

FHWA Retroreflective Sheeting Identification Guide – September 2005

Notes: ASTM Types are shown as stated by the manufacturers using ASTM D4956-04 "type" designations. Agencies should verify that the sheeting they use complies with their specifications or ASTM D4956. FHWA does not endorse or approve any material nor does it determine type category(s) for materials. This side of the Sheeting ID Guide is for rigid surfaces only. The other side is for flexible surfaces and non-signing applications.



Retroreflective Sheeting Materials for Rigid Sign Surfaces Made with Glass Beads

Example of Sheeting (Shown to scale)									
ASTM Type	I	II	II	III	III	III	III	III	III
Manufacturer	See note A	Avery Dennison®	Nippon Carbide	3M™	ATSM, Inc.	Avery Dennison®	Kiwalite®	LG Lite	Nippon Carbide
Brand Name	Engineer Grade	Super Engineer Grade	Super Engineer Grade	High Intensity	High Intensity	High Intensity	High Intensity	High Intensity	High Intensity
Series Number	Several	T-2000	15000 17000 18000	2800 3800	ASTM HI	T-5500	22000	LH8000 LH8100	N500 N800
NOTES:	A								

Retroreflective Sheeting Materials for Rigid Sign Surfaces Made with Prisms

Example of Sheeting (Shown to scale)									
ASTM Type	III, IV	III, IV, X	VII, VIII, X	VIII	IV, VIII	IX	IX	X	Unassigned
Manufacturer	Avery Dennison®	3M™	3M™	Avery Dennison®	Nippon Carbide	3M™	Avery Dennison®	Nippon Carbide	3M™
Brand Name	High Intensity Prismatic	High Intensity Prismatic	Diamond Grade™ LDP	MVP Prismatic	Crystal Grade	Diamond Grade™ VIP	Omni-View™	Crystal Grade	Diamond Grade™ DG3
Series Number	T-6500	3930	3970	T-7500	94000 (IV) 92000 (VIII)	3990	T-9500	93000	4000
NOTES:	B	B	B,D		B,C			C	

A – All the manufacturers listed on the other side of this guide (except Reflexite) provide Engineer Grade sheeting. Engineer Grade sheeting is uniform without any patterns or identifying marks. Visually, it is indistinguishable from lower quality grades (i.e., utility and commercial grades).

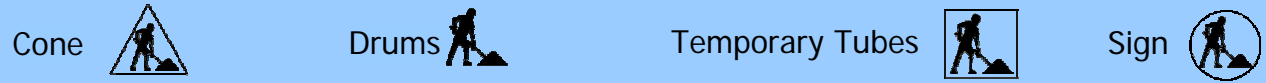
B – These materials can be classified as different ASTM Types.

C – These materials are visually indistinguishable from one another.

D – The arrow or "water mark" on this product is no longer included with new productions.

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Retroreflective Sheeting Materials for Non-Signing Applications

Example of Sheeting (Shown to scale)						
ASTM Type	III	III	V	V	III	VI
Manufacturer	Avery Dennison®	Reflexite	Reflexite	Reflexite	3M™	Reflexite
Brand Name	High Intensity Prismatic Work Zone	High Impact Channelizer Tape	Barrier Delineator	Barrier Delineator	High Intensity Flexible	Traffic Cone Collar
Series Number	WR-6100	n/a	AR1000	AP1000	3840	n/a
Typical Use	Reboundable Device	Reboundable Device	Rigid Non-Signing Surface	Rigid Non-Signing Surface	Reboundable Device	Traffic Cone

Retroreflective Sheeting Materials for Flexible Signs

Example of Sheeting (Shown to scale)						
ASTM Type	VI	VI	VI	VI	VI	VI
Manufacturer	3M™	3M™	Avery Dennison®	Reflexite	Reflexite	Reflexite
Brand Name	Diamond Grade™ Roll-Up Sign	Vinyl Roll-Up Sign	Flexible Roll-Up Sign	Flagging Material	High Performance Marathon	Super Bright Fluorescent
Series Number	RS20	RS30	WU-6014	n/a	n/a	n/a
Typical Use	Roll-Up Sign	Roll-Up Sign	Roll-Up Sign	Roll-Up Sign	Roll-Up Sign	Roll-Up Sign

Contact Information

3M - www.3M.com/tcm	Kiwalite - www.kiwa-lite.com	Reflexite - www.reflexite.com
ATSM, Inc. - www.atsminc.com	LG Lite - www.lgchem.com	Nippon Carbide - www.nikkalite.com
Avery Dennison - www.reflectives.averydennison.com		FHWA - www.fhwa.dot.gov/retro