

**OKLAHOMA DEPARTMENT OF TRANSPORTATION  
SPECIAL PROVISIONS  
FOR  
PLASTIC DRUMS**

These special provisions amend, and where in conflict, supersede applicable sections of the 2009 Standard Specifications for Highway Construction, English and Metric.

**880.02 MATERIALS** *(Replace with the following:)*

**B. Construction Signing and Traffic Control Materials**

**(10) Plastic Drums**

Provide two-piece breakaway drums in accordance with the MUTCD. The drums must accommodate conventional barricade warning lights that are in accordance with the NCHRP 350, Category I device requirements. These drums will be used as channelizing devices for construction and maintenance operations.

Provide plastic drums at least 36 in [900 mm] high and at least 18 in [450 mm] wide regardless of orientation. The plastic drum must be capable of withstanding 60 mph [100 km/h] winds, turbulence created by vehicles, and repeated movements during construction and maintenance operations. Ensure the top portion of the unit deforms and breaks away from the base upon vehicular impact. Ensure the base remains in place, allowing the vehicle to pass over it. Ensure the base weighs at least 40 lb, and the outside edge does not exceed 4 in [100 mm]. Provide rubber base collars that are clean cut, the proper size, black in color, and not curved at the top edges. Ensure the maximum diameter of the base does not exceed 36 in [900 mm].

Provide bright orange plastic drums that resist color fading. Ensure the plastic drum is crash worthy in accordance with the NCHRP 350. Ensure sheeting surfaces provide maximum adhesion of reflective sheeting to the drum body.

Provide weather tight drums designed to accept horizontal, circumferential bands of reflectorized sheeting, 4 in to 6 in [100 mm to 150 mm] wide. Provide drums with a D-shaped configuration at the base attachment point to minimize rolling after impact. Provide drums with enclosed tops, and drains to prevent water accumulation. Ensure that stacking the drums will not damage the reflective surface. Ensure each drum allows the attachment of two Type A or Type C conventional barricade warning lights. Provide warning lights capable of remaining attached during repeated impacts at speeds of at least 55 mph [88 km/h] and in accordance with NCHRP 350.

Provide drums that have alternating fluorescent orange and white horizontal circumferential stripes of retro-reflectorized sheeting. Ensure there shall be a minimum of two fluorescent orange and two white stripes, beginning with a fluorescent orange stripe at the top of the drum. If there are non-reflectorized spaces between the horizontal orange and white stripes, ensure they are no more than 2 in [50 mm] wide. Ensure the non-reflectorized portions of the drum are orange. Provide reflective sheeting that meets the requirements of the latest ASTM D4956, and the Federal Highway

Administration Luminance Factor for fluorescent orange, Type VI reboundable sheeting (see Table 880:2).

<b>Table 880:2</b>			
<b>Luminance Factor, <math>Y_T</math></b>			
Sheeting Type	Min	Max	Fluorescence Luminance Factor Limit $Y_F$
Fluorescent Orange	25	None	15