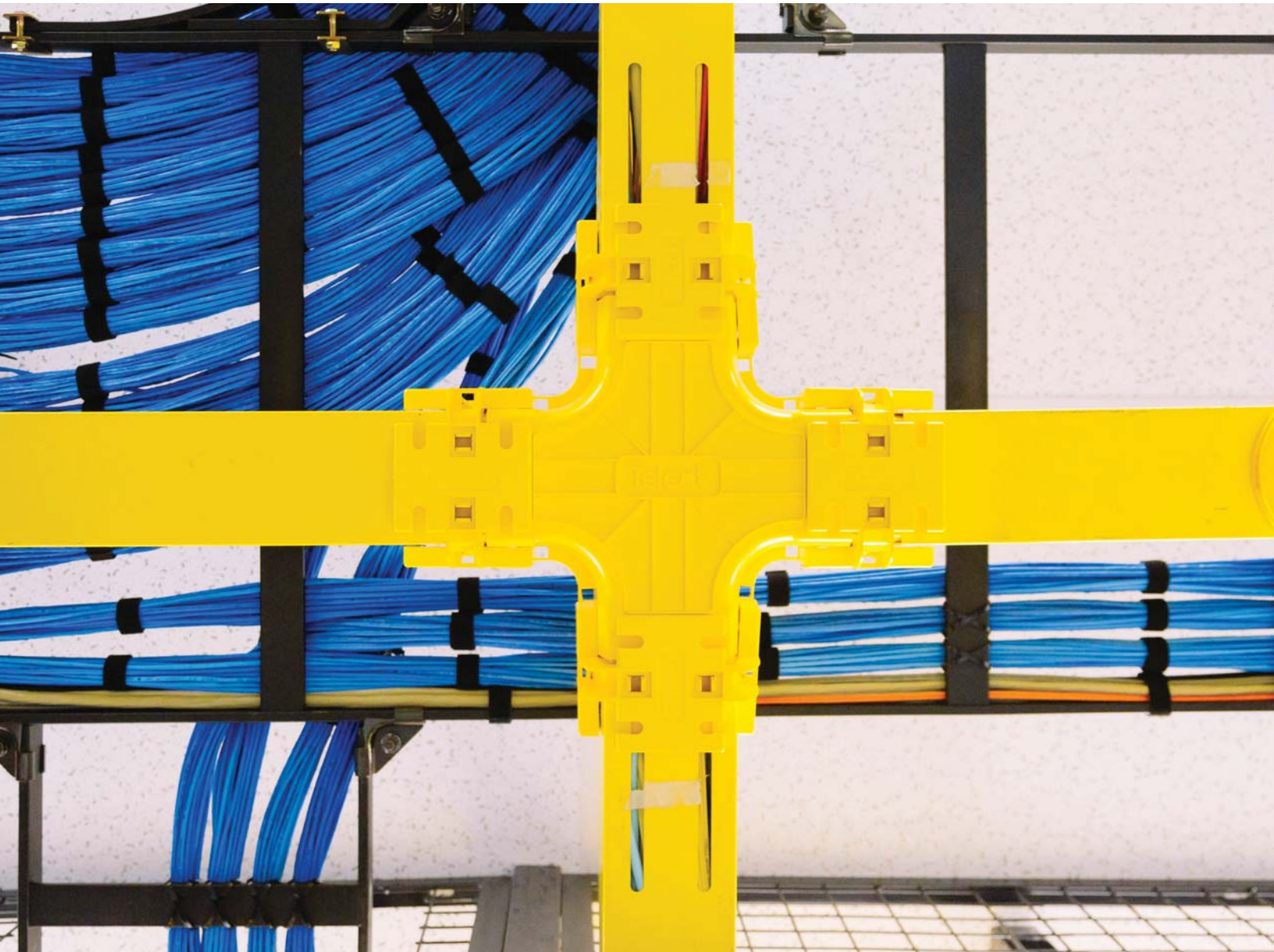


WaveTrax™

Fiber Cable Management System



we simplify networks:

Telect

WaveTrax™

Fiber Cable Management System

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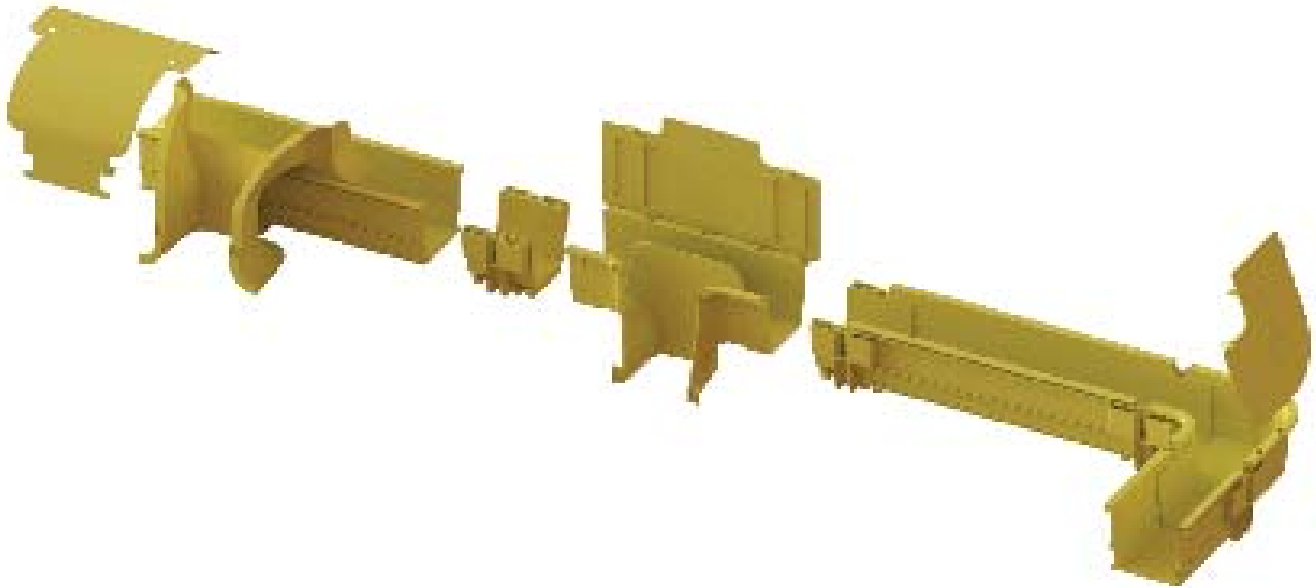
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WaveTrax™

Fiber Cable Management System

Overview

Telect WaveTrax™ is a robust overhead fiber cable management system that is designed for rapid assembly and installation. WaveTrax fiber raceway is designed to manage, route and protect fiber cables both horizontally and vertically throughout an entire network. The patented WaveTrax snap-together design is simple, seamless and flexible, enabling complete configurability of the cable management solution.



WAVETRAX SNAP-TOGETHER DESIGN

WaveTrax™

Fiber Cable Management System

Trough

- 6-foot length
- The WaveTrax trough notching tool 027-2000-1100 adds positive snap-fit features for engaging trough into FastLock couplers

| Width | Part Number |
|-------|----------------|
| 2" | 027-2000-4206 |
| 4" | 027-2000-4001 |
| 6" | 027-2000-6401 |
| 12" | 027-2000-12406 |



Trough Cover

- 6-foot length
- WaveTrax Express trough covers require no hardware to attach and have a living hinge for ease of access

| Width | Part Number |
|-------|----------------|
| 2" | 027-2000-4202 |
| 4" | 027-2000-4002 |
| 6" | 027-2000-6402 |
| 12" | 027-2000-12402 |



Trough Notching Tool

- The WaveTrax trough notching tool adds snap-fit features into the trough for positive engagement into FastLock couplers

| Width | Part Number |
|-------|---------------|
| All | 027-2000-1100 |



FastLock Coupler

- Tool-less, snap-fit junction for coupling trough, Ts, intersections, elbows and sweep transitions
- FastLock couplers can each be attached to Telect support brackets with a 3/8-inch bolt

| Width | Part Number |
|-------|----------------|
| 2" | 027-2000-4299 |
| 4" | 027-2000-4099 |
| 6" | 027-2000-6499 |
| 12" | 027-1000-12499 |



NOTE: Telect recommends installation of support brackets (027-1000-4052 and 027-2000-4060) for every 3'-5' of trough

WaveTrax™

Fiber Cable Management System

Competitive FastLock Coupler

- Convert FiberGuide® trough to Telect WaveTrax trough*

| Width | Part Number |
|-------|----------------|
| 2" | 027-1000-4279 |
| 4" | 027-2000-4007 |
| 6" | 027-2000-6407 |
| 12" | 027-1000-12407 |



Horizontal Elbow

- Horizontal elbow creates a horizontal 90-degree connection

| Width | Part Number |
|-------|----------------|
| 2" | 027-2000-4224 |
| 4" | 027-2000-4024 |
| 6" | 027-2000-6424 |
| 12" | 027-2000-12424 |



Horizontal Elbow Cover

- Cover snaps onto horizontal elbows and are hinged for ease of access to trough pathways

| Width | Part Number |
|-------|----------------|
| 2" | 027-2000-4225 |
| 4" | 027-2000-4025 |
| 6" | 027-2000-6425 |
| 12" | 027-2000-12425 |



Horizontal T

- WaveTrax T intersection that attaches with FastLock couplers
- 4", 6" and 12" Ts directly connect to drop attachments and trumpets without couplers

| Width | Part Number |
|-------|----------------|
| 2" | 027-2000-4210 |
| 4" | 027-2000-4010 |
| 6" | 027-2000-6410 |
| 12" | 027-2000-12410 |



NOTE: Telect recommends installation of support brackets (027-1000-4052 and 027-2000-4060) for every 3'-5' of trough

*All registered trademarks are property of their respective owners

WaveTrax™

Fiber Cable Management System

Horizontal T Cover

- Cover snaps onto horizontal T with a built-in hinge for ease of access to trough pathways

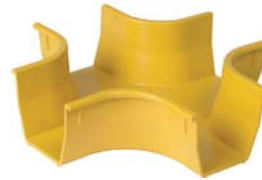
| Width | Part Number |
|-------|----------------|
| 2" | 027-2000-4211 |
| 4" | 027-2000-4011 |
| 6" | 027-2000-6411 |
| 12" | 027-2000-12411 |



Horizontal Intersection

- Allows 90-degree intersection between two horizontal trough runs

| Width | Part Number |
|-------|----------------|
| 2" | 027-2000-4230 |
| 4" | 027-2000-4030 |
| 6" | 027-2000-6430 |
| 12" | 027-2000-12430 |



Horizontal Intersection Cover

- Cover snaps onto horizontal intersection with a built-in hinge for ease of access to trough pathways

| Width | Part Number |
|-------|----------------|
| 2" | 027-2000-4231 |
| 4" | 027-2000-4031 |
| 6" | 027-2000-6431 |
| 12" | 027-2000-12431 |



Center Drop

- Allows vertical fiber drops out of a horizontal trough run

| Width | Part Number |
|-----------|----------------|
| 2" | 027-1000-4227 |
| 4" | 027-2000-4426 |
| 6" | 027-2000-6426 |
| 12" to 4" | 027-1000-12427 |
| 12" to 6" | 027-1000-12426 |



WaveTrax™

Fiber Cable Management System

Center Drop Cover

- Cover snaps onto center drop with a built-in hinge for ease of access to trough pathways

| Width | Part Number |
|-------|---------------|
| 4" | 027-2000-4427 |
| 6" | 027-2000-6427 |



Trumpet

- Trumpet provides bend radius protection for drops
- 4", 6" and 12" trumpets attach directly to drops and transitions without couplers

| Width | Part Number |
|-------|----------------|
| 2" | 027-2000-4275 |
| 4" | 027-2000-4075 |
| 6" | 027-2000-6475 |
| 12" | 027-2000-12475 |



End Cap

- Snaps onto horizontal elbows, Ts or cross intersections
- Use end cap connector for capping trough ends

| Width | Part Number |
|-------|----------------|
| 2" | 027-2000-4208 |
| 4" | 027-2000-4008 |
| 6" | 027-2000-6408 |
| 12" | 027-2000-12408 |



End Cap Connector

- End cap connector allows end cap to fit on trough without a coupler

| Width | Part Number |
|-------|----------------|
| 2" | Not required |
| 4" | 027-2000-4009 |
| 6" | 027-2000-6409 |
| 12" | 027-2000-12409 |



WaveTrax™

Fiber Cable Management System

Reducers

- Snaps onto horizontal elbows, Ts or intersections
- 2" elbows require a coupler

| Width | Part Number |
|-----------|----------------|
| 4" to 2" | 027-2000-4050 |
| 6" to 4" | 027-2000-6450 |
| 12" to 6" | 027-2000-12450 |



Reducer Covers

- Covers snap onto reducers without any additional hardware

| Width | Part Number |
|-----------|----------------|
| 4" to 2" | 027-2000-4051 |
| 6" to 4" | 027-2000-6451 |
| 12" to 6" | 027-2000-12451 |



Express Off-Ramp

- Express Off-Ramp is a modular drop that quickly snaps over the top of existing trough. Fits on 4", 6" and 12" WaveTrax
- Support with any flat profile bracket

| Drop Width | Part Number |
|------------|---------------|
| 2" Drop | 027-2000-4264 |
| 4" Drop | 027-2000-4065 |



Express Off-Ramp with Express Bracket

- Express Off-Ramp is a modular drop that quickly snaps over the top of existing trough
- Fits on 4", 6" and 12" trough
- Express bracket ratchets to attach securely to WaveTrax

| Drop Width | Part Number |
|------------|---------------|
| 2" Drop | 027-2000-4262 |
| 4" Drop | 027-2000-4062 |



Express Off-Ramp for FiberGuide® or FiberRunner® Trough

- Express Off-Ramp is a modular drop that quickly snaps over the top of FiberGuide and FiberRunner trough

| Drop Width | Part Number | |
|------------|----------------|----------------------|
| 2" Drop | 027-C0406-4262 | For 4" and 6" trough |
| 4" Drop | 027-C0406-4062 | For 4" and 6" trough |
| 4" Drop | 027-C0012-4062 | 12" trough only |



Express Off-Ramp Cover

- Express Off-Ramp fits off-ramps with or without Express brackets

| Cover Width | Part Number |
|-------------|---------------|
| 2" Cover | 027-2000-4263 |
| 4" Cover | 027-1000-4066 |



90-Degree Down Elbow

- Snaps onto horizontal Ls, Ts or intersections
- 2" elbows require a coupler

| Trough Width | Part Number |
|--------------|----------------|
| 2" | 027-2000-4277 |
| 4" | 027-2000-4077 |
| 6" | 027-2000-6477 |
| 12" to 6" | 027-2000-12477 |



90-Degree Down Elbow Covers

- Snap-on cover for 90-degree down elbow

| Trough Width | Part Number |
|--------------|----------------|
| 2" | 027-2000-4278 |
| 4" | 027-2000-4078 |
| 6" | 027-2000-6478 |
| 12" | 027-2000-12402 |



NOTE: Telect recommends installation of support brackets (027-1000-4052 and 027-2000-4060) for every 3'-5' of trough

WaveTrax™

Fiber Cable Management System

90-Degree Up Elbow

- 90-degree elbow enables ease of transition to under-floor applications
- Aluminum construction

| Trough Width | Part Number |
|--------------|----------------|
| 2" | 027-1000-4273 |
| 4" | 027-1000-4473 |
| 6" | 027-1000-6473 |
| 12" | 027-1000-12473 |



90-Degree Up Elbow Cover

- Cover snaps onto 90-degree up elbow
- Aluminum construction

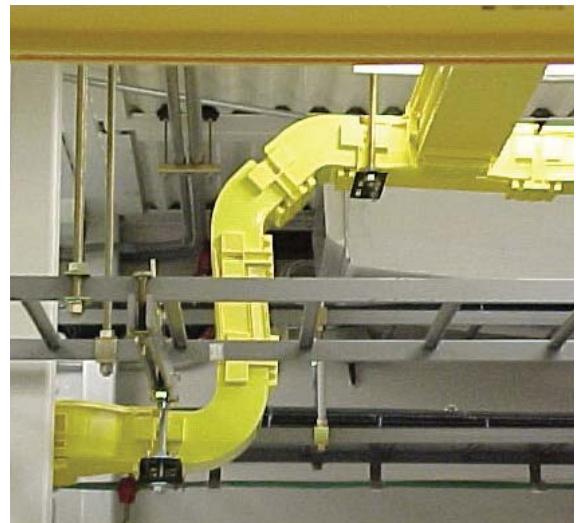
| Trough Width | Part Number |
|--------------|---------------|
| 4" | 027-1000-4474 |
| 6" | 027-1000-6474 |



45-Degree Up Elbow

- Allows 45-degree up-sweep to ease elevation changes in fiber trough
- Aluminum construction

| Trough Width | Part Number |
|--------------|----------------|
| 2" | 027-1000-4287 |
| 4" | 027-1000-4487 |
| 6" | 027-1000-6487 |
| 12" | 027-1000-12487 |



Express Trough Expansion – Expand Trough Runs without Cutting

Express T

- Express T snaps on to existing trough and eliminates cutting trough to add a 90-degree run
- The Express T creates a T intersection from a 6" trough to 4", 6" or 12" WaveTrax trough

| | Intersecting Trough | Part Number |
|-----|------------------------------------|-----------------|
| 6" | 4", 6" or 12" WaveTrax | 027-2000-6412 |
| | 4" or 6" FiberGuide or FiberRunner | 027-C0406-6412 |
| | 12" FiberGuide or FiberRunner | 027-C0012-6412 |
| 12" | 4", 6" or 12" WaveTrax | 027-2000-12412 |
| | 12" FiberGuide or FiberRunner | 027-C0012-12412 |



6" Express T



12" Express T

Express T Cover

- Covers snap onto 6" or 12" Express T

| Express T Width | Part Number |
|-----------------|----------------|
| 6" | 027-2000-6413 |
| 12" | 027-2000-12413 |



6" Express T Cover



12" Express T Cover

Express Overpass

- Expand the width of an existing trough by connecting parallel trough with an Express overpass
- Overpass can connect trough that is 4" to 12" apart

| Overpass Width | Part Number |
|------------------------------|----------------|
| 8" | 027-2000-4066 |
| 8" FiberGuide or FiberRunner | 027-C0012-4066 |



Express Overpass Cover

- Cover snaps onto Express overpass

| Overpass Width | Part Number |
|----------------|---------------|
| 8" | 027-2000-4067 |



Mounting Brackets

Support Bracket for Threaded Rod

- Supports WaveTrax couplers on new or existing 5/8" threaded rod

| Trough Width | Part Number |
|--------------|----------------|
| 2" | 027-1000-4251 |
| 4" & 6" | 027-1000-4051 |
| 12" | 027-1000-12405 |



Universal Support Bracket

- Attaches to cable rack, walls or 5/8" threaded rod to support WaveTrax couplers

| Trough Width | Part Number |
|--------------|---------------|
| 2" | 027-2000-4205 |
| 4" | 027-1000-4004 |



Center Support Bracket

- Attaches to 5/8" threaded rod to support WaveTrax couplers

| Trough Width | Part Number |
|--------------|---------------|
| 2" | 027-1000-4252 |
| 4" & 6" | 027-1000-4052 |
| 12" | 027-1000-1250 |



C-Bracket

- Attaches to 5/8" threaded rod to support WaveTrax couplers

| Trough Width | Part Number |
|--------------|---------------|
| 2" | 027-1000-4253 |
| 4" & 6" | 027-1000-4053 |
| 12" | 027-1000-1253 |



NOTE: Telect recommends installation of support brackets (027-1000-4052 and 027-2000-4060) for every 3'-5' of trough
All of the trough support brackets now include the 027-2000-4060 Mighty Clamp

WaveTrax™

Fiber Cable Management System

Adjustable Bracket

- Mounts to vertical rack flange
- 1.5" offset with 0.25" of adjustment

| Trough Width | Part Number |
|---------------|---------------|
| 2" Trough | 027-1000-4216 |
| 2" CableLinks | 027-1000-4211 |
| 4" CableLinks | 027-1000-4117 |



Cable Rack Bracket

- Mounts to most styles of cable rack and auxiliary bar

| Trough Width | Part Number |
|--------------|---------------|
| 2" | 027-1000-4260 |
| 4" & 6" | 027-1000-4062 |

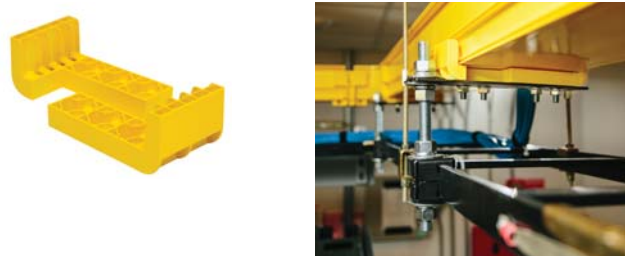


Trough Support Clamp

- Trough support clamps attach to WaveTrax brackets to securely clamp and support WaveTrax trough

| Trough Width | Part Number |
|--------------|---------------|
| 2" | 027-2000-4260 |
| 4", 6" & 12" | 027-2000-4060 |

NOTE: Telect recommends installation of support brackets (027-1000-4052 and 027-2000-4060) for every 3'-5' of trough



Threaded Rod Kit

- Mounts to most styles of cable rack and auxiliary bar
- Includes 5/8" threaded rod, clamshell brackets and hardware

| All-thread Length | Part Number |
|-------------------|---------------|
| 18" | 027-1000-4002 |
| 40" | 027-1000-4001 |



NOTE: Telect recommends installation of support brackets (027-1000-4052 and 027-2000-4060) for every 3'-5' of trough
All of the trough support brackets now include the 027-2000-4060 Mighty Clamp

WaveTrax™

Fiber Cable Management System

Clamshell Bracket Kit

- Bracket kit accommodates 5/8" threaded rod and fits most styles of cable rack and auxiliary bar

| Part Number |
|---------------|
| 027-1000-4103 |



Vertical Fiber Management Solutions

2" Flexible Tube Adapter

- Attaches single flexible tube to 2" center drop
- 2" Express Off-Ramp includes all flexible tube adapter hardware

| Drop Width | Part Number |
|-------------|---------------|
| Single Tube | 027-1000-4290 |



4" Flexible Tube Adapter

- Attaches to 4" center drops or 4" Express Off-Ramps

| Drop Width | Part Number |
|-------------|---------------|
| Single Tube | 027-2000-2000 |
| Dual Tube | 027-2000-4016 |



4" Flexible Tube Adapter Cover

- Cover for dual tube adapter

| Drop Width | Part Number |
|------------|---------------|
| 4" Cover | 027-2000-4018 |



WaveTrax™

Fiber Cable Management System

Flexible Tubing

- 2" flexible tubing

| Drop Width | Part Number |
|------------|---------------|
| 5 Feet | 027-2902-0005 |
| 10 Feet | 027-2902-0010 |
| 15 Feet | 027-2902-0015 |
| 20 Feet | 027-2902-0020 |
| 100 Feet | 027-2902-0100 |



CableLinks™

- CableLinks™ offer flexible cable routing in all 3 axes while maintaining bend radius
- Ideal for routing from overhead down to equipment racks
- 2" CableLinks 1 foot is 3 links
- 4" CableLinks 2 feet is 3 links
- 6" CableLinks 3 feet is 4 links

| Description | Part Number |
|-------------|---------------|
| 2" Link | 027-0000-4200 |
| 4" Link | 027-0000-4000 |
| 6" Link | 027-0000-6400 |



WaveTrax Adapter to CableLinks

- Connects single/dual 2" CableLinks or a single 4" CableLinks to 4" WaveTrax horizontal elbows, Ts, intersections, 4" Express off-ramps, 4" center drop or 90-degree down elbows
- Connects a 6" CableLinks to 6" WaveTrax Ls, Ts or intersections

| Width | Part Number |
|------------------------------------|---------------|
| 4" to 2" CableLinks | 027-2000-4215 |
| 2" or 4" CableLinks to 4" WaveTrax | 027-2000-4015 |
| 6" WaveTrax to 6" CableLinks | 027-2000-6415 |



4" to 2"

2" or 4" to 4"

6" to 6"

WaveTrax™

Fiber Cable Management System

CableLinks to WaveTrax Trough Adapter

- Connects CableLinks to WaveTrax trough

| Width | Part Number |
|-------|---------------|
| 2" | 027-1000-4207 |
| 4" | 027-2000-4090 |
| 6" | 027-1000-6490 |



CableLinks Rack Mount Brackets

| Width | Part Number |
|--------------|---------------|
| 2", 4" or 6" | 027-1000-4211 |



Technical Specifications

Telect WaveTrax trough has recommended capacities as indicated in the Trough Recommended Capacity table. However, WaveTrax is designed to easily support fiber up to the fiber counts indicated in the Trough Maximum Capacity table.

Trough Recommended Capacity

| Trough Pile-Up | 2" Trough | | | 4" Trough | | | 6" Trough | | | 12" Trough | | |
|----------------|-----------|------|------|-----------|------|------|-----------|------|------|------------|------|------|
| | 1.6 mm | 2 mm | 3 mm | 1.6 mm | 2 mm | 3 mm | 1.6 mm | 2 mm | 3 mm | 1.6 mm | 2 mm | 3 mm |
| 2" | 520 | 360 | 160 | 1040 | 720 | 320 | 1560 | 1080 | 480 | 3120 | 2160 | 960 |

| Patch Cord Diameter | 1.6 mm Patch Cords | 2 mm Patch Cords | 3 mm Patch Cords |
|--|--------------------|------------------|------------------|
| Recommended Patch Cord Density per in ² | 130 | 90 | 40 |

Trough Maximum Capacity

| Trough Pile-Up | 2" Trough | | | 4" Trough | | | 6" Trough | | | 12" Trough | | |
|----------------|-----------|------|------|-----------|------|------|-----------|------|------|------------|------|------|
| | 1.6 mm | 2 mm | 3 mm | 1.6 mm | 2 mm | 3 mm | 1.6 mm | 2 mm | 3 mm | 1.6 mm | 2 mm | 3 mm |
| 2" | 640 | 412 | 240 | 1280 | 824 | 368 | 1920 | 1236 | 552 | 3840 | 2472 | 1104 |
| 3" | | - | - | 1920 | 1236 | 552 | 2880 | 1854 | 828 | 5760 | 3708 | 1656 |
| 4" | | - | - | 2560 | 1648 | 736 | 3840 | 2472 | 1104 | 7680 | 4944 | 2208 |

WaveTrax™

Fiber Cable Management System

| Patch Cord Diameter | 1.6 mm Patch Cords | 2 mm Patch Cords | 3 mm Patch Cords |
|--|--------------------|------------------|------------------|
| Maximum Patch Cord Density per in ² | 160 | 103 | 46 |

Support Bracket Spacing

| FiberGuide Size | Recommended Support Spacing |
|--|---|
| 2" | 2 to 3 Feet |
| 2" track | 5 to 6 Feet |
| 4" or 6" | 3 Feet* |
| 12" and 24" | See topic 6.3 for 12 and 24" FiberGuide support recommendations |
| * More supports may be needed if multiple fittings are placed near each other. | |

6.3 12" and 24" FiberGuide System Guidelines

When installing a 12" or 24" FiberGuide System, observe these guidelines.

1. Use support kits available from ADC.

ADC support kits allow you to attach FiberGuide system components to existing hardware, such as in-place cable racks, digital cable ways, existing threaded rods and equipment racks.

2. Place support brackets directly under FiberGuide fittings.

FiberGuide fittings include T's, elbows, crosses and downspouts. If it is not possible to install support brackets directly under the fittings, install support brackets under the FiberGuide straight sections as close to the fittings as possible.

3. Avoid supporting 12" or 24" FiberGuide from Unistrut.

WaveTrax

| | | | |
|--------------------------------------|--|------------------|--------------|
| Channels | Part Number Yellow UL 94V-0 fire-retardant plastic | | |
| Transition components* | Yellow UL 94V-0 fire-retardant plastic | | |
| Covers* | Yellow UL 94V-0 fire-retardant plastic | | |
| Capacity/weight of components | 2" channel | 242 3 mm fibers | 1.17 lbs/ft |
| | 4" channel | 915 3 mm fibers | 4.43 lbs/ft |
| | 6" channel | 1382 3 mm fibers | 6.69 lbs/ft |
| | 12" channel | 2635 3 mm fibers | 12.76 lbs/ft |
| | Universal mounting bracket: 64 lbs. holding capacity per bracket | | |

*Select components constructed of 16 gauge cold-rolled steel.

CableLinks

| | | | |
|--------------------------------------|--|------------------|-------------|
| Links | Yellow UL 94V-0 fire-retardant plastic | | |
| Transition components | 16 gauge cold-rolled steel | | |
| Capacity/weight of components | 2" channel | 242 3 mm fibers | 0.6 lbs/ft |
| | 4" channel | 915 3 mm fibers | 1.8 lbs/ft |
| | 6" channel | 1382 3 mm fibers | 1.95 lbs/ft |
| | Universal mounting bracket: 64 lbs. holding capacity per bracket | | |