



PRIMEGUARD MAX[®] SEASIDE APPLICATIONS

PrimeGuard MAX[®]

Why 316 Stainless Steel?

Environment

When building near salt water 316 stainless steel is the best performing alloy in terms of resisting corrosion. It is known as Marine Grade and has been used for years in wooden boat construction and repair. 316 differs from 304 and 305 stainless steels as shown below:

Proportion of Elements in Stainless Steel, by Grade:

	304	305	316
Chromium	18–20%	17–19%	16–18%
Nickel	8–10.5%	10.5–13%	10–14%
Carbon	0.08% max	0.12% max	0.08% max
Copper	—	—	—
Molybdenum	—	—	2–3%
Manganese	< 2%	< 2%	—
Iron	Balance	Balance	Balance

All types contain a combination of nickel and chromium; the chromium creates an invisible passive film that protects the fastener. The addition of molybdenum increases the corrosion resistance and is especially effective when exposed to salt water. All resist corrosion, but 316 stainless steel is the most corrosion resistant.

It is important to understand that “corrosion resistant” is not “corrosion proof.” Note that over 65% of the nail or screw in 316 stainless steel is iron, and when iron is exposed to salt water, the possibility exists that rust can occur. In normal conditions—siding, decking, roofing and trim projects in seaside applications—316 stainless steel will function properly. In cases where oxygen flow is reduced or prohibited, and/or where the fastener is underwater for extended periods, red rust can result. It will not corrode to the point of fastener failure (completely rusting away), but will show surface conditions such as red rust that will reflect the fastener reacting to surrounding conditions.

Consider when this happens how much worse the situation would be if a non-stainless steel fastener was used.

Application

When installing siding, decking, roofing and trim in, ALWAYS consider the cost of the primary material, the expected life and the location. If the material is designed to stand the test of time and the customer expects long term performance, use a fastener that is designed to match the life expectancy.

Primary Building Product Recommendations

Review the installation guidelines! Many companies recommend stainless steel when installing their products. Seaside applications invite the use of 316 Stainless Steel.

Industry Association Recommendations

It is important to note that over the last 20 years the WRCLA, CRA and Southern Pine Council have modified their recommendations as they have learned firsthand what happens if a builder installs a project with fasteners not designed to meet the corrosive elements found in coastal conditions, or to resist the corrosive force of tannins (in cedar and redwood) or copper (in pressure treated lumber). Today they all recommend stainless steel. In the case of the Cedar Shake & Shingle Bureau the recommendation is:

Each Certi-label[®] shake or shingle shall be applied with two fasteners. Nails **must be** stainless steel **Type 316** in locations within fifteen (15) miles of salt water. For locations outside the salt water zone - nails **must be** stainless steel, **Type 304**, **Type 316**, or hot-dipped galvanized with a coating weight of 2 ASTM A 153 Class D (1.0 oz/ft). Stainless steel nails offer the highest degree of corrosion resistance.

- *Roof Manual*, pg. 12 (11/20/2013)

Cedar Shake & Shingle Bureau, www.cedarbureau.org

316 Stainless steel is the BEST OPTION in coastal applications.

Fasten it once, Fasten it with MAX.

PRIME SOURCE
BUILDING PRODUCTS, INC.

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800-676-7777
www.grip-rite.com
www.primesourcebp.com

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PGMSEA
01/2014

INTRODUCING PRIMEGUARD MAXTM YOUR ONE-STOP SHOP FOR STAINLESS STEEL FASTENERS

Offering a full selection of:

- ☑ Hand drive nails in 304 and 316 Stainless
- ☑ Collated nails in 304 and 316 Stainless
- ☑ Hand drive screws in 305, 316 and 410 Stainless

Decking



Roofing



Siding



Trim



Why Stainless?

- ☑ There is an ever-increasing demand for better performing fasteners in siding, decking, roofing, and trim applications.
- ☑ Many manufacturers require the use of stainless steel fasteners to protect product warranties.
- ☑ Engineers and architects are requiring the use of stainless steel fasteners on many projects.
- ☑ Contractors are using stainless steel fasteners to avoid claims and callbacks.
- ☑ Homeowners are spending large amounts of money on exterior projects and desire to have the right fastener used for their home.





STAINLESS STEEL - THE BEST OPTION

Understanding the Issues

Exposure to extreme weather conditions, salt air, chemicals found in pressure treated wood and other caustic conditions can pose a serious threat to metal construction fasteners. Our solid stainless steel fasteners are not subject to corrosion caused by breaches or failures in surface finishes found on galvanized and ceramic coated fasteners.

Corrosion of fasteners can quickly cause unsightly staining, streaking and discoloration, and eventually impact structural integrity. Given the high cost of labor, lumber and other building materials, paying a little more for top quality stainless steel fasteners is a good step toward preventing corrosion and protecting your investment.

About Stainless Steel Alloys

Stainless steel is comprised of iron base alloys containing a minimum of 12% chromium. This presence of chromium is key to stainless steel's corrosion resistant qualities; as it combines with oxygen to form a tough, thin, clear film of chrome oxide on the metal's surface, insulating the alloy against caustic attack.

18-8 Stainless Steel is a category that includes Type 302, 303, 304, and 305 stainless steels. These alloys contain approximately 18% chromium and 8% nickel. The properties of these alloys are similar and provide more than adequate protection in most cases. Some items may become slightly magnetic during manufacturing; but this will not interfere with corrosion resistance.

Type 316 Stainless Steel contains slightly more nickel than 18-8 stainless steel and 2-3% molybdenum giving it better resistance to corrosion, especially in high chloride (salt) environments that tend to cause pitting. It offers superior performance when exposed to seawater and even resists corrosion in sulfuric acid compounds. Type 316 stainless steel is not magnetic. We recommend 316 stainless steel for seaside applications.

Type 410 Stainless Steel is a Martensitic alloy containing 12% chromium but no nickel, making it somewhat less resistant to corrosion than all of the 300 series alloys. It is magnetic and hardenable by heat treatment, lending it to the mechanical properties necessary for concrete screws and self-drilling screws. A coating of Xylan is added to maximize the corrosion resistance.



PrimeGuard
MAX®
STAINLESS STEEL

Fastener Selection Guide





WHY CHOOSE STAINLESS STEEL?

PrimeGuard **MAX**TM STAINLESS STEEL

Build with confidence.

Why install a fifty-year siding with a five-year nail? PrimeGuard MaxTM fasteners come with a Lifetime Guarantee against rust, so your work will stand the test of time.

Do you need stainless steel fasteners?

Are you:

- Building outdoors — projects like siding, roofing, or decking?
- Building in a high-moisture environment or within fifteen miles of saltwater?*
- Working with redwood, cedar, or other woods rich in tannic acids?
- Looking for strong, high-quality fasteners with a lifetime guarantee against rust?
- Looking for a fastener with a long life to eliminate replacement costs over the project's lifetime?
- Working within building codes or to project specs that call for stainless steel fasteners?
- Interested in peace of mind and no callbacks?

You need **PrimeGuard MaxTM** Stainless Steel fasteners.

Stop Corrosion



Extractive Bleeding



Fastener Discoloration

Before It Starts

You do the work. We'll make sure it stays done.



*For jobs within fifteen miles of saltwater, choose Type 316 stainless steel for maximum corrosion resistance.



SELECTING DECK FASTENERS



How many fasteners will I need to install my deck?

This chart will help you determine how many fasteners you'll need to install your decking. Installation coverage per pound assumes fastening 16" on center, with 6" wide decking, placing 2 fasteners per joist.



Stainless Steel Fastener	Approx. Count/lb.	1 lb. Installs*	5 lb. Installs*
8d 2-1/2" Patio/Deck Nail	94 nails	26 square feet	134 square feet
12d 3-1/4" Patio/Deck Nail	60 nails	17 square feet	85 square feet
16d 3-1/2" Patio/Deck Nail	44 nails	12 square feet	62 square feet
#7 x 2-1/4" Trim Screw	138 screws	39 square feet	197 square feet
#7 x 3" Trim Screw	98 screws	28 square feet	140 square feet
#10 x 2-1/2" Exterior Screw	82 screws	23 square feet	117 square feet
#10 x 3" Exterior Screw	68 screws	19 square feet	97 square feet
#9 x 2-1/2" Composite Deck Screw II	75 screws	21 square feet	107 square feet

* when driven 2 fasteners per joist, 16" on center, on 6" wide decking; allow for some waste and loss during installation when estimating required quantities

For maximum corrosion resistance, select a fastener that will last as long as your deck:

		Recommended PrimeGuard Max™ Stainless Steel Fasteners	
		5/4" Board Applications	2" Board Applications
Decking Material	Pressure Treated Lumber	#10 x 2-1/2" Exterior Screw 8d 2-1/2" Ring Shank Patio/Deck Nail	#10 x 3" Exterior Screw 12d 3-1/4" Ring Shank Patio/Deck Nail
	Cedar or PVC	#7 x 2-1/4" Trim Screw	#7 x 3" Trim Screw
	Composite or Composite-Capped	#9 x 2-1/2" Composite Deck Screw II	—

Charts may not reflect the complete Grip-Rite® PrimeGuard Max™ product assortment. Additional fastener types may be available. See a store associate for details.



SELECTING SIDING NAILS



How many nails will I need to install my siding?

These charts will help you determine how many nails you'll need to install your siding. Installation coverage per pound assumes nailing 16" on center, with standard exposure, placing 1 nail per stud.



Stainless Steel Fastener	Approx. Count/lb.	1 lb. Installs*	5 lb. Installs*
4d 1-1/2" Split-Proof® Siding Nail	398 nails	531 linear feet	2,653 linear feet
5d 1-3/4" Split-Proof® Siding Nail	354 nails	472 linear feet	2,360 linear feet
6d 2" Split-Proof® Siding Nail	245 nails	327 linear feet	1,633 linear feet
7d 2-1/4" Split-Proof® Siding Nail	215 nails	287 linear feet	1,433 linear feet
8d 2-1/2" Split-Proof® Siding Nail	196 nails	261 linear feet	1,307 linear feet
10d 3" Split-Proof® Siding Nail	120 nails	160 linear feet	800 linear feet
4d 1-1/2" Fiber Cement Siding Nail	179 nails	239 linear feet	1,193 linear feet
6d 2" Fiber Cement Siding Nail	144 nails	192 linear feet	960 linear feet
8d 2-1/2" Fiber Cement Siding Nail	115 nails	153 linear feet	767 linear feet

Stainless Steel Collated Fastener	900 pc. Installs*	1,200 pc. Installs*	3,600 pc. Installs*
1-1/2" Collated Siding Nail	—	1,600 linear feet	4,800 linear feet
1-3/4" Collated Siding Nail	—	1,600 linear feet	4,800 linear feet
2" Collated Siding Nail	—	1,600 linear feet	4,800 linear feet
2-3/16" Collated Siding Nail	—	1,600 linear feet	4,800 linear feet
2-1/2" Collated Siding Nail	1,200 linear feet	—	4,800 linear feet

* when driven 1 nail per stud, 16" on center, standard exposure; allow for some waste and loss during installation when estimating required quantities

Charts may not reflect the complete Grip-Rite® PrimeGuard Max™ product assortment. Additional fastener types may be available. See a store associate for details.



SELECTING TRIM FASTENERS



How many fasteners will I need to install trim?

Trim is a key component of exterior protection and must withstand the elements. Corrosion-resistant stainless steel will be the best option for fastening trim.



Stainless Steel Fastener	Approx. Count/lb.	1 lb. Installs*	5 lb. Installs*
4d Finish Nail	434 nails	289 linear feet	1,447 linear feet
4d Siding Nail	398 nails	265 linear feet	1,327 linear feet
6d Finish Nail	247 nails	165 linear feet	823 linear feet
6d Siding Nail	245 nails	163 linear feet	817 linear feet
#7 x 2-1/4" Trim Screw	138 screws	92 linear feet	460 linear feet

Stainless Steel Collated Fastener	900 pcs. Installs*	1,200 pcs. Installs*	3,600 pcs. Installs*
1-1/2" Collated Siding Nail	—	800 linear feet	2,400 linear feet
1-3/4" Collated Siding Nail	—	800 linear feet	2,400 linear feet
2" Collated Siding Nail	—	800 linear feet	2,400 linear feet
2-3/16" Collated Siding Nail	—	800 linear feet	2,400 linear feet
2-1/2" Collated Siding Nail	600 linear feet	—	2,400 linear feet

Stainless Steel Collated Fastener	1,000 pcs. Installs*	2,500 pcs. Installs*	4,000 pcs. Installs*
1-1/2" 16 Gauge Straight Collated Finish Nail	667 linear feet	1,667 linear feet	—
2" 16 Gauge Straight Collated Finish Nail	667 linear feet	1,667 linear feet	—
2-1/2" 16 Gauge Straight Collated Finish Nail	667 linear feet	1,667 linear feet	—
1-1/2" 15 Gauge "DA" -style Collated Finish Nail	667 linear feet	—	2,667 linear feet
2" 15 Gauge "DA" -style Collated Finish Nail	667 linear feet	—	2,667 linear feet
2-1/2" 15 Gauge "DA" -style Collated Finish Nail	667 linear feet	—	2,667 linear feet

* when driven 2 nails per board, 16" on center; allow for some waste and loss during installation when estimating required quantities

Refer to your specific product installation guide for fastener selection and placement.

Charts may not reflect the complete Grip-Rite® PrimeGuard Max™ product assortment. Additional fastener types may be available. See a store associate for details.



SELECTING SHAKE & SHINGLE NAILS



How many nails will I need to install my roofing?

Shakes and shingles are usually attached to a roof with two fasteners, either two nails or two staples. To find the quantity you need, multiply the number of shakes or shingles you expect to apply by 2, and add a few extra fasteners to account for loss or errors during installation.



Stainless Steel Fastener	Approx. Count/lb.	1lb. Installs Up To	5 lb. Installs Up To
3d 1-1/4" Shake & Shingle Nail	470 nails	235 shakes/shingles	1,175 shakes/shingles
4d 1-1/2" Shake & Shingle Nail	394 nails	197 shakes/shingles	985 shakes/shingles
5d 1-3/4" Shake & Shingle Nail	337 nails	168 shakes/shingles	842 shakes/shingles
6d 2" Shake & Shingle Nail	237 nails	118 shakes/shingles	592 shakes/shingles
7d 2-1/4" Shake & Shingle Nail	216 nails	108 shakes/shingles	540 shakes/shingles
8d 2-1/2" Shake & Shingle Nail	196 nails	98 shakes/shingles	490 shakes/shingles

Stainless Steel Collated Fastener	900 pc. Installs Up To	1,200 pc. Installs Up To	3,600 pc. Installs Up To
1-1/4" Collated Siding Nail	—	600 shakes/shingles	1,800 shakes/shingles
1-1/2" Collated Siding Nail	—	600 shakes/shingles	1,800 shakes/shingles
1-3/4" Collated Siding Nail	—	600 shakes/shingles	1,800 shakes/shingles
2" Collated Siding Nail	—	600 shakes/shingles	1,800 shakes/shingles
2-3/16" Collated Siding Nail	—	600 shakes/shingles	1,800 shakes/shingles
2-1/2" Collated Siding Nail	450 shakes/shingles	—	1,800 shakes/shingles

For shakes and shingles. Not recommended for synthetic slate roofing products.

Charts may not reflect the complete Grip-Rite® PrimeGuard Max™ product assortment. Additional fastener types may be available. See a store associate for details.

Cost Premium?

PrimeGuard **MAX**

How much more does it cost to use
Stainless Steel Fasteners?



100 Square Foot Analysis

	<u>Pressure Treated</u>	<u>Composite</u>	<u>PVC</u>
Deck Material	\$225	\$425	\$500
Railing System	\$150	\$450	\$450
Joists and Posts	\$1,000	\$1,000	\$1,000
Labor	\$1,800	\$2,200	\$2,200
	<u>\$3,175</u>	<u>\$4,075</u>	<u>\$4,150</u>

Why Stainless Steel?

Long term beauty
Fasteners that last the life of the deck

What is the premium?



Isn't your project worth it?



Stainles Steel...PrimeGuard **MAX**...the obvious choice

Cost Premium?

PrimeGuard **MAX**

How much more does it cost to use
Stainless Steel Fasteners?

100 Linear Feet Analysis



Based on two screws every 16"

12' Board at \$30.87 each
305 Stainless Steel White Head Trim Screws at \$22 per pound
Labor

Project Cost Per
100 Linear Feet
PVC Trim

\$257
\$24
\$100
\$381

Why Stainless Steel?

Long term beauty
Fasteners that match the white trim color

Take advantage of the high quality
PVC trim and fasten it with
STAINLESS STEEL FASTENERS

2-1/4" Non Stainless Retail Cost: \$9.50/pound

\$10

Stainless Steel Premium

2-1/4" Stainless Steel Retail Cost: \$22.00/pound

\$24



Less than \$15!

\$14



Isn't your project worth it?



Stainless Steel...PrimeGuard **MAX**...the obvious choice

Cost Premium?

PrimeGuard MAX

How much more does it cost to use
Stainless Steel Fasteners?



Standard Exposure 6" Wide Boards

Siding Cost Per Square

<u>Clear Cedar</u>	<u>Fiber Cement</u>	<u>STK Cedar</u>
\$400	\$120	\$200

Why Stainless Steel?

Long term beauty
Fasteners that last the life of the siding

What is the Cost Premium?

Non Stainless Retail Sell 6d Nail
Stainless Steel Retail Sell 6d Nail

<u>Dealer Sell Hand Drive Per 1# Pound</u>	<u>Dealer Sell Hand Drive Per Square</u>
\$4.78	\$3.96
\$13.00	\$10.77



Stainless Steel Premium

\$6.81



Isn't your project worth it?

**Protect
Your
Investment**



Stainles Steel...PrimeGuard MAX...the obvious choice

THE ULTIMATE BUYER...



...IS BUYING THIS PICTURE



PrimeGuard
MAX

FASTENER LIFE

WHY WOULD YOU USE A 5-YEAR FASTENER TO INSTALL 50-YEAR SIDING?

The long life and durable appeal of **James Hardie®** products deserve to be installed with a fastener that will last as long as the siding itself.



Hot Dipped Galvanized fasteners tested for long-term performance in a lab under simulated conditions for external wear.



Why should you build with stainless?

- ☑ Recommended by James Hardie in their installation guide
- ☑ Install a 50 year siding with a fastener of similar durability
- ☑ Eliminate call backs!

The image shows a page from a technical manual. On the left is a vertical sidebar with categories: 'HandiPlex® Lap Siding', 'HandiPlex® Siding', 'HandiPlex® Vertical Siding', 'Appendix (Miscellaneous)', and 'ESG-1045 & 2000 Report'. The main content area is titled 'PNEUMATIC FASTENING' and contains text about fastening James Hardie siding. A green tip box at the bottom states: 'TIP: Stainless steel fasteners are recommended when installing James Hardie products.' On the right, a table of contents shows page numbers for '5.4', 'Faster', 'Faster', 'Over c is cou fill.', and 'Faster proper'. The page number '26' is at the bottom center.

From the February 2014 James Hardie Best Practices & Installation Guide (v. 8.1).



PrimeGuard
MAX[®]
STAINLESS STEEL

**BUILT
RIGHT**
BUILT TO LAST



Build decks to last. Build with PrimeGuard MAX[®]

PrimeGuard MAX 100% stainless steel screws, nails and collated fasteners backed by a lifetime guarantee against rust.

Why stainless steel?

- Architects specify it
- Manufacturers recommend it
- Homeowners benefit from it
- Quality builders prefer it
- Building codes require it



BUILT RIGHT. GRIP-RITE.

To learn more about why PrimeGuard MAX is your best choice for STAINLESS Fasteners, call our specialty fastener experts at 800-862-3848.

To learn more about Grip-Rite products, or to become a stocking dealer, call 800-676-7777 or visit grip-rite.com

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