

UFO FAQs About Ballistic NailScrews® (BNS)



What are Ballistic NailScrews®?

A Hybrid® Fastener—that is, an especially designed, patent pending screw that you pneumatically drive with your nail gun! NailScrews® combine the advantages of collated nails (ease and speed of installation) with the best aspects of screws (quality and adjustability). Many people are finding new ways that NailScrews® can help them and are enjoying increased production, time savings, and labor savings.

What is pull-out resistance?

The amount of force (measured in pounds) needed to withdraw a fastener from the material or substrate. For example: The 2¼" BNS averaged 523 lbs to 533 lbs in Southern Yellow Pine Testing in 2006. Intertek Report #3100366-001.

How much pull-out resistance is enough?

When you are trying to hold two pieces of wood together, the issue is to match the pull-out resistance with the head pull through. **Example:** If the fastener has 1,000 lbs of pull-out, but the head will pull through the material being fastened at 350 lbs, why have such a large difference? **“A chain is only as strong as its weakest link”** Why not match them closer together? That is what BNS allows you to do while giving you an acceptable connection. “Bigger or stronger is not always NEEDED or worth paying for.”—W. C. Litzinger **3rd Party Testing** available on request. (Intertek Report #3100366-001)

Test 1:	Shear
Test 2:	Bending Yield Strength
Test 3a:	Pull-out Resistance through 5/8" OSB into Douglas Fir
Test 3b:	Pull-out Resistance through 5/8" OSB into Southern Yellow Pine
Test 3c:	Pull-out Resistance through 3/4" OSB into Douglas Fir
Test 3d:	Pull-out Resistance through 3/4" OSB into Southern Yellow Pine
Test 4:	Pull-out Resistance through 1/2" Densglass Gold into 12 ga Steel Stud
Test 5:	Pull-out Resistance through 5/16" Hardiplank into 12 ga Steel Stud
Test 6:	Pull-out Resistance through 5/8" Sheet Rock into Southern Yellow Pine

How do I determine the appropriate length of NailScrew®?

The length of the fastener will depend on the materials to which it is attaching to the substrate material. In wood, the length of the fastener should allow the threads to penetrate the substrate at least 1" or more. When attaching to 12-16 gauge metal, the length of the fastener should only allow two to five threads to penetrate the metal. Calculate in the thickness of the material you are fastening and allow for the appropriate penetration into the substrate. Please see the chart on page 14 for more assistance.



How is installing Ballistic NailScrew® in steel different from installing in wood?

In wood, the length of the fastener should allow the threads to penetrate the substrate at least 1 – 2 inches. When attaching to metal, the length of the fastener should only allow ¼" to ½" (3 – 5 threads) to penetrate the metal. This will provide the best holding power.