

SECTION I-2- BARRIER SYSTEMS AND TERMINALS

W-BEAM GUARDRAIL GENERAL CRITERIA

During NEW CONSTRUCTION, always install to the current Standard heights.

New and existing guardrail within the project limits must meet NCHRP 350 or MASH requirements.

All guardrail shall be replaced or upgraded in accordance with Section I-1.

All w-beam guardrail panels shall be lapped in the direction of traffic. With two-way traffic, the laps on the right side of traffic are to be in the direction of traffic or toward the downstream end.

Refer to the Road and Bridge Standards for transition designs between flexible and more rigid systems.

All roadside safety devices are to be equipped with identification numbers as per Code of Virginia [§33.2-274.1](#).*

GR-2 STRONG POST W-BEAM GUARDRAIL

For GR-2, the **minimum height is 27 3/4"** to the top of the rail with a **maximum height of 28 3/4"**. When checking the height on a length of GR-2, measure at increments of 50' where there is a rail splice at a post. Refer to the GR-INS Standard for measuring w-beam guardrail based on location on a slope.

The wood and composite blockouts can be used interchangeably within a single run of guardrail for new installations, replacements, and upgrades. When existing 6"x8" wood or composite blockouts are replaced, the blockouts shall include routing to prevent blockouts from rotating. When wood posts with wood blockouts are used, they shall have **TWO** nails (one on each side) to prevent rotation of blockouts. No metal blockouts are to be replaced in-kind or installed new, and no washers will be used.

When posts are **removed** and are to be **reused**, the Post shall meet the current standard length. They shall be reused only with Standard wood or composite blockouts. When resetting rail, the posts shall be removed and the holes backfilled prior to reinstalling the posts. The height of the rail shall be measured to ensure it meets the current VDOT [Road and Bridge Standards](#).

See Section 3 for guardrail installation adjacent to curb.

* Rev. 7/15