

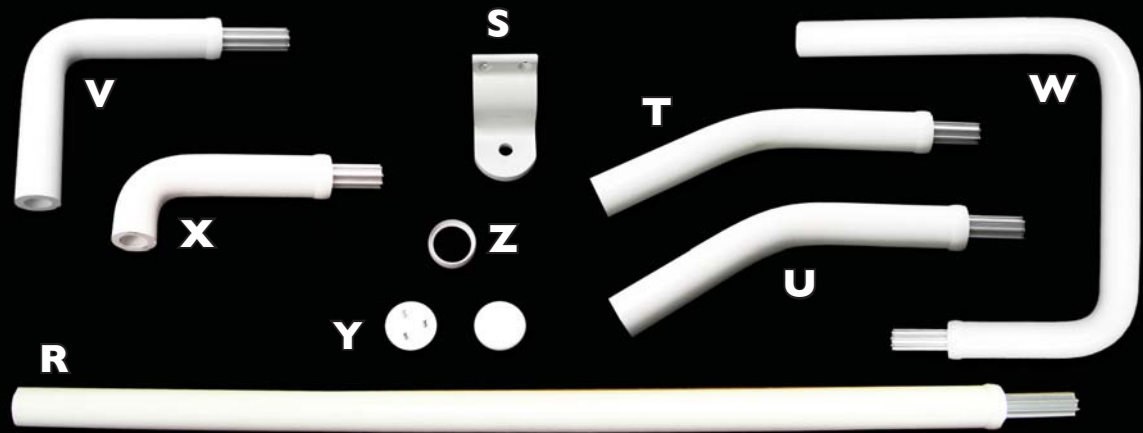


**TUSCAN**  
MANUFACTURING

# COMPLIANT RAILING™

## 1½" RAILING SYSTEM

**Meets IRC & IBC Requirements**



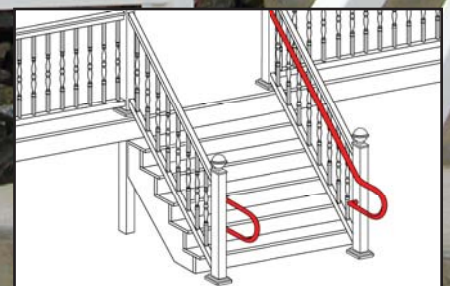
**9 SKU COMPONENT BASED SYSTEM**

See Back for Details

**Meets the Requirements of IRC Section R311, IBC Section 1009; 1010; 1012**  
**Meets ADA Standards**  
**I/A/W DOJ 28 CFR PART 36 Section 4**



- Building Code Required
- Commercial Quality
- Reinforced PVC
- Maintenance-Free
- Added Safety
- Handicap Friendly
- Easy Installation
- Attractive Appearance
- Clean Seams & Joints
- Sturdy & Rigid
- No Need to Paint
- Aluminum Reinforced
- Easy Assembly



see specs and instructions on back

# Building Code Guidelines

## IRC Section 311 - Means of Egress

### R311.5 Stairways.

"Handrails shall not project more than 4.5 inches on either side of the stairway..."  
 "Stairway...clear width...shall not be less than 31.5 inches where handrail is installed on one side..."  
 "Stairway...clear width...shall not be less than...27 inches where handrails are provided on both sides."

### R311.5.6 Handrails.

"Handrails...shall be continuous for the full length of the flight..."  
 "Handrails...shall be provided on at least one side of...flight with four or more risers."  
 "Handrails height...shall be (installed) not less than 34 inches and not more than 38 inches."  
 "Handrails...shall have a space of not less than 1/2 inches between the wall and the handrails"  
 "Handrails...shall have an outside diameter of at least 1 1/4 inches and not greater than 2 inches"

### R311.6 Ramps.

"Handrails shall be provided on at least one side of all ramps exceeding...8.33 percent slope."

## IBC Section 1009 - Stairways

### 1009.10 Handrails

"Stairways shall have handrails on each side..."  
 "Stairways within dwelling units,...are permitted to have a handrail on one side."

## IBC Section 1010 - Ramps

### 1010.8 Handrails (Ramps)

"Ramps with a rise greater than 6 inches shall have handrails on both sides."

## IBC Section 1012 - Handrails

### 1012.2 Height.

"Handrail height...shall be (installed) not less than 34 inches and not more than 38 inches"

### 1012.3 Handrail Graspability

"Handrails...shall have an outside diameter of at least 1 1/4 inches and not greater than 2 inches..."

### 1012.4 Continuity

"Handrail-gripping surfaces shall be continuous, without interruption by newel posts or other obstructions."

"Handrail brackets...attached to the bottom surface...shall not be considered obstructions."

### 1012.5 Handrail Extensions

"Handrails shall return to a wall, guard...or shall be continuous..."  
 "At (non-continuous) stairways...the handrails shall extend horizontally at least 12 inches beyond the top riser...and...bottom riser"  
 "At (non-continuous) ramps...the handrails shall extend horizontally above the landing 12 inches minimum beyond the top and bottom ramps."

### 1012.6 Clearance

"Clear space between and handrail...and other surface shall be a minimum of 1 1/2 inches."

# Installation Instructions

## Important Layout Guidelines:

### Step 1: Determine linear footage of straight handrail needed.

Measure all stairs from top nose to bottom nose.  
 Measure all level areas from outside edge to outside edge.  
 Straight handrail is needed between each component end connections or corner/stair elbow. Straight handrail is available in 6' lengths (R).

### Step 2: Determine number of mounting attachments needed:

Mounting bracket will be needed at each post or approximately every 4' to 6'.  
 One additional bracket will be needed near each end or corner condition for stability.

### Step 3: Determine number of corners, elbows or stair elbows needed:

Corners are available in 90° angles (V).  
 Stair/Ramp elbows come in 32° (T) and 38° (U) angles.

### Step 4: End condition:

3 handrail termination options are available.  
 Loop Return (W) turns handrail down and terminates with a cap.  
 Wall Return (X) terminates handrail back flush to wall.  
 Handrail can simply be cut to length and terminated with a cap (sold 2 per bag).

## Installation:

### Cutting Handrail Length

Cut handrail to correct length. Size aluminum interior so it spans all connections.  
 Continuous aluminum should span all connections.

### End & Corner & Elbow Conditions

All end/corner/elbow pieces are prefabricated with connectors and aluminum out one end. The aluminum interior on the adjoining piece must be sized to allow the aluminum to span the connection and slide into the attaching piece.

### Mounting Brackets

Mounting Brackets are provided with the necessary screws to attach the bracket to the handrail. Screws to attach the bracket to the wall surface are not included.  
 Brackets should be spaced no more than 4' on center.  
 A bracket should also be placed within 12" of any end, stair/ramp to level transition, or corner.

**Note:** All fabricated pieces including end connectors, stair/ramp to level connections and corners come with the ends already prepared including the necessary expansion connectors.

## Compliant Railing™ Specifications:

(Available in White)

### Shown

W - Loop Return Angle w/ Insert

T - 32° Angle w/ Insert

X - Wall Return Angle w/ Insert

U - 38° Angle w/ Insert

V - 90° Angle w/ Insert

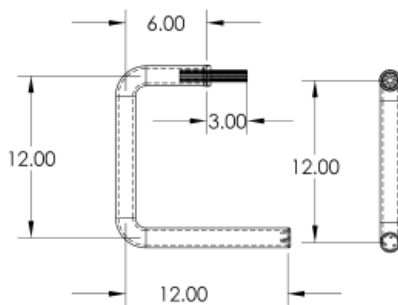
R - 1-1/2" Handrail w/ Insert

### Not Shown

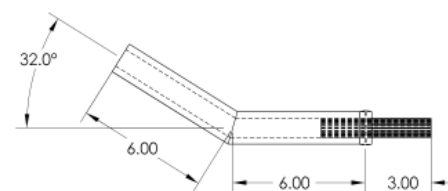
S - Handrail Bracket w/ Screws

Y - End Cap - 2/Pack

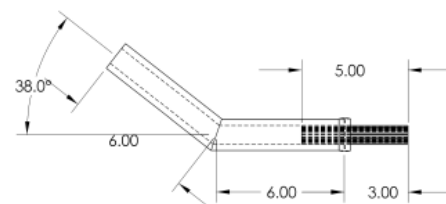
Z - Expansion Joint Ring - 6/Pack



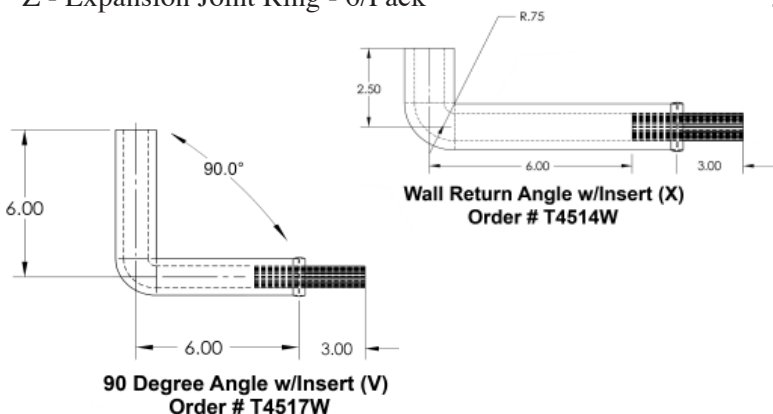
Loop Return Angle w/Insert (W)  
Order # T4518W



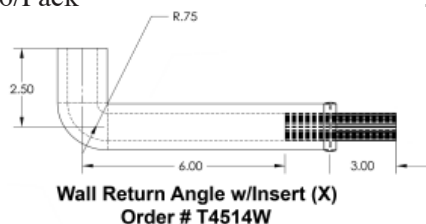
32 Degree Angle w/Insert (T)  
Order # T4515W



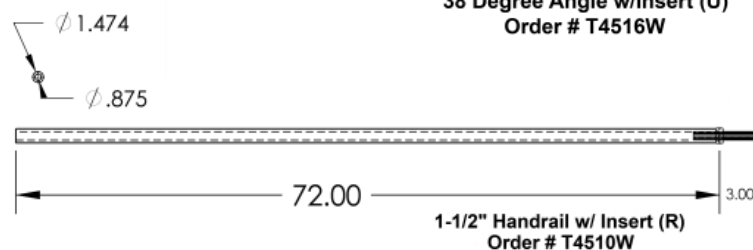
38 Degree Angle w/Insert (U)  
Order # T4516W



90 Degree Angle w/Insert (V)  
Order # T4517W



Wall Return Angle w/Insert (X)  
Order # T4514W



1-1/2" Handrail w/ Insert (R)  
Order # T4510W