Kindorf® channel is a rugged heavy gage structural quality steel channel preformed in a "U" shape with a continuous open slot the entire length. The turned-in edges serve as retaining points for the nuts and bolts assembly of fittings to the channel. The shape of the channel permits infinite adjustability of the clamping nut... simply by gliding it along the channel to the desired position. Spring-tensioned nuts are generally used for positioning overhead or in vertical channel installations. A stud nut (with spring) is provided for easy mounting of cabinets and equipment.

Channel Nuts are specially shaped as parallelograms with biting edges so that when tightened, with normal pressure on the bolt, the nut clamps the sides of the channel together in a secure connection which reinforces the rigidity of the channel itself. The nut rests on the "lips" of the channel slot.

Steel Channels
Galv-Krom® Finish
10 ft. and 20 ft. Lengths

**Solid Base**

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimensions</th>
<th>Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-906</td>
<td>1 1/4&quot; x 3/8&quot; x 14 ga.</td>
<td></td>
</tr>
<tr>
<td>B-907</td>
<td>1 1/4&quot; x 9/16&quot; x 14 ga.</td>
<td></td>
</tr>
<tr>
<td>B-901</td>
<td>1 1/4&quot; x 1/2&quot; x 12 ga.</td>
<td></td>
</tr>
<tr>
<td>B-902</td>
<td>1 1/4&quot; x 3&quot; x 12 ga.</td>
<td></td>
</tr>
</tbody>
</table>

**Bolt Hole Base**

9/32" Diameter Bolt Holes on 1 1/4" Centers 1 1/4" from End

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimensions</th>
<th>Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-905</td>
<td>1 1/4&quot; x 9/16&quot; x 14 ga.</td>
<td></td>
</tr>
<tr>
<td>B-906</td>
<td>1 1/4&quot; x 3/8&quot; x 14 ga.</td>
<td></td>
</tr>
<tr>
<td>B-903</td>
<td>1 1/4&quot; x 3&quot; x 12 ga.</td>
<td></td>
</tr>
<tr>
<td>B-909</td>
<td>1 1/4&quot; x 1/2&quot; x 12 ga.</td>
<td></td>
</tr>
<tr>
<td>B-907</td>
<td>1 1/4&quot; x 9/16&quot; x 14 ga.</td>
<td></td>
</tr>
</tbody>
</table>
Channels and Bantam Channels

**Half Slot Base**
- \( \frac{1}{4}" \times \frac{1}{4}" Slots on 1/16" Centers \( \frac{1}{4}" \) from End

- **B-907HS**
  - 1\(1/2\)" x 1\(1/2\)" x 14 ga.

- **B-909HS**
  - 1\(1/2\)" x 2" x 12 ga.

- **B-909HS** (12 ga.)
- **B-909HS-M** (14 ga.)

**Bolt Hole Base**
- Bolt Holes on 3 Sides, \( \frac{1}{16}" \) Diameter on 1/16" Centers \( \frac{1}{4}" \) from End

- **B-995** (12 ga.)
- **B-995-M** (14 ga.)
  - 1\(1/2\)" x 11/2\"

**T-Slot Base**

- **B-904**
  - 1\(1/2\)" x 1\(1/2\)" x 12 ga.
Hexavalent Galv-Krom® Is OSHA Safe

Over the past several months, there have been many questions about Hexavalent Chromium in the metal framing industry. Many of these questions relate to the changes made by OSHA. In 2006, the Occupational Safety and Health Administration (OSHA) published a revised standard, which includes changes related to occupational exposure to Hexavalent Chromium (Cr VI). The revised standard was promulgated on February 28, 2006 with the compliance provisions taking effect on November 27, 2006 for most businesses. Cr VI can be found in many metal framing products, such as the Hexavalent version of Galv-Krom® finish for Kindorf® channel.

• Occupational Exposure Limit — The changes related to Cr VI address the occupational exposure limit. Previously, this level was 52 micrograms per cubic meter (g/m³) of air. This limit has now been reduced to 5 g/m³ of air. Additionally, an “action level” has also been established at 2.5 g/m³ of air. If exposure to Cr VI exceeds these levels, comprehensive exposure control efforts must be implemented to protect workers.

• OSHA Testing for Galv-Krom® Finish — Thomas & Betts conducted documented third party testing for the Cr VI occupational exposure of a typical worker when fabricating Galv-Krom® products. A certified industrial hygienist conducted the testing. The testing was done over one full work day following the OSHA protocol, with air sampling being performed to produce an 8-hour time weighted average exposure for the affected worker. The TWA result was .00001 micrograms of Cr VI per cubic meter of air (g/m³). This level is significantly below the 2.5 g/m³ required in the OSHA standard.

• Hexavalent Galv-Krom® Finish Is OSHA Safe — Based on this testing, activities such as normal handling, cutting, grinding and welding of Galv-Krom® products do not violate the OSHA requirements related to Hexavalent Chromium.

• Certified Industrial Hygienist Report Available — The official test report certified by an independent industrial hygienist on this personal exposure testing is available to Thomas & Betts customers who require such documentation. This testing was conducted to the OSHA ID-215 ion chromatography method for analytical air sampling and meets the latest OSHA requirements. The findings are reported by a Certified Industrial Hygienist (CIH) and are recognized by OSHA as suitable for questions regarding occupational exposure to Hexavalent Chromium. For more details on this report, contact Thomas & Betts Technical Services at 888-862-3289.
New Trivalent Galv-Krom® Finish Is RoHS Compliant

For 2007, Thomas & Betts is proud to introduce the new and improved Trivalent Galv-Krom finish. Galv-Krom finish is a combination of .5 mils electro-plated Zinc and a gold Trivalent Chromium finish.

- Gold Trivalent Chromium Finish — The new Galv-Krom finish features a Trivalent Chromium formulation that provides all the features and protection of Hexavalent Chromium (CR VI) without the use of this chemical. Hexavalent Chromium is a substance that is restricted by some standards such as the European Union directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS).
- RoHS Compliant — One great feature for the new Trivalent Chromium formulation is RoHS compliance. Because Hexavalent Chromium is a substance that is restricted by RoHS, moving away from a Hexavalent formulation to the new Trivalent formulation will make the performance of Galv-Krom coating available to customers affected by RoHS and other standards like RoHS around the world.
- Trivalent Galv-Krom Finish Is OSHA Safe — As mentioned previously, the Hexavalent formulation of the Galv-Krom finish was safe with regard to the revised 2006 OSHA standard. This new Trivalent formulation of the Galv-Krom finish does not contain any Hexavalent Chromium and therefore does not fall under the scope of the OSHA standard at all. As a result, the new Trivalent Galv-Krom finish, just like the Hexavalent Galv-Krom finish, is OSHA compliant.
- ASTM B633 Specification — The improved Galv-Krom finish is applied in compliance with ASTM B633 coating, the same standard as used previously. This standard outlines electrodeposited coatings of zinc on steel.
The new and improved Galv-Krom® finish provides many benefits. First, it provides continued safety within OSHA guidelines. Second, the Trivalent formulation provides RoHs compliance. But most important of all, the new Kindorf® Galv-Krom® finish provides a level of performance unmatched by the competition.

- Superior Corrosion Protection. One hallmark of the Galv-Krom® finish is the superior corrosion protection it provides. In the ASTM B117 salt spray test, the new Galv-Krom® finish provided improved protection to the previous Hexavalent formulation, and substantially more protection than painted finishes or G-90 Pre-Galvanized (see chart to right). This outstanding corrosion protection means more versatile installations and more service life for Galv-Krom® finished products.

- Strong Abrasion Resistance. The Galv-Krom® finish won’t chip or peel like a green painted strut product. It stands up to rough handling.

- Clean Finish. For pre-galvanized finishes, the zinc finish is applied before the strut is manufactured. That means all the oil and grime collected while the steel is formed into strut remains on the strut for the customer. Because Galv-Krom® finish is applied after fabrication, the oils and grime collected during the manufacturing process are thoroughly cleaned off during plating. This creates a finished product that leaves no residue on your hands when handling.
Galv-Krom® Electro-Galvanized Finish (cont.)

- Paintable Surface. The new Galv-Krom® finish uses Nano Technology to provide a non-porous and non-crystalline surface. Not only does this feature provide enhanced corrosion protection, but also provides an excellent bond for the paint of your choice.
- No More White Rust. With Pre-Galvanized strut, a common quality headache is the formation of white rust on the zinc finish. With Galv-Krom® finish, the trivalent chromium finish is applied over the zinc, to seal in the zinc beneath and stop the formation of white rust.
- Great Electrical Conductivity. Unlike paint or enamel, the Galv-Krom® surface offers a minimum of electrical resistance so that electrical applications are easily grounded when grounding is needed.

**Metal Framing Channel Finish**

**Corrosion Resistant Testing, ASTM B117**

- Industry Enamel Green
- Epoxy Green
- Industry Pre-Galvanized
- New Trivalent Gal-Krom

![Graph showing corrosion resistance](image-url)
1. Galv-Krom®
Commonly referred to as “gold,” the Galv-Krom® finish is a combination of .5 mils electro-plated zinc and a gold trivalent chromium finish, offering superior rust protection and excellent electrical conductivity.

2. SilverGalv™ (Suffix EG)
Often referred to as “zinc plated” or “electroplated zinc,” the SilverGalv™ finish applies .5 mils of zinc and a clear conversion coat. Electrogalvanizing is available for channel as well as small fittings, hardware and threaded products.

3. Pregalvanized Steel (Suffix PG)
In addition to the standard Galv-Krom® finish, all Kindorf® channels are available in pregalvanized steel. This material is identical to the standard steel except for its ASTM G-90 zinc coating. This coating is applied at the steel mill prior to the channel fabrication.

4. Green Coated (Suffix GR)
Green urethane powder resins are applied electrostatically to the steel after fabrication. Once the material is completely covered with the powdered-form urethane, it proceeds through a 400° baking process for ten minutes, creating a chemical bond. This results in a minimum of 1.5 mil thickness of urethane coating providing excellent resistance to chipping or peeling.

5. Hot-Dipped Galvanized (Suffix HD)
The material is zinc coated after fabrication providing total product protection on all surfaces. The fabricated channel or fitting is suspended and then dipped into tanks of hot zinc for a prolonged period, creating a coherent bond. The result is superior corrosion resistance as compared to pregalvanized material. Hot-dipped galvanizing is not recommended for threaded products, considering the zinc coating thickness will often disrupt the threads.
Kindorf® hot-dipped galvanized channel is in conformance with ASTM Specifications A-123 (formerly A-386) and A-153.
Kindorf® channels maintain a minimum 1.5 ounces of zinc per square foot of steel or 2.5 mils (ASTM A-123, Thickness Grade 65). This finish is also referred to as “Hot-dipped galvanized after fabrication.”

6. PVC Coated (Prefix P)
A polyvinyl chloride (PVC) plastic coating is fused to the channel, fitting or accessory after fabrication by immersing the part in fluidized PVC tanks. The fused-melt mixed powder PVC coating thickness is 15 mils (.015”) plus or minus five mils. PVC material is a thermoplastic and will soften in high temperatures. An inherent weakness with PVC coatings occurs when field alterations are applied, such as cutting or drilling. These acts disrupt the sealed PVC product and warrant field touch-up.
Thomas & Betts cannot be held responsible for field-altered PVC coated products.
Materials

1. Standard Steel

The standard Kindorf® Channel is made from high quality ASTM A570 Grade 40 carbon steel sheet. These sections are cold formed into a unique and modular profile by an efficient roll forming process. Additionally, the process “cold works” the steel to give it greater mechanical properties.

2. Extruded Aluminum (Suffix AL)

For more corrosive environments, T&B also offers extruded aluminum channel sections. These sections are nearly identical to their steel counterparts. Aluminum channel is made from 6063 Aluminum and heat treated to a T-6 specification.

3. Non-Metallic (Suffix N)

Kindorf® channels are also available in fiberglass reinforce polyester and vinyl ester. These products are pultruded into shapes similar to steel channels. They offer a high degree of corrosion protection and are very lightweight.

4. Stainless Steel (Suffix SS)

For the most corrosive environments, T&B offers Type 304 Stainless Steel channel sections and accessories. Type 316 stainless available upon request. Contact your local sales rep. These products are identical to their carbon steel counterparts except for a much greater corrosion resistance.

Warning

Load tables, charts, and design criteria provided in this catalog are intended as guides only. Selection of proper product, installation intervals, erection, and placement are the responsibility of the user. Kindorf® products are intended to be used for the support and bracing of fixtures, cable, pipe and conduit. Improper use or installation may result in injury to persons or damage to property. We reserve the right to change material and finish specifications without notice.