Approved Products List Retroreflective Sign Sheeting (715.9.2)

Effective Date: October 18 2021 (see notes 1, 2, and 22)

TRΔ	NSFFR	FILMS	
11174	HAOL FLA	LILIVIO	

MANUFACTURER	PRODUCT	LAB APPROVAL NUMBER
3M	TPM5 clear transfer tape (see note 11)	1433733
ORAFOL Americas, Inc.	ORATAPE MT95 application tape (see note 11)	1901420
Avery Dennison	Z1XXX clear application tape (see note 11)	1433734

MANUFACTURER	PRODUCT	LAB APPROVAL NUMBER
3M	34XX Series (See note 3)	1433735
Avery Dennison	T-15XX Series (See note 3)	1394149

TYPE ASTM-I

ITPE ASTWI-III		
MANUFACTURER	PRODUCT	LAB APPROVAL NUMBER
Avery Dennison	WR-610X Series (see note 4)	1435782
Nippon Carbide	ULG-II N8XX Series (See note 15)	1394159

TYPE ASTM-IV		
MANUFACTURER	PRODUCT	LAB APPROVAL NUMBER
3M	Series 393X (See note 3)	1392883
3M	Series 331X (See note 4)	1433736
3M	Series 333X (See note 5)	1433737
3M	Series 33X (See note 5)	1394157
3M	Series 3340 (See note 17)	1433738
Avery Dennison	T-6XXX Series (See note 3)	1394161
Avery Dennison	W-6XXX Series (See note 4)	1394160
Avery Dennison	WR-71XX Series (See note 4)	1435783
Avery Dennison	WR-71XXM Series (See note 4)	1901421
ORAFOL Americas, Inc.	ORALITE 5900 Series (See note 20)	1436962
ORAFOL Americas, Inc.	ORALITE 5934 Series (See note 4)	2002941

TYPE ASTM-VI		
MANUFACTURER	PRODUCT	LAB APPROVAL NUMBER
3M	RS-2X Series (See note 6)	1394162
3M	RS-6X Series (See note 6)	1458703
	ORALITE Marathon High Performance Series RUS	
ORAFOL Americas, Inc.	(See note 6)	1394163

TYPE ASTM-IX		
MANUFACTURER 3M	PRODUCT 399X Series (See note 7)	LAB APPROVAL NUMBER 1394171
3M	3981 Series (NOTICE: See note 19)	1394169
3M	3983 Series (See note 13)	1394170
Avery Dennison	T-950X (See note 7)	1394166
Avery Dennison	T-9511 (See note 12)	1394167
Avery Dennison	T-9513 (See note 13)	1394168
Avery Dennison	W-9514 (See note 10)	1394165
Nippon Carbide	Nikkalite CRG 95847 (See note 16)	1424104
ORAFOL Americas, Inc.	ORALITE 5930-038 (See note 16)	1436964

TYPE ASTM-XI		
MANUFACTURER	PRODUCT	LAB APPROVAL NUMBER
3M	409X Series (See note 14)	1395497
3M	4081 Series (See note 8)	1395498
3M	4083 Series (See note 9)	1395499
3M	4084 Series (See note 18)	1394172
Avery Dennison	T-1150X (See note 7)	1424106
Avery Dennison	T-11511 (See note 12)	1424107
Avery Dennison	T-11513 (See note 13)	1424108
Avery Dennison	W-11514 (See note 10)	1424105
ORAFOL Americas, Inc.	ORALITE 9938 (See note 21)	2100785

NOTES:

1 - In regards to references to required sheeting types in Standard Specification sections outside of 715.9.2, on detail sheets (such as Standard Details or fabrication details), in manuals such as the Manual on Temporary Traffic Control for Streets and Highways, in Plan Notes, and on Special Details applicable to the project, the following table shall be utilized in order to verify the appropriate sheeting type to be used. All sheeting types listed in the second column are defined and specified in Section 715.9.2 of the Standard Specifications

MATERIAL "TYPE"	APPLICABLE "TYPE(S)" LISTED ABOVE
REFERENCE	
I, ASTM-I, II, ASTM-III, IV, ASTM-IV	ASTM-IV
V	ASTM-VI for roll-up signs; ASTM-XI for aluminum
V	substrate signs
VI, ASTM-IX, ASTM-XI	ASTM-XI

- 2 Matched component inks and overlay films, when required to be used, shall be the components recommended by the sheeting manufacturer providing warranty coverage.
- 3 Various colored pressure sensitive sheetings for use with aluminum substrate signs, as specified. The reflective sheeting material and all manufacturer matched components are approved for manufacturing within the WVDOH Central Sign Shop.
- 4 Various colored pressure sensitive sheetings for use with plastic substrate work zone channelization and delineation devices, including "permanent" surface mounted tubular markers and soil mounted delineator posts, as specified and as recommended by the sheeting manufacturer.
- 5 Pre-striped pressure sensitive sheeting for use with rigid plastic substrate barricades, as recommended by the sheeting manufacturer.
- 6 Sheeting for use in manufacturing work zone roll-up signs.
- 7 Various colored pressure sensitive sheetings for use with aluminum substrate signs and delineators, as specified and as recommended by the sheeting manufacturer. This approval does not include fluorescent materials. The reflective sheeting material is approved for manufacturing purposes within the WVDOH Central Sign Shop. All manufacturer matched components are approved for manufacturing within the WVDOH Central Sign Shop.
- 8 Fluorescent yellow pressure sensitive sheeting for use with aluminum substrate signs and delineators, as specified and as recommended by the sheeting manufacturer. This material is classified as being rotationally sensitive. The reflective sheeting material is approved for manufacturing purposes within the WVDOH Central Sign Shop. All manufacturer matched components are approved for manufacturing within the WVDOH Central Sign Shop.
- 9 Fluorescent yellow green pressure sensitive sheeting for use with aluminum substrate signs, as specified and as recommended by the sheeting manufacturer. This material is classified as being rotationally sensitive. The reflective sheeting material is approved for manufacturing purposes within the WVDOH Central Sign Shop. All manufacturer matched components are approved for manufacturing within the WVDOH Central Sign Shop.
- 10 Fluorescent orange pressure sensitive sheeting for use with aluminum substrate signs. The reflective sheeting material is approved for manufacturing purposes within the WVDOH Central Sign Shop. All manufacturer matched components are approved for manufacturing within the WVDOH Central Sign Shop.
- 11-The Transfer Film category is applicable to the WVDOH's raw material supply Contract only and does not apply to private fabricators.
- 12 Fluorescent yellow pressure sensitive sheeting for use with aluminum substrate signs and delineators, as specified and as recommended by the sheeting manufacturer. The reflective sheeting material is approved for manufacturing purposes within the WVDOH Central Sign Shop. All manufacturer matched components are approved for manufacturing within the WVDOH Central Sign Shop.
- 13 Fluorescent yellow green pressure sensitive sheeting for use with aluminum substrate signs, as specified and as recommended by the sheeting manufacturer. The reflective sheeting material is approved for manufacturing purposes within the WVDOH Central Sign Shop. All manufacturer matched components are approved for manufacturing within the WVDOH Central Sign Shop.
- 14 Various colored pressure sensitive sheetings for use with aluminum substrate signs and delineators, as specified and as recommended by the sheeting manufacturer. This approval does not include fluorescent materials. This material is classified as being rotationally sensitive. The reflective sheeting material is approved for manufacturing purposes within the WVDOH Central Sign Shop. All manufacturer matched components are approved for manufacturing within the WVDOH Central Sign Shop.
- 15 Various colored pressure sensitive sheetings for use with aluminum substrate signs. The reflective sheeting material is approved for manufacturing purposes within the WVDOH Central Sign Shop. The manufacturer matched components are not approved for manufacturing purposes within the WVDOH Central Sign Shop.

- 16 Fluorescent orange pressure sensitive sheetings for use with aluminum substrate signs. The reflective sheeting material is approved for manufacturing purposes within the WVDOH Central Sign Shop. The manufacturer matched components are not approved for manufacturing purposes within the WVDOH Central Sign Shop.
- 17 Pressure sensitive sheeting for use with traffic cones, as specified and as recommended by the sheeting manufacturer.
- 18 Fluorescent orange pressure sensitive sheeting for use with aluminum substrate signs. This material is classified as being rotationally sensitive. The reflective sheeting material is approved for manufacturing purposes within the WVDOH Central Sign Shop. All manufacturer matched components are approved for manufacturing within the WVDOH Central Sign Shop.
- 19 Fluorescent yellow pressure sensitive sheeting for use with aluminum substrate signs and delineators, as specified and as recommended by the sheeting manufacturer. The reflective sheeting material is approved for manufacturing purposes within the WVDOH Central Sign Shop. All manufacturer matched components are approved for manufacturing within the WVDOH Central Sign Shop. NOTE: Approval of this material has been placed on "hold". No finished products utilizing this material are to be supplied on any projects advertised on or after 7/25/12.
- 20 Various colored pressure sensitive sheetings for use with aluminum substrate signs. The material may also be used for plastic substrate work zone channelization and delineation devices, including "permanent" surface mounted tubular markers and soil mounted delineator posts, as specified and as recommended by the sheeting manufacturer. The reflective sheeting material is approved for manufacturing purposes within the WVDOH Central Sign Shop. The manufacturer matched components are not approved for manufacturing purposes within the WVDOH Central Sign Shop.
- 21 Fluorescent orange pressure sensitive sheeting for use with aluminum substrate signs. This material is classified as being rotationally sensitive. The reflective sheeting material is approved for manufacturing purposes within the WVDOH Central Sign Shop. The manufacturer matched components are not approved for manufacturing purposes within the WVDOH Central Sign Shop.
- 22 The value(s) "X" in material designations are place holders which indicate variable numerical values. These values vary based on different colors and/or widths (cut widths or stripe widths) configurations of the material and/or intended substrates for the material.