



NU-GUARD-31[™] ROADSIDE BARRIER



SGR33a-c

SHEET NO.

DATE:

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05/31/2016

INTENDED USE

The NU-GUARD-31™ system is a corrugated metal w-beam barrier for use on national, state and local roadways to prevent collisions with hazards as required by safety design standards. The system is designed for roadside applications as an alternate to SGR04, and equivalent to other 31" [790] mounting height w-beam barriers (such as SGR20), for strong or weak post applications. The system may be connected to any crashworthy 31" [790] mounting height guardrail terminal or transition system. The system is to be installed on approach slopes no greater than 10H:1V, wherever a maximum working deflection of 41" [1050] is required for TL-3 applications, and 48" [1220] for TL-4 applications.

COMPONENTS

The posts are Rib-Bak U-Channel sign posts 5 lb/ft [7.4 kg/m] fabricated from hot rolled carbon steel bars conforming to the requirements of ASTM A1075-12 with a minimum yield point of 80,000 psi [552 Mpa]

Unit length = 150" [3810]

Designator	Component	Number
RWM02a	W-beam rail	1
	NU-GUARD™ Line Post	2
	3 1/2" [90] x 1/4" [6] Washer	2
	3 1/2" [90] Guardrail-post bolt and nut	2
FBB01	Splice bolt and nut	8

The system meets NCHRP-350 TL-3 & TL-4 and MASH TL-3 requirements as a longitudinal barrier.

AGENCY ACCEPTANCE

SGR33a : FHWA Letter [B-162](#), 09/11/2007, NCHRP-350 TL-3
SGR33b : FHWA Letter [B-162B](#), 06/27/2008, NCHRP-350 TL-4
SGR33c : FHWA Letter [B-162](#), 09/11/2007, MASH TL-3

CONTACT INFORMATION

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NUCOR

BAR MILL GROUP

NUCOR STEEL MARION, INC.

All Nucor Steel Marion Inc. products are produced from 100% recycled steel.