

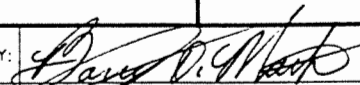
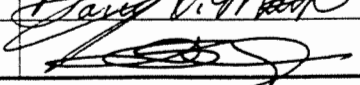
MATERIAL SPECIFICATIONS FOR STEEL BEAM SAFETY BARRIER (W-BEAM)

1. Rail and terminal elements are to be cold formed from 2.8 or 3.5 mm specified thickness sheet steel. The mechanical properties of the base metal shall conform to the following requirements:
i.e. Yield Point : minimum, 345 MPa
Tensile Strength : minimum, 483 MPa
Elongation : minimum, 12 percent in a 50 mm length
2. The rail and terminal elements shall be shaped and punched as detailed on SP 28710, 28711 and 28712. Beams to be erected on a radius of 45 m or less shall be shop curved to the appropriate curvature.
3. All rail and terminal sections shall be galvanized in accordance with the requirements of CSA Standard G164-M. The sections must be galvanized after fabrication.
4. All bolts, nuts and washers shall conform to the requirements of ASTM A307 and shall be galvanized to conform with the requirements of CSA Standard G164-M. All bolts shall be button headed and oval shouldered.
5. Galvanized surfaces damaged during fabrication, shipping or erection shall be repaired with two coatings of zinc rich paint conforming to the requirements of CGSB specification 1-GP-1815.
6. Rail and terminal elements conforming to the requirements of AASHTO designation M180, Corrugated Sheet Steel Beams for Highway Guardrail shall be deemed acceptable.

MATERIAL SPECIFICATION FOR TIMBER POSTS AND BLOCKS

1. Timber posts and blocks shall be of a species included in Species Group A, B, C or D as provided in CSA standard 0.86 and shall be No. 1 Grade, Structural Posts and Timbers graded in accordance with the requirements of the N.L.G.A. Standard Grading Rules for Canadian Timber.
2. Posts and blocks shall be rough sawn and holes drilled to the dimensions as detailed on SP 28710. All saw cuts and drilled holes shall be completed before pressure preservative treatment is applied.
3. Posts and blocks shall be pressure preservative treated in accordance with the current requirements of CSA standard 0.80, with pentachlorophenol in heavy hydrocarbon solvent or pentachlorophenol in chlorinated hydrocarbon solvent or chromated copper arsenite (CCA) or ammoniacal copper arsenite (ACA).

The retention of preservatives shall conform to the recommendations of CSA standard 080.14 Table 1, Minimum Retention of Preservatives in Pressure Treated Wood for Highway Construction, under the Headings "Post-Guardrail, Guide, Sign and Sight" for posts and "Bridge Hand Rails, Guard Rails and Posts" (not in contact with ground or water) for blocks.

 Saskatchewan Highways and Transportation		SAFETY BARRIER W-BEAM / WOOD POST MATERIAL SPECIFICATION				
RECOMMENDED BY:		DIRECTOR TECH. STDS. & POLICIES	DATE	1995-12-13	STANDARD PLAN NO	28713
APPROVED BY:		ASSIST. DEPUTY MINISTER OPERATIONS DIVISION	DATE	1995-12-19	SHEET	1 of 1