

## 3M™ Diamond Grade™ Rail Car Markings are easy to apply.

Improved visibility means improved safety for rail cars and motorists.

Rail car rolling stock displaying highly reflective conspicuity markings provide visual information for faster, more accurate decision-making by approaching drivers. Government studies show conspicuity markings reduce accidents by 29%.<sup>1</sup>

<sup>1</sup>NHTSA Study, March 2001, "Analysis of Retroreflective Markings on Trailers, Report DOT HS 809 222."

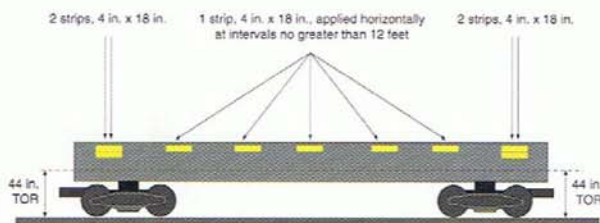
### Tools Required

Clean rags or paper towels, isopropyl alcohol, squeegee, razor knife.

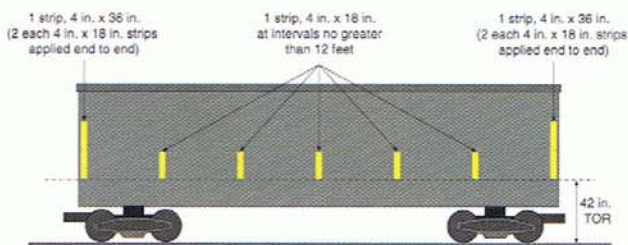
### Surface Preparation

1. Surface of rail car must be clean and dry before application. Wash surface with detergent and water to remove dirt and film, then thoroughly wipe surface with isopropyl or denatured alcohol. Apply material to dry surface.
2. Application temperature minimum: 35° F.
3. Remove liner and apply reflective material.
4. Use squeegee to firmly adhere all edges to surface.

**Retroreflective Markings Placement Guide for Typical 60 Foot Flat Car**



**Retroreflective Markings Placement Guide for Typical 60 Foot Freight Car**

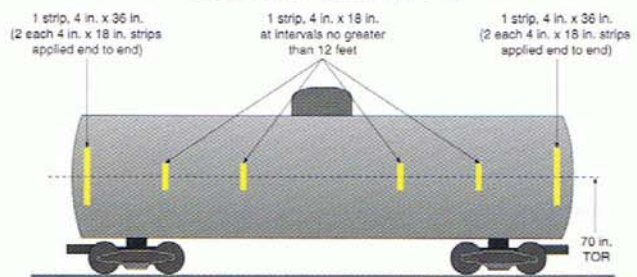


**FRA Minimum Quantity Requirement for Retroreflective Sheeting on Freight Rolling**

Freight car or locomotive length	Total sq ft of retroreflective sheeting required (per car locomotive yellow sheeting)	Retroreflective sheeting required (per car/ locomotive white sheeting)
Less than 50 ft	7	8
50 ft to 60 ft	8	10
Over 60 ft to 70 ft	9	11
Over 70 ft to 80 ft	10	12
Over 80 ft to 90 ft	11	14
Over 90 ft to 100 ft <sup>1</sup>	12	15

<sup>1</sup>Freight cars or locomotives over 100 ft. in length must be equipped with an additional one-half square foot of sheeting on each side for every additional 10 feet of length

**Retroreflective Markings Placement Guide for Typical 60 Foot Tank Car**



For more information or assistance when applying 3M™ Diamond Grade™ Conspicuity Markings, call 3M Technical Service: 1-800-553-1380, Prompt 4, 2.



### Traffic Safety Systems Division

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40% Pre-consumer waste paper

10% Post-consumer waste paper

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