



FRONT VIEW

3"

1 1/2"

SIDE VIEW

80"

75"

2 1/2"

3/4" x 2" SLOTS (TYP)

2 1/2"

GROUND STRUT

C3 x 5 x 80", GRADE A36

SLOT FOR G2

SLOT FOR G2

G1

G2

G2

Standard Drawing Reference Report

RBR-025-07

GUARDRAIL END TREATMENT TYPE 2M (TRAILING END TERMINAL)

Effective with the August 21, 2025 Letting

Design Notes

The Type 2M terminal is a non-proprietary terminal used to anchor 31" Midwest Guardrail System (MGS) W-beam guardrail. As a downstream trailing end terminal, it is crashworthy only in the direction of adjacent traffic. It is not designed to withstand impacts from the opposite direction. These terminals are typically installed beyond the clear zone of opposing traffic or at the downstream end of guardrail systems on one-way roadways. The Type 2M terminal has passed MASH Test Level 3 crash testing for impacts from the direction of adjacent traffic.

The Type 2M terminal provides structural support for the entire guardrail system. Inadequate grading at the terminal location may compromise the barrier's performance. Refer to drawing for grading details.

Type 2M terminals are fully gating from post 1 to post 5. This means that, during a crash, the terminal allows a vehicle to pass through the end of the barrier rather than redirect or contain it. Therefore, the terminal is not intended to shield fixed objects located within the gating zone, which extends perpendicular to posts 1 through 5. The terminal must be placed so that this area remains clear of obstacles. If fixed objects are present within the proposed gating zone, consider extending the guardrail to shift the gating zone beyond the fixed object.

For impacts occurring upstream of post 5, the guardrail system anchored by the Type 2M terminal is designed to redirect impacting vehicles. The Length of Need for the Type 2M begins at post 5. To ensure proper performance, no rigid objects should be placed adjacent to the barrier within the system's working width—60 inches for MGS—as these could compromise the guardrail's ability to redirect vehicles.

When curb and gutter are present with guardrail, between posts 6 and 7 of the Type 2M terminal transition to lip curb and gutter or island curb and gutter (see RPM-100). Continue the lip or island curb and gutter for 50 feet beyond post 1 of the terminal.

References

KYTC Standard Specifications for Road and Bridge Construction

- Section 719 – Guardrail
- Section 814 – Guardrail Systems

Highway Design Guidance Manual

- HD-800 ROADSIDE DESIGN
- HD-801.6 END TREATMENTS & CRASH CUSHIONS

Crash Test Reports

TTI REPORT 9-1002-6

MwRSF TRP-03-279-13

MwRSF TRP-03-469-24

Related Standard Drawings

RBB-002	GUARDRAIL AND BRIDGE END DRAINAGE FOR TWIN STRUCTURE
RBI-001	TYPICAL GUARDRAIL INSTALLATIONS
RBI-002	TYPICAL GUARDRAIL INSTALLATIONS
RBI-005	GUARDRAIL INSTALLATIONS AT BRIDGE COLUMNS
RBI-006	GUARDRAIL INSTALLATIONS AT SIGN SUPPORTS
RBR-001	STEEL BEAM GUARDRAIL ("W" BEAM)
RBR-010	GUARDRAIL TERMINAL SECTIONS
RBR-018	GUARDRAIL SYSTEM TRANSITION

Standard Drawing Revision History

Revision	Description of Changes
RBR-025-06-S	<ul style="list-style-type: none">➤ Renamed Guardrail End Treatment Type 2A to Type 2M (Trailing End Terminal)➤ Updated the design to a MASH-compliant terminal for use on the downstream trailing end of guardrail systems
DATE: 2025-07-16	