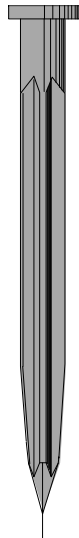


NPGS-1
 USE in
SIMPLEX
JOINTS
 with two
 elements.



NPGS-2
 USE in
COMPOUND
JOINTS
 with two or
 more
 elements

Protected under one or more patents pending.

**Compare NPGS load capacities
 with Standard Wire Nail sizes**

**GREATER HOLDING POWER
 BETTER JOINT EFFICIENCY
 SAME COUNT PER POUND**

PENNY WEIGHT	NPGS-1		NPGS-2	
	NAILS per POUND	LATERAL SWL max (lbs)	NAILS per POUND	LATERAL SWL max (lbs)
6d	174			
8d	103	132	103	102
10d	67	167	67	135
12d	61	167	61	135
16d	48	205	48	145
20d	30	312	30	159
30d			23	164

Safe Working Loads for NPGS nails are conservatively assigned based upon the joint deflection of the same *weight* wire nail.

**NON PRISMATIC
 GROOVED
 SHANK NAIL
 FOR WOOD**

Non Prismatic Grooved Shank nails provide improved holding power in lateral and withdrawal loads.

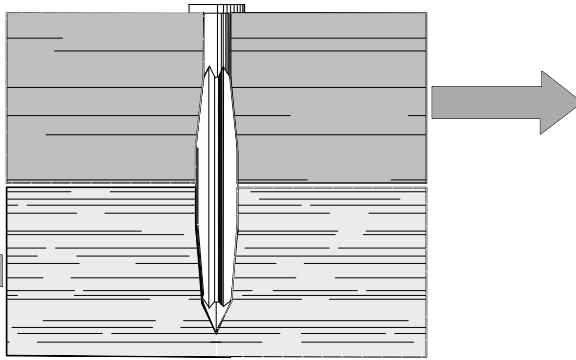
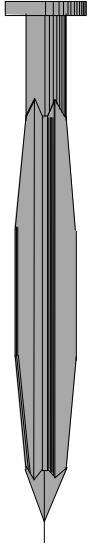
NPGS NAILS:

- Minimize wood distortion and splitting.
- Increase the area of shank contact in the wood.
- Increase joint holding power.
- Decrease number of nails required.
- Offer longer joint life, more loading cycles.

Z-Concepts LLC
Bridgeworks

7 Fourth Street
 Suite 7
 Petaluma CA
 707-763-2307

NON PRISMATIC GROOVED SHANK FASTENER



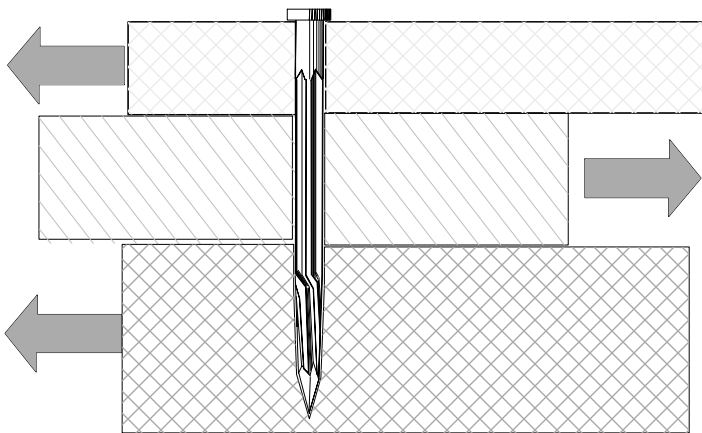
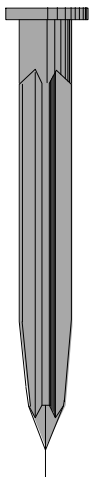
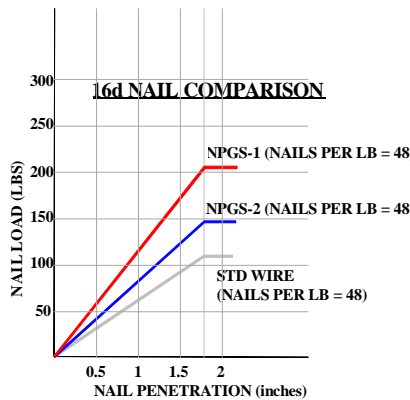
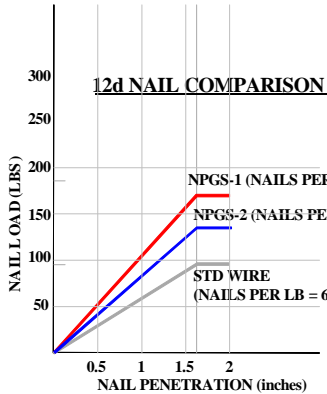
NPGS-1 nails are designed for use in simplex joint arrangements where two elements are connected.

NPGS nails are sorted according to nail count per weight and length, compared to standard wire nails.

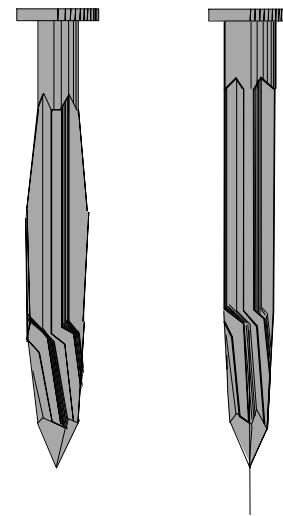
Nominal diameter of NPGS is measured at the widest portion of the shank.

Joint efficiency is indicated in how quickly the joint distortion returns to zero as the load is removed

The NPGS is configured to optimize the contact area of the nail which opposes the joint movement. Although the shank is grooved, nail efficiency is unaffected by alignment of the grooves to the direction of load



NPGS-2 nails are designed for use in COMPOUND joint arrangements where two or MORE elements are con-



Both types 1 and 2 of the NPGS shank can be mechanically deformed at the lower point of the shank taper. This creates shoulders in the ridges which offer a resistance when the shank is subjected to a withdrawal tension