

2017
FULL LINE CATALOG



Drive with Speed, Quality and Confidence



Deck building • Framing • Structural • Cabinetry • Finishing • Specialty

What Makes Us ÜberGrade?



**RECESSED
STAR DRIVE**

Drive with Speed, Quality and Confidence

Zero Stripping, with (6) points of contact

CEE THREAD™

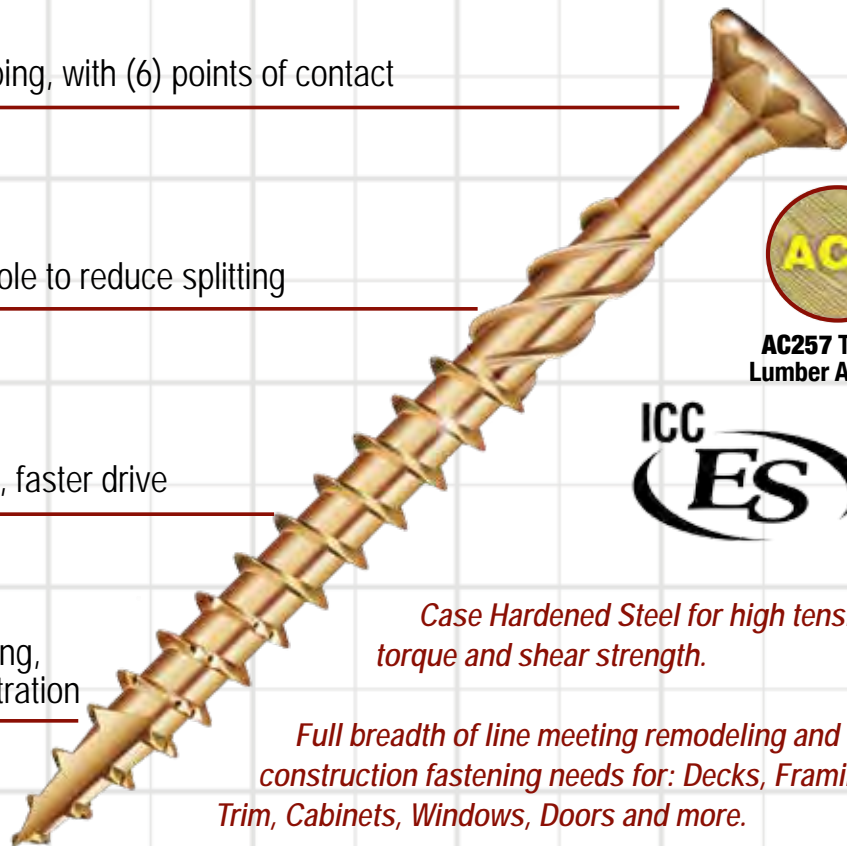
Enlarges hole to reduce splitting

W-CUT™

Low torque, faster drive

ZIP-TIP™

No pre-drilling,
faster penetration



**AC257 Treated
Lumber Approved**



*Case Hardened Steel for high tensile,
torque and shear strength.*

*Full breadth of line meeting remodeling and new
construction fastening needs for: Decks, Framing,
Trim, Cabinets, Windows, Doors and more.*

BUILDING CODE APPROVED- for structural use in treated lumber. GRK screws have been evaluated for structural and AC257 corrosion resistance to be in compliance with IBC/IRC specifications. That's why all our fasteners come with a limited lifetime warranty, so you can rest assured your installations will last the life of your project.

FOR THE MOST CORROSION RESISTANCE- Climatek® coating is approved for use in various types of preservative treated wood. Designed for interior/exterior use, the golden finish nicely matches most wood finishes. GRK recommends the use of PHEINOX™ Stainless Steel screws, especially in tropical wood, cedar, below ground grade treated lumber, pool, hot tub, sauna and applications within 15 miles of coastline.

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Always build your project according to current ICC (International Code Council) specifications. GRK's Climatek™ coating meets or exceeds standards, including AC257, for use in various type of preservative treated wood. Please view ICC Report #ESR-2442, ESR-3201 and ESR-3251 for more details. Visit <http://www.grkfasteners.com/index.php/en/techdata/code-approvals>

No pre-drilling required for most GRK products, unless required or specified by building material. Always place deck boards with outer edge of growth rings facing up (bark side up). Do not use deck cleaners which contain bleach with coated metals. Consult building material supplier's/manufacturer's recommendations for exact instructions. Decking screws should be countersunk 1/8".

SECTION 1



R4™ Multi-Purpose Framing and Decking Screws: Frame with ease and confidence. Multi-use screw for wood, particle board, sheet metal, cement fiber board, laminate and wood decking and melamine. They are self tapping eliminating pre-drilling featuring a countersinking head with cutting teeth, W-Cut™ for reducing torque, CEE Thread™ for no splitting and our Climatek™ AC257 code approved coating. For deck boards consisting of pressure treated lumber, cedar & redwood use #9 or #10 gauge screws. For Southern Yellow Pine use #10. For use in all applications including pressure treated lumber. [Some sizes come in PHEINOX™ stainless steel.](#) They are ESR code approved under ICC Report ESR-3201.

SECTION 2



RSS™ Rugged Structural Screws: Easy lag bolt alternative with immense drawing power. Ideal for use anywhere you would use a traditional lag screw and more, but with no pre-drilling required. For use in all applications including pressure treated lumber. They are self tapping eliminating pre-drilling featuring a washer head with cutting teeth, W-Cut™ for reducing torque, CEE Thread™ for no splitting and our Climatek™ AC257 code approved coating. They are ESR code approved under ICC Report ESR-2442. [Some sizes come in PHEINOX™ stainless steel.](#)
RSS™ JTS: *Joist & Truss Fastener: Used for joists and trusses..*

SECTION 3



FIN/Trim™ Trim Head Screws: Smallest head on the market for a clean finish. Perfect for all interior and exterior finishing applications including deck rails, exterior wood trim, stairs, banisters, window and door trim, base boards, crown moulding and joining cabinets. For use in all applications including pressure treated lumber. They are self-tapping eliminating pre-drilling featuring the W-Cut™ threads for reduced torque, and our Climatek™ AC257 code approved coating. They are ESR code approved under ICC Report ESR-3201. [Some sizes come in PHEINOX™ stainless steel.](#)

SECTION 4



RT Composite™ Trim Head Screws: Reverse thread design prevent mushrooming for a clean finish. Engineered for use in exterior applications including classic composite trim and decking, cPVC trim and moulding. For use in all applications including pressure treated lumber. RT™ Composite Trim screws are self-tapping eliminating pre-drilling featuring the W-Cut™ threads for reduced torque, and our Climatek™ AC257 code approved coating. They are ESR code approved under ICC Report ESR-3201. [Some sizes come in PHEINOX™ stainless steel.](#)

SECTION 5



Kameleon™ Composite Deck Screws: Heads blend in with decking with no mushrooming effect. Use in plastic or composite decking. They are available in; Grey, Tan, Brown and Redwood. The Kameleon screws are self tapping featuring fiber trapping rings, a countersinking head with cutting teeth, CEE Thread™, W-Cut™ threads for reduced torque and our Climatek™ AC257 code approved coating. They are ESR code approved under ICC Report ESR-3201.

PHEINOX™ Stainless Steel Screws: For strongest corrosion resistance.
PHEINOX™ 305 Stainless Steel Screws: Ideal for use in tropical wood, around pools, hot tubs, sauna and sea-side type applications.

PHEINOX™ 316 Stainless Steel Screws- Marine Grade Stainless:
For use in critical applications where harsh conditions require fasteners that can deliver the most reliable corrosion protection.

*The following GRK Screws are available in PHEINOX™ Stainless Steel:
R4™ Multi-Purpose Framing, RSS™ Rugged Structural Screws, Fin / Trim™
and RT Composite™ Trim Head Screws and Low Profile Cabinet™ Screws.*



SECTION 6

Low Profile Cabinet™ Screws: Built in washer head presses in flush against any material. Used for cabinet and vinyl siding installation. These unique screws are thin enough to prevent most material splitting, while providing sufficient strength to guarantee a secure installation.

White Low Profile Cabinet™ Screws: White Powder Coated heads won't chip and blend in perfectly with white cabinetry. No need for sticker covers. For interior use only.
One size comes in *PHEINOX™ stainless steel.*



SECTION 7

Top Star™ Shim Screws: For plumb installation of wooden door and window frames. No more shims! Other uses include cabinets, insulation, paneling and built-in-wall units.

The two-piece "unique screw within a screw" design reduces labor when installing wooden doors or windows. A unique 2 piece crown / bit allows for quick and easy driving.



SECTION 8

Caliburn™ Screws: Heavy duty concrete and masonry fastener. For attaching a variety of materials and fixtures to concrete. Easy driving high carbon steel allows the screws to be reinserted as they create threads while being driven into the concrete. Proper pre-drilling with correct drill bit required. Caliburn™ screws are Climatex™ AC257 code approved coating. The Caliburn™ XL is ESR code approved under ICC Report ESR-3251.

Caliburn Screw: *Tapered concrete screw for securing wood.*

Caliburn™ PH Screw: *Pan head concrete screw for a more aesthetic look.*

Caliburn™ XL Screws: *Washer head style concrete screw for strong connections*



SECTION 9

MSS™ Metal Siding Screws: Integrated rubber washer with powder coated metal finish providing exceptional corrosion resistance and a tight secure installation. Ideal for metal to wood applications such as steel siding or roofing.

They are self-tapping eliminating pre-drilling featuring the W-Cut™ threads for reduced torque.



SECTION 10

TEKS® Metal Fastening Screws: Pro Known. Pro Used. Pro Trusted. For use in all interior and exterior applications: metal-to-metal, metal-to-wood, and roofing. *A full line of Teks® metal fasteners are available in various lengths in handy-paks and pro-paks.*

TEKS® Roofing screws: *Roofing screw provides a waterproof self-sealing neoprene washer for a premium finish*

TEKS® Lath screws: *Lath screws feature a low profile head and premium finish ideal for any application*

TEKS® Winged screws: *Special wings on the self-tapping screws to ream a hole in wood to prevent thread engagement and fasten securely into metal*

TEKS® Self-Tapping screws: *Designed to drill, tap, and fasten all in one motion.*



SECTION 11

Cement Board Screws: Countersinking head for flush seating in cement board. Backer-On® and Rock-On® Cement Board Screws: For use in cement board attachment applications for fasteners that offer easiness to install and corrosion protection.

Cement Board Screws are available in three different lengths in handy-packs and Pro-paks for both Backer-On® and Rock-On®.

Backer-On® screws: *Cement board screws designed for attaching Hardiebacker® cement board*
Rock-On® screws: *Cement board screws designed for attached Durock®, Wonderboard® cement board*



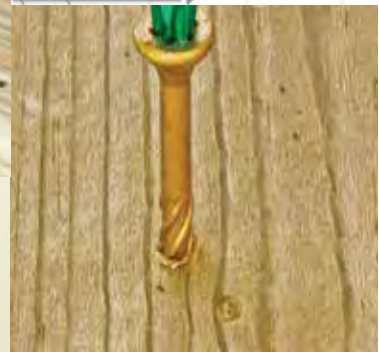
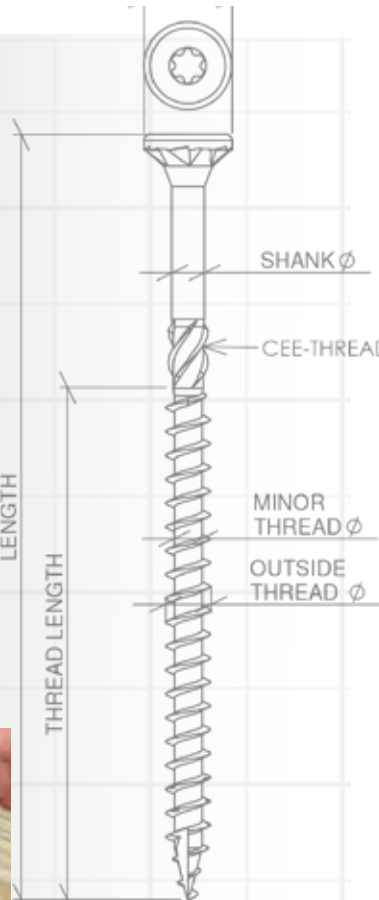
SECTION 12

GRK's R4™ self-countersinking screw has a patented underhead with saw-blade like cutting teeth and six self-contained cutting pockets. Together they act similar to a circular saw-blade, transporting the drill dust away from the edge of the screw hole while cutting a perfectly clean hole into even the most brittle materials without cracking any surface treatment.

This design enhances the R4™'s versatility by allowing the fastener to countersink into even the hardest woods. The head of the screw closes the hole off with precision, leaving no damaged fibers around the head.

R4™ screws 3-1/8" and longer have a four threaded CEE Thread. This enlarges the screw hole for the non-threaded portion of the fastener, allowing the wood to settle easily. It increases the screw's drawing strength and reduces the friction on the screw shank that lowers the driving torque.

ÜberGrade™









R4™ MULTI-PURPOSE FRAMING & DECKING SCREWS

Frame with Ease and Confidence



- **Recessed Star Drive:** Zero Stripping, with 6 points of contact
- **CEE Thread:** Enlarges hole to reduce splitting
- **W-Cut™:** Low torque, faster drive
- **Zip-Tip™:** No pre-drilling, faster penetration
- **Cutting Pockets:** provide a clean hole, reduces splitting, and bore with precision.
- **ESR-3201 Approved** for structural application.
- **Case Hardened Steel:** for high tensile, torque and shear strength.
- **Climatek™ Coating is AC257** code approved for use in treated lumber.
- For interior / exterior use in; wood, plastic, cement fiber board, particle board, sheet metal, wood decking and melamine.
- Also available in **PHEINOX™** 305 and 316 grade Stainless Steel.

| | U.S. (Std.) Size (Dia. x Length) | Metric Size (Dia. x Length) | Bulk Part No. | Bulk Box Qty. | Pro-Pak Part No. | Pro-Pak Pail Qty. | Handy-Pak Part No. | Handy-Pak Ctn. Size/Qty. |
|--|-------------------------------------|--------------------------------|------------------|------------------|---------------------|----------------------|-----------------------|-----------------------------|
|  T-15 | #6 x 1-1/4" | 3.5 x 30 | 00051† | 13,000 | | | | |
| | #6 x 1-1/2" | 3.5 x 40 | 00055† | 8,000 | | | | |
| | #6 x 2" | 3.5 x 50 | 00059† | 5,400 | | | | |
|  T-15 | #8 x 1" | 4.0 x 25 | | | | | 02067*† | S/100 |
| | #8 x 1-1/4" | 4.0 x 30 | 00069† | 10,000 | 01069† | 1,300 | 02069† | S/100 |
| | #8 x 1-1/2" | 4.0 x 40 | 00073† | 6,500 | 01073† | 1,000 | 02073† | S/100 |
| | #8 x 1-3/4" | 4.0 x 45 | 00075† | 6,000 | 01075† | 925 | 02075† | S/100 |
| | #8 x 2" | 4.0 x 50 | 00077 | 4,500 | 01077 | 850 | 02077 | S/100 |
| | #8 x 2-1/2" | 4.0 x 63 | 00079 | 3,500 | 01079 | 650 | 02079 | S/100 |
|  T-25 | #9 x 1-1/4" | 4.5 x 30 | 00091† | 8,000 | 01091† | 1,000 | | |
| | #9 x 1-1/2" | 4.5 x 40 | 00095† | 5,200 | 01095† | 820 | 02095† | S/100 |
| | #9 x 1-3/4" | 4.5 x 45 | 00097† | 4,500 | 01097† | 750 | | |
| | #9 x 2" | 4.5 x 50 | 00099 | 3,700 | 01099 | 690 | 02099 | M/100 |
| | #9 x 2-1/2" | 4.5 x 63 | 00101 | 2,900 | 01101 | 575 | 02101 | M/100 |
| | #9 x 2-3/4" | 4.5 x 70 | 00103 | 2,000 | 01103 | 480 | 02103 | M/100 |
|  T-25 | #9 x 3-1/8" | 4.5 x 80 | 00105 | 1,900 | 01105 | 425 | 02105 | M/100 |
| | #10 x 1-1/2" | 5.0 x 40 | 00127† | 4,700 | | | | |
| | #10 x 2" | 5.0 x 50 | 00131 | 3,200 | | | | |
| | #10 x 2-1/2" | 5.0 x 63 | 00133 | 2,500 | 01133 | 470 | 02133 | M/100 |
| | #10 x 2-3/4" | 5.0 x 70 | 00135 | 2,000 | 01135 | 395 | | |
| | #10 x 3-1/8" | 5.0 x 80 | 00137 | 1,500 | 01137 | 350 | 02137 | M/100 |
| | #10 x 3-1/2" | 5.0 x 90 | 00139 | 1,200 | 01139 | 300 | 02139 | M/50 |
|  T-25 | #10 x 4" | 5.0 x 100 | 00141 | 1,000 | 01141 | 270 | 02141 | M/50 |
| | #10 x 4-3/4" | 5.0 x 120 | 00143 | 800 | 01143 | 230 | 02143 | M/50 |
| | #12/14 x 4" | 6.0 x 100 | 00165 | 800 | | | | |
| | #12/14 x 4-3/4" | 6.0 x 120 | 00169 | 700 | | | 02169 | M/50 |
| | #12/14 x 5-5/8" | 6.0 x 140 | 00173 | 600 | | | 02173 | M/50 |
| | #12/14 x 6-3/8" | 6.0 x 160 | 00177 | 1,000 | | | 02177 | 9/50 |
| | #12/14 x 7-1/4" | 6.0 x 180 | 00179 | 1,000 | | | | |
|  T-25 | #12/14 x 8" | 6.0 x 200 | 00181 | 500 | | | 02181 | 9/50 |
| | #12/14 x 10" | 6.0 x 250 | | | | | 02187 | 12/50 |
| | #12/14 x 12" | 6.0 x 300 | | | | | 02193 | 12/50 |



Some sizes available in **PHEINOX™** hardened Stainless Steel; refer to Section 6. 2" bit included in Pro-Paks. 1" bit w/Handy-Paks.
*Does not come with the Zip-Tip™ feature. †Does not have the added CEE-THREAD™ feature.

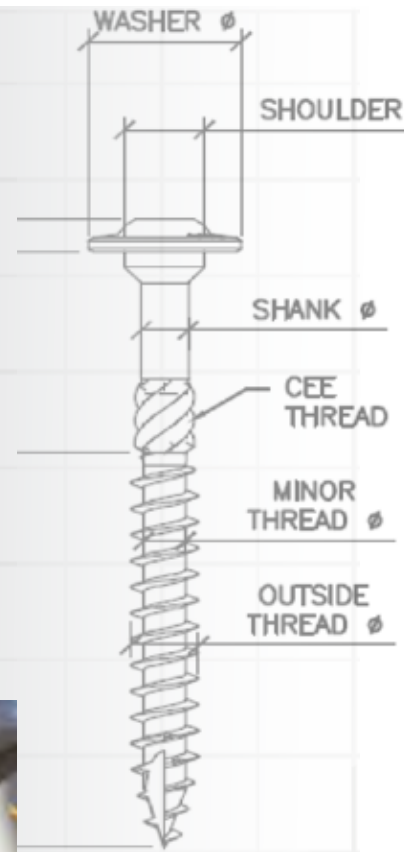
NOTE: Pro-Paks need to be ordered in multiples of two.

GRK's RSS™ screw is made of specially hardened steel to provide you with high tensile, torque and shear strength. The sharp threads and points bite instantly into the material (including hardwood), reducing the splitting effect due to smaller shanks.

RSS™ screws that are 3-1/8" and longer have CEE Threads which enlarge the screw hole for the non-threaded portion of the fastener, allowing the wood to settle easily and increases the screw's drawing strength. The CEE Thread also reduces the friction on the screw shank which can result in lowering the driving torque and the likelihood of splitting the wood. This is why the RSS™ screw is an efficient lag screw alternative.

Our round head with built-in shield (washer type head) has no sharp edges like conventional lag screws. The added shoulder (nominal diameter) underneath the washer has the ability to center the RSS™ screw in pre-drilled hardware like hinges and connector plates.

RSS™ JTS - Used for joists and trusses



ÜberGrade™



RSS™ RUGGED STRUCTURAL SCREWS

Easy Lag Bolt Alternative with Immense Drawing Power



AC257 Treated Lumber Approved



- **Recessed Star Drive:** Zero Stripping, with 6 points of contact
- **CEE Thread:** Enlarges hole to reduce splitting
- **W-Cut™:** Low torque, faster drive
- **Zip-Tip™:** No pre-drilling, faster penetration
- **Washer Head:** for immense holding power
- **Cutting Pockets:** provide a clean hole and reduces splitting, and bore with precision.
- **ESR-2442 Approved** for structural application.
- **Case Hardened Steel:** for high tensile, torque and shear strength.
- **Climatek™ Coating is AC257** code approved for use in treated lumber.
- For interior / exterior use in; carrying beams, ledger boards, stair rails, deck posts, playground equipment and other professional applications.
- Also available in **PHEINOX™** 305 and 316 grade Stainless Steel.

| U.S. (Std.) Size (Dia.x Length) | Metric Size (Dia.x Length) | Bulk Part No. | Bulk Box Qty. | Pro-Pak Part No. | Pro-Pak Pail Qty. | Handy-Pak Part No. | Handy-Pak Ctn. Size/Qty. |
|------------------------------------|-------------------------------|------------------|------------------|---------------------|----------------------|-----------------------|-----------------------------|
|------------------------------------|-------------------------------|------------------|------------------|---------------------|----------------------|-----------------------|-----------------------------|



T-25

| | | | | | | | |
|--------------|----------|----------------|-------|--------------|-----|----------------|------|
| #10 x 1-1/2" | 5.0 x 40 | 10127*† | 2,300 | | | 12127*† | S/50 |
| #10 x 2" | 5.0 x 50 | 10131*† | 1,600 | | | 12131*† | S/50 |
| #10 x 2-1/2" | 5.0 x 63 | 10133† | 1,000 | | | 12133† | M/50 |
| #10 x 2-3/4" | 5.0 x 70 | 10135† | 1,000 | | | | |
| #10 x 3-1/8" | 5.0 x 80 | 10137 | 800 | 11137 | 236 | 12137 | M/50 |



T-25

| | | | | | | | |
|---------------|----------|----------------|-------|--|--|----------------|------|
| 1/4" x 1-1/2" | 6.0 x 40 | 10151*† | 1,000 | | | 12151*† | M/50 |
| 1/4" x 2" | 6.0 x 50 | 10155*† | 800 | | | 12155*† | M/50 |
| 1/4" x 2-1/2" | 6.0 x 63 | 10157† | 700 | | | 12157† | M/50 |
| 1/4" x 3-1/8" | 6.0 x 80 | 10161 | 500 | | | 12161 | M/50 |
| 1/4" x 3-1/2" | 6.0 x 90 | 10163 | 400 | | | 12163 | M/50 |



T-30

| | | | | | | | |
|----------------|-----------|---------------|-----|--|--|---------------|--------|
| 5/16" x 2-1/2" | 7.0 x 63 | 10217† | 600 | | | 12217† | 9/100 |
| 5/16" x 2-3/4" | 7.0 x 70 | 10219† | 500 | | | 12219† | 12/100 |
| 5/16" x 3-1/8" | 7.0 x 80 | 10221 | 500 | | | 12221 | 12/100 |
| 5/16" x 3-1/2" | 7.0 x 90 | 10223 | 500 | | | 12223 | 12/100 |
| 5/16" x 4" | 7.0 x 100 | 10225 | 400 | | | 12225 | 12/100 |
| 5/16" x 5-1/8" | 7.0 x 130 | 10231 | 300 | | | 12231 | 9/50 |
| 5/16" x 6" | 7.0 x 150 | 10235 | 300 | | | 12235 | 9/50 |



T-40

| | | | | | | | |
|----------------|-----------|--------------|-----|--|--|--------------|-------|
| 3/8" x 3-1/8" | 8.0 x 80 | 10273 | 400 | | | | |
| 3/8" x 4" | 8.0 x 100 | 10275 | 400 | | | 12275 | 9/50 |
| 3/8" x 5-1/8" | 8.0 x 130 | 10278 | 300 | | | 12278 | 12/50 |
| 3/8" x 6" | 8.0 x 150 | 10281 | 300 | | | 12281 | 12/50 |
| 3/8" x 7-1/4" | 8.0 x 180 | 10285 | 200 | | | 12285 | 12/50 |
| 3/8" x 8" | 8.0 x 200 | 10287 | 300 | | | 12287 | 12/50 |
| 3/8" x 10" | 8.0 x 250 | 10293 | 300 | | | 12293 | 12/50 |
| 3/8" x 12" | 8.0 x 300 | 10299 | 300 | | | 12299 | 12/50 |
| 3/8" x 14-1/8" | 8.0 x 360 | 10307 | 200 | | | 12307 | 16/50 |
| 3/8" x 16" | 8.0 x 400 | 10311 | 100 | | | 12311 | 16/50 |

RSS™ JTS - JOIST AND TRUSS SCREW



T-25

| | | | | | | | |
|---------------|-----------|--------------|-----|--|--|--------------|------|
| 1/4" x 5" | 6.3 x 127 | | | | | 93735 | 9/50 |
| 1/4" x 6-3/4" | 6.3 x 171 | 91743 | 300 | | | 93743 | 9/50 |

RSS™ MINI HANDY-PAK

| U.S. (std.) | Metric Size | Pt. No. | Qty. |
|----------------|-------------|--------------|------|
| 5/16" x 3-1/8" | 7.0 x 80 | 14221 | M/25 |
| 5/16" x 4" | 7.0 x 100 | 14225 | M/25 |
| 5/16" x 5-1/8" | 7.0 x 130 | 14231 | M/20 |
| 5/16" x 6" | 7.0 x 150 | 14235 | M/20 |

RSS™ INDIVIDUALLY TAGGED

| U.S. (std.) | Metric Size | Pt. No. | Qty./Ctn. |
|----------------|-------------|--------------|-----------|
| 5/16" x 3-1/8" | 7.0 x 80 | 96001 | 1/50 |
| 5/16" x 4" | 7.0 x 100 | 96005 | 1/50 |
| 5/16" x 5-1/8" | 7.0 x 130 | 96010 | 1/50 |
| 5/16" x 6" | 7.0 x 150 | 96015 | 1/40 |
| 3/8" x 8" | 8.0 x 200 | 96020 | 1/25 |
| 3/8" x 10" | 7.0 x 250 | 96025 | 1/25 |
| 3/8" x 12" | 8.0 x 300 | 96030 | 1/20 |

Some sizes available in **PHEINOX™** hardened Stainless Steel; refer to Section 6.
NOTE: Pro-Paks need to be ordered in multiples of two. *Does not come with the Zip-Tip™ feature.
 †Does not have the added CEE-THREAD™ feature. 2" bit included in Pro-Paks. 1" bit with Handy-Paks.

GRK's Trim™ Head screws are an excellent choice for most fine carpentry applications, as well as window extension jambs, joining cabinets and more. Our Trim™ Head screws have the smallest screw head available; with screw lengths from 1-1/4" (30 mm) to 5" (125 mm).

Most material splitting is prevented because of the Trim™ Head screw's exceptionally small head and the W-Cut thread design.

Fin/Trim™ screws are also available in white finish to blend in with white wooden trim boards.

ÜberGrade™



FIN/TRIM™ FINISHING TRIM HEAD SCREWS

Smallest Head on the Market for a Clean Finish



AC257 Treated Lumber Approved

- **Recessed Star Drive:** Zero Stripping, with 6 points of contact.
- **Trim Head:** for a clean finished look.
- **W-Cut™:** Low torque, faster drive.
- **Zip-Tip™:** No pre-drilling, faster penetration.
- **ESR-3201 Approved** for structural application.
- **Case Hardened Steel:** for high tensile, torque and shear strength.
- **Climatek™ Coating is AC257** code approved for use in treated lumber.
- For interior / exterior use.
- Available in **Climatek™** or white finish.
- Also available in **PHEINOX™** 305 and 316 grade Stainless Steel.

| U.S. (Std.) Size (Dia.x Length) | Metric Size (Dia.x Length) | Bulk Part No. | Bulk Box Qty. | Pro-Pak Part No. | Pro-Pak Pail Qty. | Handy-Pak Part No. | Handy-Pak Ctn. Size/Qty. |
|------------------------------------|-------------------------------|------------------|------------------|---------------------|----------------------|-----------------------|-----------------------------|
| #8 x 1-1/4" | 4.0 x 30 | | | 16720 | 995 | 17720 | S/100 |
| #8 x 1-1/2" | 4.0 x 40 | 15724 | 6,500 | 16724 | 915 | 17724 | S/100 |
| #8 x 2" | 4.0 x 50 | 15728 | 4,500 | 16728 | 725 | 17728 | S/100 |
| #8 x 2-1/2" | 4.0 x 63 | 15730 | 3,500 | 16730 | 605 | 17730 | S/100 |
| #8 x 2-3/4" | 4.0 x 70 | | | | | 17732 | S/100 |
| #8 x 3-1/8" | 4.0 x 80 | 15734 | 2,500 | 16734 | 514 | 17734 | M/100 |
| #9 x 4" | 4.5 x 100 | 15760 | 1,000 | | | 17760 | M/50 |
| #9 x 5" | 4.5 x 125 | 15766 | 800 | | | 17766 | M/50 |
| WHITE FIN / TRIM™ | | | | | | | |
| #8 x 2" | 4.0 x 50 | | | 16828 | 605 | 17828 | S/100 |
| #8 x 2-1/2" | 4.0 x 63 | | | 16830 | 505 | 17830 | S/100 |

Some sizes available in **PHEINOX™** hardened Stainless Steel; refer to Section 6

NOTE: Pro-Paks need to be ordered in multiples of two. 2" bit included in Pro-Paks. 1" bit with Handy-Paks.

**Excellent for all of
your trimwork and fine
carpentry finishing.**

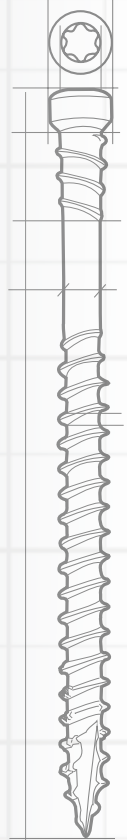
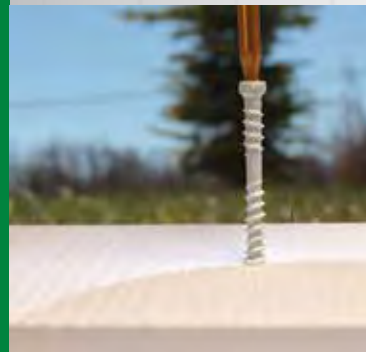


GRK has modified its innovative FIN/Trim™ Head screw to include reverse threading under the head of the fastener. This technology makes the RT Composite™ Trim Screw ideal for use in composite and cellular PVC trim.

Based on extensive tests, GRK has found that the reverse thread helps the screw head disappear beneath the surface of the classic wood composite material, reducing or eliminating the dimple that sometimes appears when using the FIN/Trim™ screw.

The reverse thread feature is available in RT Composite™ screws from 2" to 3-1/8" in length in both regular Climatek™ coating and in white Climatek™ coated finish to blend in with popular white exterior composite and cellular PVC trim.

ÜberGrade™



RT COMPOSITE™ EXTERIOR TRIM SCREWS

Reverse Thread Design Prevents Mushrooming






- **Recessed Star Drive:** Zero Stripping, with 6 points of contact.
- **Reverse Threads** eliminate mushrooming.
- **Trim Head:** for a clean finished look.
- **W-Cut™:** Low torque, faster drive.
- **Zip-Tip™:** No pre-drilling, faster penetration.
- **ESR-3201 Approved** for structural application.
- **Case Hardened Steel:** for high tensile, torque and shear strength.
- **Climatek™ Coating is AC257** code approved for use in treated lumber.
- For interior / exterior use in; exterior PVC trim (Azek,™ Klear,™ Koma™), no pre-drilling is necessary. Climatek™ coated screws work well with CAMO system.
- Available in **Climatek™** or white Climatek™ coated finish.
- Also available in **PHEINOX™** 305 and 316 grade Stainless Steel.



AC257 Treated
Lumber Approved



| U.S. (Std.) Size (Dia. x Length) | Metric Size (Dia. x Length) | Bulk Part No. | Bulk Box Qty. | Pro-Pak Part No. | Pro-Pak Pail Qty. | Handy-Pak Part No. | Handy-Pak Ctn. Size/Qty. | |
|---|--------------------------------|------------------|------------------|---------------------|----------------------|-----------------------|-----------------------------|-------|
|  T-10 | #8 x 2" | 4.0 x 50 | 15077 | 4,500 | 16077 | 725 | 17077 | S/100 |
| | #8 x 2-1/2" | 4.0 x 63 | 15079 | 3,500 | 16079 | 605 | 17079 | S/100 |
| | #8 x 3-1/8" | 4.0 x 80 | 15083 | 2,500 | 16083 | 514 | 17083 | M/100 |
|  T-15 | #9 x 2-1/2" | 4.5 x 63 | 15101 | 2,900 | 16101 | 408 | | |
| | #9 x 3-1/8" | 4.5 x 80 | 15105 | 1,900 | 16105 | 348 | 17105 | M/100 |
| WHITE RT COMPOSITE™ | | | | | | | | |
|  T-10 | #8 x 2" | 4.0 x 50 | | | 16628 | 605 | 17628 | S/100 |
| | #8 x 2-1/2" | 4.0 x 63 | 15630 | 3,500 | 16630 | 505 | 17630 | S/100 |
| | #8 x 2-3/4" | 4.0 x 70 | | | 16632 | 450 | 17632 | S/100 |
| | #8 x 3-1/8" | 4.0 x 80 | | | | | 17634 | M/100 |

Some sizes available in **PHEINOX™** hardened Stainless Steel; refer to Section 6

NOTE: Pro-Paks need to be ordered in multiples of two. 2" bit included in Pro-Paks. 1" bit with Handy-Paks.

Supreme Drawing Power
is perfect for trimwork and
deck construction.

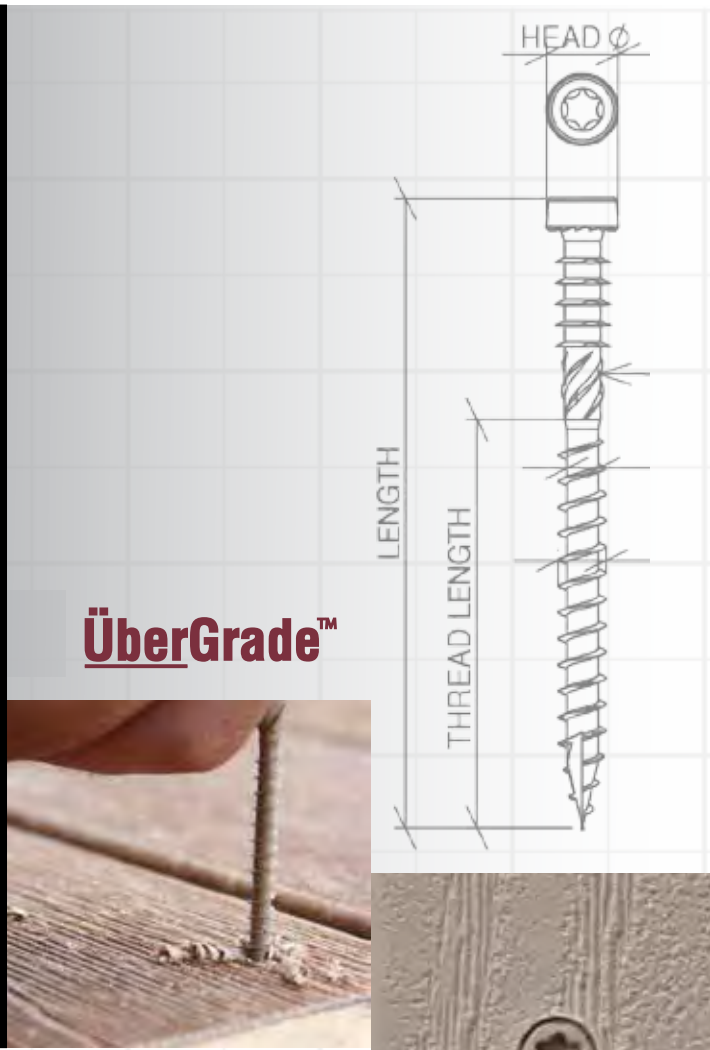


GRK's Kameleon™ screws are an excellent choice for composite and PVC decking applications. The underhead has saw-blade like cutting teeth that cut a perfectly clean hole into the decking.

The Kameleon™ also features five to seven rings that have three indented fiber traps on each ring designed to trap fibers and eliminate the mushroom effect.

The CEE Thread feature enlarges the screw hole allowing the composite decking to settle easily, increases the screw's drawing strength, and reduces the friction on the screw shank, which can result in lowering the overall driving torque.

The Kameleon™ is also available in a range of popular colors: Grey, Tan, Brown and Redwood. And, in a variety of sizes from 2-1/2" to 2-3/4".



KAMELEON™ COMPOSITE DECK SCREWS


Heads Blend in with Decking. No Mushrooming Effect



- **Recessed Star Drive:** Zero Stripping, with 6 points of contact
- **CEE Thread:** Enlarges hole to reduce splitting
- **W-Cut™:** Low torque, faster drive
- **Zip-Tip™:** No pre-drilling, faster penetration
- **Fiber Trapping Rings:** are designed to prevent mushrooming and dimpling.
- **Cutting Pockets:** provide a clean hole and reduces splitting, and bore with precision.
- **ESR-3201 Approved** for structural application.
- **Case Hardened Steel:** for high tensile, torque and shear strength.
- **Climatek™ Coating is AC257** code approved for use in treated lumber.
- For interior / exterior use in; both composite and PVC decking.



AC257 Treated Lumber Approved



| | U.S. (Std.) Size (Dia.x Length) | Metric Size (Dia.x Length) | Bulk Part No. | Bulk Box Qty. | Pro-Pak Part No. | Pro-Pak Pail Qty. | Handy-Pak Part No. | Handy-Pak Ctn. Size/Qty. |
|---------|------------------------------------|-------------------------------|------------------|------------------|---------------------|----------------------|-----------------------|-----------------------------|
| Grey | #9 x 2-1/2" | 4.5 x 63 | 65151 | 2,900 | 66151 | 510 | N/A | N/A |
| Tan | #9 x 2-1/2" | 4.5 x 63 | 65155 | 2,900 | 66155 | 510 | | |
| Brown | #9 x 2-1/2" | 4.5 x 63 | 65158 | 2,900 | 66158 | 510 | | |
| Redwood | #9 x 2-1/2" | 4.5 x 63 | 65159 | 2,900 | 66159 | 510 | | |
| Grey | #9 x 2-3/4" | 4.5 x 70 | 65171 | 2,000 | 66171 | 420 | N/A | N/A |
| Tan | #9 x 2-3/4" | 4.5 x 70 | 65175 | 2,000 | 66175 | 420 | | |
| Brown | #9 x 2-3/4" | 4.5 x 70 | 65178 | 2,000 | 66178 | 420 | | |
| Redwood | #9 x 2-3/4" | 4.5 x 70 | 65179 | 2,000 | 66179 | 420 | | |

NOTE: Pro-Paks need to be ordered in multiples of two. 2" bit included in Pro-Paks. 1" bit with Handy-Paks.

Kameleon™ Composite Deck Screws are available in 2-1/2" to 2-3/4" 5lb. Pro-Paks. Enough to cover 150 square feet. Pro-Pak screw colors are available in Grey, Tan, Brown and Redwood.

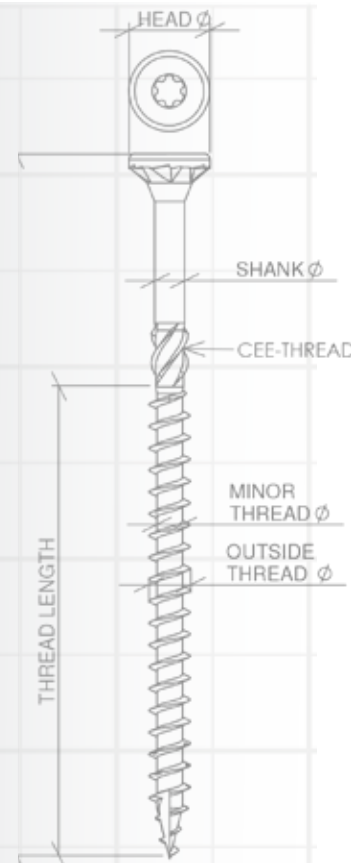
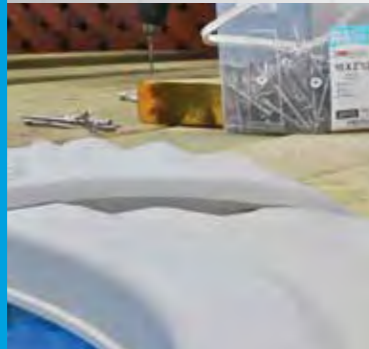


PHEINOX™ stainless steel screws are made from only the best grade of stainless steel wire, 305. The unique characteristics of the *PHEINOX™* wire give our stainless steel screws unmatched performance, by maximizing both torque and increasing bending strength.

GRK's patented R4™, RSS™, Cabinet™, Fin/Trim™, and RT Composite™ screws are available in *PHEINOX™* stainless steel. Use *PHEINOX™* screws from GRK for projects that should last a lifetime.

GRK recommends the use of its *PHEINOX™* stainless steel fasteners in tropical wood, cedar wood, pool, hot tub, sauna and sea-side applications, as well as deck applications in areas with large daily temperature variances. The ultimate finish for superior all weather corrosion protection.

ÜberGrade™



PHEINOX™ 305 STAINLESS STEEL SCREWS

Maximum Corrosion Protection for Harsh Environments





- **305 grade stainless steel** for a superior combination of strength and corrosion resistance.
- **ESR-2442 & 3201 Approved** for structural application.
- **Hardened Stainless Steel** finish provides extraordinary anti-corrosion protection.
- **CEE Thread™**- enlarges hole to reduce splitting. Increases drawing strength.
- **W-Cut™ Thread Design** tiny saw blades reduce torque by cutting through the material.
- **ZIP-TIP™** for easy starts and no pre-drilling.
- Available in a wide range of sizes and types.
- For use in exterior construction, cedar and wet environments such as lakes, pools, decks and boardwalks.



AC257 Treated Lumber Approved



| | U.S. (Std.) Size (Dia.x Length) | Metric Size (Dia.x Length) | Bulk Part No. | Bulk Box Qty. | Pro-Pak Part No. | Pro-Pak Pail Qty. | Handy-Pak Part No. | Handy-Pak Ctn. Size/Qty. |
|---|------------------------------------|-------------------------------|------------------|------------------|---------------------|----------------------|-----------------------|-----------------------------|
| R4™ SCREWS : PHEINOX™ 305 | | | | | | | | |
|  T-15 | #8 x 1-1/2" | 4.0 x 40 | | | 26073† | 857 | | |
|  T-25 | #9 x 2" | 4.5 x 50 | 25099 | 4,000 | 26099 | 609 | | |
|  T-25 | #10 x 2-1/2" | 5.0 x 63 | 25133 | 2,500 | 26133 | 425 | 27133 | M/100 |
| | #10 x 2-3/4" | 5.0 x 70 | | | 26135 | 350 | | |
| | #10 x 3-1/8" | 5.0 x 80 | 25137 | 1,500 | 26137 | 305 | 27137 | M/100 |
| | #10 x 4" | 5.0 x 100 | | | 26141 | 247 | | |
| RSS™ SCREWS: PHEINOX™ 305 | | | | | | | | |
|  T-25 | 1/4" x 1-1/2" | 6.0 x 40 | 30151*† | 1,000 | | | | |
| | 1/4" x 2" | 6.0 x 50 | 30155*† | 800 | | | | |
| | 1/4" x 2-1/2" | 6.0 x 63 | 30157† | 700 | | | | |
|  T-30 | 5/16" x 2-1/2" | 7.0 x 63 | 30217† | 600 | | | | |
| | 5/16" x 3-1/8" | 7.0 x 80 | 30221 | 500 | | | 32221 | 12/100 |
| | 5/16" x 4" | 7.0 x 100 | 30225 | 400 | | | 32225 | 12/100 |
| | 5/16" x 5-1/8" | 7.0 x 130 | 30231 | 300 | | | | |
| | 5/16" x 6" | 7.0 x 150 | 30235 | 300 | | | 32235 | 9/50 |
| RT COMPOSITE™ TRIM SCREWS: PHEINOX™ 305 | | | | | | | | |
|  T-10 | #8 x 2" | 4.0 x 50 | | | 36077 | 600 | | |
| | #8 x 2-1/2" | 4.0 x 63 | 35079 | 3,500 | 36079 | 560 | 37079 | S/100 |
| | #8 x 3-1/8" | 4.0 x 80 | | | 36083 | 385 | | |
|  T-15 | #9 x 2-1/2" | 4.5 x 63 | 35101 | 2,900 | 36101 | 365 | | |
| | #9 x 3-1/8" | 4.5 x 80 | | | 36105 | 275 | | |
|  T-10 | #8 x 2" White Hd. | 4.0 x 50 | 35628 | 4,500 | | | | |
| | #8 x 2-1/2" White Hd. | 4.0 x 63 | | | 36630 | 500 | | |
| FIN / TRIM™ SCREWS: PHEINOX™ 305 | | | | | | | | |
|  T-10 | #8 x 1-1/2" | 4.0 x 40 | | | | | 37724 | S/100 |
| | #8 x 2" | 4.0 x 50 | 35728 | 4,500 | 36728 | 600 | 37728 | S/100 |
| | #8 x 2-1/2" | 4.0 x 63 | 35730 | 3,500 | 36730 | 560 | 37730 | S/100 |
| | #8 x 3-1/8" | 4.0 x 80 | | | 36734 | 385 | 37734 | M/100 |
|  T-15 | #9 x 2-1/2" | 4.5 x 63 | | | 36752 | 365 | | |
| | #9 x 3-1/8" | 4.5 x 80 | | | 36756 | 275 | | |
| CABINET™ SCREWS: PHEINOX™ 305 | | | | | | | | |
|  T-15 | #8 x 1-1/4" | 4.0 x 30 | 30069 | 4,000 | | | | |

2" bit included in Pro-Paks. 1" bit with Handy-Paks.

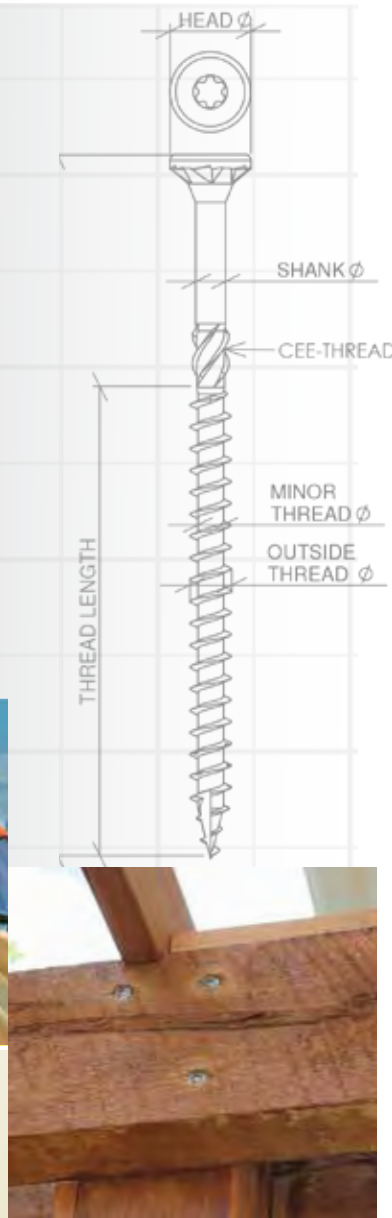
*Does not come with the Zip-Tip™ feature. †Does not have the added CEE-THREAD™ feature.

PHEINOX™ stainless steel screws are made from only the best grade of stainless steel wire, 316. The unique characteristics of the *PHEINOX™* 316 wire give our stainless steel screws unmatched performance, by maximizing both torque and increasing bending strength.

GRK's patented fastener lineup is available in a wide range of our structural, framing and interior screw varieties and are engineered to deliver exceptional and lasting performance.

The NEW *PHEINOX™* 316 stainless steel screws will provide the ultimate anti-corrosion, all-weather protection everywhere and anywhere you need a fastening solution that's impervious to the elements!

ÜberGrade™



PHEINOX™ 316 STAINLESS STEEL SCREWS

Marine Grade Protection for Superior Corrosion Resistance



**AC257 Treated
Lumber Approved**

- **316 grade stainless steel** for a superior interior / exterior corrosion resistance.
- **Marine grade protection-** for coastal, seacoast, or salt water.
- **Recessed Star Drive-** Zero stripping, with 6 points of contact.
- **CEE Thread™-** enlarges hole to reduce splitting.
- **W-Cut™-** Low torque, faster drive.
- **ZIP-TIP™-** No pre-drilling, faster penetration.
- Available in a wide range of sizes and types of GRK Fasteners.
- For use in critical applications where harsh conditions require fasteners that can deliver the most reliable corrosion protection.

| U.S. (Std.)Size (Dia.x Length) | Metric Size (Dia.x Length) | Bulk Part No. | Bulk Box Qty. | Pro-Pak Part No. | Pro-Pak Pail Qty. | Handy-Pak Part No. | Handy-Pak Ctn. Size/Qty. |
|-----------------------------------|-------------------------------|------------------|------------------|---------------------|----------------------|-----------------------|-----------------------------|
|-----------------------------------|-------------------------------|------------------|------------------|---------------------|----------------------|-----------------------|-----------------------------|

R4™ SCREWS: PHEINOX™ 316

| | | | | | | | |
|--------------|----------|--------------|-------|--------------|-----|--------------|-------|
| #10 x 2-1/2" | 5.0 x 63 | 35133 | 2,500 | 36133 | 425 | 37133 | M/100 |
| #10 x 3-1/8" | 5.0 x 80 | 35137 | 1,500 | 36137 | 305 | 37137 | M/100 |

T-25

RSS™ SCREWS: PHEINOX™ 316

| | | | | | | | |
|----------------|-----------|---------------|-----|--|--|--------------|--------|
| 5/16" x 2-1/2" | 7.0 x 63 | 40217† | 600 | | | | |
| 5/16" x 3-1/8" | 7.0 x 80 | 40221 | 500 | | | 42221 | 12/100 |
| 5/16" x 4" | 7.0 x 100 | 40225 | 400 | | | 42225 | 12/100 |
| 5/16" x 5-1/8" | 7.0 x 130 | 40231 | 300 | | | | |
| 5/16" x 6" | 7.0 x 150 | 40235 | 300 | | | 42235 | 9/50 |

T-30

FIN / TRIM™ SCREWS: PHEINOX™ 316

| | | | | | | | |
|-------------|----------|--------------|-------|--------------|-----|--------------|-------|
| #8 x 2" | 4.0 x 50 | 45728 | 4,500 | 46728 | 600 | 47728 | S/100 |
| #8 x 2-1/2" | 4.0 x 63 | 45730 | 3,500 | 46730 | 560 | 47730 | S/100 |

T-10

RT COMPOSITE™ TRIM SCREWS: PHEINOX™ 316

| | | | | | | | |
|-------------|----------|--------------|-------|--------------|-----|--------------|-------|
| #8 x 2" | 4.0 x 50 | | | 46077 | 600 | 47077 | S/100 |
| #8 x 2-1/2" | 4.0 x 63 | 45079 | 3,500 | 46079 | 560 | 47079 | S/100 |

T-10

RSS™ PHEINOX™ 316 MINI HANDY-PAK

| U.S. (Std.)Size (Dia.x Length) | Metric Size (Dia.x Length) | Part No. | Quantity |
|--------------------------------|----------------------------|---------------|----------|
| 5/16" x 2-1/2" | 7.0 x 63 | 44217† | M/25 |
| 5/16" x 3-1/8" | 7.0 x 80 | 44221 | M/25 |
| 5/16" x 4" | 7.0 x 100 | 44225 | M/25 |
| 5/16" x 5-1/8" | 7.0 x 130 | 44231 | M/20 |
| 5/16" x 6" | 7.0 x 150 | 44235 | M/20 |

T-30

2" bit included in Pro-Paks. 1" bit with Handy-Paks.

*Does not come with the Zip-Tip™ feature. †Does not have the added CEE-THREAD™ feature.



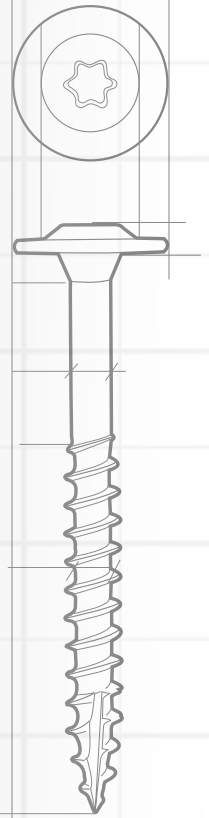
GRK's Cabinet™ screws are designed specifically for use in cabinet construction and installation. Cabinet™ screws are manufactured in a #8 gauge (4 mm) diameter for universal size convenience.

These screws are thin enough to prevent most material splitting, while providing sufficient strength to guarantee a secure installation. The washer head design presses flush against any material surface.

The Cabinet screw can also be used for light duty framing applications where a smaller diameter shank is necessary, yet a need exists for drawing power delivered by the washer head.

White Cabinet Screws match perfectly with white cabinet frames without the need of sticker covers. Specialized Powder Coated heads will not chip while being driven in, allowing for a clean finish. They are ideally suited for a wide variety of interior applications including, closets & garage organizational systems.

ÜberGrade™



LOW PROFILE CABINET™ SCREWS

Built-in Washer Head Presses Flush against any Material



- **Recessed Star Drive:** Zero Stripping, with 6 points of contact.
- **Washer Head:** Creates a flush, clean hold for a strong and secure installation.
- **W-Cut™:** Low torque, faster drive.
- **Zip-Tip™:** No pre-drilling, faster penetration.
- **Case Hardened Steel:** for high tensile, torque and shear strength.
- **Climatek™ Coating is AC257** code approved for use in treated lumber.
- For interior / exterior use.
- Also available in **PHEINOX™** 305 grade Stainless Steel.
- **White Cabinet Screw:** For interior use only.

| U.S. (Std.) Size (Dia.x Length) | Metric Size (Dia.x Length) | Bulk Part No. | Bulk Box Qty. | Pro-Pak Part No. | Pro-Pak Pail Qty. | Handy-Pak Part No. | Handy-Pak Ctn. Size/Qty. |
|------------------------------------|-------------------------------|------------------|------------------|---------------------|----------------------|-----------------------|-----------------------------|
| #8 x 1-1/4" | 4.0 x 30 | 10069 | 4,000 | 11069 | 1085 | 12069 | S/100 |
| #8 x 1-1/2" | 4.0 x 40 | 10073 | 3,000 | 11073 | 930 | 12073 | M/100 |
| #8 x 1-3/4" | 4.0 x 45 | 10075 | 2,000 | | | 12075 | M/100 |
| #8 x 2" | 4.0 x 50 | 10077 | 2,000 | 11077 | 650 | 12077 | M/100 |
| #8 x 2-1/2" | 4.0 x 63 | 10079 | 1,500 | 11079 | 563 | 12079 | M/100 |
| #8 x 2-3/4" | 4.0 x 70 | | | | | 12081 | M/100 |
| #8 x 3-1/8" | 4.0 x 80 | 10083 | 1,000 | 11083 | 400 | 12083 | M/50 |



T-15

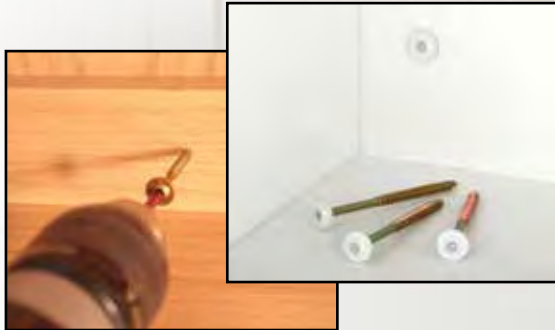
WHITE LOW PROFILE™ CABINET SCREWS

| | | | | | | | |
|-------------|----------|--|--|--|--|---------------|------|
| #8 x 1-1/4" | 4.0 x 30 | | | | | 120680 | M/80 |
| #8 x 1-1/2" | 4.0 x 40 | | | | | 120670 | M/80 |
| #8 x 2-1/2" | 4.0 x 63 | | | | | 120660 | M/80 |



T-15

Some sizes available in **PHEINOX™** hardened Stainless Steel; refer to Section 6
NOTE: Pro-Paks need to be ordered in multiples of two. 2" bit included in Pro-Paks.



**Ideal for Cabinets...
and so much more.
Also excellent for a
variety of interior or
exterior jobs.**

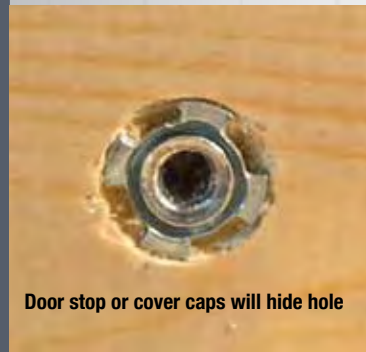
GRK's adjustable Top Star™ shim screw, is in fact a screw within a screw that allows you to install wooden doors or windows without the use of shims.

The quick and easy system reduces labor and allows for hassle free adjustment to ensure plumb installation.

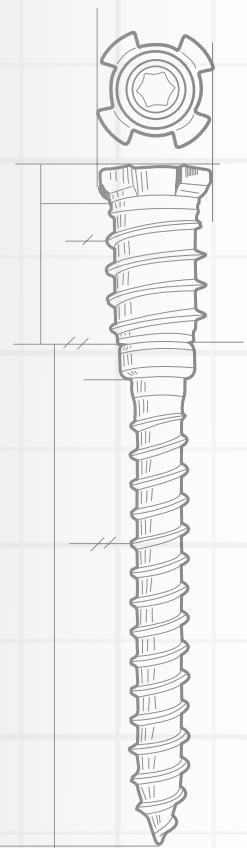
Our product is suited to meet the needs of both professional contractors and weekend warriors making the job easier for one person.

Fine adjustments are as simple as the turn of a screw, even after years of use and settling.

ÜberGrade™



Door stop or cover caps will hide hole



TOP STAR™ ADJUSTABLE SHIM SCREWS

For Plumb Installation of Wooden Doors and Windows. No More Shims!



- **Recessed Star Drive:** Zero Stripping, with 6 points of contact
- **4-point 3/8" diameter Threaded Sleeve** provides a secure hold in your wooden frame
- **Micro-Adjustments** allow for an absolutely plumb installation
- Use with GRK's **Top Star™ Crown** and **T-15 Star** bit system.
- **White Zinc Plated** finish for lasting durability.
- **For Shim Free installation** of wooden doors, windows, insulation, paneling, built-in wall units and cabinets.

| U.S. (Std.) Size (Dia.x Length) | Metric Size (Dia.x Length) | Bulk Part No. | Bulk Box Qty. | Blister-Pak Part No. | Blister-Pak Qty/per pack |
|------------------------------------|-------------------------------|------------------|------------------|----------------------|-----------------------------|
| 3/8" x 2-1/2" | 6.0 x 63 | 20157 | 100 | | |
| 3/8" x 3-1/8" | 6.0 x 80 | 20161 | 100 | | |

CROWN / BIT

Includes: (1)
Crown / Bit
with each

86465**1**

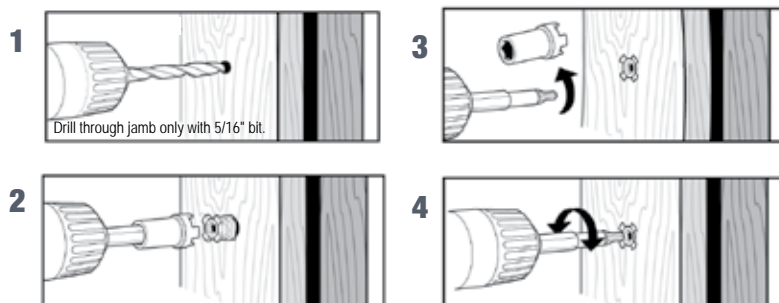
NOTE: Crown and Star bit system included in each bulk box.
5/16" drill bit not included.

The Bit drives the Top Star™ into the material when the Crown and Bit are combined. Using the Bit without the Crown adjusts the distance.

The Threaded Sleeve moves independently from the Top Star™ unless locked by the Crown. When locked, the Top Star™ gets driven into the material. Unlocked, the installed Top Star™ is ready for levelling.

The Complete Top Star™ System Includes:

| BIT | CROWN | THREADED SLEEVE |
|-----|-------|-----------------|
|-----|-------|-----------------|



Caliburn™ Concrete screws are professionally engineered fasteners with a patented thread design for ease of driving the screw in concrete and similar applications.

Available in three different head designs for multiple applications. Caliburn™, Caliburn™ PH and Caliburn™ XL are Climatek™ coated for high corrosion resistance.

Caliburn's uncompromised draw and pull-out strength make it possible to be used in jobs which previously required an anchor. The screws aggressive thread design afford it the ability to be removed and reinserted into the same pilot hole numerous times--without the concern of the fastener breaking or the threads wearing.



ÜberGrade™






CALIBURN™ CONCRETE SCREWS

Heavy Duty Concrete and Masonry Fastener



AC257 Treated Lumber Approved

- **Recessed Star Drive:** Zero Stripping, with 6 points of contact.
- **Aggressive Heavy duty threads** lock into concrete and can be removed and reinserted without screw damage.
- **ESR-3251** approved for use in anchoring into concrete.
- **Countersinking Bugle Head** locks wood to concrete for complete installation and effective anchoring.
- **Caliburn™ PH** pan head, which is ideal for an exposed finished look including installation of electrical boxes.
- **Caliburn™ XL** washer head design for superior holding power.
- **Climatek™ Coating is AC257** code approved for use in treated lumber.
- Ideal for use in anchoring to concrete or wood to concrete applications including basement framing and sheds.

| | U.S. (Std.) Size (Dia. x Length) | Metric Size (Dia. x Length) | Bulk Part No. | Bulk Box Qty. | Pro-Pak Part No. | Pro-Pak Pail Qty. | Handy-Pak Part No. | Handy-Pak Ctn. Size/Qty. |
|---|-------------------------------------|--------------------------------|------------------|------------------|---------------------|----------------------|-----------------------|-----------------------------|
|  T-30 | 1/4" x 1-3/4" | 6.0 x 45 | 55159 | 1,000 | N/A | N/A | 57153 | M/50 |
| | 1/4" x 2-1/4" | 6.0 x 55 | | | | | 57156 | M/50 |
| | 1/4" x 2-3/4" | 6.0 x 70 | | | | | 57159 | M/50 |
| | 1/4" x 3-1/2" | 6.0 x 90 | | | | | 57163 | M/50 |
| | 1/4" x 5" | 6.0 x 125 | | | | | 57171 | M/50 |
| CALIBURN™ PH | | | | | | | | |
|  T-30 | 1/4" x 1-3/4" | 6.0 x 45 | | | N/A | N/A | 57828 | M/50 |
| | 1/4" x 2-1/4" | 6.0 x 55 | | | | | 57831 | M/50 |
| CALIBURN™ XL | | | | | | | | |
|  T-40 | 19/64" x 2-3/4" | 7.5 x 70 | 55778 | 400 | N/A | N/A | 57774 | M/25 |
| | 19/64" x 3-1/2" | 7.5 x 90 | | | | | 57778 | M/25 |
| | 19/64" x 5" | 7.5 x 125 | | | | | 57785 | M/25 |

1" bit included in Handy-Paks



Great for a wide variety of indoor / outdoor home renovation projects



Decorative Pan Head

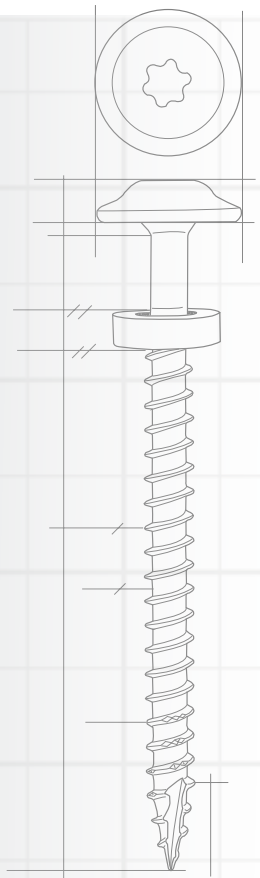
Washer Head

Countersinking Head

The MSS™ was developed and patented based on the RSS™ model. This screw has an integrated washer-head and is complemented by a rubber washer below the screw head. This feature also helps protect the washer from prolonged exposure to the sun for long lasting, secure siding installations.

No pre-drilling is needed due to the MSS™ tip design for thin sidings as well as thick studs. The MSS™ is powder coated for exceptionally high corrosion resistance.

ÜberGrade™



MSS™ METAL SIDING SCREWS

Integrated Head Design with Powder Coating Finish

- **White Color, Low Profile Head** produces a clean, finished look which is preferred for moldings, closet organizers and metal siding.
- **Washer Head** increases holding power.
- **Rubber Washer** seals drill hole from the elements.
- **W-Cut™ Thread Design** tiny saw blades reduce torque by cutting through the material.
- **ZIP-TIP™** for easy starts and no pre-drilling.
- For use in interior or exterior applications including metal siding, garage door trim and even closet organizers. Not for use with treated lumber.



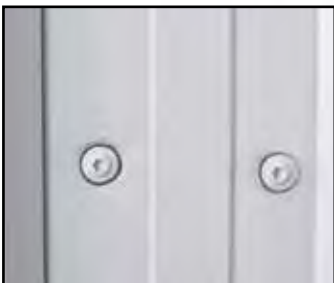


T-25

| U.S. (Std.) Size (Dia.x Length) | Metric Size (Dia.x Length) | Bulk Part No. | Bulk Box Qty. | Pro-Pak Part No. | Pro-Pak Pail Qty. | Handy-Pak Part No. | Handy-Pak Ctn. Size/Qty. |
|------------------------------------|-------------------------------|------------------|------------------|---------------------|----------------------|-----------------------|-----------------------------|
| #9 x 1-1/2" | 4.5 x 40 | 40090 | 3,000 | | | 44090 | M/100 |
| #9 x 2" | 4.5 x 50 | 40120 | 2,000 | N/A | N/A | | |

1" bit included in Handy-Paks

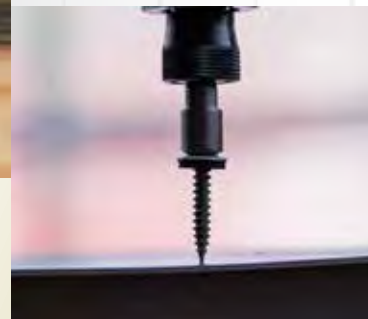
Self-tapping screws with integrated washer head, for fastening metal siding to a wooden framed structures.



TEKS® metal fasteners were developed and launched as the first self-drilling metal screw with over 50 years of experience. There is a wide variety of head styles to cover all interior and exterior applications on metal-to-metal, metal-to-wood, and roofing.

No tool slippage or cam-outs even with older sockets and worn bits. TEKS® screws can drill, tap, and fasten in one motion. Lastly, long life finishes mean no streaking from corrosion.

Teks®



TEKS® METAL FASTENERS

Pro Known. Pro Used. Pro Trusted.

- **High performance, precise drive surface and recess:** Reduces cam-outs to prevent slipping during installation.
- **Precise point:** Designed to drill, tap, and fasten all in one motion.
- **Threading:** Allows for less effort needed to fasten through material.
- **Special finishes:** Protect the job's appearance with long lasting corrosion resistant coatings.
- **Special wings:** Self-Tapping Screws ream a hole in the wood to prevent thread engagement and fasten securely into metal.
- **Self-sealing neoprene washer:** Unique Roofing Screws provide a waterproof seal for a premium finish.
- **Low profile head:** Lath Screws feature a premium finish that is ideal for virtually any application.

| U.S. (Std.) Size (Dia. x Length) | Metric Size (Dia. x Length) | Pro-Pak Part No. | Pro-Pak Pail Qty. | Handy-Pak Part No. | Handy-Pak Ctn. Size/Qty. |
|---|--------------------------------|---------------------|----------------------|-----------------------|-----------------------------|
| TEKS® SELF-TAPPING SCREWS | | | | | |
| HEX WASHER HEAD / DRILL POINT (METAL TO METAL) | | | | | |
| 8 x 1/2" | 4.0 x 12.7 | | | 21308 | S/280 |
| 8 x 3/4" | 4.0 x 19.1 | | | 21312 | S/180 |
| 8 x 1" | 4.0 x 25.4 | | | 21316 | S/170 |
| 8/18 x 2-1/2" | 4.0 x 63.5 | | | 21800 | S/280 |
| 10 x 5/8" | 5.0 x 15.9 | | | 21396 | S/170 |
| 10 x 3/4" | 5.0 x 19.1 | 21322 | 450 | 21320 | S/150 |
| 10 x 1" | 5.0 x 25.4 | | | 21328 | M/140 |
| 10 x 1-1/2" | 5.0 x 38.1 | | | 21332 | M/90 |
| 10/16 x 3/4" | 5.0 x 19.1 | | | 21806 | S/150 |
| 10/16 x 1" | 5.0 x 25.4 | | | 21808 | S/140 |
| 10/16 x 1-1/2" | 5.0 x 38.1 | | | 21810 | S/90 |
| 12 x 3/4" | 6.0 x 19.1 | | | 21336 | M/120 |
| 12 x 1" | 6.0 x 25.4 | 21341 | 400 | 21340 | M/100 |
| 12 x 1-1/2" | 6.0 x 38.1 | | | 21344 | M/80 |
| 12 x 2" | 6.0 x 50.8 | | | 21348 | M/60 |
| 12/14 x 1" | 6.0 x 25.4 | | | 21816 | M/100 |
| 12/14 x 2" | 6.0 x 50.8 | | | 21820 | M/60 |
| 14 x 3/4" | 7.0 x 19.1 | | | 21349 | S/100 |
| 14 x 1" | 7.0 x 25.4 | | | 21351 | S/60 |
| 14 x 1-1/2" | 7.0 x 38.1 | | | 21352 | M/50 |
| 14 x 2-1/2" | 7.0 x 63.5 | 21358 | 120 | 21356 | M/30 |
| 1/4-14 x 1" | 6.3 x 25.4 | | | 21824 | S/60 |
| HEX WASHER HEAD / SHARP POINT (METAL TO METAL) | | | | | |
| 6 x 1/2" | 3.5 x 12.7 | | | 21301 | S/320 |
| 6 x 3/4" | 3.5 x 19.1 | | | 21302 | S/200 |
| 7 x 1/2" | 3.8 x 12.7 | | | 21305 | S/310 |
| 7 x 3/4" | 3.8 x 19.1 | | | 21390 | S/190 |
| 8 x 1/2" | 4.0 x 12.7 | | | 21310 | S/300 |
| 8 x 3/4" | 4.0 x 19.1 | | | 21314 | S/180 |
| 8 x 1-1/2" | 4.0 x 38.1 | | | 21318 | M/85 |
| 8 x 2" | 4.0 x 50.8 | | | 21319 | M/60 |
| 10 x 3/4" | 5.0 x 19.1 | | | 21327 | M/150 |
| PAN HEAD / DRILL POINT (METAL TO METAL) | | | | | |
| 8 x 1/2" | 4.0 x 12.7 | | | 21360 | S/300 |
| 8 x 3/4" | 4.0 x 19.1 | | | 21364 | S/240 |
| 10 x 3/4" | 5.0 x 19.1 | | | 21372 | S/170 |
| 10/16 x 3/4" | 5.0 x 19.1 | | | 21870 | M/170 |
| PAN HEAD / SHARP POINT (METAL TO METAL) | | | | | |
| 6 x 1/2" | 3.5 x 12.7 | | | 21359 | S/300 |
| PANCAKE HEAD / DRILL POINT (METAL TO METAL) | | | | | |
| 10 x 5/8" | 5.0 x 15.9 | | | 21376 | S/190 |
| PHILLIPS WAFER HEAD / DRILL POINT W/REAMER WINGS (WOOD TO METAL) | | | | | |
| 1/4-20 x 3" | 6.3 x 76.2 | | | 21378 | M/40 |
| 10 x 1-7/16" | 5.0 x 11.1 | 21381 | 300 | 21380 | S/100 |
| 12 x 2-3/4" | 6.0 x 69.9 | 21386 | 200 | 21384 | S/40 |

| U.S. (Std.) Size (Dia. x Length) | Metric Size (Dia. x Length) | Pro-Pak Part No. | Pro-Pak Pail Qty. | Handy-Pak Part No. | Handy-Pak Ctn. Size/Qty. |
|---|--------------------------------|---------------------|----------------------|-----------------------|-----------------------------|
| TEKS® ROOFING SCREWS | | | | | |
| HEX WASHER HEAD / SHARP POINT (METAL TO WOOD) | | | | | |
| 9 x 1" | 4.5 x 25.4 | 21401 | 360 | 21400 | M/120 |
| 9 x 1-1/2" | 4.5 x 38.1 | 21406 | 400 | 21404 | M/100 |
| 9 x 2-1/2" | 4.5 x 63.5 | | | 21407 | M/60 |
| HEX WASHER HEAD / DRILL POINT (METAL TO METAL) | | | | | |
| 12 x 3/4" | 6.0 x 19.1 | | | 21408 | M/90 |
| 12 x 1" | 6.0 x 25.4 | 21418 | 400 | 21412 | M/80 |
| 12 x 1-1/2" | 6.0 x 38.1 | 21422 | 300 | | |
| 12 x 2" | 6.0 x 50.8 | 21427 | 150 | 21416 | M/50 |
| TEKS® LATH SCREWS | | | | | |
| MODIFIED TRUSS HEAD / SHARP POINT (METAL TO METAL) | | | | | |
| 8 x 1/2" | 4.0 x 12.7 | | | 21500 | S/260 |
| 8 x 3/4" | 4.0 x 19.1 | 21506 | 600 | 21504 | S/200 |
| 8 x 1" | 4.0 x 25.4 | 21510 | 398 | 21508 | S/170 |
| 8 x 1-1/4" | 4.0 x 31.8 | | | 21512 | M/140 |
| 8 x 1-5/8" | 4.0 x 41.3 | | | 21516 | M/120 |
| 8 x 2" | 4.0 x 50.8 | | | 21518 | M/100 |
| 8 x 2-1/2" | 4.0 x 63.5 | | | 21519 | M/80 |
| MODIFIED TRUSS HEAD / DRILL POINT (METAL TO METAL) | | | | | |
| 8 x 1/2" | 4.0 x 12.7 | | | 21520 | S/260 |
| 8 x 3/4" | 4.0 x 19.1 | 21525 | 600 | 21524 | S/200 |
| 8 x 1" | 4.0 x 25.4 | 21530 | 510 | 21528 | S/170 |
| 8 x 1-1/4" | 4.0 x 31.8 | | | 21532 | M/140 |
| 8 x 1-5/8" | 4.0 x 41.3 | | | 21536 | M/120 |
| 8 x 2" | 4.0 x 50.8 | | | 21538 | M/100 |
| 8 x 2-1/2" | 4.0 x 63.5 | | | 21540 | M/80 |

Pro-Paks and Handy-Paks must be ordered in eaches but in Master Carton Quantities.



Hex Washer Head



Wafer Head

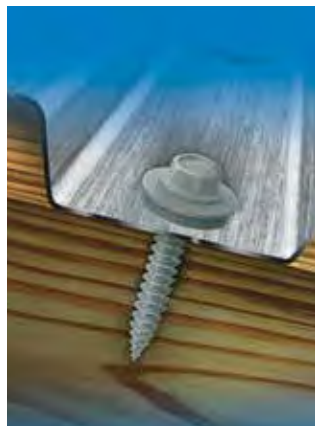


Pan Head



Hex Washer Head with Serrations

©2009 Crown Bolt & Nut Co.



Backer-On® cement screws are designed for attaching Hardiebacker cement board and Rock-On® cement board screws are designed for attaching Durock cement board to wood or light gauge steel studs. The new patented serrated head design countersinks for flush seating even at an angle, providing for smooth surface for tile. The Star drive recess with T-25 bit provides Stikfit for one-handed installation. Backer-On® and Rock-On® screws feature a Climacoat corrosion resistant finish that prevents rust from bleeding into grout and are perfect for use in high moisture areas such as baths, showers, countertops, and floors.

Backer-On® and Rock-On® cement board screw comply with ANSI standards for cement board installation as specified by cement board manufacturers. Cement board manufacturers require ANSI compliance in order to remain eligible for warranty.

Standard roofing nails, drywall screws, and other alternatives to cement board screws are typically not specified by cement board manufacturers and not ANSI compliant.

ROCK-ON®
BACKER-ON®

CEMENT BOARD SCREWS

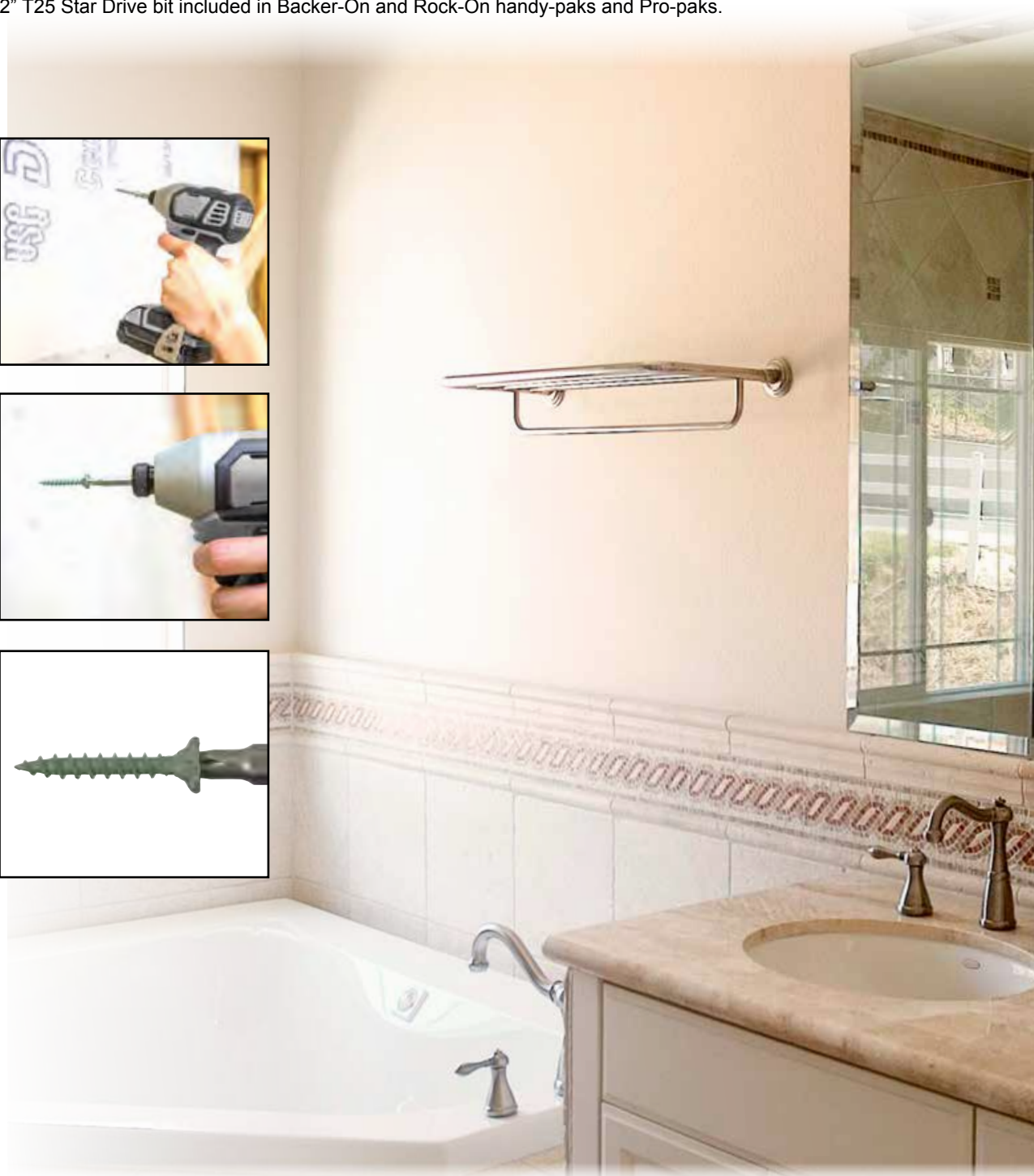
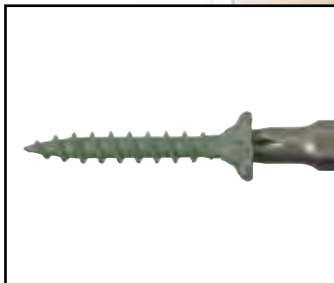
ROCK-ON® / BACKER-ON® Patented Serrated Head for Flush Seating



- **Serrated head design:** for flush seating even at an angle.
- **Star drive with T-25 bit:** provides Stikfit for easy one-handed installation and eliminates cam-outs.
- **Single lead thread:** Backer-On® feature starts quickly in wood fiber dense board material.
- **Hi-Lo thread:** Rock-On® starts quickly in wood fiber dense board material.
- **Sharp point:** Offers immediate pick-up and eliminates the need to pre-drill.
- **Climacoat finish:** Corrosion resistance that prevents unsightly rust from bleeding into tile.
- Available in a 3 different lengths in small packs and contractor buckets.

| U.S. (Std.) Size (Dia.x Length) | Metric Size (Dia.x Length) | Bulk Part No. | Bulk Box Qty. | Pro-Pak Part No. | Pro-Pak Pail Qty. | Handy-Pak Part No. | Handy-Pak Ctn. Size/Qty. |
|------------------------------------|-------------------------------|------------------|------------------|---------------------|----------------------|-----------------------|-----------------------------|
| BACKER-ON® SCREWS | | | | | | | |
| #9 x 1-1/4" | 4.5 x 32 | | | 23406 | 750 | 23401 | M/185 |
| #9 x 1-5/8" | 4.5 x 42 | N/A | N/A | 23416 | 575 | 23411 | M/140 |
| #9 x 2-1/4" | 4.5 x 57 | | | | | 23421 | M/100 |
| ROCK-ON® SCREWS | | | | | | | |
| #9 x 1-1/4" | 4.5 x 32 | | | 23306 | 750 | 23301 | M/185 |
| #9 x 1-5/8" | 4.5 x 42 | N/A | N/A | 23316 | 575 | 23311 | M/140 |
| #9 x 2-1/4" | 4.5 x 57 | | | | | 23321 | M/100 |

2" T25 Star Drive bit included in Backer-On and Rock-On handy-paks and Pro-paks.



Star Drive Bits, Crown / Bit and Magnetic Bit Holder



Part No.
88492



| Bit Size | Bit Color | Fits | Bulk Part No. | Bulk Box Qty. | Carded Part No. | Carded Qty/per pack |
|---|-----------|------------------------------|---------------|---------------|-----------------|---------------------|
| T-10 1" | yellow | Trim™ Head #8 | 86417 | 50 | 87417 | 2 |
| T-10 2" | yellow | | 86419 | 25 | 187419 | 2 |
| T-10 3" | yellow | | 87421 | 2 | | |
| T-10 6" | yellow | | 87423 | 2 | | |
| T-15 1" | red | R4™ Screw #6 & 8 | 86425 | 50 | 87425 | 2 |
| T-15 2" | red | Trim™ Head #9 | 86427 | 25 | 187427 | 2 |
| T-15 3" | red | Cabinet™ Screw | | | 87429 | 2 |
| T-15 6" | red | Vinyl Window #8 | | | 87431 | 2 |
| T-20 1" | purple | Kameleon™ Screws | 86435 | 25 | 87433 | 2 |
| T-20 2" | purple | | | | 187435 | 2 |
| T-20 6" | purple | | | | 87439 | 2 |
| T-25 1" | green | R4™ #9,10 &12, Caliburn™, | 86441 | 50 | 87441 | 2 |
| T-25 2" | green | RSS™ #10 & 1/4" | 86443 | 25 | 187443 | 2 |
| T-25 3" | green | MSS™ #9 | 86445 | 25 | 87445 | 2 |
| T-25 6" | green | | | | 87447 | 2 |
| T-30 1" | black | RSS™ Structural Screw | 86449 | 50 | 87449 | 2 |
| T-30 2" | black | 5/16" & 3/8", | 86451 | 25 | 187451 | 2 |
| T-30 3" | black | Caliburn™ & Caliburn PH™ | | | 87453 | 2 |
| T-30 6" | black | | | | 87455 | 2 |
| T-40 1" | blue | Caliburn XL™ Screws | | | 87457 | 2 |
| T-40 2" | blue | RSS™ Structural Screw 3/8" | 86459 | 25 | 187459 | 2 |
| CROWN / BIT | | | | | | |
| | | TOP STAR™ | | | 86465 | 1 |
| STAR DRIVE BIT KIT with Quick Change Adaptor | | | | | | |
| T-15, T-20, T-25 T-30, T-40 | Assorted | All 1" & 2" Star Drive Heads | | | 88492 | 4 |

High Impact Merchandisers Designed to Drive Sales

Displays are free with qualifying order.

Rolling Rack:

GRK# 89001-GRK

Ideal for secondary placement. Can be moved around retail space. Holds Pro-Paks, Handy-Paks, Blister-Paks and/or open stock in bins.



Universal Display:

GRK# 99900

Ideal for end-cap with large selection of GRK product.



FASTENER TECHNICAL DATA

RSS™

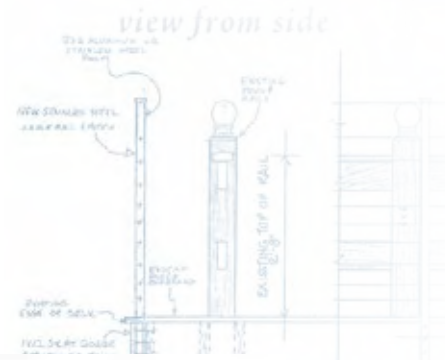


TABLE 1—RSS™ FASTENER SPECIFICATIONS

| FASTENER DESIGNATION N | LENGTH ¹ (inches) | THREAD LENGTH ² (inches) | MINOR THREAD DIAMETER (inch) | SHANK DIAMETER (inch) | OUTSIDE THREAD DIAMETER (inch) | NOMINAL BENDING YIELD STRENGTH ³ F _y (psi) | ALLOWABLE STEEL STRENGTH | | |
|---------------------------|---------------------------------|--|------------------------------|-----------------------|--------------------------------|--|--------------------------|-------------|--------|
| | | | | | | | TENSILE (lbf) | SHEAR (lbf) | |
| 1/4 | 2 1/2" | 1 1/2" | 0.152 | 0.169 | 0.236 | 170,400 | 1112 | 754 | |
| | 2 3/4" | 1 3/4" | | | | | | | |
| | 3 1/8" | 2" | | | | | | | |
| | 3 1/2" | 2 1/8" | | | | | | | |
| 3/16 | 2 1/8" | 1 1/2" | 0.167 | 0.195 | 0.276 | 190,900 | 1415 | 982 | |
| | 2 1/4" | 1 3/4" | | | | | | | |
| | 2 3/8" | 2 1/8" | | | | | | | |
| | 2 1/2" | 2 1/2" | | | | | | | |
| | 3 1/8" | 2 3/4" | | | | | | | |
| | 3 1/2" | 3 1/2" | | | | | | | |
| | 4" | 3 3/4" | | | | | | | |
| | 5 1/8" | 5" | | | | | | | |
| 1/2 | 3 1/8" | 2 1/8" | 0.191 | 0.219 | 0.313 | 178,000 | 1941 | 1231 | |
| | 3 1/2" | 2 3/8" | | | | | | | |
| | 4" | 3 1/4" | | | | | | | |
| | 5 1/8" | 3 3/4" | | | | | | | |
| | 6" | 4" | | | | | | | |
| | 7 1/4" | 4 1/2" | | | | | | | |
| | 8" | 5 1/4" | | | | | | | |
| | 9 1/4" | 5" | | | | | | | |
| | 11 7/8" | 5 3/4" | | | | | | | |
| | 14 1/8" | 5 1/2" | | | | | | | |
| LPS | 7 1/8" | 2 1/4" | 0.152 | 0.171 | 0.240 | 172,600 | 1051 | 666 | |
| | 7 1/2" | 3 1/8" | 0.191 | 0.219 | 0.311 | 167,600 | 1714 | 1094 | |
| LTF | 9 1/8" | 3 1/2" | | | | | | | |
| | 11 3/4" | 3 3/8" | | | | | | | |
| RSS PHEINOX | 1/4 | 2 1/2" | 0.152 | 0.169 | 0.236 | 111,400 | 628 | 546 | |
| | 1/4 | 3 1/8" | | | | | | | 2" |
| | 3/16 | 2 1/2" | | | | | | | 1 3/4" |
| | 3/16 | 3 1/8" | | | | | | | 2 1/8" |
| | 3/16 | 4" | | | | | | | 2 1/2" |
| | 3/16 | 5 1/8" | | | | | | | 3 3/4" |
| JTS | 1/4 | 3 3/8" | 0.152 | 0.171 | 0.240 | 226,300 | 1104 | 769 | |
| | 1/4 | 5" | | | | | | | 1 3/8" |
| | 1/4 | 6 3/4" | | | | | | | 1 1/2" |

For S_t: 1 inch = 25.4 mm; 1 psi = 6.9 kPa; 1 lbf = 4.4 N.

¹The length of fasteners is measured from the underside of the head to bottom of the tip. See Figure 1.

²Length of thread includes tip. See Figure 1.

³Bending yield strength determined in accordance with ASTM F1575 using the minor thread diameter.

⁴See Figure 1 for additional dimensional information.



RSS™

TABLE 2—RSS™ REFERENCE WITHDRAWAL (W) AND PULL-THROUGH (P) DESIGN VALUES¹

| FASTENER DESIGNATION | THREAD LENGTH (inches) | W (lbf/in.) ² | | P (lbf) ³ | | WET SERVICE FACTOR, C _w | |
|----------------------|------------------------|----------------------------|-----------------|----------------------------|-----------------|------------------------------------|------|
| | | For Specific Gravities of: | | For Specific Gravities of: | | | |
| | | 0.42 ≤ G < 0.55 | 0.55 ≤ G < 0.67 | 0.42 ≤ G < 0.55 | 0.55 ≤ G < 0.67 | | |
| RSS | 1/4 x 2 1/2" | 151 | 186 | 165 | 275 | 0.70 | |
| | 1/4 x 2 3/4" | | | | | | |
| | 1/4 x 3 1/8" | | | | | | |
| | 1/4 x 3 1/2" | | | | | | |
| | 5/16 x 2 1/2" | 165 | 227 | 207 | 418 | | |
| | 5/16 x 2 3/4" | | | | | | |
| | 5/16 x 3 1/8" | | | | | | |
| | 5/16 x 3 1/2" | | | | | | |
| | 5/16 x 4" | | | | | | |
| | 5/16 x 5 1/8" | | | | | | |
| | 5/16 x 6" | 180 | 259 | 196 | 351 | | |
| | 5/16 x 3 1/2" | | | | | | |
| | 5/16 x 4" | | | | | | |
| | 5/16 x 5 1/2" | | | | | | |
| | 5/16 x 6" | | | | | | |
| | 5/16 x 7 1/4" | | | | | | |
| 5/16 x 8" | | | | | | | |
| 5/16 x 10" | | | | | | | |
| 5/16 x 12" | | | | | | | |
| 5/16 x 14 1/8" | | | | | | | |
| 5/16 x 16" | | | | | | | |
| LPS | 1/4 x 8" | 2 7/8 | 128 | 201 | 136 | 395 | 0.52 |
| LTF | 1/4 x 8" | 3 7/8 | 163 | 216 | 202 | 373 | 0.70 |
| | 1/4 x 10" | 3 7/8 | | | | | |
| | 1/4 x 12" | 3 7/8 | | | | | |
| PHEInox | 1/4 x 2 1/2" | 134 | 187 | 162 | 306 | 0.70 | |
| | 1/4 x 3 1/8" | | | | | | |
| | 5/16 x 2 1/2" | 136 | 202 | 199 | 254 | | |
| | 5/16 x 3 1/8" | | | | | | |
| | 5/16 x 4" | | | | | | |
| | 5/16 x 5 1/8" | | | | | | |
| 5/16 x 6" | | | | | | | |
| JTS | 1/4 x 3 1/8" | 152 | 191 | 154 | 372 | 0.68 | |
| | 1/4 x 5" | | | | | | |
| | 1/4 x 6 1/4" | | | | | | |

For SI: 1 inch = 25.4 mm, 1 lbf = 4.4 N.

¹Values must be multiplied by all applicable adjustment factors, in accordance with the NDS. When the fasteners are used in wet service conditions, the wet service factors shown in the table are applicable.²Tabulated reference withdrawal design values are in pounds per inch of thread penetration into the side grain of the main member, and must be multiplied by the thread length embedded in the member in order to get the total withdrawal design value in pounds. Length of CEE threads must not be included in the withdrawal value determination.³Tabulated pull-through design values are based on a minimum side member thickness of 5/8 inch.

These figures are only offered as a guide and are not reduce by any safety factor.

For safety factor requirements in your area, contact your local building official, architect or engineer.



RSS™ FASTENER TECHNICAL DATA

TABLE 3—RSS™ REFERENCE LATERAL DESIGN VALUES (Z) FOR SINGLE SHEAR (TWO-MEMBER) CONNECTIONS¹
 [For Sawn Lumber with Both Members of Identical Specific Gravity]

| FASTENER DESIGNATION | SIDE MEMBER THICKNESS, t (inches) | FASTENER PENETRATION INTO MAIN MEMBER, p (inches) | REFERENCE LATERAL DESIGN VALUE, Z (lbf) FOR SPECIFIC GRAVITIES OF: | | | | WET SERVICE FACTOR, C _w | |
|----------------------|-----------------------------------|---|--|--|-----------------------------------|--|------------------------------------|-------|
| | | | 0.42 ≤ G < 0.55 | | 0.55 ≤ G < 0.67 | | | |
| | | | Parallel to Grain, Z _∥ | Perpendicular to Grain, Z _⊥ | Parallel to Grain, Z _∥ | Perpendicular to Grain, Z _⊥ | | |
| RSS | 1/4 x 2 1/2" | 3/4 | 153 | 137 | 175 | 175 | 0.70 | |
| | 1/4 x 2 3/4" | 3/4 | | | | | | 2 |
| | 1/4 x 3 1/8" | 3/4 | | | | | | 2 3/8 |
| | 1/4 x 3 1/2" | 3/4 | | | | | | 2 3/4 |
| | 5/16 x 2 1/2" | 3/4 | 168 | 133 | 214 | 178 | | |
| | 5/16 x 2 3/4" | 3/4 | | | | | | 2 |
| | 5/16 x 3 1/8" | 3/4 | | | | | | 2 3/8 |
| | 5/16 x 3 1/2" | 3/4 | | | | | | 2 3/4 |
| | 5/16 x 4" | 1 1/2 | 239 | 236 | 333 | 257 | | |
| | 5/16 x 5 1/8" | 1 1/2 | | | | | | 3 1/2 |
| | 5/16 x 6" | 2 | 265 | 299 | 472 | 289 | | |
| | 3/8 x 3 1/8" | 3/4 | 188 | 156 | 251 | 220 | | |
| | 3/8 x 4" | 1 1/2 | 224 | 205 | 274 | 264 | | |
| | 3/8 x 5 1/8" | 1 1/2 | | | | | | 3 5/8 |
| | 3/8 x 6" | 2 | 270 | 296 | 325 | 288 | | |
| | 3/8 x 7 1/4" | 2 3/4 | 423 | 291 | 593 | 304 | | |
| 3/8 x 8" | 3 1/2 | 4 3/8 | | | | | | |
| 3/8 x 10" | 3 1/2 | 6 1/4 | | | | | | |
| 3/8 x 12" | 3 1/2 | 8 3/8 | | | | | | |
| 3/8 x 14 1/8" | 3 1/2 | 10 5/8 | | | | | | |
| 3/8 x 16" | 3 1/2 | 12 1/8 | | | | | | |
| LPS | 1/4 x 8" | 5 | 249 | 257 | 358 | 219 | 0.62 | |
| LTF | 3/8 x 8" | 4 | 433 | 315 | 556 | 402 | 0.70 | |
| | 3/8 x 10" | 6 | | | | | | |
| | 3/8 x 12" | 8 | | | | | | |
| PHEInox | 1/4 x 2 1/2" | 3/4 | 162 | 134 | 215 | 185 | 0.70 | |
| | 1/4 x 3 1/8" | 3/4 | | | | | | 2 3/8 |
| | 5/16 x 2 1/2" | 3/4 | 151 | 149 | 181 | 175 | | |
| | 5/16 x 3 1/8" | 3/4 | | | | | | 2 3/8 |
| | 5/16 x 4" | 1 1/2 | 249 | 229 | 337 | 272 | | |
| | 5/16 x 5 1/8" | 1 1/2 | | | | | | 3 5/8 |
| 5/16 x 6" | 2 | 302 | 340 | 449 | 358 | | | |
| JTS | 1/4 x 3 3/8" | 1 3/4 | 157 | 168 | 217 | 217 | 0.70 | |
| | 1/4 x 5" | 1 3/4 | 168 | 221 | 241 | 237 | | |
| | 1/4 x 6 3/4" | 1 3/4 | | | | | | 5 |

For SE: 1 inch = 25.4 mm ; 1 lbf = 4.4 N.

¹Values must be multiplied by all applicable adjustment factors, in accordance with the NDS. When the fasteners are used in wet service conditions, the wet service factors shown in the table are applicable.

These figures are only offered as a guide and are not reduce by any safety factor.
 For safety factor requirements in your area, contact your local building official, architect or engineer.

FASTENER TECHNICAL DATA

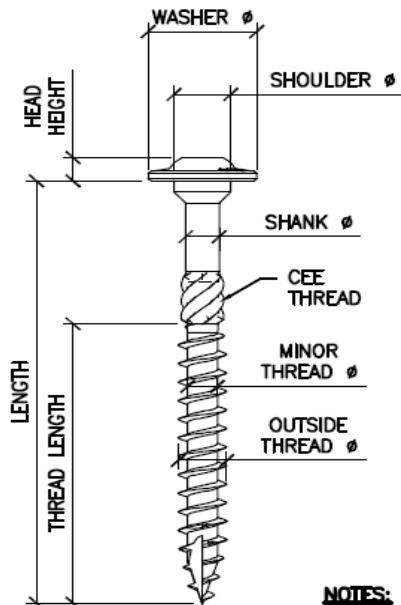
RSS™







TABLE 4 - CONNECTION GEOMETRY

| CONNECTION GEOMETRY / CRITERIA | DIAMETERS ¹ | RSS, LPS, JTS & PHEINOX 1/4" NOMINAL DIAMETER (inches) | RSS & PHEINOX 5/16" NOMINAL DIAMETER (inches) | RSS & LTF 3/8" NOMINAL DIAMETER (inches) |
|---|------------------------|--|---|--|
| Minimum Edge Distance | | | | |
| Loading Parallel to Grain | 8 | 1 1/2 | 1 5/8 | 1 7/8 |
| Loading Perpendicular to grain, Loaded Edge | 8 | 1 1/2 | 1 5/8 | 1 7/8 |
| Loading Perpendicular to grain, Unloaded Edge | 8 | 1 1/2 | 1 5/8 | 1 7/8 |
| Minimum End Distance | | | | |
| Tension Load Parallel to Grain | 15 | 2 5/8 | 3 | 3 3/8 |
| Compression Load Parallel to Grain | 10 | 1 3/4 | 2 | 2 1/4 |
| Load Perpendicular to Grain | 10 | 1 3/4 | 2 | 2 1/4 |
| Spacing (Pitch) Between Fasteners in a Row | | | | |
| Parallel to Grain | 15 | 2 5/8 | 3 | 3 3/8 |
| Perpendicular to Grain | 10 | 1 3/4 | 2 | 2 1/4 |
| Spacing (Gage) Between Rows of Fasteners | | | | |
| In-Line | 5 | 7/8 | 1 | 1 1/8 |
| Staggered | 2.5 | 1/2 | 1/2 | 5/8 |
| Minimum Penetration into Main Member For Single Shear Connections | 6 | 1 1/8 | 1 1/4 | 1 3/8 |

For SI: 1 inch = 25.4 mm

¹ Diameter is the shank diameter as specified in Table 1.



| SCREW TYPE | HEAD STAMP | WASHER Ø ± 0.020 | HEAD HEIGHT ± 0.010 | SHOULDER Ø ± 0.010 | CEE THREAD ² |
|---------------------|---|------------------------|------------------------|--------------------------|-------------------------|
| RSS 1/4 (6.0mm) |  | 0.533 | 0.110 | 0.244 | LENGTH ≥ 3/8" |
| RSS 5/16 (7.0mm) |  | 0.620 | 0.157 | 0.301 | LENGTH ≥ 3/8" |
| RSS 3/8 (8.0mm) |  | 0.689 | 0.181 | 0.364 | LENGTH ≥ 3/8" |
| LTF 3/8 (8.0mm) |  | 0.688 | 0.181 | 0.364 | LENGTH ≥ 3/8" |
| LPS 1/4 (6.0mm) |  | 0.535 | 0.090 | 0.244 | NO |
| JTS 1/4 (6.3mm) |  | 0.534 | 0.090 | 0.244 | LENGTH ≥ 5" |

NOTES:

- SEE TABLE 1 FOR OVERALL LENGTH, THREAD LENGTH, SHANK DIAMETER, OUTSIDE THREAD DIAMETER AND MINOR THREAD DIAMETER.
- CEE THREAD ON SCREWS WITH LENGTHS GREATER THAN OR EQUAL TO THOSE INDICATED. NOT USED FOR CALCULATIONS.

FIGURE 1 – FASTENER DIMENSIONS



FASTENER TECHNICAL DATA

R4™, Trim™, Kameleon™



TABLE 1A—CARBON STEEL FASTENER SPECIFICATIONS

| FASTENER DESIGNATION | OVERALL LENGTH ¹ (inches) | THREAD LENGTH ² (inches) | HEAD DIAMETER (inch) | HEAD RECESS | ROOT DIAMETER (inch) | SHANK DIAMETER (inch) | OUTSIDE THREAD DIAMETER (inch) | SPECIFIED BENDING YIELD STRENGTH ³ F _y (psi) | ALLOWABLE STEEL STRENGTH | | |
|----------------------|--------------------------------------|-------------------------------------|----------------------|-------------|----------------------|-----------------------|--------------------------------|--|--------------------------|-------------|-----|
| | | | | | | | | | Tensile (lbf) | Shear (lbf) | |
| R4 | 9x2" | 2 | 1 1/8 | 0.329 | Star drive T-25 | 0.112 | 0.126 | 0.173 | 156800 | 627 | 426 |
| | 9x2 1/2" | 2 1/2 | 1 7/8 | | | | | | | | |
| | 9x2 7/8" | 2 7/8 | 1 7/8 | | | | | | | | |
| | 9x3 1/2" | 3 1/2 | 2 1/8 | 0.368 | Star drive T-25 | 0.124 | 0.142 | 0.193 | 143590 | 846 | 542 |
| | 10x2 1/2" | 2 1/2 | 1 7/8 | | | | | | | | |
| | 10x3 1/8" | 3 1/8 | 2 1/8 | | | | | | | | |
| | 10x3 1/2" | 3 1/2 | 2 1/8 | | | | | | | | |
| | 10x4" | 3 7/8 | 2 1/8 | | | | | | | | |
| | 10x4 1/4" | 4 1/4 | 3 | | | | | | | | |
| | 12x2 1/2" | 2 1/2 | 1 7/8 | 0.439 | Star drive T-25 | 0.148 | 0.171 | 0.234 | 134280 | 1134 | 655 |
| | 12x2 7/8" | 2 7/8 | 1 7/8 | | | | | | | | |
| | 12x3 1/8" | 3 1/8 | 2 1/8 | | | | | | | | |
| | 12x3 1/2" | 3 1/2 | 2 1/8 | | | | | | | | |
| | 12x4" | 3 7/8 | 2 1/8 | | | | | | | | |
| | 12x4 1/4" | 4 1/4 | 3 | | | | | | | | |
| 12x5 1/8" | 5 1/8 | 3 | | | | | | | | | |
| 12x6 1/8" | 6 1/8 | 3 | | | | | | | | | |
| 12x7 1/2" | 7 | 3 | | | | | | | | | |
| 12x8" | 7 7/8 | 3 | | | | | | | | | |
| 12x10" | 9 1/2 | 3 | | | | | | | | | |
| 12x12" | 11 1/2 | 3 | | | | | | | | | |
| TRIM | 8x2 1/2" | 2 1/2 | 1 7/8 | 0.197 | Star drive T-10 | 0.100 | 0.111 | 0.156 | 148410 | 499 | 360 |
| | 8x2 7/8" | 2 7/8 | 1 7/8 | | | | | | | | |
| | 8x3 1/8" | 3 1/8 | 2 1/8 | 0.230 | Star drive T-15 | 0.112 | 0.126 | 0.175 | 147280 | 576 | 425 |
| | 9x2 1/2" | 2 1/2 | 1 7/8 | | | | | | | | |
| | 9x3 1/8" | 3 1/8 | 2 1/8 | | | | | | | | |
| KAMELEON | 9x2 1/2" | 2 1/2 | 1 7/8 | 0.258 | Star drive T-20 | 0.112 | 0.134 | 0.173 | 160210 | 634 | 437 |
| | 9x2 7/8" | 2 7/8 | 1 7/8 | | | | | | | | |
| | 9x3" | 3 | 1 7/8 | | | | | | | | |

TABLE 1B—PHEINOX™ FASTENER SPECIFICATIONS

| FASTENER DESIGNATION | OVERALL LENGTH ¹ (inches) | THREAD LENGTH ² (inches) | HEAD DIAMETER (inch) | DRIVER SIZE | ROOT DIAMETER (inch) | SHANK DIAMETER (inch) | OUTSIDE THREAD DIAMETER (inch) | SPECIFIED BENDING YIELD STRENGTH ³ F _y (psi) | ALLOWABLE STEEL STRENGTH | | |
|----------------------|--------------------------------------|-------------------------------------|----------------------|-------------|----------------------|-----------------------|--------------------------------|--|--------------------------|-------------|-----|
| | | | | | | | | | Tensile (lbf) | Shear (lbf) | |
| R4 | 9x2" | 2 | 1 1/8 | 0.329 | Star drive T-25 | 0.112 | 0.128 | 0.173 | 113340 | 467 | 334 |
| | 10x2 1/2" | 2 1/2 | 1 7/8 | 0.368 | Star drive T-25 | 0.124 | 0.142 | 0.193 | 170220 | 490 | 424 |
| | 10x3 1/8" | 3 1/8 | 2 1/8 | | | | | | | | |
| | 10x4" | 3 7/8 | 2 1/8 | | | | | | | | |
| | 12x2 1/2" | 2 1/2 | 1 7/8 | 0.439 | Star drive T-25 | 0.148 | 0.171 | 0.234 | 159920 | 681 | 507 |
| | 12x3 1/8" | 3 1/8 | 2 1/8 | | | | | | | | |
| | 12x4" | 3 7/8 | 2 1/8 | | | | | | | | |
| 12x4 1/4" | 4 1/4 | 3 | | | | | | | | | |
| TRIM | 8x2 1/2" | 2 1/2 | 1 7/8 | 0.197 | Star drive T-10 | 0.100 | 0.111 | 0.156 | 117540 | 350 | 267 |
| | 8x2 7/8" | 2 7/8 | 1 7/8 | | | | | | | | |
| | 8x3 1/8" | 3 1/8 | 2 1/8 | 0.230 | Star drive T-15 | 0.112 | 0.126 | 0.175 | 66340 | 394 | 319 |
| | 9x2 1/2" | 2 1/2 | 1 7/8 | | | | | | | | |
| | 9x3 1/8" | 3 1/8 | 2 1/8 | | | | | | | | |

For SI: 1 inch = 25.4 mm; 1 psi = 6.9 kPa.

¹Overall length of fastener is measured from the top of the head to bottom of the tip. See Figure 1.

²Length of thread includes lip. See detailed illustrations in Figure 1.

³Bending yield strength determined in accordance with ASTM F1575 using the root diameter.



FASTENER TECHNICAL DATA

R4™, Trim™, Kameleon™

TABLE 2A—CLIMATEK™ COATED FASTENER REFERENCE WITHDRAWAL DESIGN VALUES (W)^{1,2}

[Tabulated Withdrawal Design Values (W) Are in Pounds per Inch of Thread Penetration into Side Grain of Main Member]

| FASTENER DESIGNATION | THREAD LENGTH ¹ , (inches) | WITHDRAWAL, W (lbs./in.) ³ FOR SPECIFIC GRAVITY =0.67 | | |
|-----------------------------------|---------------------------------------|--|-----------------------------------|-----|
| R4 | 9x2" | 179 | | |
| | 9x2 ¹ / ₂ " | | | |
| | 9x2 ³ / ₄ " | | | |
| | 9x3 ¹ / ₂ " | | | |
| | 10x2 ¹ / ₂ " | | | |
| | 10x2 ³ / ₄ " | | | |
| | 249 | 10x3 ¹ / ₂ " | | |
| | | 10x3 ³ / ₄ " | | |
| | | 10x4" | | |
| | | 10x4 ³ / ₄ " | | |
| | | 12x2 ¹ / ₂ " | | |
| | | 12x2 ³ / ₄ " | | |
| R4 | 12x3 ¹ / ₂ " | 255 | | |
| | 12x3 ³ / ₄ " | | | |
| | 12x4" | | | |
| | 12x4 ³ / ₄ " | | | |
| | 12x5 ³ / ₄ " | | | |
| | 12x6 ³ / ₄ " | | | |
| | 3 | 12x7 ¹ / ₄ " | | |
| | | 12x8" | | |
| | | 12x10" | | |
| | | 12x12" | | |
| | | TRIM | 8x2 ¹ / ₂ " | 175 |
| | | | 8x2 ³ / ₄ " | |
| 8x3 ¹ / ₂ " | | | | |
| 9x2 ¹ / ₂ " | | | | |
| 9x2 ³ / ₄ " | | | | |
| 221 | 9x3 ¹ / ₂ " | | | |
| | 9x3 ³ / ₄ " | | | |
| | 9x3 ¹ / ₂ " | | | |
| KAMELEON | 9x2 ¹ / ₂ " | 186 | | |
| | 9x2 ³ / ₄ " | | | |
| | 9x3" | | | |

Pilot hole requirements:
70% of the root diameter of the screw
For SI: 1 inch = 25.4 mm; 1 lb/in = 175 N/m.
¹Values must not be multiplied by any adjustment factors.
²Fastener withdrawal was tested in accordance with ASTM D1761.
³Reference withdrawal design values (W) shall be multiplied by the length of thread penetration in the main member (including tip).

TABLE 2B—PHEINOX™ STAINLESS STEEL FASTENER REFERENCE WITHDRAWAL DESIGN VALUES (W)^{1,2}

[Tabulated Withdrawal Design Values (W) Are in Pounds per Inch of Thread Penetration into Side Grain of Main Member]

| FASTENER DESIGNATION | THREAD LENGTH ¹ , (inches) | WITHDRAWAL, W (lbs./in.) ³ FOR SPECIFIC GRAVITY =0.67 |
|----------------------|---------------------------------------|--|
| R4 | 9x2" | 213 |
| | 10x2 ¹ / ₂ " | 123 |
| | 10x2 ³ / ₄ " | |
| | 10x3 ¹ / ₂ " | |
| | 10x3 ³ / ₄ " | |
| | 146 | 10x4" |
| | | 12x2 ¹ / ₂ " |
| | | 12x3 ¹ / ₂ " |
| | | 12x4" |
| | | 12x4 ³ / ₄ " |
| 3 | | |
| TRIM | 8x2 ¹ / ₂ " | 106 |
| | 8x2 ³ / ₄ " | |
| | 8x3 ¹ / ₂ " | 115 |
| | 9x2 ¹ / ₂ " | |
| | 9x2 ³ / ₄ " | |
| | 9x3 ¹ / ₂ " | |

Pilot hole requirements:
80% of the root diameter of the screw
For SI: 1 inch = 25.4 mm; 1 lb/in = 175 N/m.
¹Values must not be multiplied by any adjustment factors.
²Fastener withdrawal was tested in accordance with ASTM D1761.
³Reference withdrawal design values (W) shall be multiplied by the length of thread penetration in the main member (including tip).

TABLE 3B—PHEINOX™ STAINLESS STEEL FASTENER REFERENCE PULL-THROUGH DESIGN VALUES (P)

[Tabulated Pull-Through Design Values (P) are in Pounds]

| FASTENER DESIGNATION | MINIMUM SIDE MEMBER THICKNESS (inch) | PULL-THROUGH, P (lb) FOR SPECIFIC GRAVITY = 0.67 |
|----------------------|--------------------------------------|--|
| R4 | 9x2" | 184 |
| | 10x2 ¹ / ₂ " | |
| | 10x2 ³ / ₄ " | |
| | 10x3 ¹ / ₂ " | |
| | 10x4" | |
| | 12x2 ¹ / ₂ " | |
| | 12x3 ¹ / ₂ " | |
| 336 | 12x4" | |
| | 12x4 ³ / ₄ " | |
| | 12x4" | |
| TRIM | 8x2 ¹ / ₂ " | 70 |
| | 8x2 ³ / ₄ " | |
| | 8x3 ¹ / ₂ " | |
| | 9x2 ¹ / ₂ " | |
| | 9x2 ³ / ₄ " | |
| | 9x3 ¹ / ₂ " | |
| 124 | 9x2 ¹ / ₂ " | |
| | 9x2 ³ / ₄ " | |
| | 9x3 ¹ / ₂ " | |
| | 9x3 ³ / ₄ " | |
| | 9x3 ¹ / ₂ " | |

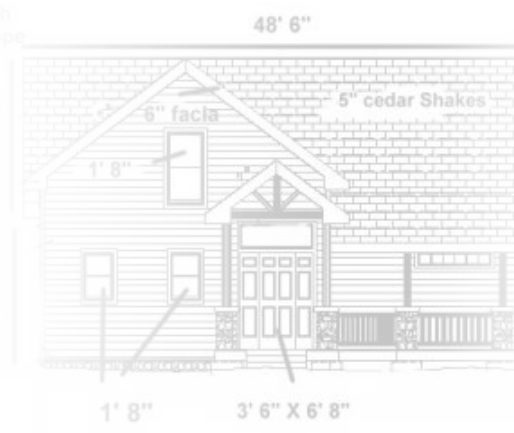
Pilot hole requirements:
90% of the root diameter of the screw
For SI: 1 inch = 25.4 mm; 1 lb = 4.4N.
¹Values shall be multiplied by all applicable adjustment factors (see NDS Table 10.3.1) as applicable to withdrawal.

TABLE 3A—CLIMATEK™ COATED FASTENER REFERENCE PULL-THROUGH DESIGN VALUES (P)¹

[Tabulated Pull-Through Design Values (P) are in Pounds]

| FASTENER DESIGNATION | MINIMUM SIDE MEMBER THICKNESS (inch) | PULL-THROUGH, P (lb) FOR SPECIFIC GRAVITY = 0.67 |
|------------------------------------|--------------------------------------|--|
| R4 | 9x2" | 162 |
| | 9x2 ¹ / ₂ " | |
| | 9x2 ³ / ₄ " | |
| | 9x3 ¹ / ₂ " | |
| | 10x2 ¹ / ₂ " | |
| | 10x2 ³ / ₄ " | |
| | 10x3 ¹ / ₂ " | |
| | 10x3 ³ / ₄ " | |
| | 10x4" | |
| | 10x4 ³ / ₄ " | |
| | 12x2 ¹ / ₂ " | |
| | 407 | |
| 12x3 ¹ / ₂ " | | |
| 12x3 ³ / ₄ " | | |
| 12x4" | | |
| 12x4 ³ / ₄ " | | |
| 12x5 ³ / ₄ " | | |
| 12x6 ³ / ₄ " | | |
| 12x7 ¹ / ₄ " | | |
| 12x8" | | |
| 12x10" | | |
| 12x12" | | |
| TRIM | | 8x2 ¹ / ₂ " |
| | 8x2 ³ / ₄ " | |
| | 8x3 ¹ / ₂ " | |
| | 8x3 ³ / ₄ " | |
| 94 | 9x2 ¹ / ₂ " | |
| | 9x2 ³ / ₄ " | |
| | 9x3 ¹ / ₂ " | |
| KAMELEON | 9x2 ¹ / ₂ " | 143 |
| | 9x2 ³ / ₄ " | |
| | 9x3" | |

Pilot hole requirements:
90% of the root diameter of the screw
For SI: 1 inch = 25.4 mm; 1 lb = 4.4N
¹Values shall be multiplied by all applicable adjustment factors (see NDS Table 10.3.1) as applicable to withdrawal.



FASTENER TECHNICAL DATA

R4™, Trim™, Kameleon™

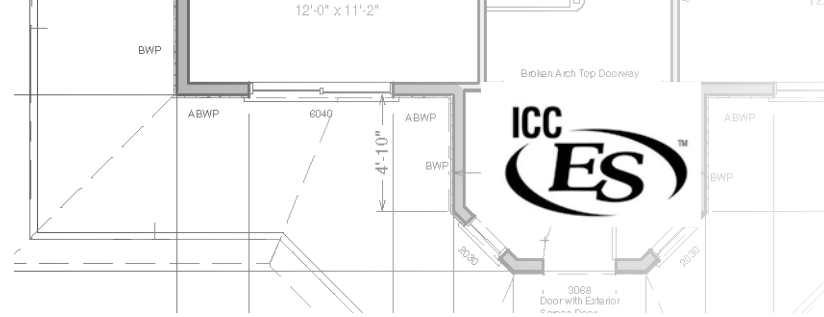


TABLE 4A—CLIMATEK™ COATED FASTENER
REFERENCE LATERAL DESIGN VALUES (Z) FOR SINGLE
SHEAR (TWO-MEMBER) CONNECTIONS^{1,2}
 [For Sawn Lumber with Both Members of Identical Specific Gravity]

| FASTENER DESIGNATION | SIDE MEMBER THICKNESS, t_s (inch) | FASTENER PENETRATION, P (inches) | REFERENCE LATERAL DESIGN VALUE, Z (pounds) FOR SPECIFIC GRAVITY OF: | |
|----------------------|-------------------------------------|------------------------------------|---|-----|
| | | | 0.67 Parallel to Grain, Z_1 | |
| R4 | 9x2" | $\frac{3}{4}$ | $1\frac{1}{8}$ | 175 |
| | 9x2 $\frac{1}{2}$ " | $\frac{3}{4}$ | $1\frac{1}{2}$ | |
| | 9x2 $\frac{3}{4}$ " | $\frac{3}{4}$ | 2 | |
| | 9x3 $\frac{1}{8}$ " | $\frac{3}{4}$ | $2\frac{3}{8}$ | |
| | 10x2 $\frac{1}{2}$ " | $\frac{3}{4}$ | $1\frac{1}{2}$ | |
| | 10x2 $\frac{3}{4}$ " | $\frac{3}{4}$ | 2 | 203 |
| | 10x3 $\frac{1}{8}$ " | $\frac{3}{4}$ | $2\frac{3}{8}$ | |
| | 10x3 $\frac{1}{2}$ " | $\frac{3}{4}$ | $2\frac{3}{4}$ | |
| | 10x4" | $\frac{3}{4}$ | $3\frac{1}{8}$ | |
| | 10x4 $\frac{3}{4}$ " | $\frac{3}{4}$ | $3\frac{1}{8}$ | |
| | 12x2 $\frac{1}{2}$ " | $\frac{3}{4}$ | $1\frac{1}{2}$ | 242 |
| | 12x2 $\frac{3}{4}$ " | $\frac{3}{4}$ | 2 | |
| | 12x3 $\frac{1}{8}$ " | $\frac{3}{4}$ | $2\frac{3}{8}$ | |
| | 12x3 $\frac{1}{2}$ " | $\frac{3}{4}$ | $2\frac{3}{4}$ | |
| | 12x4" | $\frac{3}{4}$ | $3\frac{1}{8}$ | |
| 12x4 $\frac{3}{4}$ " | $\frac{3}{4}$ | $3\frac{1}{8}$ | | |
| 12x5 $\frac{1}{8}$ " | $\frac{3}{4}$ | $4\frac{3}{4}$ | | |
| 12x6 $\frac{3}{8}$ " | $\frac{3}{4}$ | $5\frac{1}{2}$ | | |
| 12x7 $\frac{1}{4}$ " | $\frac{3}{4}$ | $6\frac{1}{4}$ | | |
| 12x8" | $\frac{3}{4}$ | 7 | | |
| 12x10" | $\frac{3}{4}$ | 9 | 84 | |
| 8x2 $\frac{1}{2}$ " | $\frac{3}{4}$ | $1\frac{1}{2}$ | | |
| 8x2 $\frac{3}{4}$ " | $\frac{3}{4}$ | 2 | | |
| 8x3 $\frac{1}{8}$ " | $\frac{3}{4}$ | $2\frac{1}{2}$ | | |
| 9x2 $\frac{1}{2}$ " | $\frac{3}{4}$ | $1\frac{1}{2}$ | | |
| TRIM | 9x2 $\frac{3}{4}$ " | $\frac{3}{4}$ | 2 | 104 |
| | 9x3 $\frac{1}{8}$ " | $\frac{3}{4}$ | $2\frac{3}{8}$ | |
| | 9x2 $\frac{1}{2}$ " | $\frac{3}{4}$ | $1\frac{5}{8}$ | |
| KAMELEON | 9x2 $\frac{3}{4}$ " | $\frac{3}{4}$ | $1\frac{7}{8}$ | 159 |
| | 9x3" | $\frac{3}{4}$ | $1\frac{7}{8}$ | |
| | | | | |

Pilot hole requirements:
 90% of the root diameter of the screw

For SI: 1 inch = 25.4 mm.

¹Values shall be multiplied by all applicable adjustment factors (see NDS Table 10.3.1).

²Lateral load testing was performed in accordance with ASTM D1761.

TABLE 4B—PHEINOX™ STAINLESS STEEL FASTENER
REFERENCE LATERAL DESIGN VALUES (Z) FOR SINGLE
SHEAR (TWO-MEMBER) CONNECTIONS^{1,2}
 [For Sawn Lumber with Both Members of Identical Specific Gravity]

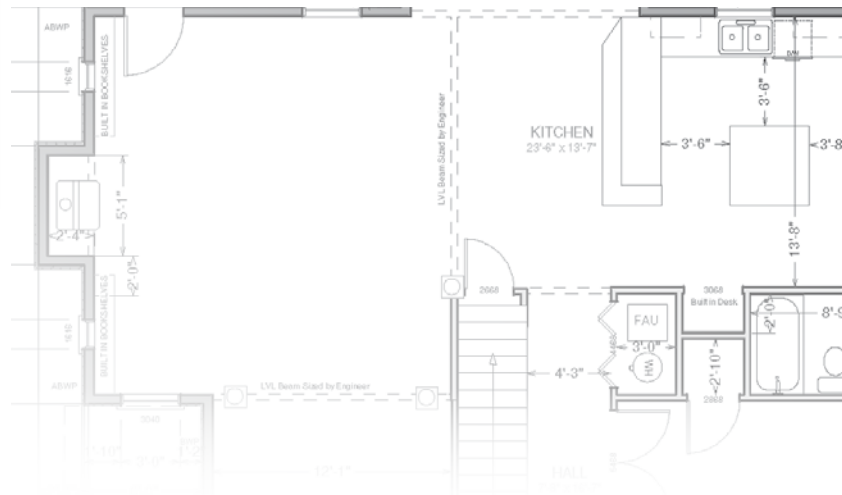
| FASTENER DESIGNATION | SIDE MEMBER THICKNESS, t_s (inch) | FASTENER PENETRATION, P (inches) | REFERENCE LATERAL DESIGN VALUE, Z (pounds) FOR SPECIFIC GRAVITY OF: | | |
|----------------------|-------------------------------------|------------------------------------|---|----------------|-----|
| | | | 0.67 Parallel to Grain, Z_1 | | |
| R4 | 9x2" | $\frac{3}{4}$ | $1\frac{1}{8}$ | 212 | |
| | 10x2 $\frac{1}{2}$ " | $\frac{3}{4}$ | $1\frac{1}{2}$ | | |
| | 10x2 $\frac{3}{4}$ " | $\frac{3}{4}$ | 2 | 235 | |
| | 10x3 $\frac{1}{8}$ " | $\frac{3}{4}$ | $2\frac{3}{8}$ | | |
| | 10x4" | $\frac{3}{4}$ | $3\frac{1}{8}$ | | |
| | 12x2 $\frac{1}{2}$ " | $\frac{3}{4}$ | $1\frac{3}{8}$ | | |
| | TRIM | 12x3 $\frac{1}{8}$ " | $\frac{3}{4}$ | $2\frac{3}{8}$ | 328 |
| | | 12x4" | $\frac{3}{4}$ | $3\frac{1}{8}$ | |
| | | 12x4 $\frac{3}{4}$ " | $\frac{3}{4}$ | $3\frac{1}{8}$ | |
| | | 8x2 $\frac{1}{2}$ " | $\frac{3}{4}$ | $1\frac{5}{8}$ | 78 |
| 8x2 $\frac{3}{4}$ " | | $\frac{3}{4}$ | 2 | | |
| 8x3 $\frac{1}{8}$ " | | $\frac{3}{4}$ | $2\frac{3}{8}$ | 108 | |
| 9x2 $\frac{1}{2}$ " | $\frac{3}{4}$ | $1\frac{3}{8}$ | | | |
| 9x2 $\frac{3}{4}$ " | $\frac{3}{4}$ | 2 | | | |
| RT COMPOSITE | 9x3 $\frac{1}{8}$ " | $\frac{3}{4}$ | $2\frac{3}{8}$ | 107 | |
| | 8x2 $\frac{1}{2}$ " | $\frac{3}{4}$ | $1\frac{1}{2}$ | | |
| | 8x2 $\frac{3}{4}$ " | $\frac{3}{4}$ | 2 | | |
| | 8x3 $\frac{1}{8}$ " | $\frac{3}{4}$ | $2\frac{3}{8}$ | 151 | |
| | 9x2 $\frac{1}{2}$ " | $\frac{3}{4}$ | $1\frac{1}{2}$ | | |
| | 9x2 $\frac{3}{4}$ " | $\frac{3}{4}$ | 2 | | |

Pilot hole requirements:
 90% of the root diameter of the screw

For SI: 1 inch = 25.4 mm.

¹Values shall be multiplied by all applicable adjustment factors (see NDS Table 10.3.1).

²Lateral load testing was performed in accordance with ASTM D1761.



FASTENER TECHNICAL DATA

R4™, Trim™, Kameleon™



TABLE 5—CONNECTION GEOMETRY REQUIREMENTS^{1,2}

| CONDITION | | MINIMUM DISTANCE OR SPACING (inches) | | | |
|------------------------------------|--------------------------------|--------------------------------------|------------------|-----------------|-----------------|
| | | D = 0.111" | D = 0.128-0.134" | D = 0.142" | D = 0.171 |
| End distance | Loading toward end | 2 | 2 | 2 1/8 | 2 5/8 |
| | Loading away from end | 1 1/8 | 1 1/4 | 1 3/8 | 1 3/4 |
| | Loading perpendicular to grain | NA ³ | NA ³ | NA ³ | NA ³ |
| Edge distance | Loading parallel to grain | 1 | 1 | 1 1/8 | 1 3/8 |
| | Loading perpendicular to grain | NA ³ | NA ³ | NA ³ | NA ³ |
| Spacing between fasteners in a row | Loading parallel to grain | 1 3/4 | 2 | 2 1/8 | 2 5/8 |
| | Loading perpendicular to grain | NA ³ | NA ³ | NA ³ | NA ³ |
| Spacing between rows | In-line rows | 5/8 | 5/8 | 3/4 | 7/8 |
| | Staggered rows ⁴ | 1/4 | 3/8 | 3/8 | 3/8 |

For SI: 1 inch = 25.4 mm.

¹ End distances, edge distances and screw spacing must be sufficient to prevent splitting of the wood, or as required by this table, whichever is the more restrictive. See Section 4.2.

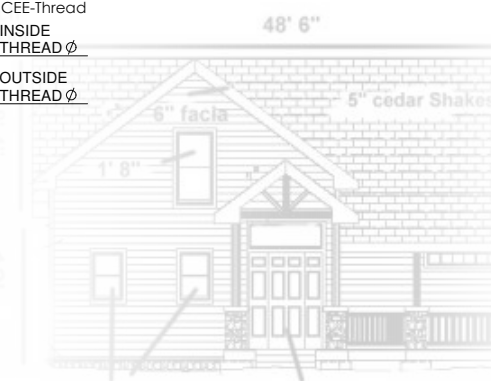
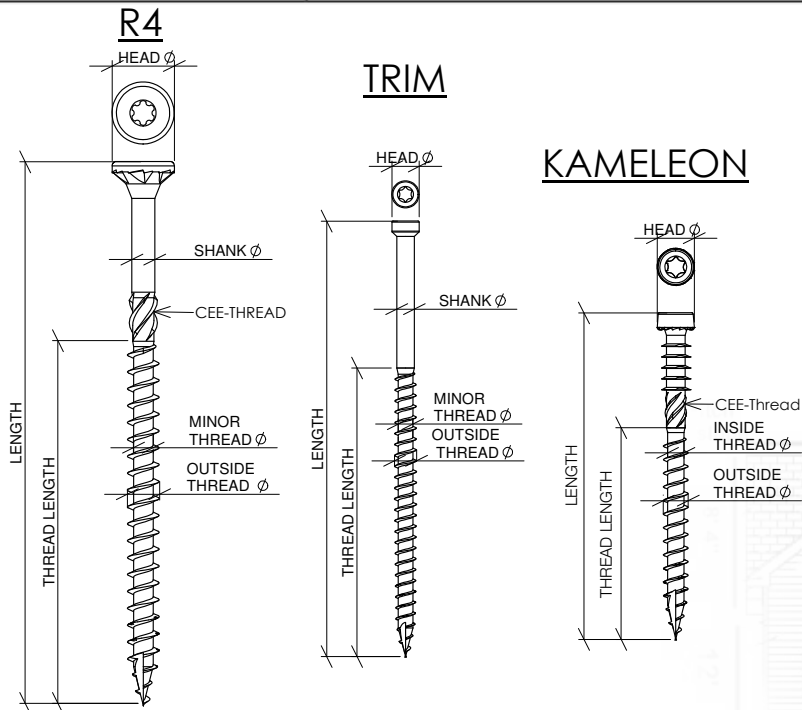
² The term *D* is the shank diameter, as specified in Table 1.

³ Loading perpendicular to grain is outside the scope of this evaluation report.

⁴ Values for spacing between staggered rows apply where screws in adjacent rows are offset by half of the spacing between screws in a row.

TABLE 6—EXPOSURE CONDITIONS FOR FASTENERS WITH INTENDED USE AND LIMITATIONS OF RECOGNITION

| EXPOSURE CONDITION | TYPICAL APPLICATIONS | RECOGNITION LIMITATIONS |
|--|--------------------------------------|--|
| Corrosion Resistance of Fasteners | | |
| 1 | Treated wood in dry use applications | Limited to use where equilibrium moisture content of the chemically treated wood meets the dry service conditions as described in the NDS. |
| 3 | General construction | Limited to freshwater and chemically treated wood exposure, i.e., no saltwater exposure. |





FASTENER TECHNICAL DATA

Caliburn™ XL



FOOTING SCHEDULE

| | |
|-----------------|--------------|
| HOUSE WALLS | 20" x 9" Min |
| DECKS & PORCHES | 18" x 9" Min |
| BEARING WALL | 20" x 9" Min |
| GARAGE WALL | 18" x 9" Min |

Min 2 #4 Rebar Horizontal
on undisturbed or compacted soil

INSULATION SCHEDULE

| | |
|---------------------------|----------|
| Ceilings | R-38 Min |
| Wall above grade | R-19 Min |
| Wall Interior below grade | R-13 Min |

TABLE 1—GRK CALIBURN XL 7.5 SCREW ANCHORS INSTALLATION SPECIFICATIONS

| ANCHOR PROPERTY / SETTING INFORMATION | SYMBOL | UNITS | NOMINAL ANCHOR SIZE ¹⁹ / ₆₄ INCH (7.5 mm) | |
|---|--------------------|----------------|--|---------------|
| Nominal anchor diameter | $d_a [d_a]^1$ | in. (mm) | 0.295 (7.5) | |
| Minimum diameter of hole clearance in fixture | d_{hr} | in. (mm) | ⁵ / ₁₆ (7.9) | |
| Nominal drill bit diameter | d_{dr} | mm | 6 | |
| Bit tolerance range | - | mm | 6.15 to 6.40 | |
| Maximum impact torque power rating | $T_{impact,max}$ | ft-lb. (Nm) | 33 (45) | |
| Screw length | L | in. (mm) | 3.62 (92) | 4.92 (125) |
| Minimum nominal embedment depth | h_{nom} | in. (mm) | 2.76 (70) | 3.35 (85) |
| Length of thread | l_{gtr} | in. (mm) | 2.83 (72) | 3.43 (87) |
| Minimum member thickness | h_{min} | in. (mm) | 4.33 (110) | 5.32 (135) |
| Minimum edge distance | $c_{min} = c_{ec}$ | in. (mm) | 5.67 (144) | 5.67 (144) |
| Minimum spacing distance | s_{min} | in. (mm) | 7.56 (192) | 7.56 (192) |
| Minimum hole depth | h_d | in. (mm) | 3.35 (85) | 3.94 (100) |

For SI: 1 inch = 25.4 mm, 1 ft-lb = 1,356 N-m.

¹The notation in brackets is for the 2006 IBC.

Note:

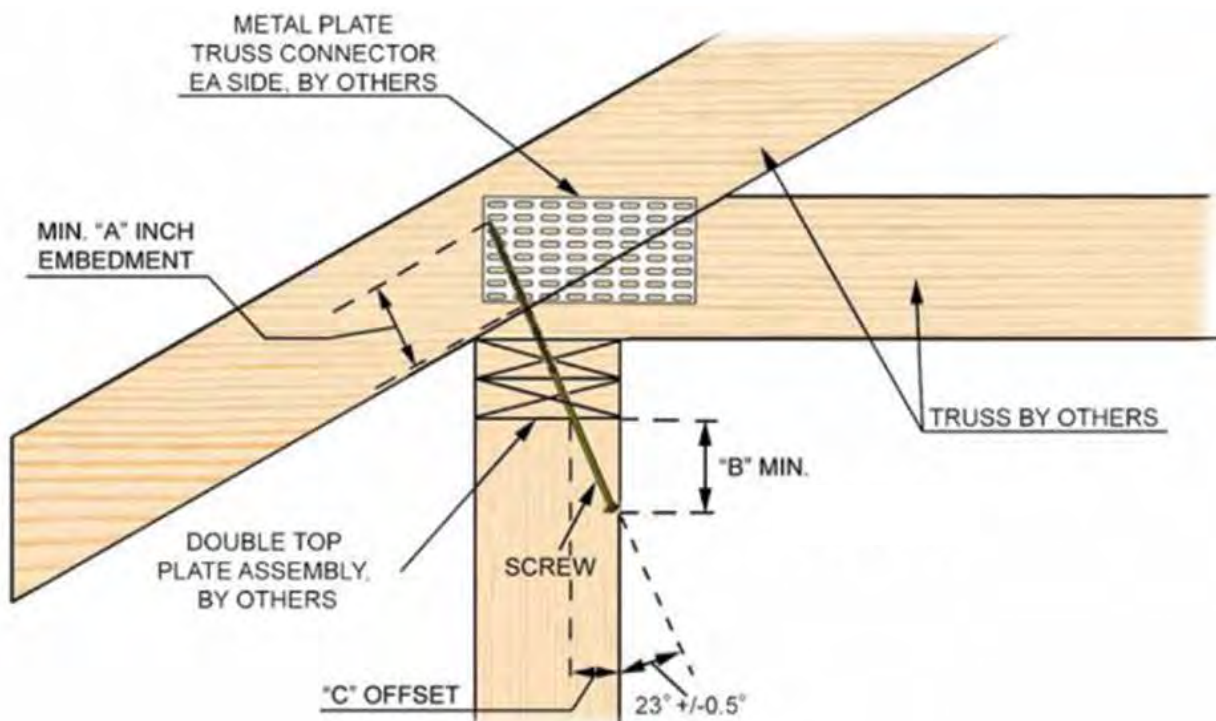
For safety factor requirements in your area, contact your local building official, architect or engineer. Testing was performed according to ASTM standard E-488-96. **The Caliburn™ XL is on the ICC Report ESR-3251.** For most current information and specifications visit our website: www.grkfasteners.com.

Roof Joist or Roof Truss to Top Plate or Stud Connection

Table 1 Allowable Design Loads for Roof Joist or Roof Truss to Top Plate Connections

| Load Type | Screw Type | Wood Species | | |
|----------------------------------|-----------------|-----------------------|----------------------------|--------------------------|
| | | SP (Southern Pine) | DFL (Douglas Fir Larch) | SPF (Spruce Pine Fir) |
| Allowable Uplift in lbs | Ø3/8 RSS | 1230 | 1017 | 717 |
| Allowable Shear / Lateral in lbs | | 528 | 480 | 393 |
| Allowable Uplift in lbs | # 12 R4 | 873 | 722 | 509 |
| Allowable Shear / Lateral in lbs | | 352 | 322 | 273 |
| Allowable Uplift in lbs | Ø1/4 LPS/RSS | 562 | 465 | 328 |
| Allowable Shear / Lateral in lbs | | 242 | 221 | 188 |

FIGURE 1 Typical Connection Details



Multiple Sawn Lumber & Engineered Wood Beams

Table 1 MFR Lumber G=0.5

| JTS Screw | # of Screw rows | Fastener Spacing in inches | Allowable Face Mounted Loads Per Foot (PLF) Assembly per Table 3 | | | | | | | | | | | | | | | | | |
|------------|-----------------|----------------------------|---|---|-----|-----|---|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | | | A | B | C | D | E | F | | | | | | | | | | | | |
| ¼ x 3-3/8" | 2 | 24 | 212 | X | X | X | X | X | X | | | | | | | | | | | |
| | 2 | 16 | 318 | | | | | | | | | | | | | | | | | |
| | 2 | 12 | 424 | | | | | | | | | | | | | | | | | |
| | 3 | 24 | 318 | | | | | | | | | | | | | | | | | |
| | 3 | 16 | 477 | | | | | | | | | | | | | | | | | |
| | 3 | 12 | 636 | | | | | | | | | | | | | | | | | |
| ¼ x 5" | 2 | 24 | 212 | X | X | 238 | X | X | X | | | | | | | | | | | |
| | 2 | 16 | 318 | | | | | | | 357 | | | | | | | | | | |
| | 2 | 12 | 424 | | | | | | | | 476 | | | | | | | | | |
| | 3 | 24 | 318 | | | | | | | | | 357 | | | | | | | | |
| | 3 | 16 | 477 | | | | | | | | | | 536 | | | | | | | |
| | 3 | 12 | 636 | | | | | | | | | | | 714 | | | | | | |
| ¼ x 6-3/4" | 2 | 24 | X | X | 255 | 238 | X | X | | | | | | | | | | | | |
| | 2 | 16 | | | | | | | 318 | 383 | | | | | 357 | | | | | |
| | 2 | 12 | | | | | | | | | 424 | | | | | 510 | 476 | | | |
| | 3 | 24 | | | | | | | | | | 318 | | | | | | 383 | 357 | |
| | 3 | 16 | | | | | | | | | | | 477 | | | | | | | 575 |
| | 3 | 12 | | | | | | | | | | | | 636 | | | | | | |

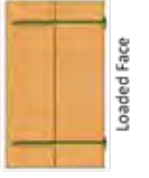





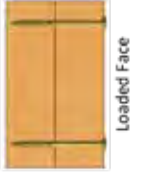


Note: 1. Applied load from joist are assumed to be uniform
2. Fastener capacity is based on fastener spacing, not joist spacing

Table 2 Sawn Lumber with Varying Specific Gravity values

| RSS | # of Screw rows | Fastener Spacing in inches | Allowable Face Mounted Loads Per Foot (PLF) | | | |
|------------|-----------------|----------------------------|---|-----------------|---------------|-------------------------|
| | | | S.Pine G=0.55 | D.Fir G=0.50 | SPF G=0.42 | Assembly per Table 3 |
| ¼ x 2-3/4" | 2 | 24 | 190 | 165 | 127 | G |
| | 2 | 16 | 285 | 248 | 191 | |
| | 2 | 12 | 380 | 330 | 254 | |
| | 3 | 24 | 285 | 248 | 191 | |
| | 3 | 16 | 428 | 372 | 286 | |
| | 3 | 12 | 570 | 495 | 381 | |
| 5/16 x 4" | 2 | 24 | 257 | 214 | 210 | H |
| | 2 | 16 | 386 | 321 | 315 | |
| | 2 | 12 | 514 | 428 | 420 | |
| | 3 | 24 | 386 | 321 | 315 | |
| | 3 | 16 | 578 | 482 | 473 | |
| | 3 | 12 | 771 | 642 | 630 | |
| 5/16 x 6" | 2 | 24 | 257 | 214 | 210 | I |
| | 2 | 16 | 386 | 321 | 315 | |
| | 2 | 12 | 514 | 428 | 420 | |
| | 3 | 24 | 386 | 321 | 315 | |
| | 3 | 16 | 578 | 482 | 473 | |
| | 3 | 12 | 771 | 642 | 630 | |

Note: 1. Applied load from joist are assumed to be uniform
2. Fastener capacity is based on fastener spacing, not joist spacing

Table 3 Assembly Types (Cutting Plane 'A-A' per Fig.3)

| MFR Lumber | | |
|---|--|--|
| A | B | C |
| 2 x 1-3/4" | 3 x 1-3/4" | 4 x 1-3/4" |
|  |  |  |
| D | E | F |
| 1 x 1-3/4" to 3-3/8" | 2 x 3-1/2" | 1-3/4" ES of 3- 1/2" |
|  |  |  |
| Sawn Lumber | | |
| G | H | I |
| 2 x 1-1/2" | 3 x 1-1/2" | 4 x 1-1/2" |
|  |  |  |

Note: Load should be applied to the face w/the screw head

ABBREVIATIONS:

- D.Fir = Douglas Fir-Larch
- ES = each side
- H. Fir = Hem -Fir
- JTS = Joist and Truss Screw
- MFR = Manufactured structural composite lumber
- PLF = Pounds per linear foot
- RSS = Rugged Structural Screw
- SPF = Spruce-Pine-Fir
- S.Pine = Southern Pine
- tm = Thickness of main member
- ts = Thickness of side member
- TYP = Typical
- o.c. = on center

Minimum Spacing Geometry - perpendicular to grain loading

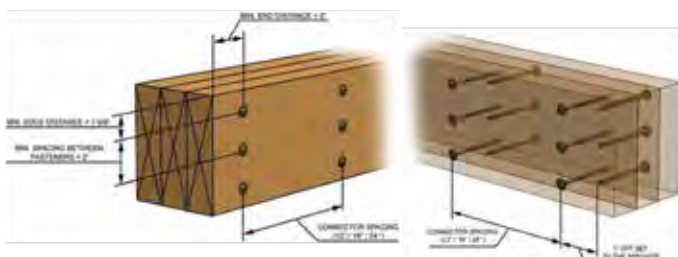


Figure 1a

Figure 1b

Multi-Ply Beam with One Face Loaded

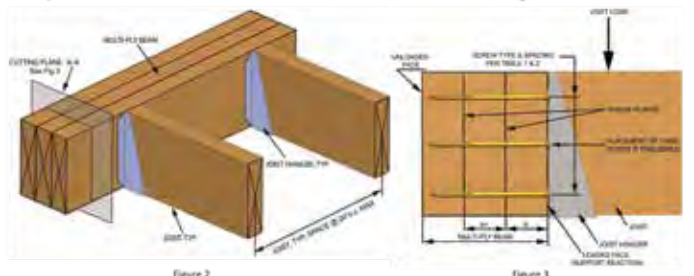
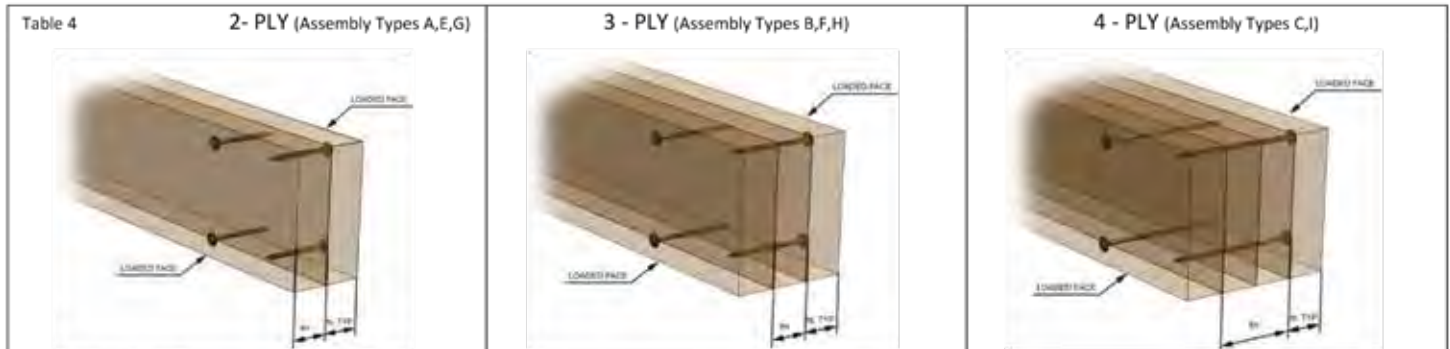


Figure 2

Figure 3

Multiple Sawn Lumber & Engineered Wood Beams

Multi-Ply Beams w/loads on Both Faces



Note: 1. See Tables 1 & 2 for load carrying capacity.
 2. RSS/JTS screws shall be sized to penetrate laminations from both sides.

Multi-Ply Beam Point Load

Table 5 MFR Lumber G=0.5

| JTS Screw | # Screws | Max Point Load to One Side of Member ** | | | | | |
|--------------|----------|---|------|------|------|------|------|
| | | A | B | C | D | E | F |
| 1/4 x 3-3/8" | 4 | 848 | | | | | |
| | 6 | 1272 | | | | | |
| | 8 | 1696 | | | | | |
| 1/4 x 5" | 4 | | 848 | | 952 | | |
| | 6 | | 1272 | | 1428 | | |
| | 8 | | 1696 | | 1904 | | |
| 1/4 x 6-3/4" | 4 | | | 848 | | 1020 | 952 |
| | 6 | | | 1272 | | 1530 | 1428 |
| | 8 | | | 1696 | | 2040 | 1904 |

Table 6 Sawn Lumber with Varying Specific Gravity values

| RSS | # Screws | Max Point Load to One Side of Member ** | | | | Assembly |
|--------------|----------|---|-----------------|---------------|---|----------|
| | | S.Pine G=0.55 | D.Fir G=0.50 | SPF G=0.42 | | |
| 1/4 x 2-3/4" | 4 | 760 | 660 | 508 | G | |
| | 6 | 1140 | 990 | 762 | | |
| | 8 | 1520 | 1320 | 1016 | | |
| 5/16 x 4" | 4 | 1028 | 856 | 840 | H | |
| | 6 | 1542 | 1284 | 1260 | | |
| | 8 | 2056 | 1712 | 1680 | | |
| 5/16 x 6" | 4 | 1028 | 856 | 840 | I | |
| | 6 | 1542 | 1284 | 1260 | | |
| | 8 | 2056 | 1712 | 1680 | | |

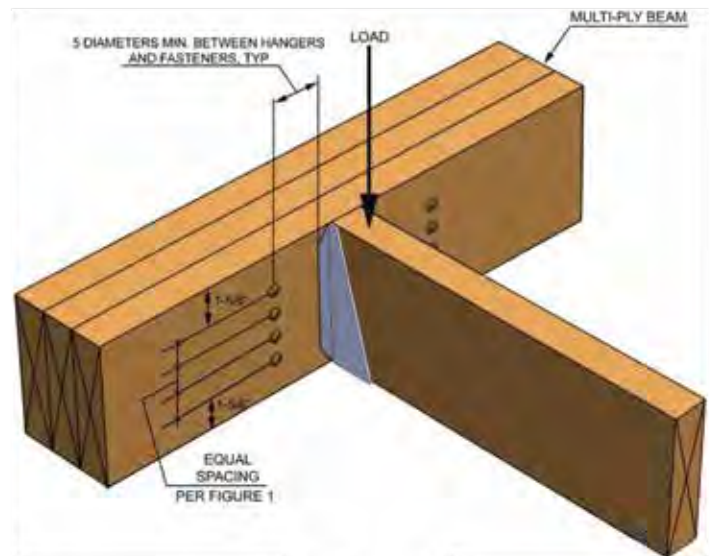


Figure 5

** Note when applying loads on both faces of built up beam, screws determined from table 5 & 6 shall be installed on both sides 1" offset for rows on opposite face.

Multi-Ply Beam Top-Loaded

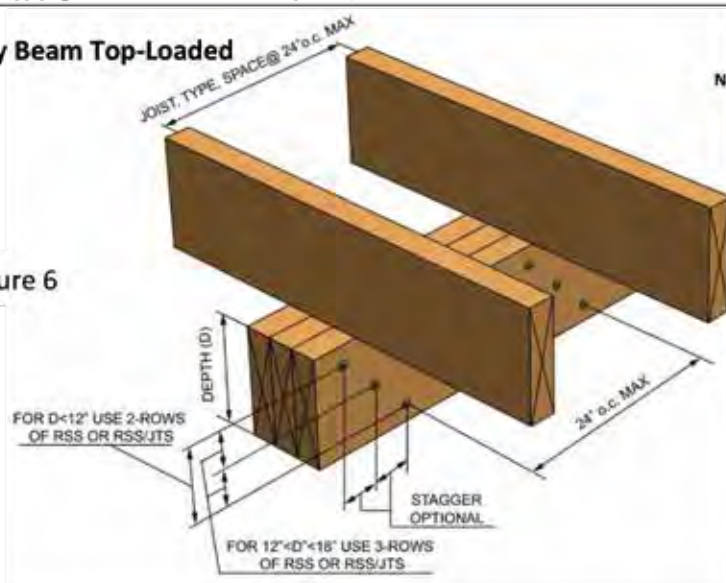


Figure 6

Note: 1. Load must be applied evenly across entire beam width. Otherwise, use connection for side-loaded beams.
 2. RSS/JTS screw shall be sized to penetrate through all plies
 3. For beams with 4 or more plies, install screws on both faces 1" offset between rows on opposite faces.

For ICC Report ESR-2442, please visit:
www.icc-es.org/reports/pdf-files/icc-es/ESR-2442.pdf

Ledger Board: Structural Screw

Table 1

| RSS 5/16 x 4" | | | Joist span | | | | |
|-----------------|---------------------------|------------------------------|-------------------------|------|-------|-------|-------|
| | | | 6 ft | 8 ft | 10 ft | 12 ft | 14 ft |
| Live load (psf) | Wood Species | Screw Shear Capacity (lb/ft) | Screw Spacing in inches | | | | |
| 40 | G= 0.42 / SPF | 182 | 14 | 10 | 8 | 7 | 6 |
| 40 | G = 0.50 / DF-PSL-LVL-LSV | 213 | 17 | 12 | 10 | 8 | 7 |
| 40 | G = 0.55 / SP | 252 | 20 | 15 | 12 | 10 | 8 |
| 60 | G= 0.42 / SPF | 182 | 10 | 7 | 6 | 5 | 4 |
| 60 | G = 0.50 / DF-PSL-LVL-LSV | 213 | 12 | 9 | 7 | 6 | 5 |
| 60 | G = 0.55 / SP | 252 | 14 | 10 | 8 | 7 | 6 |

NOTE: 1. Deck Dead Load = 10 psf

Table 2 (wet-use in- service)

| RSS 5/16 x 4" | | | Joist span | | | | |
|-----------------|---------------------------|------------------------------|---|------|-------|-------|-------|
| | | | 6 ft | 8 ft | 10 ft | 12 ft | 14 ft |
| Live load (psf) | Wood Species | Screw Shear Capacity (lb/ft) | Screw Spacing in inches/ wet-use in- service | | | | |
| 40 | G= 0.42 / SPF | 127 | 10 | 7 | 6 | 5 | 4 |
| 40 | G = 0.50 / DF-PSL-LVL-LSV | 150 | 12 | 9 | 7 | 6 | 5 |
| 40 | G = 0.55 / SP | 176 | 14 | 10 | 8 | 7 | 6 |
| 60 | G= 0.42 / SPF | 127 | 7 | 5 | 4 | 3 | 3 |
| 60 | G = 0.50 / DF-PSL-LVL-LSV | 150 | 8 | 6 | 5 | 4 | 3 |
| 60 | G = 0.55 / SP | 176 | 10 | 7 | 6 | 5 | 4 |

NOTE: 1. Deck Dead Load = 10 psf

Table 3

| PHEINOX RSS 5/16 x 4"(Stainless steel) | | | Joist span | | | | |
|--|---------------------------|------------------------------|-------------------------|------|-------|-------|-------|
| | | | 6 ft | 8 ft | 10 ft | 12 ft | 14 ft |
| Live load (psf) | Wood Species | Screw Shear Capacity (lb/ft) | Screw Spacing in inches | | | | |
| 40 | G= 0.42 / SPF | 151 | 12 | 9 | 7 | 6 | 5 |
| 40 | G = 0.50 / DF-PSL-LVL-LSV | 187 | 14 | 11 | 8 | 7 | 6 |
| 40 | G = 0.55 / SP | 204 | 16 | 12 | 9 | 8 | 6 |
| 60 | G= 0.42 / SPF | 151 | 8 | 6 | 5 | 4 | 3 |
| 60 | G = 0.50 / DF-PSL-LVL-LSV | 187 | 10 | 8 | 6 | 5 | 4 |
| 60 | G = 0.55 / SP | 204 | 11 | 8 | 6 | 5 | 4 |

NOTE: 1. Deck Dead Load = 10 psf

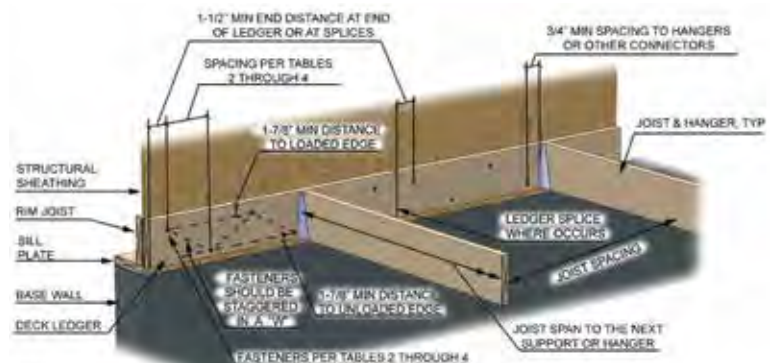
Table 4 (wet-use in- service)

| PHEINOX RSS 5/16 x 4"(Stainless steel) | | | Joist span | | | | |
|--|---------------------------|------------------------------|---|------|-------|-------|-------|
| | | | 6 ft | 8 ft | 10 ft | 12 ft | 14 ft |
| Live load (psf) | Wood Species | Screw Shear Capacity (lb/ft) | Screw Spacing in inches/ wet-use in- service | | | | |
| 40 | G= 0.42 / SPF | 106 | 8 | 6 | 5 | 4 | 3 |
| 40 | G = 0.50 / DF-PSL-LVL-LSV | 131 | 10 | 7 | 6 | 5 | 4 |
| 40 | G = 0.55 / SP | 143 | 11 | 8 | 6 | 5 | 4 |
| 60 | G= 0.42 / SPF | 106 | 6 | 4 | 3 | 3 | 2 |
| 60 | G = 0.50 / DF-PSL-LVL-LSV | 131 | 7 | 5 | 4 | 3 | 3 |
| 60 | G = 0.55 / SP | 143 | 8 | 6 | 4 | 4 | 3 |

NOTE: 1. Deck Dead Load = 10 psf

Table 5 Wood Species Specific Gravities

| Species | | Specific Gravity (G) |
|-------------------------|-------|----------------------|
| Spruce-Pine Fir | (SPF) | G = 0.42 |
| Hem-Fir | (HF) | G = 0.43 |
| Douglas Fir Larch | (DFL) | G = 0.50 |
| Parallel Strand Lumber | (PSL) | G = 0.50 |
| Laminated Veneer Lumber | (LVL) | G = 0.50 |
| Laminated Strand Lumber | (LSL) | G = 0.50 |
| Southern Pine | (SP) | G = 0.55 |





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We maintain lot traceability on all products listed in this catalog as long as they are in their original bulk boxes. Certifications are maintained on all fasteners.

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