

SEE NOTES, SECTION V/6 AT LEFT

SEE NOTE SECTION

PRE-FIN AS  
CLOSURE TO  
TO MATCH  
WINDOWS

INSTALL PANELS  
WINDOW

TO HEAD BLOCKING

NEW LOW

CAULK AROUND WINDOW  
PERIMETER INTERIOR &  
EXTERIOR

# HIGH STRENGTH GALVANIZED STEEL TUBING FOR RESIDENTIAL & COMMERCIAL CONSTRUCTION



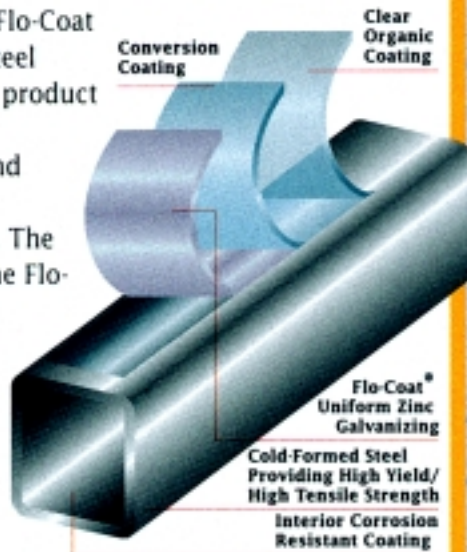
 **allied**  
TUBE & CONDUIT  
CONSTRUCTION  
DIVISION

A tyco INTERNATIONAL LTD. COMPANY



## The Flo-Coat Process

Allied's zinc Flo-Coat galvanized steel tubing is the product of choice for residential and commercial construction. The unique, in-line Flo-Coat process provides a triple layer of corrosion protection that stands the test of time.



The process begins with flat strip steel, which is cold-formed and electric-resistance or induction welded. The cold forming and quenching process creates greater yield and tensile strength compared to alternative tubing of the same O.D. and gauge. After welding, the tube goes through three coating baths. The first coating bath bonds zinc to the hot tubing, and is followed by a conversion coating. As the tube goes through the conversion coating bath, the process chemically changes the zinc already on the surface of the tube. The compounds which are formed make the zinc even less subject to corrosion than unprotected zinc. This conversion coating also provides another layer of protection for longer resistance to white rust corrosion.

The excess solution is then removed from the tube and the tube is dried to prepare for its third and final protective coating bath... an application of a clear organic polymer to give the tube superior corrosion resistance, added aesthetic appeal, and long-lasting surface brightness. This coating is then cured to a smooth, hard finish near the end of the in-line process. The result is a smooth, shiny end product appearance that is unmatched in terms of strength and durability — it will not oxidize or "gray down" with age, nor will the coating flake off during fabrication operations.

## More than Double the Performance vs. Pregalvanized Tube

Allied's Flo-Coat galvanized steel tubing provides outstanding corrosion protection because of the synergism created between the three coatings. The conversion coating passivates the zinc to slow down the white rust growth process, and the clear topcoat then "seals in" the protection.

Pregalvanized products do not provide this "sealed" protection. On the inside of Allied's Flo-Coat galvanized steel tubing a corrosion-resistant zinc based coating is applied after the tube is welded, and completely covers the interior. When pregalvanized steel is formed and welded, the inside weld area is left bare — unprotected since the interior cannot be re-metalized. The exposed metal is immediately left to be attacked by all corrosive elements. The exterior of the weld is re-metalized, but is still far more susceptible to corrosion than Allied's Flo-Coat galvanized steel tubing.



## Salt Spray Tests

Pregalvanized G-90  
100% White Rust  
10% Red Rust



405 Hours

Flo-Coat Galvanized Steel  
20% White Rust  
1st Sign of Red Rust



840 Hours



**Allied offers the following stock sizes with our unique in-line zinc Flo-Coat® Process:**

- 1.500 Sq. x 20 ga.
- 1.500 Sq. x 18 ga.
- .750 x 1.500 Rect. x 20 ga.
- 1.500 x 3.500 Rect. x 18 ga.

**Benefits of using Allied Tube's construction material:**

- Superior corrosion protection
  - Controlled zinc weight
- Greater yield and tensile strengths
  - Controlled steel properties
  - Tube certifications available
- Nationwide distribution capabilities

**Fabrication options:**

- **Swaging**  
Rounds or rectangles swaged to fit square openings
- **Stencilling**  
Standard industry or custom stencilling
- **Cutting**  
Secondary saw cutting to meet precise length tolerance
- **Punching**  
Standard and custom hole configurations

**Light-wall tube sizes produced by Allied Tube and Conduit: (outside diameter in inches)**

O.D./GA.	22	20	19	18	17	16
<b>ROUNDS</b>						
.500	•	•	•	•	•	•
.625	•	•	•	•	•	•
.706	•	•	•	•	•	•
.750	•	•	•	•	•	•
.815	•	•	•	•	•	•
.840	•	•	•	•	•	•
.875	•	•	•	•	•	•
.910	•	•	•	•	•	•
.922	•	•	•	•	•	•
.980	•	•	•	•	•	•
.995	•	•	•	•	•	•
1.000	•	•	•	•	•	•
1.029	•	•	•	•	•	•
1.050	•	•	•	•	•	•
1.125	•	•	•	•	•	•
1.163		•	•	•	•	•
1.250		•	•	•	•	•
1.290			•	•	•	
1.315		•	•	•	•	•
1.375		•	•	•	•	•
1.500		•	•	•	•	•
1.510		•	•	•	•	•
1.625		•	•	•	•	•
1.638			•	•	•	•
1.660		•	•	•	•	•
1.690						•
1.740		•	•	•	•	•
1.750		•	•	•	•	•
1.875						•
1.883			•	•	•	•
1.900		•	•	•	•	•
2.000		•	•	•	•	•
2.197			•	•	•	•
2.250				•	•	•
2.360				•	•	•
2.375			•	•	•	•
2.500				•	•	•
<b>SQUARES</b>						
.750		•	•	•	•	•
.813		•	•	•	•	•
.875		•	•	•	•	•
1.000		•	•	•	•	•
1.250		•	•	•	•	•
1.500		•	•	•	•	•
1.625						•
1.750						•
2.000						•
<b>RECTANGLES</b>						
.625 x 1.125		•	•	•	•	•
.750 x 1.500		•	•	•	•	•
.890 x 1.917		•	•	•	•	•
1.000 x 1.750		•	•	•	•	•
1.000 x 2.000		•	•	•	•	•
1.500 x 3.500				•	•	•
2.000 x 3.000						•



SEE NOTES  
As reported by the American Iron and Steel Institute Construction Market Committee, there are a number of benefits and advantages that result from building with steel, including: Builder Benefits, Homeowner Benefits and Environmental Advantages.

### **Builder Benefits**

- Steel will not rot, shrink, swell, split or warp, and is non-combustible.
  - Steel framing is a proven technology that is user-friendly, allowing for a smooth transition from other materials.
  - Steel is competitively priced and consistent in quality.
  - The inherent strength of steel usually translates into fewer members.
  - Steel members weigh as much as 60% less than wood members; therefore, foundation loads can be reduced.
  - Steel framing accommodates all types of commonly used finishing materials.
- Steel framing does not need to be treated for termites. It is free of resin adhesives and other chemicals used to treat wood framing products.
  - Remodeling can be easily accomplished. Non-load bearing walls can be easily removed, altered and relocated.
  - Steel-framed homes allow for faster assembly, plus low maintenance costs.
  - There are no special tools required for framing.

### **Environmental Advantages**

- All steel products are recyclable.
- Steel products can be recycled repeatedly without degradation or loss of properties.
- During the last decade, more than 1 trillion pounds of steel scrap have been recycled, keeping a valuable commodity out of landfills.

### **Homeowner Benefits**

- Steel's inherent strength and non-combustible qualities enable a steel-framed home to resist such devastating events as fires, earthquakes and hurricanes.

Distributed by:



16100 South Lathrop Ave  
Harvey, Illinois 60426  
(708) 339-1610  
(800) 882-5543