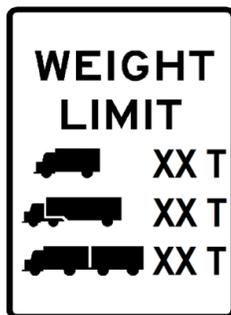


## BRIDGE LOAD POSTING

Load posting is often required for bridges when the structure does not have enough capacity to safely carry the State of Minnesota Legal Loads. Their purpose is to prevent heavy loads that cause stresses above the safe limit from crossing the bridge. The Minnesota Manual of Uniform Traffic Control Devices (MN MUTCD) regulates the signs that can be used by the State. The MUTCD is very restrictive as to what information can be shown, such as symbols, figures and text.

### SIGN R12-5

Posting sign R12-5 as shown in Figure 1 is the most common bridge load posting sign in Minnesota and used when both single unit vehicles and semi-trucks require load posting. Figure 1 uses typical truck configurations that are easily recognizable to represent various vehicle configuration. The weight that corresponds to each figure is the maximum gross vehicle weight (GVW) of the truck that can cross the bridge. The symbols shown in Figure 1 are the only vehicle silhouettes allowed by MN MUTCD on a posting sign. It is important to note that the number of axles shown on each figure is a representative example only and that the actual axle configuration may be different.



*Figure 1*

To further interpret what the 3 silhouettes represent on the R12-5 posting sign, explanation and examples for each of the figure is shown on sheet 2.

### SIGN R12-5M (old R12-5a)

Posting sign R12-5M as shown in Figure 2 is used when only the single unit vehicle requires load posting. The sign only applies to any single unit vehicle that has its trailer permanently attached to the tractor (power unit) on one frame, regardless of the number of tires, axles or axle configuration. See TRUCK (TYPE M3) on sheet 2 for examples of vehicles represented by this sign.



*Figure 2*

### SIGN R12-1a

In addition, bridge weight limits may be signed differently as shown in Figure 3. The sign is frequently used in situations where severe load restrictions apply. The gross vehicle weight (Figure 3) for any vehicle including cars and trucks is limited regardless of the number of axles or axle configuration that the vehicle has. The gross weight of the entire vehicle including separate trailers being pulled must be equal to or less than the limit on the sign.



*Figure 3*

# BRIDGE LOAD POSTING

Rev. 1/2021

The purpose of this document is to help local agencies and the traveling public of Minnesota better understand and interpret bridge load posting signs.

State Aid Bridge  
3485 Hadley Avenue North  
Oakdale, MN 55128

STATE AID FOR LOCAL  
TRANSPORTATION



**TRUCK (TYPE M3)**

The first silhouette is a single unit vehicle. The single unit vehicle has a power unit and trailer that form one vehicle. The power unit and trailer are not designed to be detachable. The following are examples of vehicles governed by the single unit silhouette. *Specialized Hauling Vehicles (SHVs) fall under this category.*



1. Fold in along dash line



**TRUCK + TRAILER (TYPE M3S2-40)**

The second silhouette is a two-unit vehicle. The vehicle consists of a power unit and a trailer. The power unit or single unit truck for this vehicle is detachable from the trailer. The following are examples of vehicles governed by the two-unit silhouette.



2. Fold in along dash line



**TRUCK + DOUBLE TRAILERS (TYPE M3S3-40)**

The third silhouette is a three-unit vehicle. It consists of a power unit and two trailers that are detachable from one another. The following are examples of vehicles governed by the three-unit silhouette.

