



# ALABAMA DEPARTMENT OF TRANSPORTATION

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### TECHNICAL ADVISORY 1-20

TO: All Region Engineers

FROM: Scott W. George, P.E. *AWD*  
Materials & Tests Engineer

RE: **Maximum Volume of Concrete Allowed in a Transit Mixer**

The purpose of this technical advisory is to provide guidance to Area Construction personnel on the maximum volume of concrete that may be delivered to a jobsite in any given transit mixer.

Item 501.03(b)2 of the 2018 ALDOT Standard Specifications requires all concrete mixing and transporting equipment to meet the requirements of AASHTO M 157, *Standard Specification for Ready-Mixed Concrete*. The relevant language from M 157 is as follows:

“Each truck mixer or agitator shall have attached thereto in a prominent place a metal plate or plates on which are plainly marked the gross volume of the drum, the capacity of the drum or container in terms of the volume of mixed concrete, and the minimum and maximum mixing speeds of rotation of the drum, blades, or paddles. When the concrete is truck mixed [...] or shrink mixed [...], the volume of mixed concrete shall not exceed 63 percent of the total volume of the drum or container. When the concrete is central mixed [...], the volume of concrete in the truck mixer or agitator shall not exceed 80% of the total volume of the drum or container.”

In other words, the maximum allowable volume that may be delivered to a project is dependent on the truck. Figure 1 is an example of the standard manufacturer's rating plate found on ready-mix trucks. The value shown on this plate is the maximum volume of concrete that may be delivered in that truck.

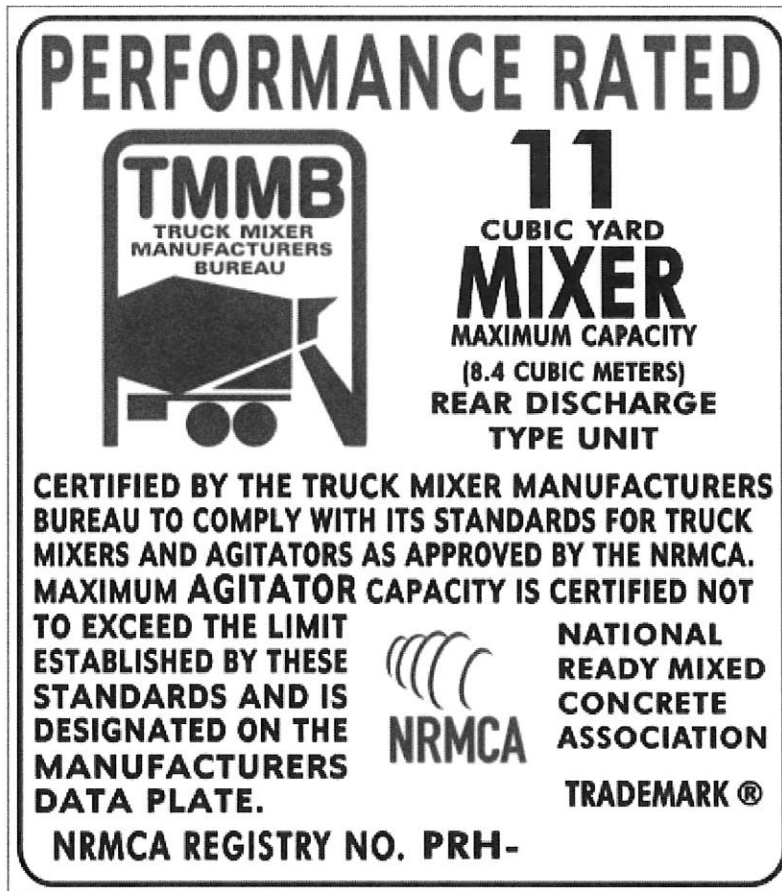


Figure 1: Standard Capacity Rating Plate

Please note that these requirements do not supersede and should be taken in conjunction with all applicable laws & regulations concerning gross vehicle weight for commercial vehicles.

CC: Mr. George Conner, P.E.  
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