

DECLARATION OF PERFORMANCE

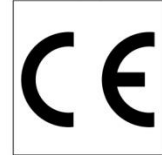
Construction Products Regulation 305/2011

No. 2500-1609

Prismatic Engineering Grade Retroreflective Sheeting:

T-2500 PEG Series

T-2500 PEG Series with 4930 Screen Ink



T-2500 PEG Series, in conjunction with the components listed, is a high-quality, 7-year durable, prismatic retroreflective material with a pressure sensitive adhesive. This product is intended for use on permanent or temporary highway safety devices that require Class 1 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 15/0920** dated 31/05/2017 & **ETA 18/0544** dated 15/10/2018.

Essential Characteristics		Performance	Assessment Document
Daylight Chromaticity		Per Table 3	EAD 120001-01-0106, 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-2500 PEG 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: 08 August, 2022, Illinois, USA

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	
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 (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	0,130	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	

Notes: A – When material is sampled, processed and tested per Avery Dennison Product Data Bulletins, Instructional Bulletins, and EN 12899-1:2007, Section 4.1.1.3.

Table 4: Coefficients of Retroreflection¹, R_A (cd/lux/m²)

Entrance Angle (β_1 , $\beta_2=0^\circ$)	Observation Angle (α)	R _A						
		White	Yellow	Orange	Green	Red	Blue	Brown
5°	0.2°	70	50	25	9	14	4	1
30°		30	22	7	3.5	6	1.7	0.3
5°	0.33°	50	35	20	7	10	2	0.6
30°		24	16	8	3	4	1	0.2
5°	0.5°	30	25	13	4.5	7.5	2	0.3
30°		15	13	4	2.2	3	0.8	0.2
5°	1.0°	5	3	1.8	1	2	0.6	0.2
30°		3	2	1.1	0.8	1	0.3	0.2

Notes: 1 – When material is sampled, processed and tested per Avery Dennison Product Data Bulletins, Instructional Bulletins, and EAD 12000-01-0106, Section 2.2.3 averaging $\epsilon=0^\circ$ and 90° .

Table 5: Coefficients of Retroreflection², R_A (cd/lux/m²)
(Includes RA1)

Entrance Angle (β_1 , $\beta_2=0^\circ$)	Observation Angle (α)	R _A							
		White	Yellow	Orange	Green	Red	Blue	Brown	Grey
5°	0.2°	70	50	25	9	14.5	4	1	42
30°		30	22	10	3.5	6	1.7	0.3	18
40°		10	7	2.2	1.5	2	0.5	-	6
5°	0.33°	50	35	20	7	10	2	0.6	30
30°		24	16	8	3	4	1	0.2	14.4
40°		9	6	2.2	1.2	1.8	-	-	5.4
5°	2.0°	5	3	1.2	0.5	1	-	-	3
30°		2.5	1.5	0.5	0.3	0.5	-	-	1.5
40°		1.5	1	-	0.2	0.5	-	-	0.9

Notes: 2 – When material is sampled, processed and tested per Avery Dennison Product Data Bulletins, Instructional Bulletins, and EAD 120001-01-0106, Section 2.2.3 at $\epsilon=0^\circ$ only.

Table 6: Specific Signing Combination Performance Declarations

Signing Component	Product Name	Colors and Product Number	Declared Retroreflective Detail
Native Sheeting	T-2500 Series	T-2500 White T-2501 Yellow T-2505 Blue T-2508 Red	Per Tables 4 & 5
Electronic Cuttable Overlay [#]	OL-2000 EC Film Series & 3801 Black	OL-2000/OL1000 Clear applied to T-2500 OL-2000/OL1000 Clear applied to T-2501 3801 Black	Per Tables 4 & 5
Solvent Screen Ink [#]	4930 Series	Yellow ^a Orange ^a Blue ^a Green ^a Red ^a Red onto T-2501 Yellow Black	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 when processed per German requirements.

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