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## Frequently Asked Questions Concerning the AISI Base Test and the Use of the AISI Anchorage Equations

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FREQUENTLY ASKED QUESTIONS CONCERNING THE AISI BASE TEST  
AND THE USE OF THE AISI ANCHORAGE EQUATIONS

James Fisher<sup>1</sup>, Roger LaBoube<sup>2</sup>, Thomas M. Murray<sup>3</sup>, and Joe Nunnery<sup>4</sup>

The AISI Base Test Method was first introduced into the 1996 AISI Specification. Section C3.1.4 of the Specification provides a method for determining the nominal moment strength of a C- or Z- section under gravity load in the plane parallel to the web with the top flange supporting a standing seam roof system. A standing seam roof system is defined as a roof system in which the side laps between the roof panels or deck are arranged in a vertical position above the roof line, and the roof panel system is secured to the purlins by means of concealed hold down clips that are attached to the purlins with mechanical fasteners.

Section C3.1.4 makes use of a "Reduction Factor",  $R$ , which is to be determined experimentally using the "Base Test Method for Purlins Supporting a Standing Seam Roof System". The test method is contained in Part VIII of the 1997 AISI Cold-Formed Steel Design Manual.

The Specification also permits the use of discrete point bracing to determine the nominal moment strength using the equations in Section C3.1.2.

In addition to adding Section C3.1.4 to the 1996 Specification, Section D3.2.1 "Anchorage of Bracing for Roof Systems Under Gravity Load with Top Flange Connected to Sheathing" was changed so that the bracing equations can be applied to standing seam roof systems as well as through fastened systems.

The purpose of this discussion is to answer questions which have been raised by designers who are using these new provisions of the 1996 Specification.

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