

# DECLARATION OF PERFORMANCE

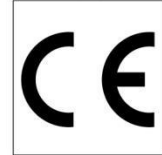
Construction Products Regulation 305/2011

No. 2500D-1601

## Prismatic Engineering Grade Retroreflective Sheeting:

T-2500D PEG Series

T-2500D PEG Series with TrafficJet Ink & Clear Overlay



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 18/0544** dated 15/10/2018.

Essential Characteristics		Performance	Assessment Document
Daylight Chromaticity		Per Table 2	EAD 120001-01-0106, September 2016
Luminance Factor		Per Table 2	
Coefficient of retro-reflection, Rotational Symmetry		Per Tables 3 & 4, 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-2500D 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: Sandeep Kottarath, Global Quality Manager

Date: 1 April, 2019, Illinois, USA

Table 2: Daytime Chromaticity and Luminance Factors<sup>A</sup>

Colour		Colour Box Coordinates				Luminance Factor $\beta$
		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	0,631	0,560	0,506	0,570	$\geq 0,14$
	y	0,369	0,360	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	0,558	0,479	$0,01 \leq \beta \leq 0,09$
	y	0,397	0,429	0,394	0,373	
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	$0,11 \leq \beta \leq 0,18$
	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: Coefficients of Retroreflection<sup>1</sup>,  $R_A$  (cd/lux/m<sup>2</sup>)

Entrance Angle ( $\beta_1$ , $\beta_2=0^\circ$ )	Observation Angle ( $\alpha$ )	$R_A$						
		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  $90^\circ$ .

Table 4: Coefficients of Retroreflection<sup>2</sup>,  $R_A$  (cd/lux/m<sup>2</sup>)  
(Includes RA1)

Entrance Angle ( $\beta_1$ , $\beta_2=0^\circ$ )	Observation Angle ( $\alpha$ )	$R_A$							
		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 5: Specific Signing Combination Performance Declarations

Signing Component	Product Name	Colors and Product Number	Declared Retroreflective Detail
Native Sheeting	T-2500D Series	T-2500D White T-2501D Yellow	Per Tables 3 & 4
Electronic Cuttable Overlay <sup>#</sup>	OL-1000	OL-1000 Clear OL-1000 Clear Applied to T-2501D Yellow	Per Tables 3 & 4
Digital Printing <sup>#</sup>	TrafficJet with OL-1000	Yellow Blue <sup>a</sup> Green <sup>a</sup> Red <sup>a</sup> Red Applied to T-2501D Yellow <sup>+</sup> Brown <sup>a</sup> Worboy Green <sup>a</sup> Grey <sup>a</sup> Black Black Applied to T-2501D Yellow	70% of Tables 3 & 4

Notes:

<sup>#</sup> - Declared performance for components assumes application to white native sheeting unless otherwise noted.

<sup>a</sup> - Declared performance is 100% of Table 4 values when processed per German requirements.

<sup>+</sup> - Declared performance is 50% of red values stated in Tables 3 & 4.