DECLARATION OF PERFORMANCE

Construction Products Regulation 305/2011

No. 2500-1606

Prismatic Engineering Grade Retroreflective Sheeting:

T-2500 PEG Series
T-2500 PEG Series with 4930 Screen Ink
T-2500 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

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Oegstgeest, The Netherlands

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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 29/01/2016 & **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-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: Sandeep Kottarath, Global Quality Manager

Date: 20 November, 2018, Illinois, USA

Table 2: Daytime Chromaticity and Luminance Factors[A]

Colour		Colour Box Coordinates				Luminance Factor ß
		1	2	3	4	
White	x	0,355	0,305	0,285	0,335	≥ 0,27
	y	0,355	0,305	0,325	0,375	
Yellow	x	0,545	0,487	0,427	0,465	≥ 0,16
	y	0,454	0,423	0,483	0,534	
Red	x	0,735	0,674	0,569	0,655	≥ 0,03
	y	0,265	0,236	0,341	0,345	
Orange	x	0,631	0,560	0,506	0,570	≥ 0,14
	y	0,369	0,360	0.404	0,429	
Green	x	0,007	0,248	0,177	0,026	≥ 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	≥ 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	≤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[1], R_A (cd/lux/m^2)

		R_A						
Entrance Angle (β_1, β_2=0°)	Observation Angle (α)	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 ε=0° and 90 °.

Table 4: Coefficients of Retroreflection[2], R_A (cd/lux/m^2)

(Includes RA1)

		R_A							
Entrance Angle (β_1, β_2=0°)	Observation Angle (α)	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 ε=0° only.

Table 5: 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 3 & 4
Electronic Cuttable Overlay#	OL-2000 EC Film Series & 3801 Black	OL-2000 Clear OL-2000 Clear Applied to T-2501 Yellow 3801 Black	Per Tables 3 & 4
Solvent Screen Ink#	4930 Series	Yellow [a] Orange [a] Blue [a] Green [a] Red [a] Red Applied to T-2501 Yellow Black	70% of Tables 3 & 4
Digital Printing#	TrafficJet with OL-1000 or OL-2000 Clear	Yellow Blue [a] Green [a] Red [a] Red Applied to T-2501 Yellow Brown [a] Worboy Green[a] Grey[a] Black Black Applied to T-2501 Yellow	70% of Tables 3 & 4

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

[a] – Declared performance is 100% of Table 4 values when processed per German requirements.

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