Poly RAIL Systems
by Digger Specialties, Inc.

TRX and T-BIRD
Vinyl Railing
PolyRail® TRX Vinyl Railing has passed IBC code requirements. CCRR-0147

4-Way Adjustable Aluminum Post Mount

PolyRail® T-Bird Vinyl Railing features a distinct T-shaped top rail creating a “Drink Rail”.

DSI ADVANTAGES
TABLE OF CONTENTS

TRX Vinyl Railing ................................................................................................................................................. 2-5
T-Bird Vinyl Railing ............................................................................................................................................... 6-9
Standard Vinyl Posts and Post Mounts .................................................................................................................. 10-11
“A” Series Decorative Vinyl Posts .................................................................................................................... 12
Column Clad Vinyl Post Wraps ............................................................................................................................ 13
“B” Series Aluminum Posts .................................................................................................................................. 14
Continuous Handrail ............................................................................................................................................. 15
Colors and Powder Coating ................................................................................................................................. 16-17
# TRX RAILING

**STANDARD BALUSTER**  
1-3/8” x 1-3/8” Square Vinyl  
3-7/8” Baluster Spacing

**“A” SERIES BALUSTER**  
1-3/8” x 1-3/8” Decorative Vinyl  
3-7/8” Baluster Spacing  
42” Balusters are Aluminum Reinforced

**“B” SERIES BALUSTER**  
3/4” Round Aluminum  
3-7/8” Baluster Spacing  
See Page 16 for Baluster Colors

For code compliance information visit [diggerspecialties.com](http://diggerspecialties.com) for details on lengths and balusters covered by testing report CCRR-0147.

<table>
<thead>
<tr>
<th>Section Type</th>
<th>Length</th>
<th>Height</th>
<th>Baluster Style</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4’</td>
<td>36”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>14’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Straight</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stair</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crossover - Straight</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crossover - Stair</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single Chippendale - Straight</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Double Chippendale - Straight</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chippendale - Stair</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single Caribbean - Straight</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Double Caribbean - Straight</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caribbean - Stair</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Railing Support included with all 5’ - 10’ sections. Crossover Sections (10’ - 16’) include two Railing Supports.
HIDDEN SCREW RAIL MOUNTS

STANDARD WALL MOUNTS:
1-4 pack is included inside each boxed railing section.
A 4 pack contains (2) top mounts, (2) bottom mounts, and screws.

STANDARD STAIR MOUNTS:
1-4 pack is included inside each boxed stair railing section.
A 4 pack contains (2) top mounts, (2) bottom mounts, and screws.

OPTIONAL SPECIALTY MOUNTS:
These mounts are not included with boxed sections.
A 4 pack contains (2) top mounts, (2) bottom mounts, and screws.

For Stair Racking information visit polyrail.com

8” AND 10” ROUND COLUMN ADAPTERS

RAIL SUPPORTS
### Baluster Style

<table>
<thead>
<tr>
<th>Gate Size (width x height)</th>
<th>Standard Baluster</th>
<th>&quot;A&quot; Series Baluster</th>
<th>&quot;B&quot; Series Baluster</th>
</tr>
</thead>
<tbody>
<tr>
<td>36&quot; x 36&quot;</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>48&quot; x 36&quot;</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>36&quot; x 42&quot;</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>48&quot; x 42&quot;</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>

### RESIDENTIAL HINGE

![Residential Hinge](image)

### RESIDENTIAL LATCH

![Residential Latch](image)

Colors available:
- White
- Tan
- Mocha
- Black
T-BIRD VINYL RAILING
T-BIRD RAILING

STANDARD BALUSTER
1-3/8" x 1-3/8" Square Vinyl
3-1/2" Baluster Spacing

“A” SERIES BALUSTER
1-3/8" x 1-3/8" Decorative Vinyl
3-1/2" Baluster Spacing
42" Balusters are Aluminum Reinforced

“B” SERIES BALUSTER
3/4" Round Aluminum
3-7/8" Baluster Spacing
See Page 16 for Baluster Colors

<table>
<thead>
<tr>
<th>Section Type</th>
<th>Length</th>
<th>Height</th>
<th>Baluster Style</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4'</td>
<td>10'</td>
<td></td>
</tr>
<tr>
<td>Straight</td>
<td>•</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Stair</td>
<td>•</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Crossover - Straight</td>
<td>•</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6'</td>
<td>12'</td>
<td></td>
</tr>
<tr>
<td>Crossover - Stair</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td></td>
<td>8'</td>
<td>14'</td>
<td></td>
</tr>
<tr>
<td>Single Chippendale - Straight</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Double Chippendale - Straight</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Chippendale - Stair</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

Note: Railing Support included with all 8’ - 10’ sections. 16’ Crossover Sections include two Railing Supports.
HIDDEN SCREW RAIL MOUNTS

STANDARD WALL MOUNTS:
1-4 pack is included inside each boxed railing section.
A 4 pack contains (2) top mounts, (2) bottom mounts, and screws.

STANDARD STAIR MOUNTS:
1-4 pack is included inside each boxed stair railing section.
A 4 pack contains (2) top mounts, (2) bottom mounts, and screws.

OPTIONAL SPECIALTY MOUNTS:
These mounts are not included with boxed sections.
A 4 pack contains (2) top mounts, (2) bottom mounts, and screws.

For Stair Racking information visit polymail.com

8” AND 10” ROUND COLUMN ADAPTERS

RAIL SUPPORTS

8
Baluster Style

Gate Size (width x height)  
36” x 36”  48” x 36”  36” x 42”  48” x 42”

<table>
<thead>
<tr>
<th>Baluster Style</th>
<th>36” x 36”</th>
<th>48” x 36”</th>
<th>36” x 42”</th>
<th>48” x 42”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Baluster</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>&quot;A&quot; Series Baluster</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>&quot;B&quot; Series Baluster</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

Top Rail Aluminum Reinforcement

Bottom Rail Aluminum Reinforcement

RESIDENTIAL HINGE

RESIDENTIAL LATCH

White  Tan  Black
VINYL POSTS SPECIFICATIONS

<table>
<thead>
<tr>
<th></th>
<th>4&quot; Post Sleeve</th>
<th>5&quot; Post Sleeve</th>
<th>5&quot; Support Post</th>
<th>6&quot; Post Sleeve</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Heights</strong></td>
<td>38&quot;, 44&quot;, 48&quot;, 54&quot;</td>
<td>38&quot;, 44&quot;, 48&quot;, 54&quot;</td>
<td>8', 9', 10'</td>
<td>38&quot;, 44&quot;, 48&quot;, 54&quot;</td>
</tr>
<tr>
<td><strong>Load Capacity</strong></td>
<td>Non-Load Bearing w/o Wood Post</td>
<td>Non-Load Bearing w/o Wood Post</td>
<td>8' = 12,000 lb.</td>
<td>Non-Load Bearing w/o Wood Post</td>
</tr>
</tbody>
</table>

VINYL POSTS

5" Square Support Posts are Reinforced with Sturdy Corrugated Aluminum

VINYL POST CAPS

- **Flat Cap** 4", 5", 6"
- **Trim Cap** 4", 5"
- **Gothic Cap** 4", 5"
- **Ball Cap** 4", 5"

MAGENA STAR

Magen Star Ornamental Low Voltage and Solar Lights. Visit [magenastar.com](http://magenastar.com) for more information and to see additional styles.

VINYL POST CAPS

- Ornemental Low Voltage 4"
- Ornemental Low Voltage 5"
- Ornemental Solar 4"
- Ornemental Solar 5"

VINYL POST FLAIRS

- **4" Flair** (1-piece) Use with IBC/IRC Post Mount and Sleeve
- **4" Flair** (2-piece) Use with IBC/IRC Post Mount and Sleeve
- **4" Snap Lock Flair** (1 or 2 piece) Use with Residential Post Mount and Sleeve
- **5" Flair** (1-piece) Use with Square Support Posts or Sleeves
- **6" Decorative Flair** (1-piece)
POST MOUNTS & KITS

4" RESIDENTIAL ADJUSTABLE ALUMINUM POST MOUNTS

Requires 4" (.160" Wall) Post Sleeve.

Top View
Powder coated base plates resist corrosion and ACQ wood treatment.

Angle Adjustment Leveling Bolts
Heavy-Duty Standard

TOP AND BOTTOM POST MOUNTS

5" Top & Bottom Hurricane Mount Set (Included with all 5" Square Support Posts)
Optional 4" Top and Bottom Post Mount Plates

TRX BOXED POST KIT

5 Options Available:
1. Without Aluminum Post Mount
2. With IRC Post Mount
3. With IBC Post Mount
4. With Residential Heavy Duty Post Mount
5. With Residential Standard Post Mount

Includes:
• 4" x 4" Vinyl Post
• Post Mount (optional)
• Flat or Trim Cap
• Post Flair

4" IBC AND IRC POST MOUNTS

IBC (HEAVY DUTY) POST MOUNTS:
- IBC Approved
- 3.62" Tube
- .060" Wall
- ½" x 5½" square plate with 8 fasteners
- Shims and leveling bolts included

Top View
43" IBC Post Mount
Available in 37", 43", 47"
& 53" lengths

Requires 4" (.135" Wall) Post Sleeve
Note: 5" and 6" Post Mounts available.
Contact Customer Service for information.

IRC (STANDARD) POST MOUNTS:
- IRC Approved
- 3.62" Tube
- .060" Wall
- ¾" x 5½" square plate with 4 fasteners
- Shims and leveling bolts included

Top View
37" IRC Post Mount
Available in 37", 43", 47"
& 53" lengths
“A” SERIES DECORATIVE VINYL POSTS

POSTS

“A” Series and Victorian Support Posts are Reinforced with Sturdy Aluminum


CAP

“A” Series Decorative Post Caps are Easily Attached with Vinyl Adhesive
Cap is Included with Post

FLAIRS

4” Flair (1-piece) Use with IBC/IRC Post Mount 4” Flair (2-piece) Use with IBC/IRC Post Mount 4” Snap Lock Flair (1 or 2 piece) Use with Residential Post Mount 5” Decorative Flair Use with Decorative Support Posts

SUPPORT POST MOUNTS

4” Top & Bottom Post Mount Plates (Included with all 4” “A” Series Support Posts) 5” Top & Bottom Post Mount Plate Set (Included with all 5” Decorative Support Posts) Optional 5” Top & Bottom Hurricane Mount Sets are Tested for High Wind Loads for 5” “A” Series Post

POSTS SPECIFICATIONS

<table>
<thead>
<tr>
<th></th>
<th>4” “A” Series Post</th>
<th>4” “A” Series Support Post</th>
<th>5” “A” Series Support Post</th>
<th>5” Victorian Support Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heights</td>
<td>38&quot;, 44&quot;, 48&quot;, 52&quot;</td>
<td>9’</td>
<td>9’, 10’</td>
<td>9’</td>
</tr>
<tr>
<td>Load Capacity</td>
<td>Non-Load Bearing w/o Aluminum Post Mount</td>
<td>3,900 lb.</td>
<td>9’ = 7,520 lb.</td>
<td>9’ = 7,520 lb.</td>
</tr>
</tbody>
</table>
COLUMNS CLAD VINYL POST WRAPS

STYLES
The Wood Post Supplies Load Capacity

- Ratchets to Lock Together
- Wraps Around the Wood Post – No Screws Needed

CAP
Column Clad Cap
4”, 6”

FLAIR
Column Clad Flair (4-piece)
4”, 6”, 8”

SPECIFICATIONS

<table>
<thead>
<tr>
<th></th>
<th>4” Smooth Column Clad</th>
<th>6” Smooth Column Clad</th>
<th>4” Fluted Column Clad</th>
<th>6” Fluted Column Clad</th>
<th>8” Fluted Column Clad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heights</td>
<td>8’6”, 10’</td>
<td>8’6”, 10’</td>
<td>8’6”, 10’ (Special Order)</td>
<td>8’6”, 10’ (Special Order)</td>
<td>10’ (Special Order)</td>
</tr>
<tr>
<td>Load Capacity</td>
<td>Non-Load Bearing w/o Wood Post</td>
<td>Non-Load Bearing w/o Wood Post</td>
<td>Non-Load Bearing w/o Wood Post</td>
<td>Non-Load Bearing w/o Wood Post</td>
<td>Non-Load Bearing w/o Wood Post</td>
</tr>
</tbody>
</table>
**“B” SERIES ALUMINUM POSTS**

See Page 16 for Color Options

**POSTS**

- 4" Post Sleeve (.065" wall)
- 4" Post w/Plate (.090" wall)
- 6" Post w/Plate (.090" wall)
- 4" Support Post (.090" wall)
- 6" Support Post (.090" wall)

**CAPS**

- Flat Cap 4" & 6"
- Ball Cap 4"

**FLAIR**

- Post Flair (2-piece) 4" & 6"

**TIE DOWN BRACKET**

- Tie Down Bracket with Cover (Set of 2)
- Installation Instructions Require 2 Sets per Support Post

**“B” SERIES POSTS SPECIFICATIONS**

<table>
<thead>
<tr>
<th></th>
<th>4&quot; “B” Series Post Sleeve</th>
<th>4&quot; “B” Series Post w/Plate</th>
<th>6&quot; “B” Series Post w/Plate</th>
<th>4&quot; “B” Series Support Post</th>
<th>6&quot; “B” Series Support Post</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Actual ASD Load Bearing Capacity</strong></td>
<td>Non-Load Bearing w/o Wood Post</td>
<td>Non-Load Bearing</td>
<td>Non-Load Bearing</td>
<td>8’ = 13,531 lb.</td>
<td>9’ = 12,751 lb.</td>
</tr>
</tbody>
</table>
ADA COMPLIANT HANDRAIL
A variety of rail lengths and accessories complete this system.
Available in 8', 10', & 16' Rail Lengths.
Available in all the colors shown on page 16.

STAIR APPLICATION
1. 1-3/8" Handrail (8', 10' & 16')
2. Internal Connector
3. Collar Rings (to cover splice)
4. Internal End Cap
5. 180° Elbow
6. Adjustable Elbow
7. 90° Elbow
8. 90° Welded Elbow
9. Inside Corner Mount & 90° Elbow Detail
10. Wall Mount
11. Extended Wall Mount
12. Wall Return
13. Wall-End Mount

DECK APPLICATION
1. 1-3/8" Handrail (8', 10' & 16')
2. Internal Connector
3. Collar Rings (to cover splice)
4. Internal End Cap
5. 180° Elbow
6. Adjustable Elbow
7. 90° Elbow
8. 90° Welded Elbow
9. Inside Corner Mount & 90° Elbow Detail
10. Wall Mount
11. Extended Wall Mount
12. Wall Return
13. Wall-End Mount
VINYL COLORS

DSI Vinyl Products are available in three colors. Our Mocha color is available for select products, please see individual product pages for availability.

ALUMINUM COLORS

DSI Aluminum Products are offered in 12 standard AAMA 2604 colors. Custom colors and AAMA 2605 colors are available by special order.

Colors shown are a close representation of the true color. Please consult actual samples for accurate powder coating colors.
DSI's aluminum Powder Coating offers an uncompromising quality created by state-of-the-art technology. Our system provides the highest quality powder coating on the market with a lifetime limited warranty giving you peace of mind in your investment.

The raw premium-grade aluminum is inspected to be free of blemishes and is not exposed to the outdoor elements.

A 200 MPH air blast removes water drops from the pre-treated aluminum. A convection oven completes the dry-off process.


Powder is applied with 18 automated and 2 manual spray guns. Compressed process air is dried to -35°F Dew Point for superior adhesion.

The powder coating is then bonded and adhered to the aluminum substrate in a 400 degree cure stage.
We have tried to make this catalog comprehensive and factual. We reserve the right to discontinue at any time, without notice, colors, materials, equipment and availability. Since some information may have been updated since the time of printing, we are not responsible for typographical or pictorial errors. Materials shown may vary slightly from actual colors. ©Digger Specialties 2019/02  99677