

Construction Fastener Guide: Types and Uses

A Fastener for Every Use, and a Use for Every Fastener

“If you build it, he will come,” is a famous line from the 1989 movie *Field of Dreams*. Whether you are building your dream baseball field, or a towering high-rise complex, the integrity and longevity of your structure relies upon the quality of the resources you select. All construction needs solid and dependable materials; but equally important is the quality of construction fasteners used to hold your dream together.

Within every type of construction -- from small to large, industrial, commercial or residential -- you will need fasteners. The construction fastener you select will depend on the materials you are using and the function they must meet. For example, you will need a different type of construction fastener to connect steel rods vs. the type you will need to link two wooden beams.

The fasteners also need to meet all shear values and tensile strength requirements of your project, and all government quality standards. Other considerations when selecting construction fasteners include environmental and aesthetic requirements, budgetary constraints and application methods.

Basic Construction Fasteners

Nails and Screws: The most basic construction fasteners are nails and screws. Typically, these are purchased in bulk quantities appropriate to the project, or in collated form held together with wire, plastic or paper. Collated fasteners are designed for use in pneumatic nailers, and are configured either in strips or in coils and held together at a specified angle and spacing.

Job Packs:

Fasco America, the exclusive distributor for BECK Fastener Group[®] in North America, recently introduced its innovative Job Pack Nail Program. This system addresses the issue of flexibility in not needing a quantity of fasteners that exceeds the requirements of a particular project.

Job Packs offer an assortment high-quality of construction fasteners in 800 to 1,000 counts. Packaged individually, and in an assortment of lengths and finishes, are joist hanger nails, paper tape clipped head nails, plastic strip nails, wire coil nails and plastic sheet nails.

BECK Fastener Group[®] Job Pack coil nails are packaged four to a box; a quantity perfect for smaller construction jobs. These coil nails will fit most common pneumatic coil nailers. Most nailers have a specified capacity between 200 and 300 nails, and by utilizing the Job Pack Nail Program, contractors will find they have fewer partially used coils left over at the

end of a project. This program also makes it easier and more efficient to switch between construction fasteners of different sizes and/or finishes as needed within a project.

The Job Pack fasteners are manufactured with the identical high-quality materials and innovations that have been the standard of the BECK Fastener Group[®] for more than 100 years.

Specialty Fasteners

Hybrid Fasteners:

A performance-driven crossover construction fastener is available in the form of SCRAIL[®] fasteners, available from Fasco America. The Faster Fastener[®] is a hybrid between a screw and a nail; combining the advantages of both. These collated fasteners, when applied by a pneumatic nailer, are twice as fast as collated screws and eight times faster than bulk screws.

SCRAIL[®] fasteners combine the speed of nail application with the dramatically increased holding power of screws. These fasteners are manufactured for use in most common nailers and are available in a wide variety of finishes, sizes, drives, thread types and specialized collations.

SCRAIL[®] construction fasteners are designed for use in subflooring, wood or composite decking, formwork, fencing, crating, railings, outdoor furniture and a wide range of other construction projects. These fasteners can be easily adjusted or removed if necessarily, with minimal damage to the surface material.

Every construction project will require specific fasteners and the SCRAIL[®] family of fasteners offers something for every project need. All SCRAIL[®] fasteners are available in a variety of thread types and finishes.

Standard SCRAIL[®] fasteners are excellent for building crates or pallets and are perfect for use in manufactured housing, doors and windows. SCRAIL[®] fasteners also are an essential component in quality framing of all types. The strength of the framework within any building is vital to ensure long-term stability of the structure. It is essential that all screws are sufficiently sunk into joists or studs and there are no missing or improperly connected fasteners. When applied by a pneumatic nailer, collated construction fasteners can help create a sturdy and stable frame in less time. Using SCRAIL[®] nail screw hybrids in that nailer will provide even greater holding power.

Standard SCRAIL[®] fasteners are also an excellent choice when applying drywall. Wooden framing studs naturally swell and warp with changes in temperature and humidity. This movement can create significant problems by causing fasteners to loosen. The possibility of a fastener becoming loose, or falling out completely, can be eliminated by using pneumatically driven collated SCRAIL[®] construction fasteners.

BeckDeck[®] construction fasteners are double-threaded and an exceptional choice for decking, railing or fencing. These fasteners can dramatically reduce the time needed for completion without sacrificing quality. Additionally, these

fasteners dramatically reduce what is referred to as “mushrooming” or “volcanoeing” – an unwanted mound of material that appears around other fastener heads when driven by pneumatic nailer into composite material.

The InvisiDeck® Hidden SCRAIL® Fastener System allows the creation of flawlessly smooth deck surfaces combined with adjustability and strength. This hidden fastening system works with composite material, most exotic hardwoods, and with grooved or non-grooved applications. The InvisiDeck® system, using I-CLP CLIPS, reduces the time required for deck construction by three to five times over conventional construction methods. This system not only saves time and labor costs, it greatly improves the appearance, usability and value of the deck.

SubLoc® SCRAIL® fasteners, when used to apply sub-flooring or to build stairs, essentially eliminate squeaks and creaks. Current construction techniques involve building most stairs and steps using nails. The same is true with most subflooring. Both the flooring and the stairs would begin to creak or squeak after use. By using SubLoc® SCRAIL® collated nail screw fasteners, these unwelcome noises can be reduced significantly, if not eliminated, due to their special adhesive coating and the fact that they are easy to adjust. A SubLoc® SCRAIL® hybrid fastener will also provide a cleaner surface once wood filler has been applied.

Mini-SCRAIL® fasteners are perfectly sized for the manufacturing of fine furniture or millwork. It is important that screws be set deeply and firmly in anything built with the intention of supporting weight. By using Mini-SCRAIL® fasteners, you increase both load capacity and create sturdier furniture. These fasteners are also available with decorative heads styles that may be incorporated into your design.

SteelThread SCRAIL® is for light gauge steel construction. They are particularly unique since they minimize deflection when applied to the supported edge of the steel stud they also provide an optimal connection between gypsum or wood material and steel receiving member. Fastening drywall, wood, gypsum or deck boards to steel using conventional methods often damages the surface material. SteelThread SCRAIL® fasteners driven with a pneumatic nailer vastly reduce the possibility of such damage.

Heavy-Duty Fasteners:

Some projects will require superior holding power. With a big job, you need a strong partner.

Hi-Load SCRAIL® fasteners combine the extraordinary holding power of the hybrid SCRAIL® with automated commercial fastening systems. These heavy-duty fasteners are available in either wire or plastic sheet coils and designed to work with most common nailing heads.

Available in lengths from 1 5/8” to 3”, **Hi-Load SCRAIL®** fasteners feature electro-galvanized or FasCoat™ finishes. They are manufactured with star, philips, pozidrive, square or versadrive head types.

Staples, Brads, Pins and T-Nails

Master Distributor



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Within any construction project, there may be a need for additional types of fasteners. The BECK Fastener Group® offers high-quality staples, brads, pins and t-nails.

Standard Staples are available in fine, medium and heavy-duty varieties. **Specialty Staples** are designed for paper, textiles and fabrics. **Carton Closing Staples** come in either stick or roll configurations. **Hog Rings** either have a straight, round or curved crown.

Brads are available either straight or angled and come in a wide selection of sizes and lengths.

Additionally, **Pins** and **T-Nails** are offered in various sizes.

Head Types, Threads and Finishes

Every construction project will consist of a variety of tools and equipment. It is important to have a choice in the fasteners you select.

Head types available through SCRAIL® include square, philips, star and pozidrive. Also available is the versadrive that combines a #2 square and a #2 philips.

SCRAIL® fasteners feature fine and coarse threads, and the mushrooming-eliminating BeckDeck® double thread.

For use where corrosion resistance is an important factor, SCRAIL® offers its FasCoat™ finish, which tests show can withstand up to 2,000 hours and more of salt spray testing.

SCRAIL® fasteners are also available with electro-galvanized finish and can be matched to more than 2000 manufacturers' colors.

Your next construction project may be a state-of-the-art baseball stadium, or a simple deck on a mountain cabin. If you build it with quality fasteners, people will come to see, enjoy, and even rely upon your finished project for years to come.

SCRAIL® fasteners are distributed by [Fasco America, Inc.](#), the American distribution arm for BECK Group products. The focus of the BECK Fastener Group® is innovative thinking and consistent quality dedicated to satisfying each customer's unique needs.

To learn more about SCRAIL® and the other fasteners available through Fasco America, Inc. and the BECK Fastener Group®, [contact](#) our main office or the regional manager serving your area. Additional information is also available on the SCRAIL® [Facebook Page](#) and videos are on [YouTube](#).

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