

January 1, 2023

**RE: Stainless-Steel Nails in Simpson Strong-Tie® Connectors**

To Whom It May Concern:

Simpson Strong-Tie stainless-steel connectors are required to be installed using stainless-steel fasteners. However, testing by the USDA Forest Service, Forest Products Laboratory has shown that stainless-steel nails with smooth shanks do not have the same withdrawal resistance as smooth-shank carbon-steel nails. For further information, see "Withdrawal Strength and Bending Yield Strength of Stainless Steel Nails," *Journal of Structural Engineering*, 2015. In addition, recent load testing at Simpson Strong-Tie indicates that allowable load values for some Simpson Strong-Tie stainless-steel connectors have changed when smooth shank nails are used.

Refer to [strongtie.com/products/categories/zmax.html](https://strongtie.com/products/categories/zmax.html) for a list of connectors available in stainless steel, which includes links to load tables for carbon-steel and stainless-steel smooth-shank nail installations, as applicable.

In cases where these load tables indicate stainless-steel smooth-shank nail installations have reduced loads, full allowable loads listed for the carbon-steel connector may be achieved if the stainless-steel connector is installed with the correct **replacement stainless-steel Simpson Strong-Tie Strong-Drive® SCNR Ring-Shank Connector** nails as shown in the Nail Substitution Chart below.

**Nail Substitution Chart**  
**Replacement Ring-Shank Stainless-Steel Nails, Type 316 Stainless Steel**

Catalog-Specified Carbon-Steel Smooth-Shank Nail		Replacement Stainless-Steel Strong-Drive SCNR® Ring-Shank Connector Nail	
Type	Size (inches) (Dia. x Length)	Hand-Drive	Collated
N8	0.131 x 1.5	SSNA8	T10A150MCN
8d Common	0.131 x 2.5	SSA8D	T10A250MCN
N10	0.148 x 1.5	SSNA10D	T9A150MCN
10d x 2.5"	0.148 x 2.5	---	T9A250MCN
10d Common	0.148 x 3.0	SSA10D	---
16d Common	0.162 x 3.5	SSA16D	---

Collated nails listed are available in 33" paper tape strips.

Please note: The information in this letter is valid until **12/31/2024**, when it will be re-evaluated by Simpson Strong-Tie. Refer to [strongtie.com](https://strongtie.com) for additional pertinent information. If you have any additional questions or need further assistance regarding this matter, please contact the Engineering Department of Simpson Strong-Tie at (800) 999-5099.

Sincerely,

**SIMPSON STRONG-TIE COMPANY INC.**