

CONSULTING ENGINEERS
GENERAL MEMORANDUM 07-11

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING AND
HIGHWAY OPERATIONS
OFFICE OF ENGINEERING

New Bridge Design Standard Practice

November 28, 2007

To: CONSULTING ENGINEERS

The "Bridge Design Standard Practices" are hereby revised to include the enclosed new standard practice entitled "Use of Painted Structural Steel."

Very truly yours,

Thomas A. Harley, P.E.
Manager of Consultant Design
Bureau of Engineering and
Highway Operations

Enclosure

BRIDGE DESIGN STANDARD PRACTICES

Use of Painted Structural Steel - In order to reduce future maintenance, the use of painted steel should be minimized. For new construction, weathering steel, galvanizing or metallizing and top coating should be considered for structural steel bridges with life-cycle cost a consideration.

Proposed new practice:

New structural steel bridges may be either coated or uncoated.

- Coated steel shall be either galvanized or shop metallized and top coated.
- Uncoated steel shall be weathering steel.

In order to reduce future maintenance, the use of coated steel should be minimized. Uncoated weathering steel should be the first choice for structural steel bridges with life-cycle cost as a consideration. The use of galvanizing or metallizing and top coating should also be considered when the look of weathering steel is objectionable.

Weathering steel should be the first consideration for most bridges especially those in rural areas. The use of weathering steel in urban areas or where the bridge will be highly visible shall be discussed with the Municipal Officials prior to its use. Weathering steel shall be designated for all structural steel bridges over railroads.

Where the use of weathering steel is not appropriate, such as bridges subject to vehicular salt spray, near a salt water environment, or a heavy industrial area, the use of galvanized steel should be considered. Where the length of the structural steel members precludes use of galvanized steel, coated steel should be used.

The third choice for the remaining structural steel bridges is the use of shop metallizing. Shop metallizing shall include a colored urethane top coat.