THE FIRST IS STILL THE SIMPLEST, THE STRONGEST AND THE MOST VERSATILE.

A true parallel expansion design incorporating SAE torque specifications and clamp loads. All the attributes of a standard Grade 5 bolt and nut including the convenience of installation with high speed impact tools.

- Greater clamping power since it functions like a standard nut and bolt
- Shear load bears on full diameter of bolt
- Reusable and inexpensive to reuse
- Nut expands parallel to the sides of hole distributing compression along the entire length
- Nut stays in the hole upon removal

**TEST DATA 3/4" @ 3-3/8" EMBEDMENT**

<table>
<thead>
<tr>
<th>Unreinforced 3000 P.S.I. Concrete</th>
<th>Unreinforced 5000 P.S.I. Concrete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile - 11,906 lbs</td>
<td>Tensile - 17,073 lbs</td>
</tr>
<tr>
<td>Shear - 27,916 lbs</td>
<td>Shear - 28,110 lbs</td>
</tr>
</tbody>
</table>

**MATERIAL SPECIFICATIONS:**

- **BOLTS:**
  - S.A.E. Grade 5 Heat Treated Steel
  - Hardness - RC 25/34
  - Proof Load - 85,000 P.S.I.
  - Tensile Strength - 120,000 P.S.I.
  - Zinc Plated to A.S.T.M. B-633

- **EXPANDER NUT:**
  - S.A.E. 903 A.S.T.M. B86
  - Die cast Zamak No. 3
  - Zinc Alloy
  - Tensile Strength 43,000 P.S.I.

**TESTED OR APPROVED BY:**

- Pittsburgh Testing Laboratory PG-2170
- City of New York
- City of San Francisco
- Many State D.O.T.’s
- Federal General Services - Exceeds G.S.A. FF-S-325
- Meets O.S.H.A. requirement of Sec. No. 1910.212(b)
- Produced under quality assurance programs in accordance with 10 CFR 50 Appendix b and N.R.C Requirements

**RECOMMENDED APPLICATIONS:**

- Temporary Highway Barriers
- Highway Guide Rail
- Highway Expansion Joints
- Railroad Rail Track Plate Fastening
- Tilt Wall Temporary Support Bracing
- Safety Cable Tie-Off
- Rapid Runway Repair
- Lift Points

Made in the USA

1 GUNNEBO DRIVE • LONOKE, AR 72086
800-336-1640 • FAX 501-676-2524
www.mktfastening.com
The first is still the simplest, the strongest and the most versatile.

A true parallel expansion design incorporating SAE torque specifications and clamp loads. All the attributes of a standard Grade 5 bolt and nut including the convenience of installation with high speed impact tools.

**Taper Bolt Can Be Removed and Replaced Hundreds of Times**

**Taper Bolt Can Be Used in a New Hole Hundreds of Times...Not Just Twice!**

**Taper Bolt Can Be Adjusted to Fit Slightly Oversize Holes!**

**Taper Bolt Is a True Bolt Size/Hole Size Anchor and Needs No Special Drills!**

**Taper Bolt Offers 40% Greater Tensile Strength and 50% Greater Shear Strength**

**Taper Bolt Is Manufactured from a Certified Full Diameter Grade 5 Steel Bolt**

---

**Test Data 1/2" @ 2-3/8" Embedment**

<table>
<thead>
<tr>
<th>Unreinforced 3000 P.S.I. Concrete</th>
<th></th>
<th>Unreinforced 3000 P.S.I. Concrete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile - 8,165 lbs</td>
<td>Shear - 12,177 lbs</td>
<td>Tensile - 4,650 lbs</td>
</tr>
<tr>
<td>Shear - 12,177 lbs</td>
<td></td>
<td>Shear - 6,140 lbs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unreinforced 5000 P.S.I. Concrete</th>
<th></th>
<th>Unreinforced 5000 P.S.I. Concrete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile - 9,346 lbs</td>
<td>Shear - 15,217 lbs</td>
<td>Tensile - 5,840 lbs</td>
</tr>
<tr>
<td>Shear - 15,217 lbs</td>
<td></td>
<td>Shear - 7,220 lbs</td>
</tr>
</tbody>
</table>

---

**Material Specifications:**

**Bolts:**
S.A.E. Grade 5 Heat Treated Steel
Hardness - RC 25/34
Proof Load - 85,000 P.S.I.
Tensile Strength - 120,000 P.S.I.
Zinc Plated to A.S.T.M. B-633

**Expander Nut:**
S.A.E. 903 A.S.T.M. B86
Die cast Zamak No. 3
Zinc Alloy
Tensile Strength 43,000 P.S.I.

**Material Specifications:**

Case Hardened Carbon Steel
Zinc Plated to A.S.T.M. B-633

---

**Taper Bolt Has Over 45 Years of Proven Versatility and Dependability**