

# 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.