

## **SPECIFICATIONS**

Box beam rail elements shall be tubes manufactured from either ASTM A 500 Grade B cold-rolled tubing, ASTM A 501 hot-rolled tubing or automotive Rollover Protective Steel (ROPS). ASTM A 500 Grade B tubing is generally the most easily and economically obtained section, but there have been reported problems with the steel fracturing at low temperatures. When using ASTM A 500 Grade B steel, it is highly recommended that the Drop-Weight-Tear test (ASTM E 436) be performed to ensure that each lot of material has adequate fracture toughness, especially in regions that experience prolonged cold weather. ASTM A 501 tubing and ROPS tubing can generally be used without the need for the Drop-Weight-Tear test.

The beams should be hot-dip zinc coated according to AASHTO M 111 (ASTM A 123).

Inertial properties shown below are based on the gross cross-section dimensions without a reduction for splice and bolt holes.

Designator	Area	$I_x$	$I_{v}$	$S_x$	$S_{v}$
	$in^2 [10^3 \text{ mm}^2]$	$in^4 [10^6  mm^4]$	$in^4 [10^6 \text{ mm}^4]$	$in^3 [10^3 \text{ mm}^3]$	$in^3 [10^3 \text{ mm}^3]$
RBM11	4.96 [3.2]	29.79 [12.4]	46.61 [19.4]	9.95[163]	11.66 [191]

Dimensional tolerances not shown or implied are intended to be those consistent with the proper functioning of the part, including its appearance and accepted manufacturing practices.

## INTENDED USE

This component is the main rail element in the SGM03 box beam median barrier. The rail is attached to the PSE07 post using the FPP04 rail support plate.

## **BOX-BEAM MEDIAN BARRIER RAIL**

RBN	<b>I</b> 11
SHEET NO.	DATE
2 of 2	7/18/2005