



Panduit Pathways System  
Daniel Chynoransky

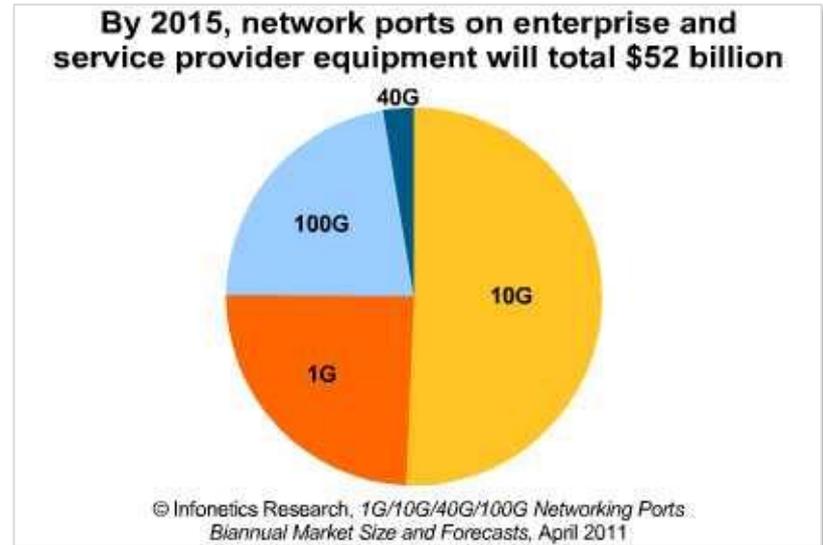
**PANDUIT**<sup>®</sup>  
infrastructure for a connected world

# Agenda

- Cable Pathway Trends
- FiberRunner Fiber Optic Cable Pathways
- Wyr-Grid Overhead Cable Pathways
- Competitive Advantage
- Sales Strategy

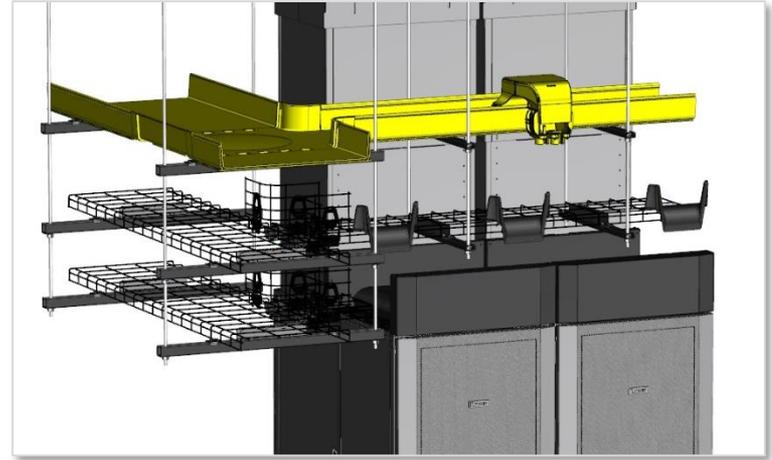
# Trends – Increasing Data Transmission Rates

- Business Impact
  - More time required to ensure cables are protected from physical damages
  - Higher potential for call backs and connectivity troubleshooting



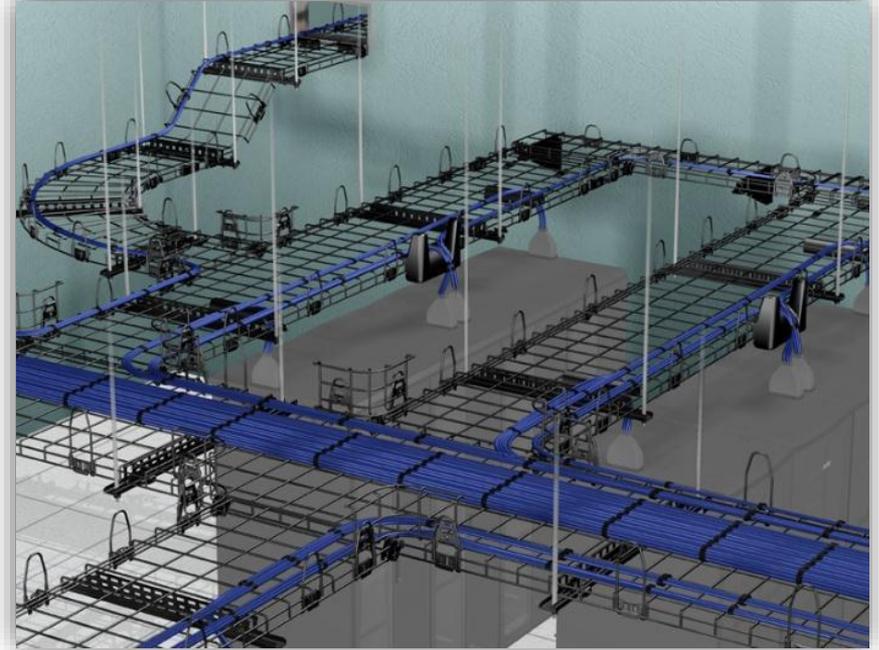
# Trends – Cable Routing Moving Overhead

- Business Impact of multi-tier/overhead development
  - More time required to install multiple tiers in constricted spaces
  - Complicated designs increase engineering and detailing costs



# Trends – Flexibility / Versatility / Aesthetic

- Business Impact
  - Reduce engineering and specification time to accommodate diverse designs
  - Improve aesthetics to enhance business development



# Target Applications

- Data Centers
  - Enterprise Data Centers
  - Large Complex Data Centers
  - DCSP Retail Co-Location
  - DCSP Hosted Cloud
- Enterprise
  - Telco Rooms
  - Throughout the Enterprise



# Typical Cable Pathway Application Needs

EDI Target Segment	Offering	Application
<i>Enterprise Data Center</i>	<b>FIBERRUNNER</b>  Wyr-Grid	<ul style="list-style-type: none"> <li>• Comprehensive Offering Deployed Through-out Whitespace</li> <li>• Install - Integrates with Cabinets &amp; Containment</li> <li>• Need to Adapt to Various Infrastructure</li> </ul>
<i>Large Complex Data Center</i>		
<i>DCSP Retail Colo</i>		
<i>DCSP Hosted/Cloud</i>		<ul style="list-style-type: none"> <li>• Accommodates High Cable Densities in Main Runs</li> <li>• Fast Installation Time</li> <li>• Adapt to Competitive Systems</li> </ul>
<i>Telco Room</i>		<ul style="list-style-type: none"> <li>• Availability</li> <li>• Simple Installation</li> </ul>
<i>Enterprise</i>	Wyr-Grid	<ul style="list-style-type: none"> <li>• Versatility – Same system can be used through-out</li> <li>• Reduce Installation Time</li> <li>• Cost Effective</li> </ul>

# Who Cares? Who makes the buying decision?



## Persona

### End User / Facility Manager / IT

- Decision maker
- Responsible for infrastructure lifecycle management

### Infrastructure Engineer / Consultant

- Key Influencer or responsible for specification
- Often has design control

### Contractor

- Influencer
- Often responsible for cable tray selection

### Procurement

- Influencer
- Focus more on cost of materials than features

# *FIBERRUNNER* Cable Routing System Benefits

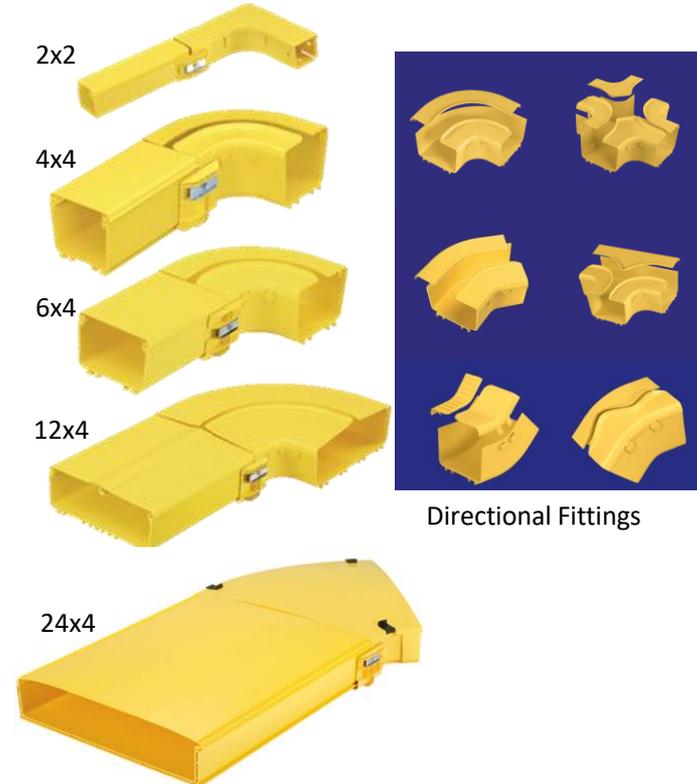
## *Why do your customers care?*

- Reduces installation labor costs by 50% compared to competitive fiber optic ducting systems
- Protect fiber optic cables maximizing long term performance and reduced risk
- Provides scalability and design versatility for data center applications



# Capacity, Design Flexibility & Reduced Installation

- 5 Channel Sizes Provide Capacity for High and Low Density Applications
- Range of Fittings, Brackets & Spill-Outs adapt system to any structure
- Offered in Fiber Yellow, Black & Telco Orange
- Integral Bend Radius Control and Snap-On Covers Provide Maximum Cable Protection



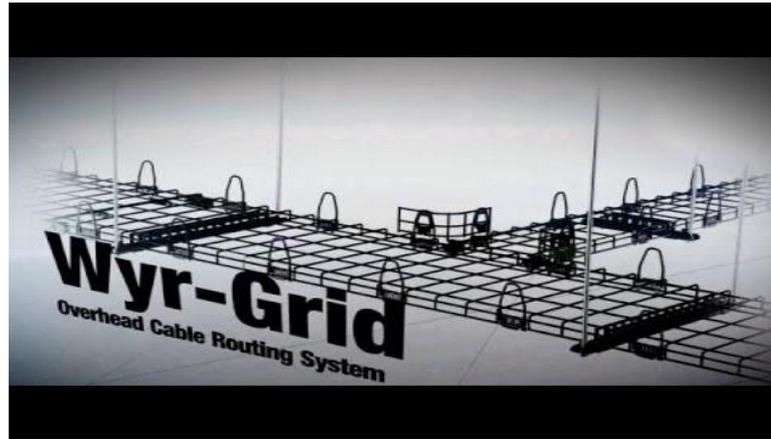
# Competitive Review

Competitor	Strength	Weakness
Commscope – ADC FiberGuide	<ul style="list-style-type: none"> <li>• Comprehensive Offering</li> <li>• LSZH Claim</li> <li>• Channel Presence</li> </ul>	<ul style="list-style-type: none"> <li>• Weak marketing approach</li> <li>• Weak focus on channel</li> <li>• Longer Install Time</li> </ul>
R&M Fiber Optic Raceway (Riechle & De Massari)	<ul style="list-style-type: none"> <li>• LSZH Claim</li> <li>• Low Cost Offering</li> </ul>	<ul style="list-style-type: none"> <li>• Does not offer brackets*</li> <li>• Longer install time</li> </ul>
Warren & Brown	<ul style="list-style-type: none"> <li>• LSZH Claim</li> <li>• Lower Cost</li> </ul>	<ul style="list-style-type: none"> <li>• Difficult to Assemble</li> <li>• Weak focus on Channel</li> </ul>



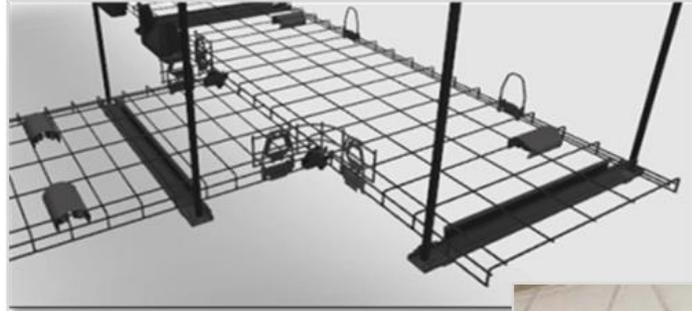
\* Possible partnership with OBO Betterman

# Wyr-Grid Overhead Cable Pathway System



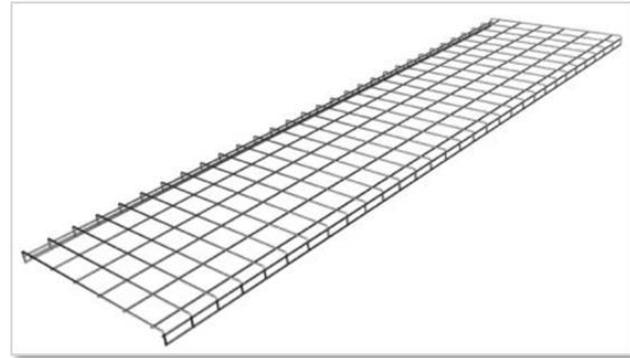
# Wyr-Grid Overhead Cable Pathway Benefits

- Reduces installation labor costs by 50% compared to traditional wire basket and ladder rack systems
- Versatile systems adapt to any telco, building, or data center environment



# Design Flexibility Features

- Available in 5 widths
  - 8" (20 cm)
  - 12" (30 cm)
  - 18" (45 cm)
  - 24" (60 cm)
  - 30" (76 cm)
- 10ft (3m) standard length
- Black and ElectroZinc finishes



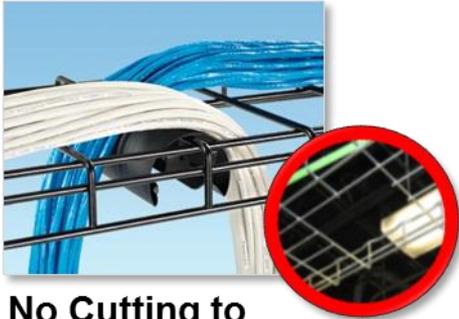
# Reduced Installation Time Features

- Splice connectors quickly to join two sections of straight pathway
- Mechanically bonds pathways together



# Reduced Installation Time Features

- Snap-on Accessories



**No Cutting to  
Create Bottom  
Drops**



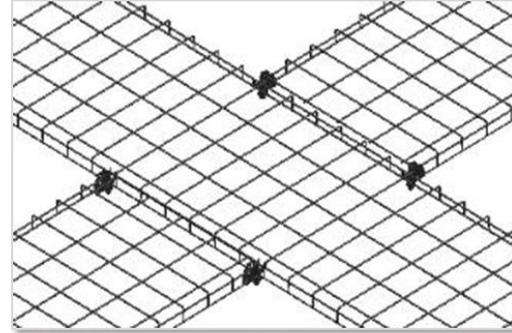
**No Cutting to  
Form Side Exits**



**No Cutting to  
Form Tees &  
Crosses**

# Reduced Installation Time Features

- Intersection splice quickly joins pathway sections without any cutting
- Mechanically bonds pathway sections



Cablofil/B-Line Require  
Excessive Cutting  
Strength is Reduced  
Requires Loose Hardware  
Leaves Sharp Edges In Pathway

# Risks of Using Traditional Wire Baskets

- Competitive baskets leave exposed sharp edges at cable exits and intersections



# Competitive Review

Competitor	Strength	Weakness
Legrand – Cablofil Wire Basket Tray	<ul style="list-style-type: none"> <li>• Global leader / Strong Disty</li> <li>• Comprehensive Line</li> <li>• Strong Spec Position</li> </ul>	<ul style="list-style-type: none"> <li>• Weak focus on DC</li> <li>• Longer Installation time</li> </ul>
OBO Betterman	<ul style="list-style-type: none"> <li>• Comprehensive Line</li> <li>• Strong Spec Position</li> <li>• Ladder Rack / Wire Basket</li> </ul>	<ul style="list-style-type: none"> <li>• Weak focus on DC</li> <li>• Longer installation time</li> <li>• No connectivity offering</li> </ul>
Local / Regional Suppliers	<ul style="list-style-type: none"> <li>• Lower Cost</li> <li>• Relationship</li> </ul>	<ul style="list-style-type: none"> <li>• Weak focus on DC</li> <li>• Longer installation time</li> <li>• No connectivity offering</li> </ul>



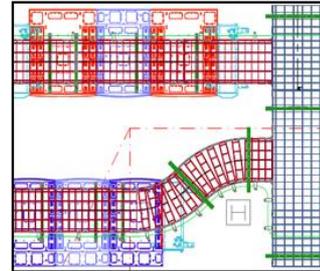
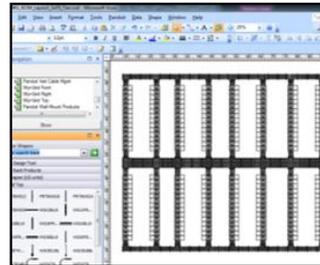
# Speed System Design & Specification

## Complimentary Design Tools Provide:

- Drag & Drop part functionality
- BOM Generator

## Design tools available for the following...

- AutoCAD – Design in 2D or 3D
- Visio – 2D Design Tool
- BIM shapes For AutoDesk Revit Tool (on AutoDesk SEEK website)



# Sales Strategy

- What is your installation time frame?
- What happens if your cables are damaged by the pathway?
- How do you plan to accommodate multiple pathways?
- How important are data center aesthetics?



# PIA – Hook & Loop Cable Ties

## *What's In It For You?*

- Easily Add \$\$\$ per Project
- Avg. of 100 Ties per 100' Cable Bundle
- Low Touch / High Margin



# Primary Applications



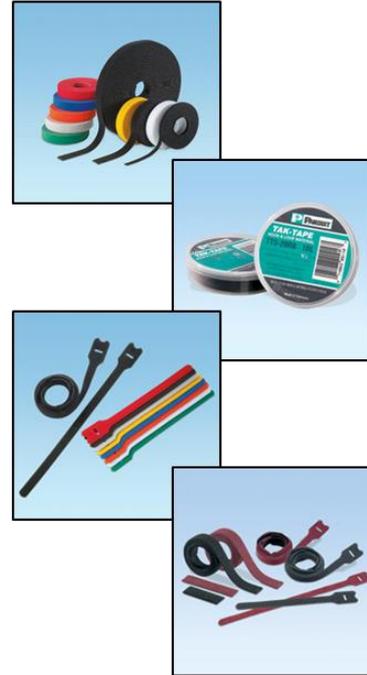
Managing &  
Grooming Cable  
Bundles on  
Pathways

Managing Cables in  
High Density Rack  
Applications



# Opportunity Overview

- Used In Virtually All Cabling Projects
- User Benefits
  - Comprehensive Assortment
  - Availability
- Distributor Benefits
  - Easy “Add-On” Sale
  - High Margin / Low Touch



# Network Cable Ties

## Hook & Loop Tak-Ty Rolls – HLS5S-X0 & HLM-15R0

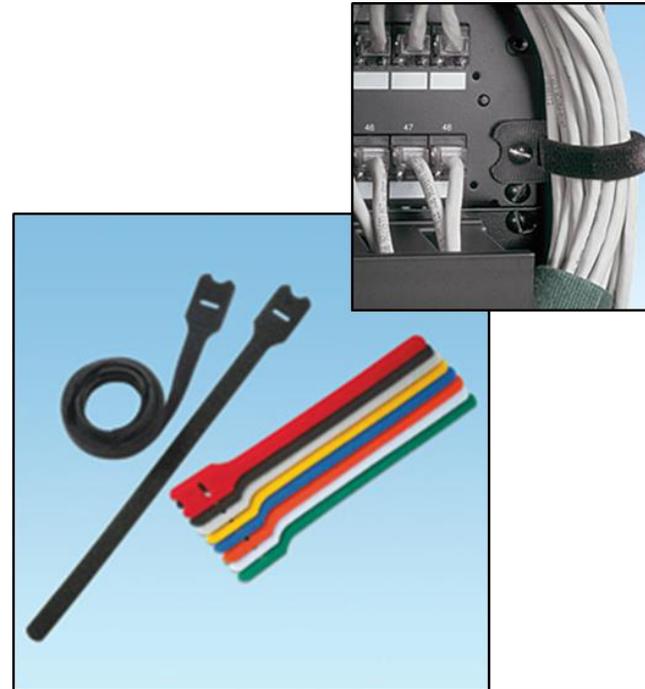
- Continuous (Cut-to-length) Rolls
- Perforated Rolls for Pre-Determined Bundle Sizes
- Multiple Colors
- Standard 20mm Width has 50 lb. Loop Tensile Strength
- Available in 8mm width with 40 lb. Loop Tensile Strength



# Network Cable Ties

## Hook & Loop Tak-Ty Ties – HLT-21X0

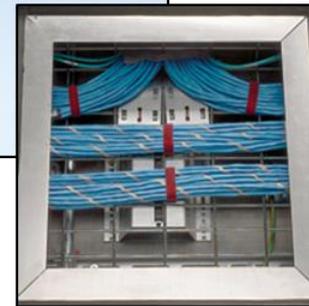
- Premium Grade Product Suitable for 100 cycles
- Slot Allows for Pre-Wrapping of Bundles
- “X” for Screw Fastening of Ties
- Available in 200mm and 300mm
- Multiple Colors



# Network Cable Ties

## Hook & Loop Plenum Tak-Ty HLTP21-X12 & HLSP21-X12

- UL Listed for use in air handling spaces such as above suspended ceilings or under raised floors
- UL94V-2 flammability rating
- Standard or perforated rolls, or die cut tie shape
- Available in 200mm and 300mm lengths, and in black or maroon



# Network Cable Ties

## Hook & Loop Tak-Tape Rolls – TTS-35R0

- Cost effective product suitable for 30+ cycles
- Thin and flexible product for general bundling
- Available in 20' or 35' cut-to-length rolls
- Black only – NO plenum rating
- Standard  $\frac{3}{4}$ " width has 40 lb. loop tensile

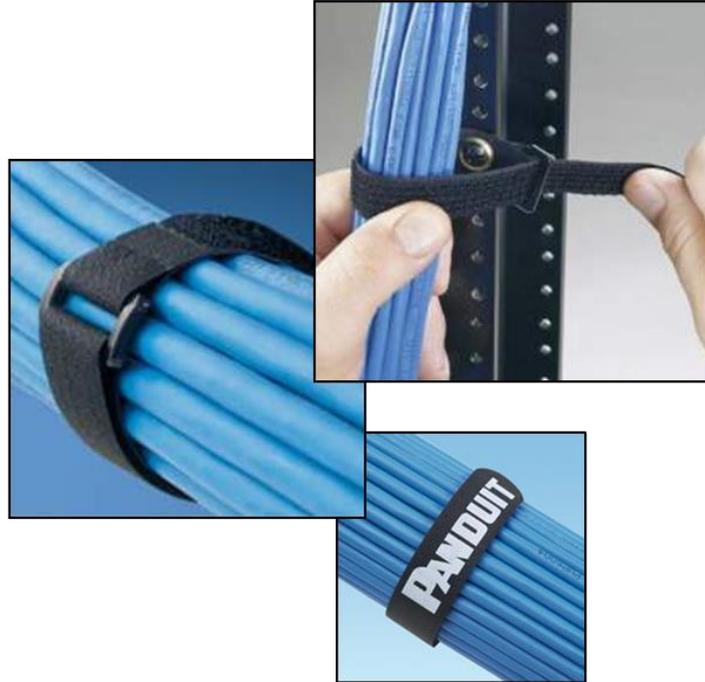
strength



# Network Cable Ties

Hook & Loop Ultra-Cinch UCT3S-X0 & UGCT3S-X0ies)

- Unique material - Hooks and loops on same side
- Available with or without brass grommet
- Multiple colors
- Standard  $\frac{3}{4}$ " width
- Available with "write-on" area or custom printed



# Network Cable Ties

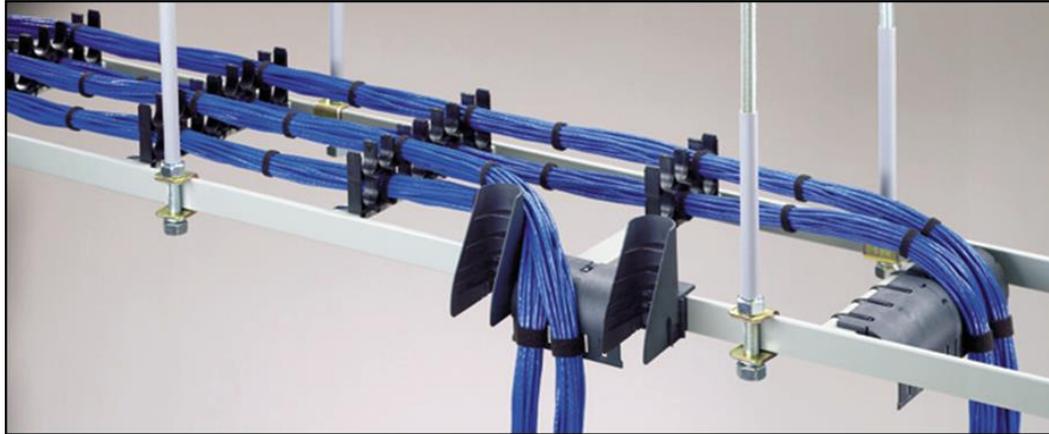
## CBOT Installation Device - CBOT24K

- Organize up to 24 Cables per Bundle
- Decrease Installation Time by 50%
- Accommodate a Wide Range of Data Cable Diameters
- Smooth Edges Prevent Cable Abrasion



# Ladder Rack Accessories

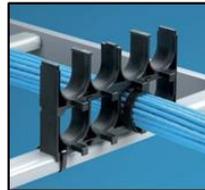
## Ladder Rack Accessories



**Threaded Rod Cover**



**Cable Rack Spacers**



**Waterfall Products**



# Sales Tools

- Sample Bags
- Bulletins
- On-Line Drawings
- NCG and EG Printed Catalogs
- What Else can we Provide??