4 & 5 |
| UV Screen Ink [#] | UVTS with UV Clearcoat | Blue ^a Red Red onto T-7501B Yellow ⁺ Black | 70% of Tables 4 & 5 |
| Digital Printing Ecosolvent [#] | TrafficJet with OL-1000 or OL-2000 Clear or OL1200 Anti-Dew | Yellow Blue Green Red Red onto T-7501B Yellow Brown Worboy Green (not OL-2000) Grey + OL-1000 only Black Black onto T-7501B Yellow | 70% of Tables 4 & 5 |
| Digital Printing UV [#] | TrafficJet with OL-1000 or OL-2000 Clear or OL1200 Anti-Dew | Yellow ^a Blue ^a Green ^a Red Red onto T-7501B Yellow ⁺ Worboy Green ^a (not OL-2000) Brown ^a Black Black onto T-7501B Yellow | 70% of Tables 4 & 5 |

Notes: [#] - Declared performance for components assumes application to white native sheeting unless otherwise noted.

^a - Declared performance is 100% of Table 5 values processed per German requirements.

⁺ - Declared performance is 50% of red values stated in Tables 4 & 5.