

## SECTION 1072 -- REFLECTORS

### 1072.01 -- Description

Authorized reflectors are described in this Section.

### 1072.02 -- Material Characteristics

1. The reflector shall consist of a round retroreflecting lens permanently bonded and hermetically sealed to its back.
2. The back may be either acrylic plastic or metal foil; however, the foil back reflectors must have a minimum 0.018 inch thick aluminum housing.
3. The aluminum housing is not required with the acrylic plastic back.
4. The reflector shall have a mounting hole in the center with a diameter of not less than 3/16 inch.
5. The reflector shall have a visible reflective area when mounted of not less than 6.5 square inches.
6. The lens shall consist of a smooth front surface free from projections or indentations other than the central mounting hole and manufacturer's identification.
7. The rear surface shall be a prismatic configuration such that it will cause total internal reflection of light.
8. The prism arrangement in the lens shall be such that the lens will have a segmented appearance with at least 2 and not more than 6 segments in each unit.
9. The unit shall be permanently sealed against dust, water, and water vapor.
10. Fasteners for delineators shall be at least 3/16 inch diameter pan or round head machine screws (length shown in the plans) conforming to the requirements of ASTM F 568.
11. The reflectors shall meet specific intensity requirements shown in Table 1072.01.

**Table 1072.01**

<b>Reflector Requirements</b>					
<b>Observation Entrance</b>		<b>Minimum Specific Intensity (Candelpower per foot-candle)</b>			
<b>Angle, (degrees)</b>	<b>Angle, (degrees)</b>	<b>White</b>	<b>Yellow</b>	<b>Red</b>	<b>Blue</b>
0.1	0	120	72	30	12
0.1	20	48	29	12	4.8
0.33	0	20	12	5	2.0
0.33	20	8	5	2	0.8

**1072.03 -- Acceptance Requirements**

1. Acceptable reflectors are shown on the NDR Approved Products List.
2. Fasteners for delineators shall be sample and tested in accordance with the requirements shown in the NDR *Materials Sampling Guide*.