

## Exterior Nails

# Strong-Drive® SCNR RING-SHANK CONNECTOR Nail

For Simpson Strong-Tie® Connectors

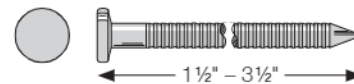
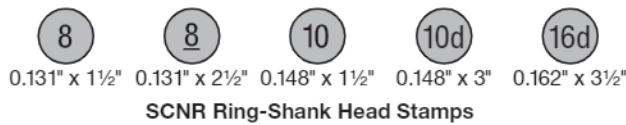
Strong-Drive SCNR Ring-Shank Connector nails are the best choice for achieving full load values in stainless steel connectors. Choose Type 316 stainless-steel nails when using stainless-steel connectors.

### Features:

- Head ID stamp for easy identification
- Type 316 stainless steel for use with stainless-steel connectors
- Use stainless-steel ring-shank nails for full connector loads
- Complies with ASTM F1667, metal hardware nails

See p. 149 for collated Strong-Drive SCNR Ring-Shank Connector nails.

For Technical Data and Loads, see C-F-2023TECHSUP *Fastening Systems Technical Guide*, p. 207



### Type 316 Stainless Steel

Diameter x Length (in.)	Gauge	Head Diameter (in.)	Approx. Count per lb.	1 lb. Model No.	Retail Pack Count	Retail Pack	Mini-Bulk Count	Mini-Bulk	Bulk Count	Bulk Model No.
0.131 x 1 1/2"	10	0.28	155	SSNA8	150	SSNA8D	750	SSNA8D5	3,750	SSNA8DB
0.131 x 2 1/2"	10	0.28	94	SSA8D	90	SSA8DD	450	SSA8D5	2,250	SSA8DB
0.148 x 1 1/2"	9	0.31	123	SSNA10	120	SSNA10D	600	SSNA10D5	3,000	SSNA10DB
0.148 x 3"	9	0.31	63	SSA10D	50	SSA10DD	250	SSA10D5	1,250	SSA10DB
0.162 x 3 1/2"	8	0.34	44	SSA16D	40	SSA16DD	200	SSA16D5	1,000	SSA16DB



### Hot-Dip Galvanized – ASTM A153, Class D

Diameter x Length (in.)	Gauge	Head Diameter (in.)	Approx. Count per lb.	1 lb. Model No.	1 lb. Box Model No.	Approx. 5 lb. Count	5 lb. Box Model No.	Approx. 25 lb. Count	25 lb. Box Model No.
0.250 x 2 1/2"	3 1/2	0.50	27	N54AHDG — Sold by the pound					



### Bright

Diameter x Length (in.)	Gauge	Head Diameter (in.)	Approx. Count per lb.	1 lb. Model No.	1 lb. Box Model No.	Approx. 5 lb. Count	5 lb. Box Model No.	Approx. 25 lb. Count	25 lb. Box Model No.
0.250 x 2 1/2"	3 1/2	0.50	27	N54A — Sold by the pound					

Bright nails are not for use in exterior or preservative-treated wood applications.

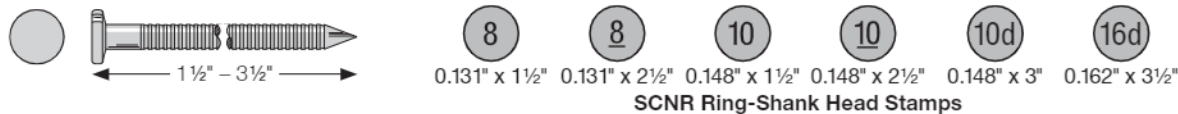
## Connector/Steel-to-Wood Fastening

# Strong-Drive® SCNR RING-SHANK CONNECTOR Nail

### Simpson Strong-Tie Connectors

Strong Drive® SCNR Ring-Shank Connector nails are the best choice for achieving maximum load values in stainless-steel connectors.

For more information, see pp. 133 and 149, C-F-2023 *Fastening Systems* catalog



When installing galvanized connectors and straps, use an SCN that is zinc galvanized.  
If the connectors and straps are stainless steel, then stainless-steel SCNRs shall be used.

### Stainless-Steel Nails

The USDA Forest Service, Forest Products Laboratory showed that stainless-steel nails with smooth shanks do not have the same withdrawal resistance as smooth-shank carbon steel nails (Withdrawal strength and bending yield strength of stainless-steel nails, 2015, *Journal of Structural Engineering*). In addition, Simpson Strong-Tie conducted an extensive series of withdrawal testing with stainless-steel nails made from Type 304, Type 305 and Type 316 stainless steels to assess the stainless-steel ring-shank nail withdrawal performance over a wide range of nail diameters (0.072 in. to 0.238 in.) and wood specific gravities (0.42 to 0.55). The withdrawal tests were conducted in accordance with ASTM D1761 using wood conditioned to 12-percent moisture content. Further, the reference allowable withdrawal resistance for each of the tested nails was calculated using the withdrawal calculation for post-frame ring-shank nails in NDS-12, equation 11.2-4 (NDS-15, equation 12.2-4), NDS-2015, equation 12.2-4 and NDS-2018, equation 12.4-5,

$$W = 1800 G^2 D$$

The allowable withdrawal loads for Simpson Strong-Tie stainless-steel ring-shank nails with a safety factor of 5.0 were at or above the calculated reference withdrawal resistance for deformed-shank nails. As a result, the deformed-shank nails equation for reference withdrawal design values can be safely used for Simpson Strong-Tie stainless-steel ring-shank nails of all diameters across the specific gravity range of 0.42 to 0.55. This finding and recommendation are specific to Simpson Strong-Tie stainless-steel ring-shank nails and shall not be applied to stainless-steel ring-shank nails made by other manufacturers.

The bending yield strength of Simpson Strong-Tie stainless-steel nails (smooth and ring-shank) meet the bending yield strength specifications of ASTM F1667, which are the same as those in the IBC and IRC.

### Stainless Steel Nails for Connectors

Simpson Strong-Tie stainless-steel connectors are required to be installed using stainless-steel fasteners. Recent testing at Simpson Strong-Tie indicates that allowable load values for some Simpson Strong-Tie stainless-steel connectors have changed when smooth-shank stainless steel nails are used. Refer to [strongtie.com/products/categories/zmax.html](http://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 same 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 following Nail Substitution Chart.

## 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	
	Hand-Drive	Collated
Length (in.)		
0.131 x 1.5	SSNA8	T10A150MCN
0.131 x 2.5	SSA8D	T10A250MCN
0.148 x 1.5	SSNA10	T9A150MCN
0.148 x 2.5	—	T9A250MCN
0.148 x 3.0	SSA10D	—
0.162 x 3.5	SSA16D	—

1. Collated nails listed are available in 33° paper tape strips.