2016 FULL LINE CATALOG

Deck building • Framing • Structural
Cabinetry • Finishing • Specialty

GRK FASTENERS™

ÜberGrade

Drive with Speed, Quality and Confidence

What Makes Us ÜberGrade?

RECESSED STAR DRIVE

Zero Stripping, with (6) points of contact

CEE THREAD™

Enlarges hole to reduce splitting

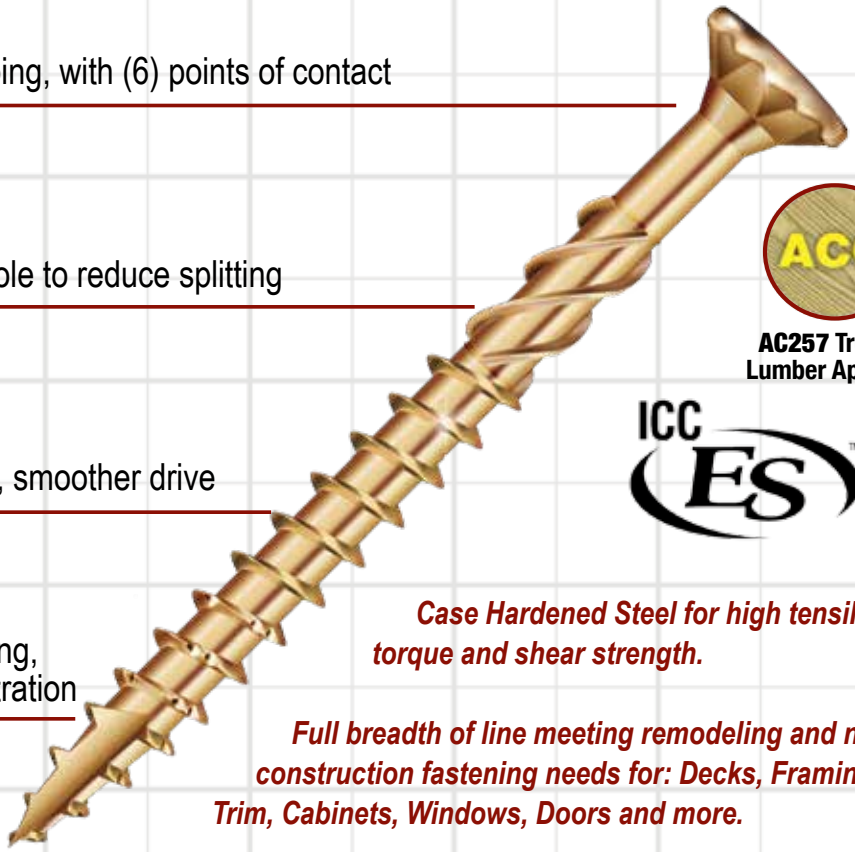
W-CUT™

Low torque, smoother drive

ZIP-TIP™

No pre-drilling, faster penetration

Drive with Speed, Quality and Confidence



ACQ

AC257 Treated Lumber Approved

ICC ES

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- GRK recommends the use of *PHE*INOX™ Stainless Steel screws, especially in tropical wood, cedar, below ground grade treated lumber, pool / hot tub / sauna and applications within 15 miles of coastline. 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.

Table of Contents

GRK FASTENERS
ÜberGrade

Fastener Selection Guide and Quick Reference Product Locator

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 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 counter-sinking 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 *PHE*INOX™ stainless steel.

They are ESR code approved under ICC Report ESR-3201.

SECTION 2

RSS™ Rugged Structural Screws: Speedy 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 *PHE*INOX™ stainless steel.

RSS™ JTS: *Joist & Truss Fastener: Used for joists and trusses..*
RSS™ LTF: *Timber Frame Fastener: Designed specifically for the Log Home & Timber frame market.*

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 *PHE*INOX™ 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 *PHE*INOX™ 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.

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 *PHE*INOX™ stainless steel.

SECTION 6

***PHE*INOX™ Stainless Steel Screws:** For Strongest corrosion resistance. Recommended for use in tropical wood, around pools, hot tubs, sauna and sea-side type applications. Available in 305 grade stainless steel.

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

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

VWS™ Vinyl Window Screws: Install replacement vinyl windows without the use of shims! Allows for quick, easy and precise leveling capabilities.

The self-tapping screw features a patented washer head design with a unique edge under the screw head designed to capture the vinyl extrusion during penetration. The secondary shoulder allows for adjustments and fine tuning of framework until the window is plumb.

SECTION 9

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 Climatek™ 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 10

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.

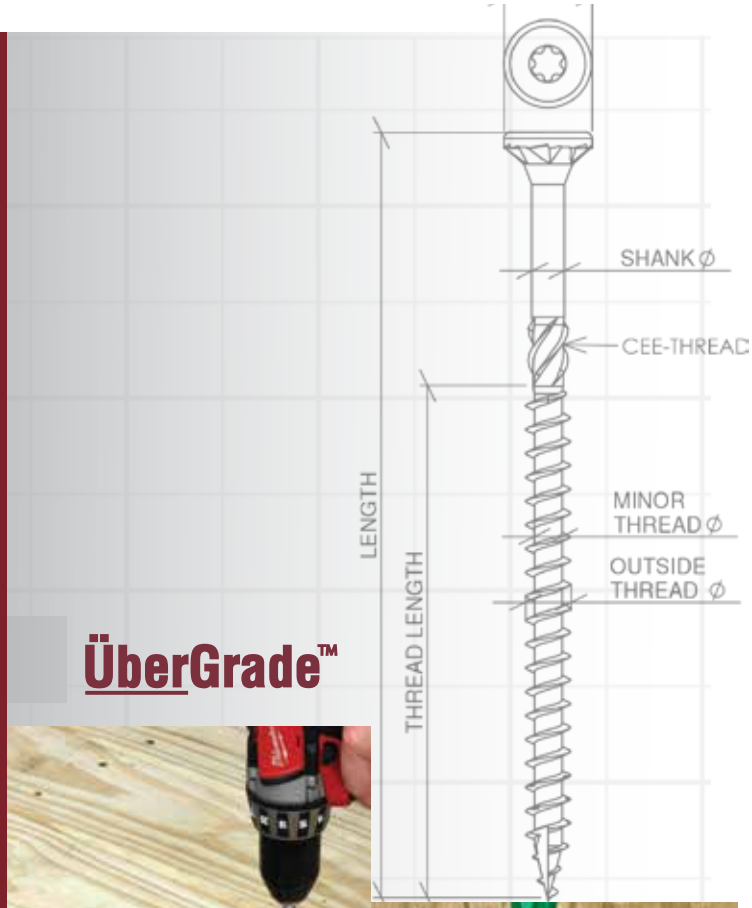
They are self-tapping eliminating pre-drilling featuring the W-Cut™ threads for reduced torque.

SECTION 11

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 2" 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 SCREWS

Frame with Ease and Confidence

ICC ES

ACQ

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, smoother 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 ***PHE*INOX™** 305 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.
#6 x 1-1/4”	3.5 x 30	**00051**	13,000	**01051**	1,590		
#6 x 1-1/2”	3.5 x 40	**00055**	8,000	**01055**	1,325		
#6 x 2"	3.5 x 50	**00059**	5,400				
#8 x 1"						**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
#8 x 2-3/4”	4.0 x 70			**01081**	615		
#9 x 1-1/4”	4.5 x 30	**00091**	8,000	**01091**	1,000	**02091**	S/100
#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	**02097**	S/100
#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
#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	**02135**	M/100
#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
#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			**02179**	9/50
#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


T-15


T-15


T-25


T-25


T-25

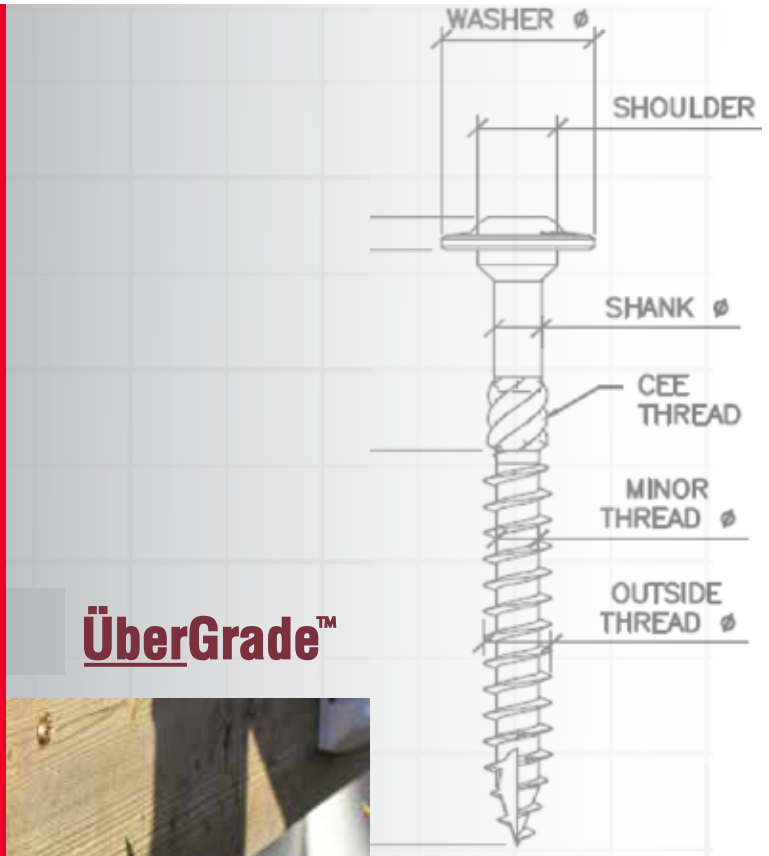
Some sizes available in ***PHE*INOX**™ hardened Stainless Steel; refer to Section 7. 2” bit included in Pro-Paks. 1” bit w/Handy-Paks.
*Does not come with the **Zip-Tip**™ feature. **NOTE:** Pro-Paks need to be ordered in multiples of two.

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*
RSS™ LTF - *Designed for log home and timber frame*



ÜberGrade™

RSS™ RUGGED STRUCTURAL SCREWS

Speedy 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, smoother 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 ***PHE*INOX™** 305 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.
#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			**12135**	M/50
#10 x 3-1/8”	5.0 x 80	**10137**	800	**11137**	236	**12137**	M/50
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
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
3/8” x 3-1/8”	8.0 x 80	**10273**	400			**12273**	9/50
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


T-25


T-25


T-30


T-40

RSS™ JTS - JOIST AND TRUSS SCREW

1/4” x 3-3/8”	6.3 x 85					**93727**	M/50
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


T-25

RSS™ LTF - TIMBER FRAME SCREW

3/8” x 8"	8.0 x 200					**93287**	12/50
3/8” x 10"	8.0 x 250					**93293**	12/50
3/8” x 12"	8.0 x 300					**93299**	12/50


T-40

RSS™ BLISTER-PAK

U.S. (std.)	Metric Size	Pt. No.	Qty.
5/16” x 3-1/8"	7.0 x 80	**13221**	15
5/16” x 4"	7.0 x 100	**13225**	12
5/16” x 5-1/8"	7.0 x 130	**13231**	10
5/16” x 6"	7.0 x 150	**13235**	8

RSS™ MINI HANDY-PAK

U.S. (std.)	Metric Size	Pt. No.	Qty.
5/16” x 2-1/2"	7.0 x 63	**14217**	M/25
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

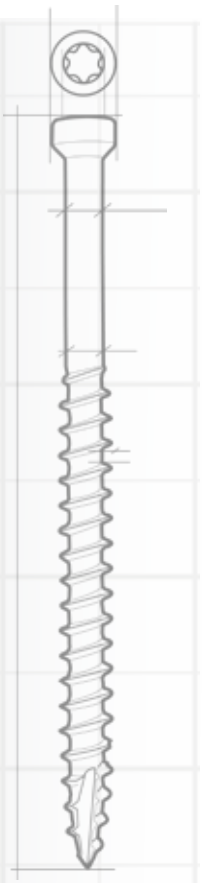
U.S. (std.)	Metric Size	Pt. No.	Qty./Ctn.
5/16” x 3-1/8"	7.0 x 80	**96001**	1/50
5/16” x 4"	7.0 x 100	**96005**	1/50
5/16” x 5-1/8"	7.0 x 130	**96010**	1/50
5/16” x 6"	7.0 x 150	**96015**	1/40
3/8” x 8"	8.0 x 200	**96020**	1/25
3/16” x 10”	7.0 x 250	**96025**	1/25
3/8” x 12”	8.0 x 300	**96030**	1/20

Some sizes available in ***PHE*INOX™** hardened Stainless Steel; refer to Section 7.
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 Climatek™coated 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

ICC ES

ACQ

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, smoother 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 Climatek™ coated finish.
- Also available in ***PHE*INOX™** 305 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-10	#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			**16732**	544	**17732**	S/100
	#8 x 3-1/8”	4.0 x 80	**15734**	2,500	**16734**	514	**17734**	M/100
 T-15	#9 x 3-1/8”	4.5 x 80					**17756**	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™							
 T-10	#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

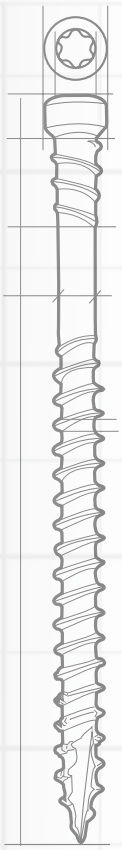
Excellent for all of your trimwork and fine carpentry finishing.

Some sizes available in ***PHE*INOX™** hardened Stainless Steel; refer to Section 7
NOTE: Pro-Paks need to be ordered in multiples of two. 2” bit included in Pro-Paks. 1” bit with Handy-Paks.

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

ACQ

AC257 Treated Lumber Approved

ICC ES

- **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, smoother 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,™ Kleer,™ 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 ***PHE*INOX™** 305 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-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 2-3/4"	4.0 x 70	**15081**	3,000			**17081**	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	**17101**	M/100
#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

Supreme Drawing Power is perfect for trimwork and deck construction.

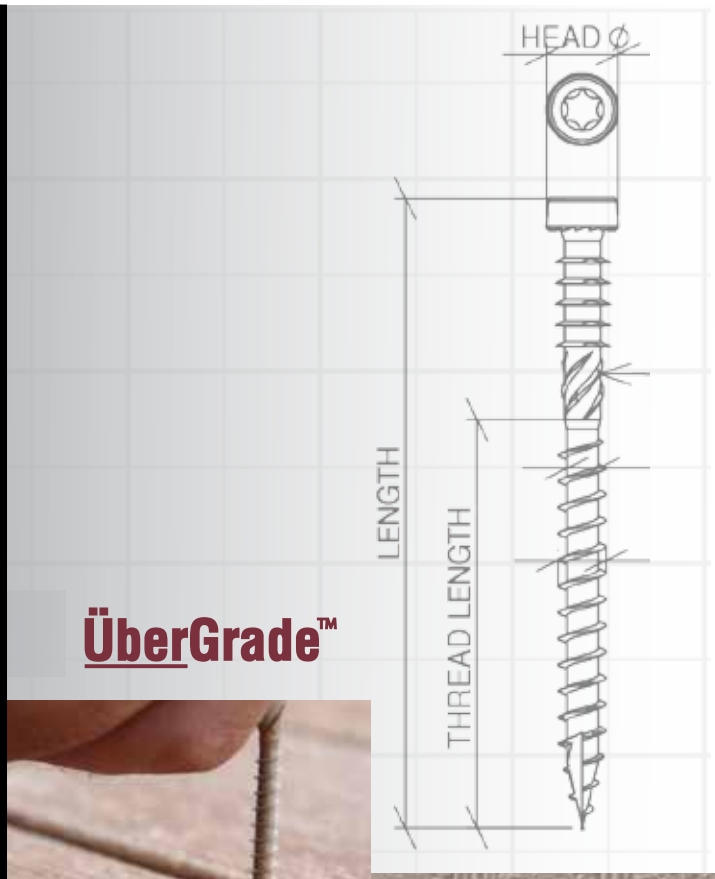
Some sizes available in ***PHE*INOX™** hardened Stainless Steel; refer to Section 7
NOTE: Pro-Paks need to be ordered in multiples of two. 2" bit included in Pro-Paks. 1" bit with Handy-Paks.

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".



ÜberGrade™

KAMELEON™ COMPOSITE DECK SCREWS

Heads Blend in with Decking. No Mushrooming Effect

ACQ

AC257 Treated Lumber Approved

ICC ES

- **Recessed Star Drive:** Zero Stripping, with 6 points of contact
- **CEE Thread:** Enlarges hole to reduce splitting
- **W-Cut™:** Low torque, smoother 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.


T-20

	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	**67151**	M/100
Tan	#9 x 2-1/2"	4.5 x 63	**65155**	2,900	**66155**	510	**67155**	M/100
Brown	#9 x 2-1/2"	4.5 x 63	**65158**	2,900	**66158**	510	**67158**	M/100
Redwood	#9 x 2-1/2"	4.5 x 63	**65159**	2,900	**66159**	510	**67159**	M/100
Grey	#9 x 2-3/4"	4.5 x 70	**65171**	2,000	**66171**	420		
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		

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.

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

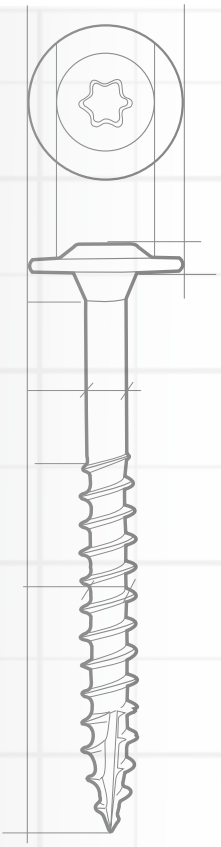
GRK's Cabinet™ screws are designed specifically for use in cabinet construction and installation. Cabinet™ screws are manufactured in a #8 gauge (4 mm) diameter for universal size convenience.

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.

Builders have discovered that short Cabinet™ screws can sometimes be used in vinyl siding installation, which makes this fastener ideal for both interior and exterior applications.

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 stickercovers. 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, smoother 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 ***PHE*INOX™** 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”	4.0 x 25	**12067**					
#8 x 1”	4.0 x 25	**11067**	3,000				
#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	**11064**	1085	**12064**	M/100
#8 x 1-1/2”	4.0 x 40	**11063**	930	**12063**	M/100
#8 x 2-1/2”	4.0 x 63	**11062**	563	**12062**	M/100
#8 x 3-1/8”	4.0 x 80	**11061**	400	**12061**	M/50

T-15

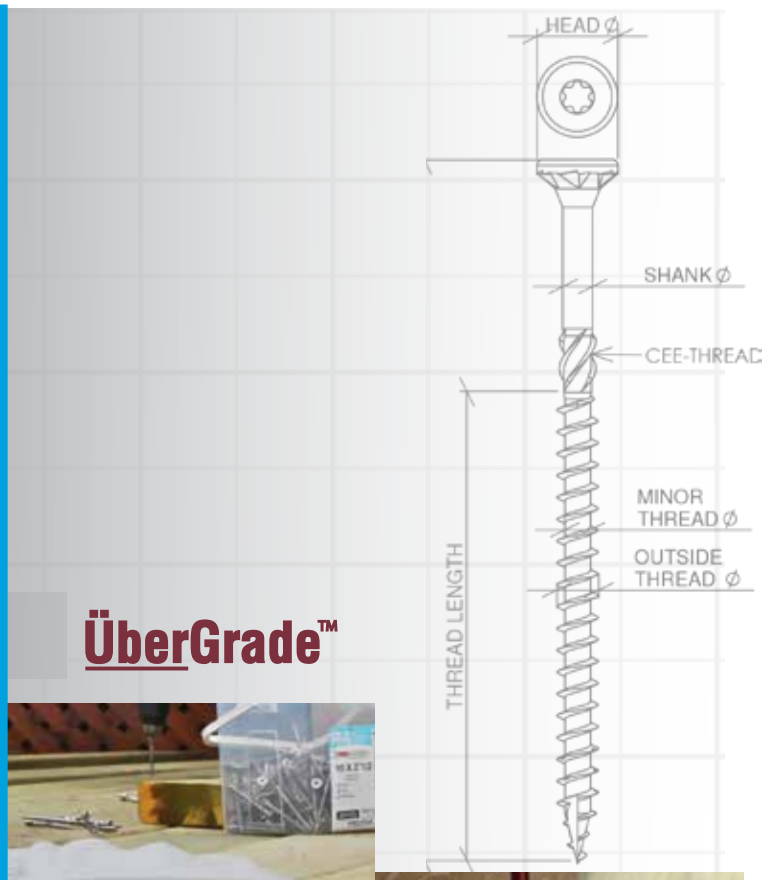
Ideal for Cabinets... and so much more. Also excellent for a variety of interior or exterior jobs.

Some sizes available in ***PHE*INOX™** hardened Stainless Steel; refer to Section 7
NOTE: Pro-Paks need to be ordered in multiples of two. 2” bit included in Pro-Paks.

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 *PHE*INOX™ 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™

*PHE*INOX™ 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 in coastal areas and below ground applications and use including pools, docks and boardwalks.

ACQ

AC257 Treated Lumber Approved

ICC ES

	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							
 T-15	#8 x 1-1/4"	4.0 x 30					**27069**	S/100
	#8 x 1-1/2"	4.0 x 40			**26073**	857	**27073**	S/100
	#8 x 1-3/4"	4.0 x 45					**27075**	S/100
 T-25	#9 x 1-1/2"	4.5 x 40	**25095**	5,000				
	#9 x 2"	4.5 x 50	**25099**	4,000	**26099**	609	**27099**	M/100
 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	**25135**	2,000	**26135**	350	**27135**	M/100
	#10 x 3-1/8"	5.0 x 80	**25137**	1,500	**26137**	305	**27137**	M/100
	#10 x 4"	5.0 x100	**25141**	1,000	**26141**	247		
	RSS™ SCREWS							
 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							
 T-10	#8 x 2"	4.0 x 50			**36077**	600	**37077**	S/100
	#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	**37083**	M/100
 T-15	#9 x 2-1/2"	4.5 x 63	**35101**	2,900	**36101**	365	**37101**	M/100
	#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	**36628**	540	**37628**	S/100
	#8 x 2-1/2"	4.0 x 63			**36630**	500	**37630**	S/100
	FIN / TRIM™ SCREWS							
 T-10	#8 x 1-1/2"	4.0 x 40	**35724**	6,500	**36724**	800	**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 2-3/4"	4.0 x 70					**37732**	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	**35756**	1,900	**36756**	275		
	CABINET™ SCREWS							
 T-15	#8 x 1-1/4"	4.0 x 30	**30069**	4,000	**31069**	600	**32069**	S/100

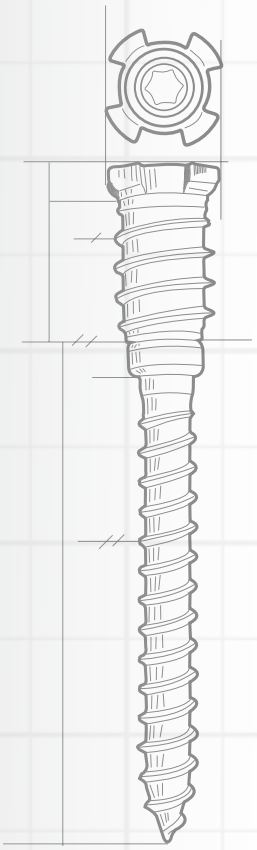
2" bit included in Pro-Paks. 1" bit with Handy-Paks.

GRK's adjustable Top Star(TM) 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.

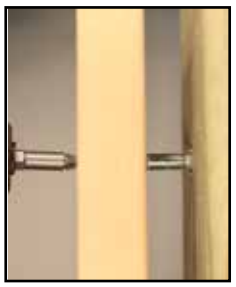
U.S. (Std.)Size (Dia.x Length)	Metric Size (Dia.x Length)	Bulk Part No.	*Bulk* Box Qty.	Blister-Pak Part No.	*Blister-Pak* Qty/per pack
3/8" x 2-1/2"	6.0 x 63	**20157**	100		
3/8" x 3-1/8"	6.0 x 80	**20161**	100		
CROWN / BIT					
Includes: (1) Crown / Bit with each				**86465**	1

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.

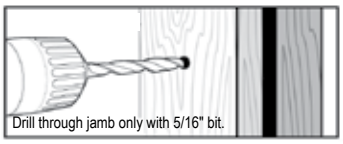
The Threaded Sleeve moves independently from the Top Star™ unless locked by the Crown. When locked, the Top Star™ gets driven into the material. Unlocked, the installed Top Star™ is ready for levelling.

The Complete Top Star™ System Includes:

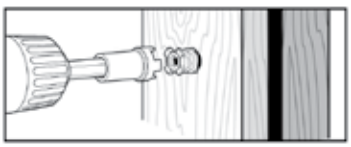
BIT **CROWN** **THREADED SLEEVE**



1

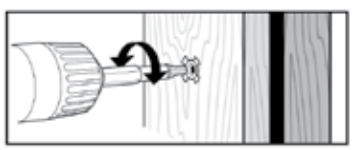


2



3

4

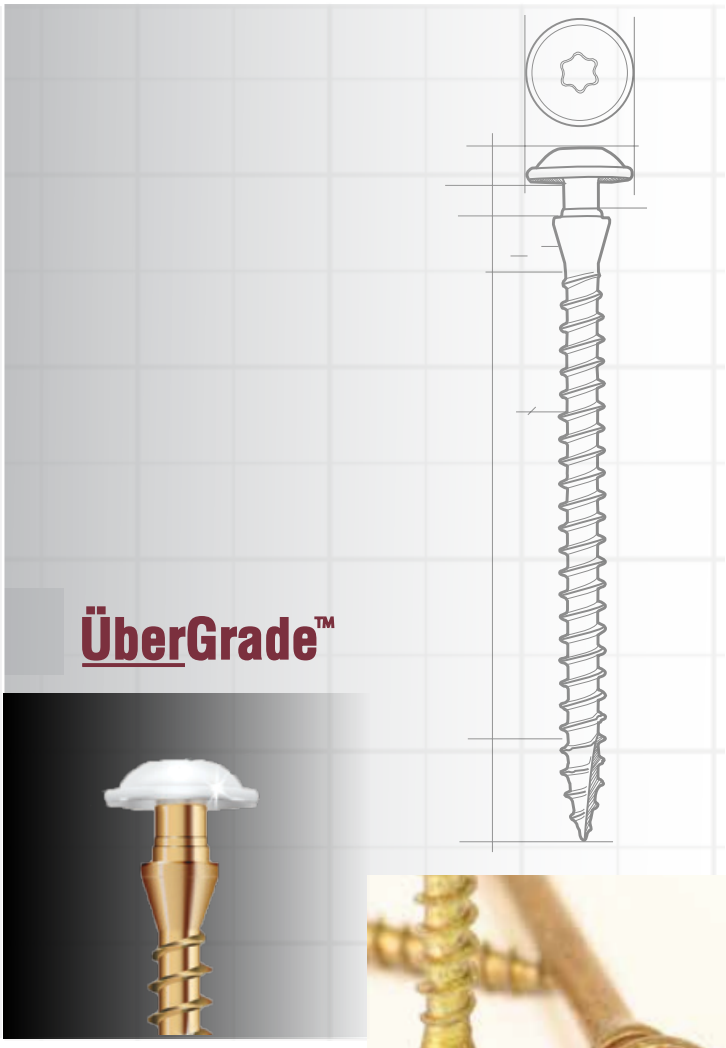


NOTE: Crown and Star bit system included in each bulk box. 5/16" drill bit not included.

GRK's VWS™ Vinyl Window Screws are designed to quickly adjust windows to plumb alignments without tedious measuring. The patented Vinyl Window Screw makes setting vinyl windows a breeze.

By catching the window frame between the screw head and the screw's secondary shoulder, the window position can be quickly and easily adjusted.

Our product is perfectly suited to meet the needs of both the professional and do-it-yourself installers. Simply pre-drill the first layer, insert screw, lock collar and adjust... it's just that easy.



VWS™ VINYL WINDOW SCREWS

Install Replacement Windows without the use of Shims

- **Tek Point Drill Tip** with white head for metal studs.
- **Patented Washer Head** creates a tight draw.
- **Climatek™ Coating is AC257** code approved for use in treated lumber.
- **Innovative Edge Design** under the head to capture the vinyl strap at penetration time.
- **W-Cut™ Thread Design** tiny saw blades reduce torque by cutting through the material.
- **ZIP-TIP™** for easy starts and no pre-drilling.

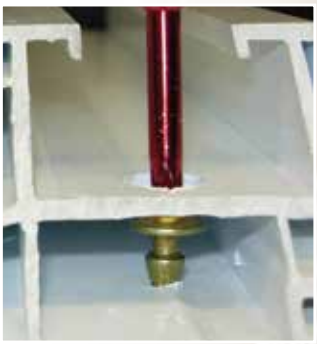
ICC ES

ACQ

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-15	#8 x 2-1/2"	4.0 x 63	**50079**	800	**51137**	225	**52137**	M/50
T-25	#10 x 3-1/8" (with Drill Tip)	5.0 x 80	**50137**					

1.



2.

3.

1. **Pre-drill window frame.**

2. **Install screw.**

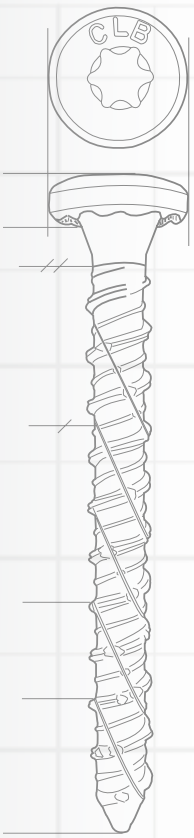
3. **Lock collar & adjust.**

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

Cailburn™ 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

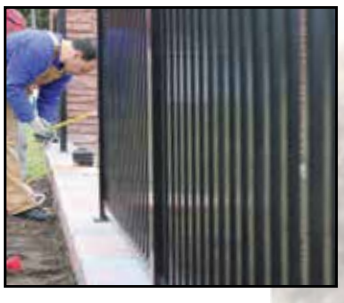
ICC ES

ACQ

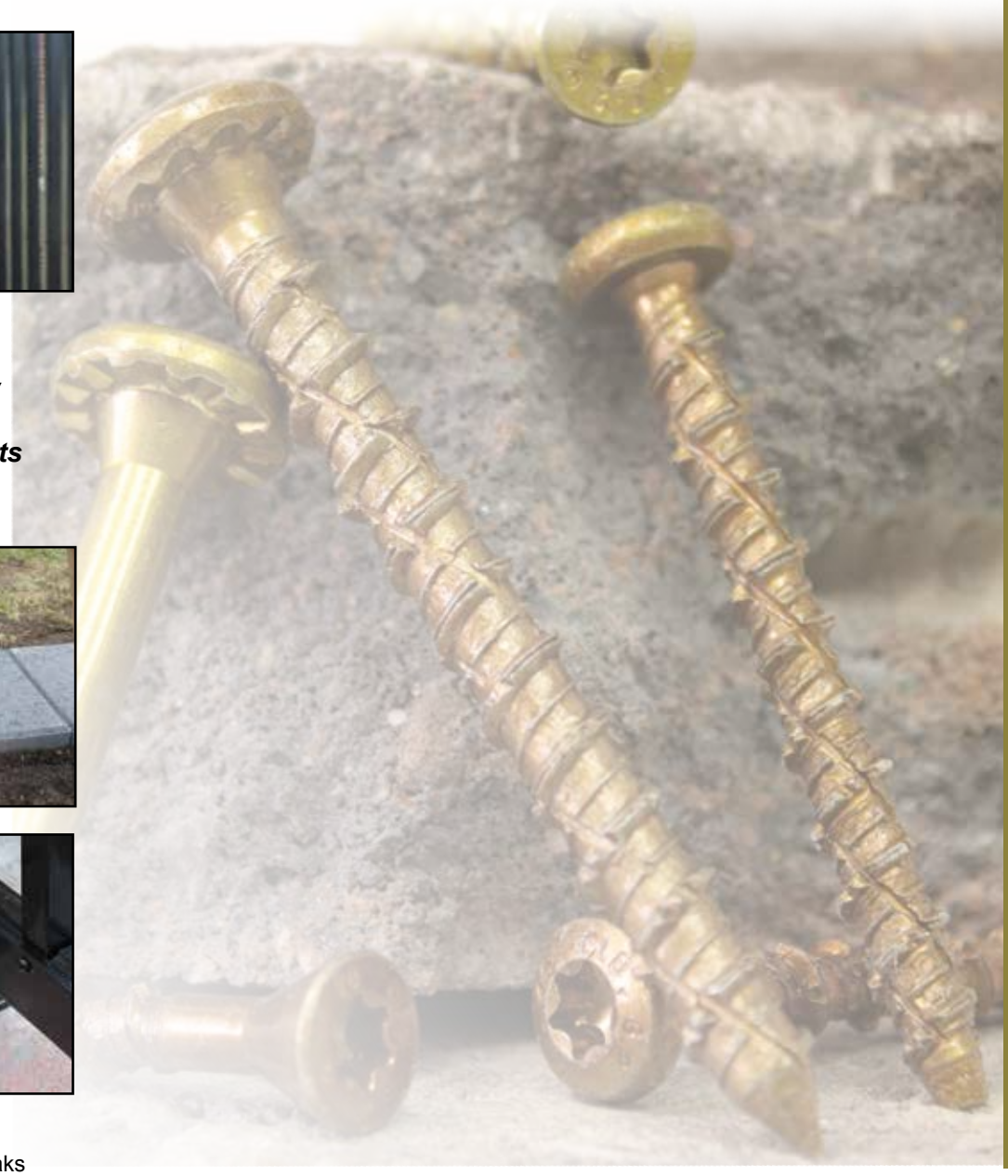
AC257 Treated Lumber Approved

- **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			**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	**55163**	800			**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					**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					**57774**	M/25
	19/64" x 3-1/2"	7.5 x 90	**55778**	400			**57778**	M/25
	19/64" x 5"	7.5 x 125	**55785**	300			**57785**	M/25



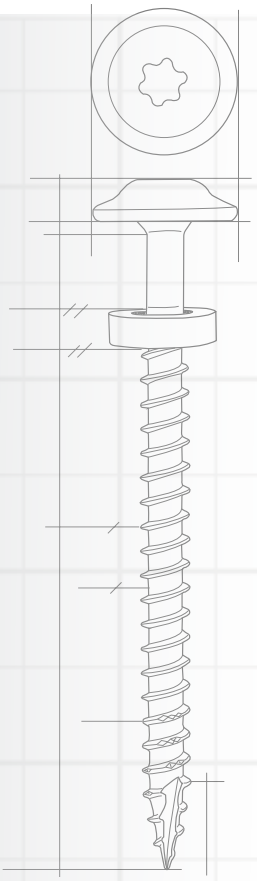
Great for a wide variety of indoor / outdoor home renovation projects



1" bit included in Handy-Paks

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.

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"	4.5 x 25	**40060**	3,000			**44060**	M/100
#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			**44120**	M/100

T-25

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

1" bit included in Handy-Paks

Star Drive Bits, Crown / Bit and Magnetic Bit Holder

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		**186419**	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	**186427**	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			**87433**	2
T-20 2"	purple		**186435**	25	**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"	**186443**	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",	**186451**	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"	**186459**	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.

Universal Display:

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

Rolling Rack:

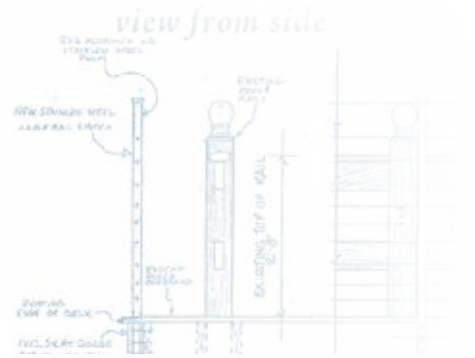
Ideal for secondary placement. Can be moved around retail space. Holds Pro-Paks, Handy-Paks, Blister-Paks and/or open stock in bins.

Cardboard Display:

Ideal for secondary placement in aisle or by checkouts. Free-Standing unit holds Handy-Paks or open stock in bins.

Blue Bins:

Great for selling fasteners by the piece on GRK displays, gondolas, or by Contractor Desk.



TECHNICAL FASTENER DATA

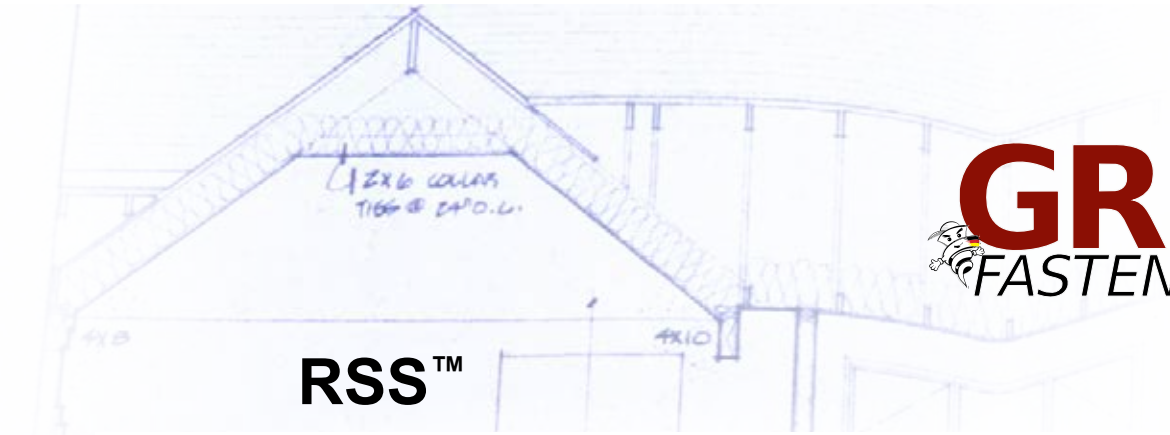
RSS™

TABLE 1—RSS™ FASTENER SPECIFICATIONS

FASTENER DESIGNATION		LENGTH[1] (inches)	THREAD LENGTH[2] (inches)	MINOR THREAD DIAMETER (inch)	SHANK DIAMETER (inch)	OUTSIDE THREAD DIAMETER (inch)	NOMINAL BENDING YIELD STRENGTH[3] F_{yb} (psi)	ALLOWABLE STEEL STRENGTH	
								TENSILE (lbf)	SHEAR (lbf)
RSS	1/4 x 2 1/2"	2 3/8	1 1/2	0.152	0.169	0.236	170,400	1112	754
	1/4 x 2 3/4"	2 3/4	1 3/4						
	1/4 x 3 1/8"	3 1/8	2						
	1/4 x 3 1/2"	3 1/2	2 3/8						
	5/16 x 2 1/2"	2 3/8	1 1/2	0.167	0.195	0.276	190,900	1415	982
	5/16 x 2 3/4"	2 3/4	1 3/4						
	5/16 x 3 1/8"	3 1/8	2 1/8						
	5/16 x 3 1/2"	3 1/2	2 1/2						
	5/16 x 4"	3 7/8	2 3/4						
	5/16 x 5 1/8"	5	3 1/2						
	5/16 x 6"	5 7/8	3 7/8						
	3/8 x 3 1/8"	3 1/8	2 1/8	0.191	0.219	0.313	178,000	1941	1231
	3/8 x 4"	3 7/8	2 3/4						
	3/8 x 5 1/8"	5 1/8	3 1/2						
	3/8 x 6"	5 7/8	4						
	3/8 x 7 1/4"	7	4 1/2						
	3/8 x 8"	7 7/8	4 3/8						
	3/8 x 10"	9 3/4	5						
	3/8 x 12"	11 7/8	5 7/8						
	3/8 x 14 1/8"	14 1/8	5 7/8						
	3/8 x 16"	15 5/8	5 3/4						
LPS	1/4 x 8"	7 7/8	2 7/8	0.152	0.171	0.240	172,600	1051	666
LTF	3/8 x 8"	7 7/8	3 7/8	0.191	0.219	0.311	167,600	1714	1094
	3/8 x 10"	9 7/8	3 7/8						
	3/8 x 12"	11 3/4	3 7/8						
RSS PHEinox	1/4 x 2 1/2"	2 3/8	1 1/2	0.152	0.169	0.236	111,400	628	546
	1/4 x 3 1/8"	3 1/8	2						
	5/16 x 2 1/2"	2 3/8	1 5/8	.167	0.195	0.276	118,300	806	668
	5/16 x 3 1/8"	3 1/8	2 1/8						
	5/16 x 4"	3 7/8	2 1/2						
	5/16 x 5 1/8"	5 1/8	3 3/8						
	5/16 x 6"	5 7/8	3 7/8						
JTS	1/4 x 3 3/8"	3 3/8	1 3/8	0.152	0.171	0.240	226,300	1104	769
	1/4 x 5"	5	1 5/8						
	1/4 x 6 3/4"	6 3/4	1 1/2						

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

[1]The length of fasteners is measured from the underside of the head to bottom of the tip. See Figure 1.
[2]Length of thread includes tip. See Figure 1.
[3]Bending yield strength determined in accordance with ASTM F1575 using the minor thread diameter.
[4]See Figure 1 for additional dimensional information.



GRK FASTENERS™ ÜberGrade

RSS™

TABLE 2—RSS™ REFERENCE WITHDRAWAL (*W*) AND PULL-THROUGH (*P*) DESIGN VALUES[1]

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

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

[1]Values 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.
[2]Tabulated 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.
[3]Tabulated pull-through design values are based on a minimum side member thickness of 3/4 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.

TABLE 3—RSS™ REFERENCE LATERAL DESIGN VALUES (Z) FOR SINGLE SHEAR (TWO-MEMBER) CONNECTIONS[1]
[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_M
				0.42 ≤ G < 0.55		0.55 ≤ G < 0.67		
				Parallel to Grain, $Z_\parallel$	Perpendicular to Grain, $Z_\perp$	Parallel to Grain, $Z_\parallel$	Perpendicular to Grain, $Z_\perp$	
RSS	1/4 x 2 1/2"	3/4	1 5/8	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	1 5/8	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	2 3/8	239	236	333	257	
	5/16 x 5 1/8"	1 1/2	3 1/2					
	5/16 x 6"	2	3 7/8	265	299	472	289	
	3/8 x 3 1/8"	3/4	2 3/8	188	156	251	220	
	3/8 x 4"	1 1/2	2 3/8	224	205	274	264	
	3/8 x 5 1/8"	1 1/2	3 5/8					
	3/8 x 6"	2	3 7/8	270	296	325	288	
	3/8 x 7 1/4"	2 3/4	4 1/4	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	2 7/8	249	257	358	219	0.62
LTF	3/8 x 8"	4	3 7/8	433	315	556	402	0.70
	3/8 x 10"	6	3 7/8					
	3/8 x 12"	8	3 3/4					
PHEinox	1/4 x 2 1/2"	3/4	1 5/8	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	1 5/8	151	149	181	175	
	5/16 x 3 1/8"	3/4	2 3/8					
	5/16 x 4"	1 1/2	2 3/8	249	229	337	272	
	5/16 x 5 1/8"	1 1/2	3 5/8					
	5/16 x 6"	2	3 7/8	302	340	449	358	
JTS	1/4 x 3 3/8"	1 3/4	1 5/8	157	168	217	217	0.70
	1/4 x 5"	1 3/4	3 1/4	168	221	241	237	
	1/4 x 6 3/4"	1 3/4	5					

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

[1]Values 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.

TECHNICAL FASTENER DATA

RSS™

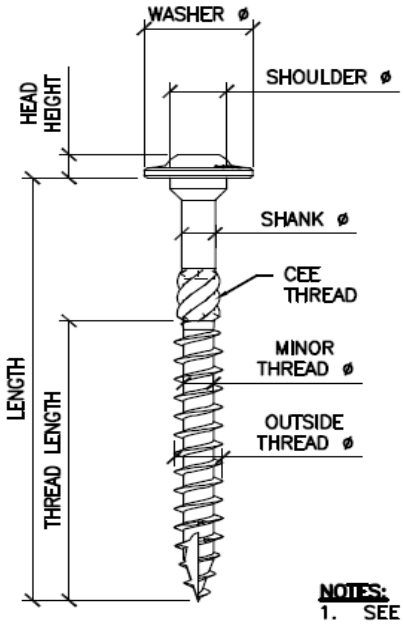
TABLE 5 - CONNECTION GEOMETRY

CONNECTION GEOMETRY / CRITERIA	DIAMETERS[1]	RSS, LPS, JTS & *PHE* INOX 1/4" NOMINAL DIAMETER (inches)	RSS & *PHE* INOX 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[2]	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.

[2] Reduce lateral load values provided in Table 4 when penetration is less than 10D.



SCREW TYPE	HEAD STAMP	WASHER ø ± 0.020	HEAD HEIGHT ± 0.010	SHOULDER ø ± 0.010	CEE THREAD [2]
RSS ¼ (6.0mm)		0.533	0.110	0.244	LENGTH ≥ 3⅛"
RSS 5⁄16 (7.0mm)		0.620	0.157	0.301	LENGTH ≥ 3⅛"
RSS ⅜ (8.0mm)		0.689	0.181	0.364	LENGTH ≥ 3⅛"
LTF ⅜ (8.0mm)		0.688	0.181	0.364	LENGTH ≥ 3⅛"
LPS ¼ (6.0mm)		0.535	0.090	0.244	NO
JTS ¼ (6.3mm)		0.534	0.090	0.244	LENGTH ≥ 5"

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

FIGURE 1 – FASTENER DIMENSIONS

TECHNICAL FASTENER DATA

R4™, Trim™, Kameleon™

TABLE 1– FASTENER SPECIFICATIONS

FASTENER DESIGNATION		OVERALL LENGTH[1] (inches)	LENGTH OF THREAD[2] (inches)	MINOR THREAD DIAMETER[3] (inches)	SHANK DIAMETER[3] (inches)	OUTSIDE THREAD DIAMETER[3] (inches)	ALLOWABLE STEEL STRENGTH		
							Bending Yield Strength[4] F_{yb} (psi)	Tensile (psi) [pounds]	Shear (psi) [pounds]
R4	9x2"	2	1 1/4	0.117	0.130	0.174	167160	61760 [627]	39660 [428]
	9x2 1/2"	2 3/8	1 5/8						
	9x2 3/4"	2 3/4	1 7/8						
	9x3 1/8"	3 1/8	2 1/8						
	10x2 1/2"	2 3/8	1 5/8	0.128	0.142	0.194	151150	62640 [846]	44520 [542]
	10x2 3/4"	2 3/4	1 7/8						
	10x3 1/8"	3 1/8	2 1/8						
	10x3 1/2"	3 1/2	2 3/8						
	10x4"	3 7/8	2 5/8						
	10x4 3/4"	4 5/8	3						
	12x2 1/2"	2 3/8	1 1/2	0.153	0.172	0.238	141350	60580 [1134]	38610 [655]
	12x2 3/4"	2 3/4	1 3/4						
	12x3 1/8"	3 1/8	2 1/8						
	12x3 1/2"	3 1/2	2 3/8						
	12x4"	3 7/8	2 5/8						
	12x4 3/4"	4 5/8	3						
	12x5 5/8"	5 1/2	3						
	12x6 3/8"	6 1/4	3						
	12x7 1/4"	7	3						
	12x8"	7 7/8	2 5/8						
	12x10"	9 3/4	2 3/4						
	12x12"	11 3/4	2 3/4						
TRIM	8x2 1/2"	2 3/8	1 1/2	0.106	0.116	0.160	156220	56580 [499]	40000 [360]
	8x2 3/4"	2 3/4	1 7/8						
	8x3 1/8"	3 1/8	2 1/8						
	9x2 1/2"	2 3/8	1 5/8	0.114	0.128	0.176	155030	57000 [576]	42160 [425]
	9x2 3/4"	2 3/4	1 3/4						
	9x3 1/8"	3 1/8	2 1/8						
KAMELEON	9x2 1/2"	2 1/2	1 5/8	0.119	0.134	0.177	168640	57490 [634]	37870 [437]
	9x2 3/4"	2 3/4	1 3/4						
	9x3 1/8"	3 1/8	2 1/8						

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

ULTIMATE LOAD VALUES TENSILE AND SHEAR

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

[2]Length of thread includes tip. See detailed illustration, Figure 1.

[3]Minor thread, shank and outside thread diameters are shown in table without manufacturing tolerances.

[4]Bending yield strength determined in accordance with ASTM F 1575 using the minor thread diameter.

TECHNICAL FASTENER 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.

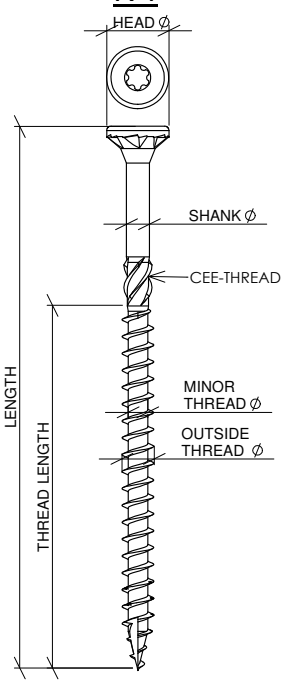
[3] Loading perpendicular to grain is outside the scope of this evaluation report.

[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.

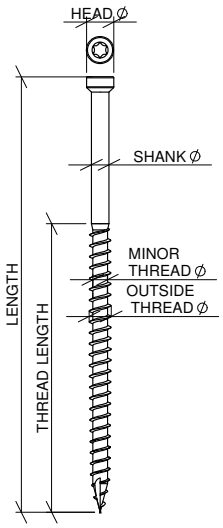
TABLE 6—EXPOSURE CONDITIONS FOR FASTENERS WITH INTENDED USE AND LIMITATIONS OF RECOGNITION

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.

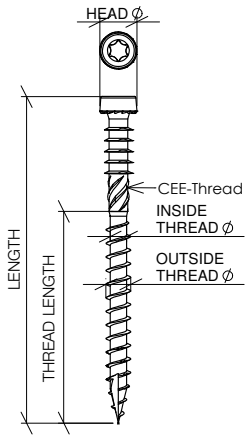
R4

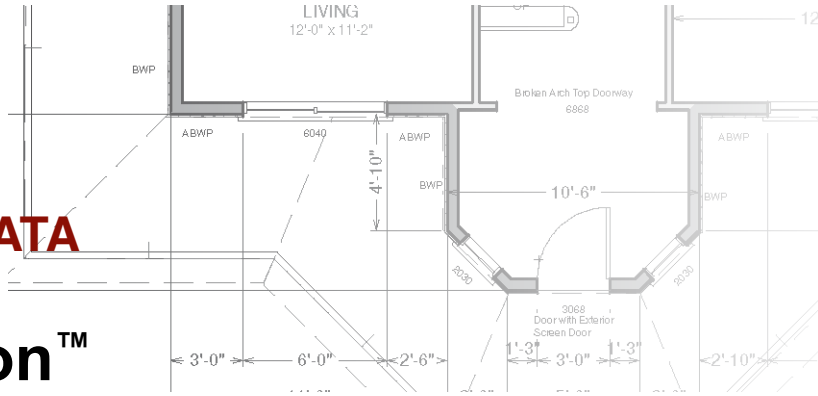


TRIM



KAMELEON





TECHNICAL FASTENER 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[3], (inches)	WITHDRAWAL, W (lbs./in.)[3] FOR SPECIFIC GRAVITY =0.67
R4	9x2"	1 1/4	179
	9x2 1/2"	1 5/8	
	9x2 3/4"	1 7/8	
	9x3 1/8"	2 1/8	
	10x2 1/2"	1 5/8	249
	10x2 3/4"	1 7/8	
	10x3 1/8"	2 1/8	
	10x3 1/2"	2 3/8	
	10x4"	2 5/8	
	10x4 3/4"	3	
	12x2 1/2"	1 5/8	255
	12x2 3/4"	1 7/8	
	12x3 1/8"	2 1/8	
	12x3 1/2"	2 3/8	
	12x4"	2 5/8	
	12x4 3/4"	3	
	12x5 3/8"	3	
	12x6 3/8"	3	
	12x7 1/4"	3	
	12x8"	3	
	12x10"	3	
	12x12"	3	
TRIM	8x2 1/2"	1 5/8	175
	8x2 3/4"	1 7/8	
	8x3 1/8"	2 1/8	
	9x2 1/2"	1 5/8	221
	9x2 3/4"	1 7/8	
	9x3 1/8"	2 1/8	
KAMELEON	9x2 1/2"	1 5/8	186
	9x2 3/4"	1 3/4	
	9x3"	1 3/4	

Pilot hole requirements:
70% of the root diameter of the screw

For **SI:** 1 inch = 25.4 mm; 1 lbf/in = 175 N/m.

[1]Values must not be multiplied by any adjustment factors.

[2]Fastener withdrawal was tested in accordance with ASTM D1761.

[3]Reference 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[3], (inches)	WITHDRAWAL, W (lbs./in.)[3] FOR SPECIFIC GRAVITY =0.67
R4	9x2"	1 1/4	213
	10x2 1/2"	1 5/8	123
	10x2 3/4"	1 7/8	
	10x3 1/8"	2 1/8	
	10x4"	2 5/8	
	12x2 1/2"	1 5/8	146
	12x3 1/8"	2 1/8	
	12x4"	2 5/8	
	12x4 3/4"	3	
TRIM	8x2 1/2"	1 5/8	106
	8x2 3/4"	1 7/8	
	8x3 1/8"	2 1/8	
	9x2 1/2"	1 5/8	115
	9x2 3/4"	1 7/8	
	9x3 1/8"	2 1/8	

Pilot hole requirements:
80% of the root diameter of the screw

For **SI:** 1 inch = 25.4 mm; 1 lbf/in = 175 N/m.

[1]Values must not be multiplied by any adjustment factors.

[2]Fastener withdrawal was tested in accordance with ASTM D1761.

[3]Reference 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)[1]

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

	FASTENER DESIGNATION	MINIMUM SIDE MEMBER THICKNESS (inch)	PULL-THROUGH, P (lbf) FOR SPECIFIC GRAVITY = 0.67
R4	9x2"	3/4	184
	10x2 1/2"	3/4	220
	10x2 3/4"		
	10x3 1/8"		
	10x4"		
	12x2 1/2"	3/4	336
	12x3 1/8"		
	12x4"		
	12x4 3/4"		
TRIM	8x2 1/2"	3/4	70
	8x2 3/4"		
	8x3 1/8"		
	9x2 1/2"	3/4	124
	9x2 3/4"		
	9x3 1/8"		

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

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

[1]Values 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 (lbf) FOR SPECIFIC GRAVITY = 0.67
R4	9x2"	3/4	162
	9x2 1/2"		
	9x2 3/4"		
	9x3 1/8"		
	10x2 1/2"	3/4	275
	10x2 3/4"		
	10x3 1/8"		
	10x3 1/2"		
	10x4"		
	10x4 3/4"		
	12x2 1/2"	3/4	407
	12x2 3/4"		
	12x3 1/8"		
	12x3 1/2"		
	12x4"		
	12x4 3/4"		
	12x5 3/8"		
	12x6 3/8"		
	12x7 1/4"		
	12x8"		
	12x10"		
	12x12"		
TRIM	8X2½"	3/4	61
	8x2¾"		
	8x3 1/8"		
	9x2 1/2"	3/4	94
	9x2 3/4"		
	9x3 1/8"		
KAMELEON	9x2 1/2"	3/4	143
	9x2 3/4"		
	9x3"		

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

For **SI:** 1 inch = 25.4 mm; 1 lbf = 4.4N

[1]Values shall be multiplied by all applicable adjustment factors (see NDS Table 10.3.1) as applicable to withdrawal.

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, $Z_{\|}$
R4	9x2"	3/4	1 1/8	175
	9x2 1/2"	3/4	1 1/2	
	9x2 3/4"	3/4	2	
	9x3 1/8"	3/4	2 3/8	
	10x2 1/2"	3/4	1 1/2	203
	10x2 3/4"	3/4	2	
	10x3 1/8"	3/4	2 3/8	
	10x3 1/2"	3/4	2 3/4	
	10x4"	3/4	3 1/8	
	10x4 3/4"	3/4	3 7/8	
	12x2 1/2"	3/4	1 1/2	242
	12x2 3/4"	3/4	2	
	12x3 1/8"	3/4	2 3/8	
	12x3 1/2"	3/4	2 3/4	
	12x4"	3/4	3 1/8	
	12x4 3/4"	3/4	3 7/8	
	12x5 1/8"	3/4	4 3/4	
	12x6 3/8"	3/4	5 1/2	
	12x7 1/4"	3/4	6 1/4	
	12x8"	3/4	7	
	12x10"	3/4	9	
	12x12"	3/4	11	
TRIM	8x2 1/2"	3/4	1 1/2	84
	8x2 3/4"	3/4	2	
	8x3 1/8"	3/4	2 1/2	
	9x2 1/2"	3/4	1 1/2	104
	9x2 3/4"	3/4	2	
	9x3 1/8"	3/4	2 3/8	
KAMELEON	9x2 1/2"	3/4	1 5/8	159
	9x2 3/4"	3/4	1 7/8	
	9x3"	3/4	1 7/8	

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

For **SI:** 1 inch = 25.4 mm.

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

[2]Lateral 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]

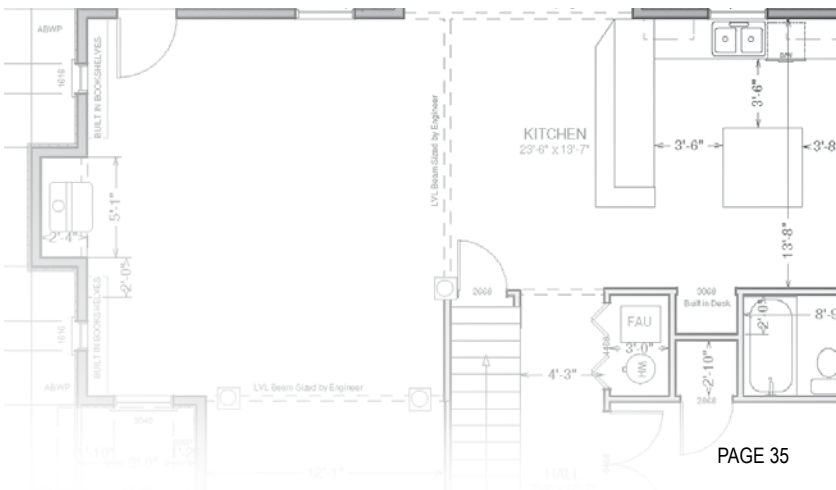
FASTENER DESIGNATION		SIDE MEMBER THICKNESS, t_s (inch)	FASTENER PENETRATION, *P* (inches)	REFERENCE LATERAL DESIGN VALUE, *Z* (pounds) FOR SPECIFIC GRAVITY OF: 0.67 Parallel to Grain, $Z_{\|}$
R4	9x2"	3/4	1 1/8	212
	10x2 1/2"	3/4	1 1/2	235
	10x2 3/4"	3/4	2	
	10x3 1/8"	3/4	2 3/8	
	10x4"	3/4	3 1/8	
	12x2 1/2"	3/4	1 5/8	328
	12x3 1/8"	3/4	2 3/8	
	12x4"	3/4	3 1/8	
	12x4 3/4"	3/4	3 7/8	
TRIM	8x2 1/2"	3/4	1 5/8	78
	8x2 3/4"	3/4	2	
	8x3 1/8"	3/4	2 3/8	
	9x2 1/2"	3/4	1 5/8	108
	9x2 3/4"	3/4	2	
	9x3 1/8"	3/4	2 3/8	
RT COMPOSITE	8x2 1/2"	3/4	1 1/2	107
	8x2 3/4"	3/4	2	
	8x3 1/8"	3/4	2 3/8	
	9x2 1/2"	3/4	1 1/2	151
	9x2 3/4"	3/4	2	
	9x3 1/8"	3/4	2 3/8	

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

For **SI:** 1 inch = 25.4 mm.

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

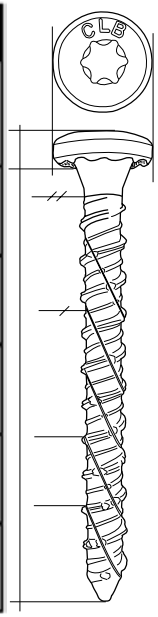
[2]Lateral load testing was performed in accordance with ASTM D1761.



TECHNICAL FASTENER DATA

Caliburn™, Caliburn™ PH, Caliburn™ XL

TECHNICAL DATA					
SCREW SIZE	EMBED. DEPTH (in.)	2000 psi CONCRETE Tension/Pullout lbs	2000 psi CONCRETE Shear lbs	BIT SIZE	DRILL SIZE
1/4 x 1 3/4	1 1/2	1655	1505	T30	3/16
1/4 x 2 1/4	2	2120	2055	T30	3/16
19/64 x 2 3/4	2 1/2	2209	3135	T40	1/4
19/64 x 3 1/2	3 1/4	2523	3200	T40	1/4
19/64 x 5	4 3/4	5724	3300	T40	1/4



Note:
All values are based on close tolerance holes drilled a minimum of 1/4” deeper than embedment depth.

All listed values shown are average pull out and shear values for GRK's CALIBURN™, Caliburn™ PH and CALIBURN™ XL screws. Values will vary depending on a number of factors, including the quality of the concrete and size of the drill hole.

These figures are only offered as a guide. They are not guaranteed by GRK and not reduced by any safety factor.

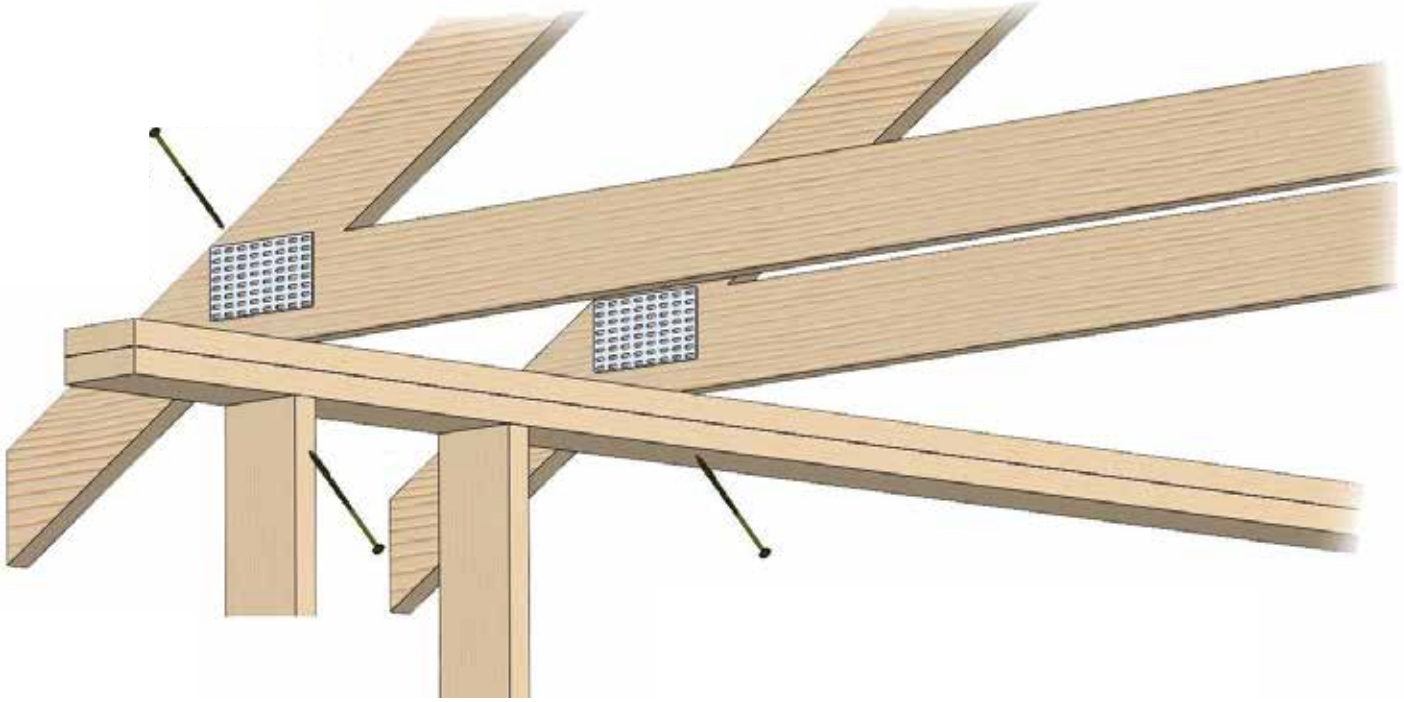
For safety factor requirements in your area, contact your local building official, architect or engineer. Testing was performed according to ASTM standard E-488-96. **The Caliburn™ XL has also an ICC Report ESR-3251.** For most current information and technical specifications (shear & tension) visit 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)	**HF** (Hem Fir)	**SPF** (Spruce Pine Fir)
Allowable Uplift in lbs	Ø3/8 RSS	1230	1017	752	717
Allowable Shear / Lateral in lbs		528	480	409	393
Allowable Uplift in lbs	# 12 R4	873	722	534	509
Allowable Shear / Lateral in lbs		352	322	280	273
Allowable Uplift in lbs	Ø1/4 LPS/RSS	562	465	344	328
Allowable Shear / Lateral in lbs		242	221	192	188

FIGURE 1 Typical Connection Details



Multiple Sawn Lumber & Engineered Wood Beams

Table1 **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					
	2	16	318					
	2	12	424					
	3	24	318					
	3	16	477					
	3	12	636					
¼ x 5"	2	24		212		238		
	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			212		255	238
	2	16			318		383	357
	2	12			424		510	476
	3	24			318		383	357
	3	16			477		575	536
	3	12			636		766	714

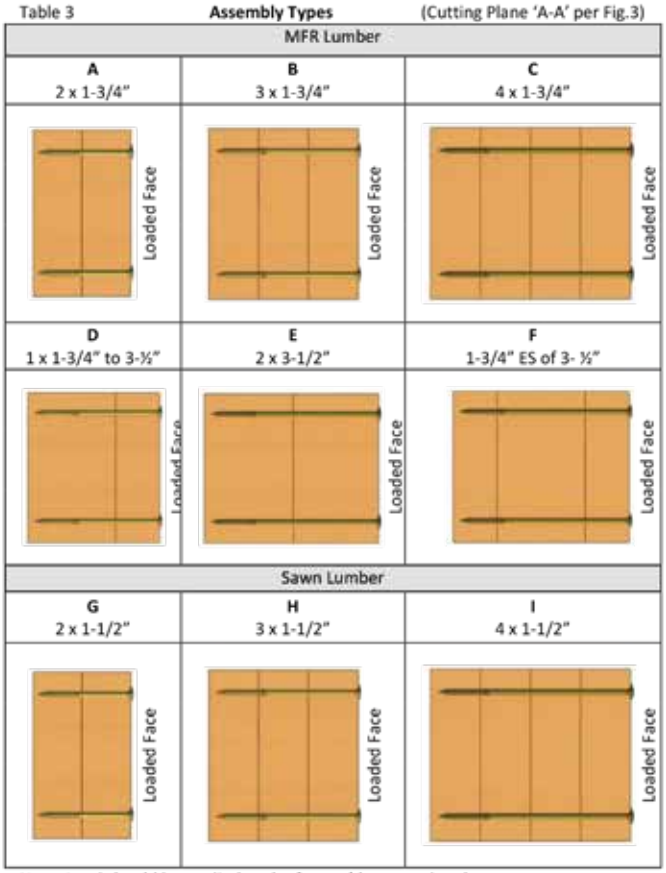
Note: 1. Applied load from joist are assumed to be uniform
2. Fastener capacity is based on fastener spacing , not joist spacing

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)



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

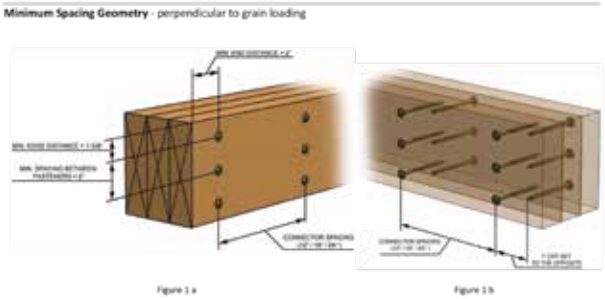


Figure 1 a Figure 1 b

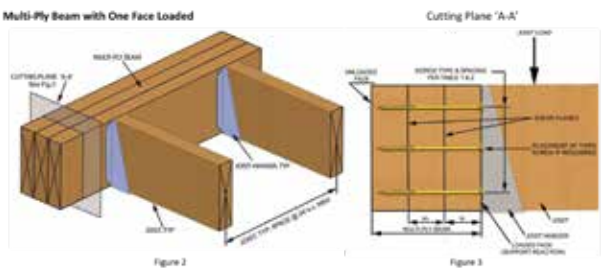
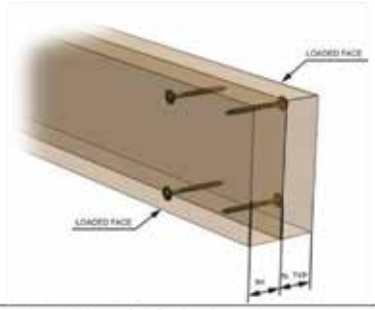
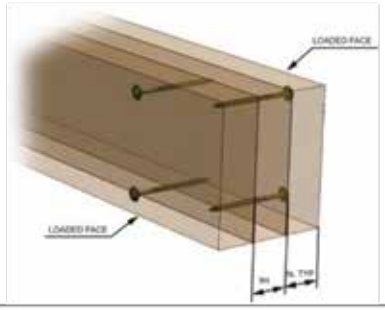
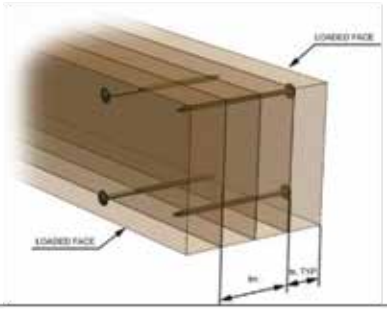


Figure 2 Figure 3

Multiple Sawn Lumber & Engineered Wood Beams

Multi-Ply Beams w/loads on Both Faces

Table 4

2- PLY (Assembly Types A,E,G)	3 - PLY (Assembly Types B,F,H)	4 - PLY (Assembly Types C,I)
		

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 **			
		S.Pine G=0.55	D.Fir G=0.50	SPF G=0.42	Assembly
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	

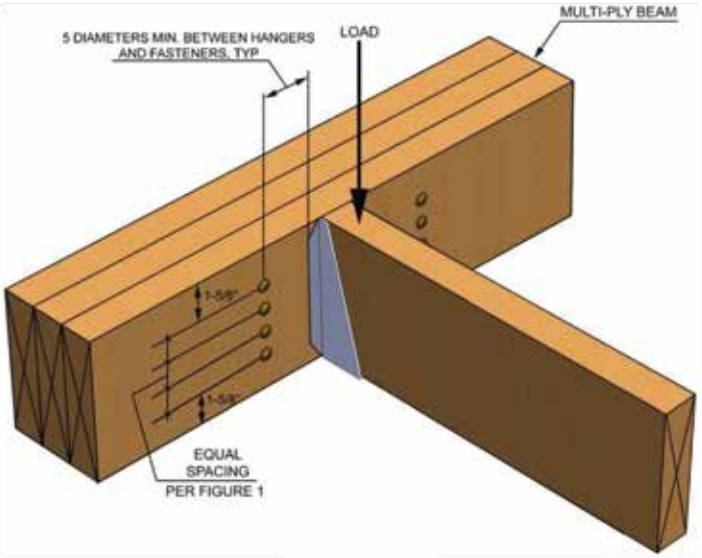


Figure 5

** 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

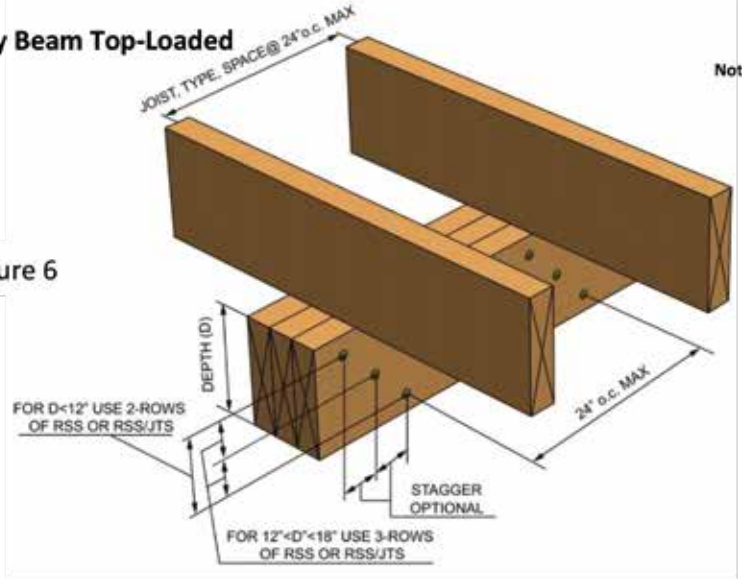


Figure 6

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.

Scan code for the ICC Report ESR-2442

Ledger Board: Structural Screw

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	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 3 (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	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 4

***PHE*INOX** 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	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

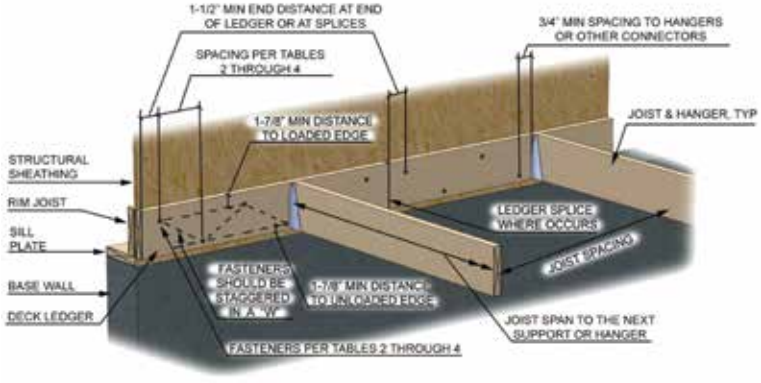
Table 5 (wet-use in- service)

***PHE*INOX** 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	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

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



LIABILITY AND WARRANTIES

GRK Fasteners™ is a distributor of commercial grade fasteners. Conformance to “IFI” specifications is formally requested from our suppliers. The parts that we supply are quality inspected by independent labs.

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.

Hydrogen Embrittlement: We require our platers and suppliers of plated fasteners to bake case hardened parts to “IFI” specifications. However, this process does not guarantee that hydrogen embrittlement will not still be present after baking or that it will not occur at a later date while in service. Specialized testing or a substitute part may be required, depending on the application.

Liability: Claims against GRK Fasteners™ shall be limited to a refund or credit for the price billed or paid for faulty or incorrect merchandise. Seller shall not be responsible for buyer's manufacturing costs, labor, alternate purchases, extra freight, replating, plating, lost profit, good will, recall costs, or other incidental or consequential damages.

Warranties: GRK Fasteners™ (“GRK”) warrants to the first retail purchaser that its Climatek™ coated and *PHE*INOX™ stainless steel screws will not rust under normal environmental conditions when used in accordance with the recommendations listed in GRK's Screw Selection Guide for the life of the project. This warranty is not transferable.

Refunds: In order to receive a refund, the customer must return to us at least 50 of the defective screws (including screw heads) for verification.

THERE ARE NO UNDERSTANDINGS, AGREEMENTS, REPRESENTATIONS OR ADDITIONAL WARRANTIES, EXPRESSED OR IMPLIED (INCLUDING ANY REGARDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE), NOT SPECIFIED HEREIN, RESPECTING ANY SALE OF PRODUCTS BY GRK FASTENERS™, (TO THE EXTENT PERMITTED BY LAW).

Drive with Speed, Quality and Confidence...

FASTER INSTALLATIONS: No pre-drilling and faster driving. Innovative, patented features like our Zip-Tip™ and W-Cut threads are specially designed to bite instantly and with less torque for effortless fastening. This allows for almost twice as many screws drive per battery life, especially with larger diameter screws. See for your self by visiting our web site for the RSS vs. Lag Screw challenge.

NO STRIPPING, NO SPLITTING, NO HEAD POPS: Quality products mean no wasted time on the job site. Labor savings turn into dollar savings, more so over the life of the project. Recessed star drive screws eliminate any stripping when used with GRK bits. Our CEE thread prevents splitting of wood for a quality installed look. Case hardened steel screws will not break and heads won't pop during installation.

BUILDING CODE APPROVED: Confidence that our products will perform, even after the project is complete. All GRK screws have been evaluated for structural values in compliance with IBC/IRC specification. Our high tensile, torque and shear strength allow for immense drawing power out performing most other competitive fasteners. AC257 code approved for corrosion resistance in treated lumber, **Climatek**™ is the foremost name in corrosion protection and is exclusively available on GRK products. Originally designed for the Navy, GRK has adapted this coating for their fastener line-up and rigorously tests them to meet and exceed all standards. With a limited **Lifetime Warranty**, you can rest assured your installations will withstand the test of time.

Always build your project according to current ICC (International Code Council) specifications.

GRK Fasteners™ is a proud member of the North American Deck and Rail Association.

GRK Fasteners USA
ITW Renovations / Remodeling
955 National Pkwy, Suite 95500
Schaumburg, IL 60173

GRK Fasteners Canada
ITW Construction Products
120 Travail Road
Markham, ON L3S 3J1

WWW.GRKFASTENERS.COM

Part# 99915 03/16