

# LightWays™

Fiber Routing System



## Selection Guide







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# LightWays™

## Fiber Routing System

# Protecting

## Your **Critical** Fiber Infrastructure

Siemon LightWays is a flexible fiber routing system for supporting the growing amount of fiber optic cables required to connect critical networking equipment in the data center. This routing system is fully enclosed to protect fiber from dirt and dust as it traverses from network distribution areas to storage and server areas. Strong enough to protect cables against the most rigorous of conditions, LightWays is specifically designed to maintain proper bend radius of fiber optic cabling, which is imperative to preventing microbend and macrobend losses that can adversely impact system performance.

Manufactured from halogen free, flame-retardant UL94/V0 plastic and available in four different sizes. LightWays is easy to assemble and includes a wide variety of straight duct, elbows, tees, crosses, reducers and innovative outlets for designing a system that meets the exact needs of any data center space. The system's easy access covers allow fiber optic cables to be installed in or removed from pathways at any time without the need to disconnect the whole system. The LightWays Fiber Routing System is the ideal solution for protecting, segregating and managing your data center's critical fiber infrastructure.



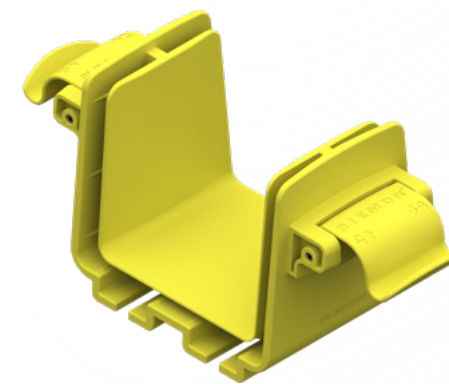


# TOOLLESS JOINER

## Effortless, Reusable and Secure Connections

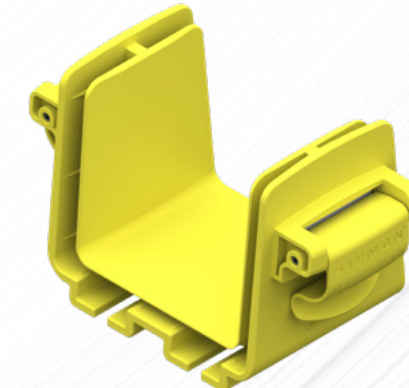
The LightWays™ system includes an innovative toolless joiner that provides a quick and easy method for connecting LightWays ducts, elbows, tees, crosses and reducers. With no tools needed for installation or removal, the LightWays joiner makes building a complete fiber routing system far less time consuming than systems that require drilling, nuts, bolts or other tools to join components.

Available in all four LightWays duct sizes, the LightWays toolless joiner provides an audible click to ensure that each component is successfully and securely joined together. Each joiner can be easily removed and reused throughout the system.



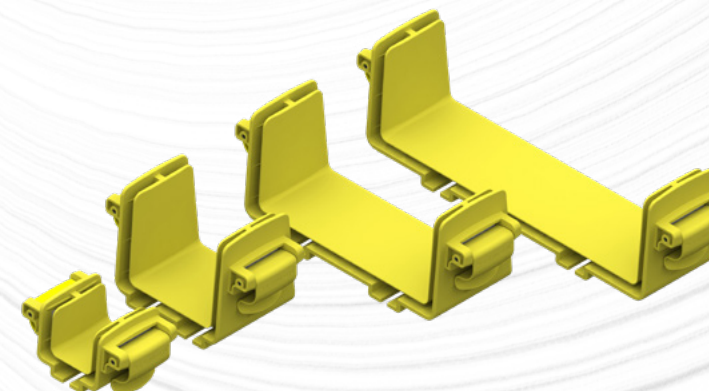
### Reusable Connections

Joiner can be reused as needed throughout the system. To remove the joiner, simply lift the locking levers into the unlocked position. To reattach the joiner simply push down on the locking levers and an audible click will ensure a secure connection.



### Effortless Connections

Joiner arrives in the locked position ready to easily slide in the LightWays ducts, elbow, tees, crosses and reducers for a secure connection.



### Various Sizes

The joiner is available in all four LightWays sizes including: 50mm X 50mm (2 X 2 in.), 100mm X 100mm (4 X 4 in.), 200mm X 100 mm (8 X 4 in.) and 300mm X 100mm (12 X 4 in.).



# WATERFALL OUTLET



## Innovation Meets Excellence

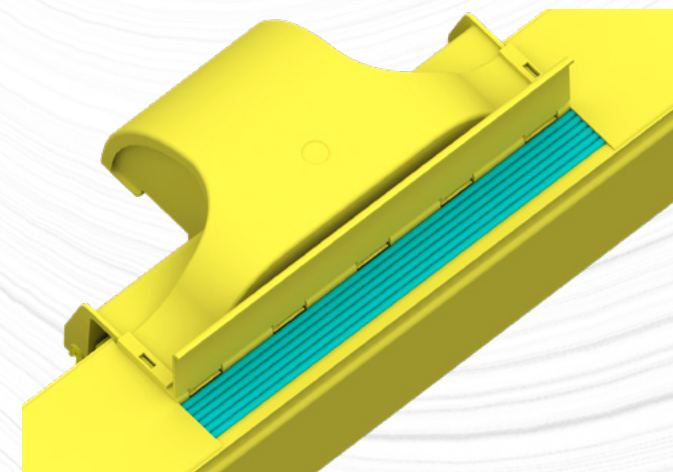
Siemon's Waterfall Outlet is a revolutionary component for LightWays™ fiber routing. This non-intrusive fiber optic outlet is simply and easily placed over the sidewall of any new or existing channel to create a vertical drop-off from a horizontal run. With full radius control, the Waterfall Outlet safely routes fibers to and from racks and cabinets.

This fiber outlet presents a low profile above the channel's edge and is easily installed without tools anywhere along the sidewall of straight channels. The outlet also features a unique two-piece cover with a hinged rear section that allows users to easily access the fibers that bypass the outlet without having to remove the main cover. This allows fiber to be added, moved or adjusted without disturbing those inside the outlet. A trumpet is available for use with the outlet, as well as an outlet adapter for transitioning from a waterfall outlet to flexible tubing.



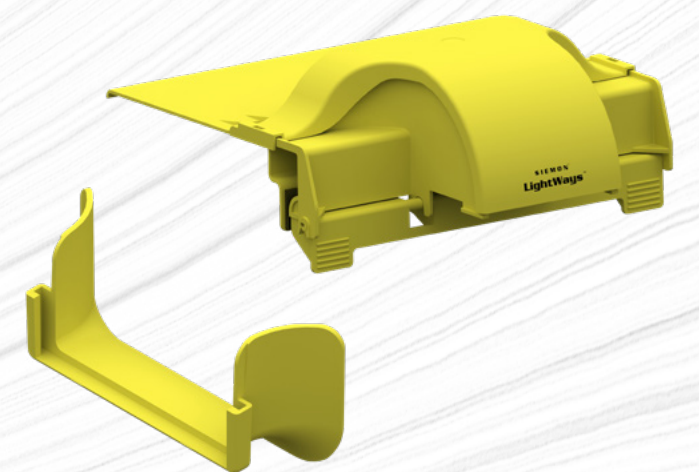
## Easy to Install

This fiber outlet features a low profile above the channel's edge and is easily installed without tools anywhere along the side-wall of straight channels.



## Simplified Access

The hinged section of the waterfall allows easy access.



## Bend Radius Protection

The optional trumpet can attach to the outlet to provide a smooth bend radius for exiting fiber.



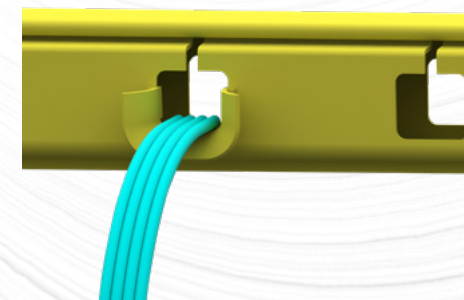
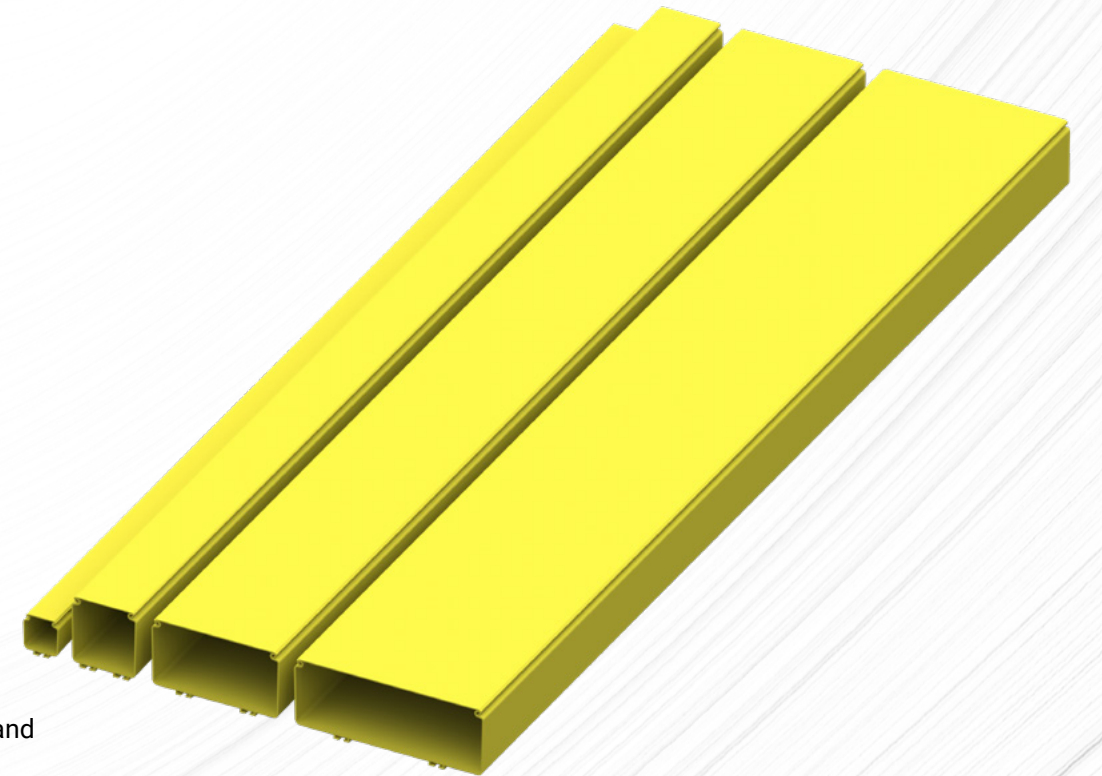
# A VARIETY OF OPTIONS

## Straight Runs with a Variety of Fitting Options

LightWays™ Fiber Routing System includes 1.8m (6 ft.) sections of straight solid or straight slotted duct that are easily joined together using a combination of elbows, tees, crosses, reducers or duct and fitting splices. Slotted duct with cutouts spaced either 50mm (2 in.) or 100mm (4 in.) on center allows fiber to vertically drop into cabinets and racks in virtually any location along the route, and they can be used with slotted channel trumpets to maintain proper bend radius for exiting fiber. End caps are also available for sealing the ends of straight duct.

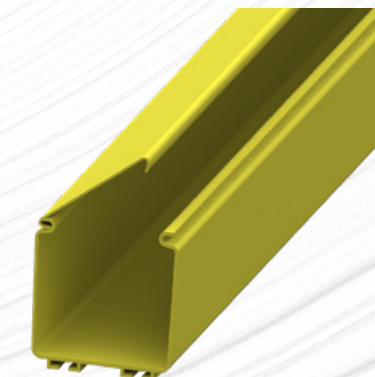
### Variety of Sizes

Solid duct available in  
50mm X 50mm (2 X 2in.),  
100mm X 100mm (4 X 4 in.),  
200mm X 100 mm (8 X 4 in.) and  
300mm X 100mm (12 X 4 in.).



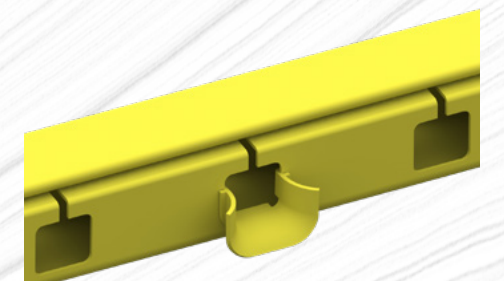
### Proper Bend Radius

Slotted channel trumpets can be attached to slotted duct to protect exiting fiber.



### Easy Access Covers

The system's easy access covers allow fiber optic cables to be installed in or removed from pathways at any time.



### Multiple Outlets

The Slotted straight run can be arranged to exit fiber every 50 or 100mms, ensuring the perfect drop down angle for your fiber cable.

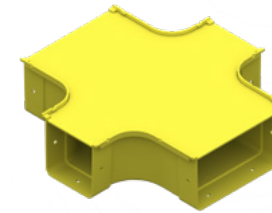


# URNS AND TRANSITIONS

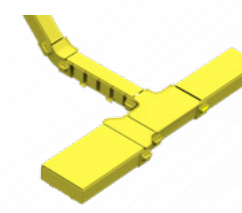
## Overcome any Obstacle with LightWays Fitting Options

LightWays™ Fiber Routing System includes 45- and 90-degree horizontal elbows for making left- or right-hand turns and bends in horizontal routes. The 45- and 90-degree vertical inside (up) and outside (down) elbows allow for connecting horizontal routes of different heights, which is ideal for raising or lowering the pathway to avoid obstacles

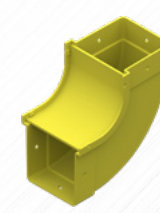
Horizontal and vertical tees are used to branch off from main routes, while 4-way horizontal crosses are used to establish cross intersections in straight duct. Horizontal, vertical, straight and 4-way cross reducers enable branching off from larger to smaller routes. Also available are 3- and 4-sided trumpets that can be attached to any horizontal duct or fitting to maintain proper bend radius for exiting fiber.



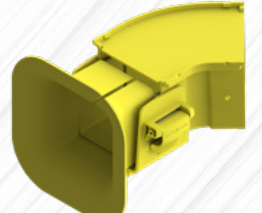
4-Way Cross



Size Reducers



Vertical Transitions

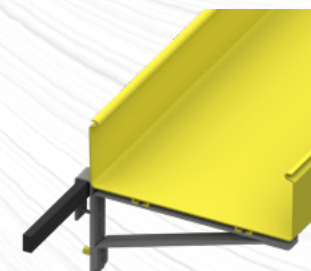


4-Sided Trumpets

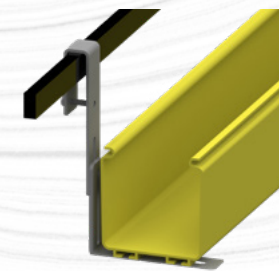


## Support for all Your Fiber Data Center Deployment Needs

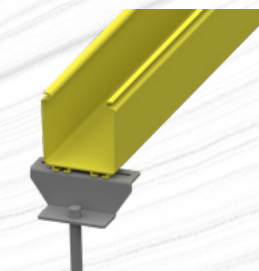
A variety of hardware and accessories are available to adapt LightWays to virtually any environment. Ladder brackets and basket tray kits allow LightWays to be mounted to overhead pathway systems. Rod mounting kits secure LightWays in locations that use steel rods, such as beneath raised floors. Universal mounting hardware can be configured to suit multiple applications where flexibility is required.



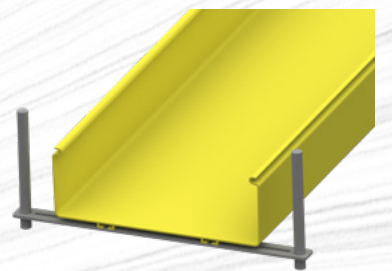
Universal Bracket



Ladder Bracket



Center Support Bracket



Double Rod Bracket



Material

- Halogen-free
- Color: Yellow

Material Compliance

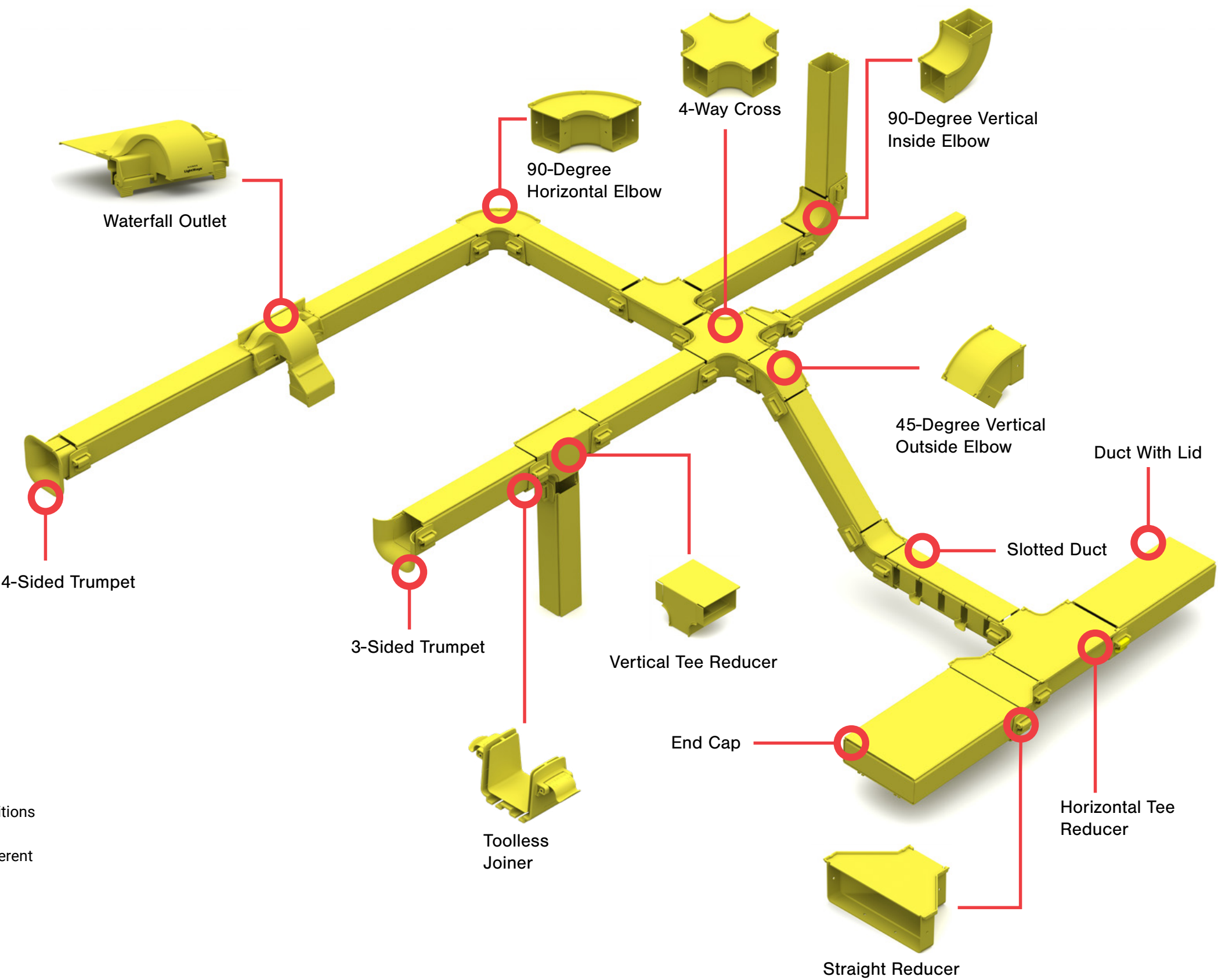
- EN 61249-2-21, IEC 61249-2-21: Non-halogenated Material
- EN 60695-11-10, IEC 60695-11-10: Fire hazard testing
- UL94/V0 plastic flame-retardant
- Directive 2015/65/EU RoHS Compliant
- EC 1907/2006 REACH Compliant

Performance Compliance

- EN 62368-1, IEC 62368-1: Safety Standard
- ANSI/TIA-942-B, Telecommunications Infrastructure Standard for Data Centers
- ANSI/TIA-569-B, Commercial Building Standard for Telecommunications Pathways and Spaces
- ANSI/UL 2024, Cable Routing Assemblies and Communications Raceways
- CAN/ULC-S143, Standard Method of Fire Tests for Non-Metallic Electrical and Optical Fiber Cable Raceway Systems
- NFPA 70 National Electrical Code (NEC)
- CSA C22.1 Canadian Electrical Code Part 1
- Suitable for riser and general-purpose applications

Benefits

- Segregates fiber optic cable from other media to provide flexibility for future additions or changes
- Fully encloses cables to keep out dirt and dust as the fiber traverses through different areas of the data center
- Protects cables by maintaining proper bend radius, preventing microbends and macrobends that degrade performance
- Maintains attractive aesthetics by enclosing cables throughout the facility





Straight, Solid Duct

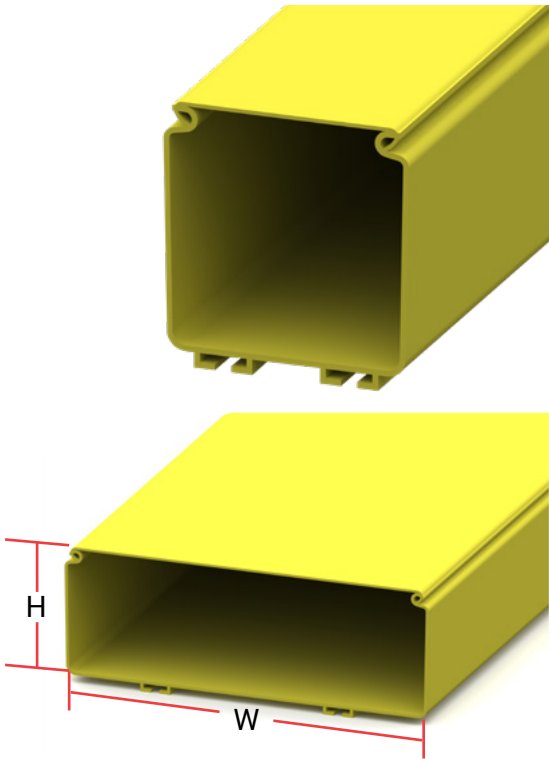
Straight, solid duct is used to support straight runs of fiber. These ducts are easily joined together using a combination of elbows, tees, crosses, reducers and joiners. End caps are used to seal the ends of straight duct.

Solid Duct with Cover

Part Number	Description
LW-DCA05-18-05C	50mm x 50mm (2 x 2 in.), 1.8m (6 ft.)
LW-DCA10-18-05C	100mm x 100mm (4 x 4 in.), 1.8m (6 ft.)
LW-DCA20-18-05C	200mm x 100mm (8 x 4 in.), 1.8m (6 ft.)
LW-DCA30-18-05C	300mm x 100mm (12 x 4 in.), 1.8m (6 ft.)

Solid Duct without Cover

Part Number	Description
LW-DCA05-18-05N	50mm x 50mm (2 x 2 in.), 1.8m (6 ft.)
LW-DCA10-18-05N	100mm x 100mm (4 x 4 in.), 1.8m (6 ft.)
LW-DCA20-18-05N	200mm x 100mm (8 x 4 in.), 1.8m (6 ft.)
LW-DCA30-18-05N	300mm x 100mm (12 x 4 in.), 1.8m (6 ft.)



Duct sizes are indicated by w (width) x h (height).  
Example: 200mm (w) x 100mm (h)

Duct Capacity Chart

Fiber Optic Cable Nominal Diameter mm (in.)	Duct Size mm (in.)			
	50x50 (2x2)	100x100 (4x4)	200x100 (8x4)	300x100 (12x4)
1.60 (0.63)	584	2296	4507	6685
2.00 (0.79)	374	1469	2884	4278
3.00 (0.12)	166	653	1282	1901
5.00 (0.20)	59	235	461	684
7.00 (0.28)	30	119	235	349
9.40 (0.37)	16	66	130	193
11.00 (0.43)	12	48	95	141
13.20 (0.52)	8	33	66	98

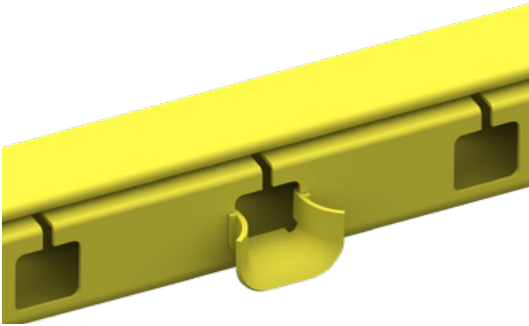
Duct cable capacities reflect a calculated fill ratio of 50% which is intended to reflect 100% fill during actual use

Straight, Slotted Duct with Cover

Straight, slotted duct features cutouts spaced either 50mm (2 in.) or 100mm (4 in.) on center. These slots allow fiber to vertically drop into cabinets and racks in virtually any location along the route, and can be used with slotted channel trumpets to protect fiber bend radius.

Slotted Duct with Cover

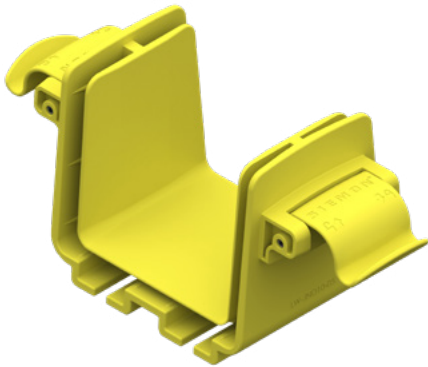
Part Number	Description
LW-DCB05-18-05C	50mm x 50mm (2 x 2 in.) x 1.8m (6 ft.) with slots spaced 50mm (2 in.) on center
LW-DCC05-18-05C	50mm x 50mm (2 x 2 in.) x 1.8m (6 ft.) with slots spaced 100mm (4 in.) on center
LW-DCB10-18-05C	100mm x100mm (4 x 4 in.) x 1.8m (6 ft.) with slots spaced 50mm (2 in.) on center
LW-DCC10-18-05C	100mm x100mm (4 x 4 in.) x 1.8m (6 ft.) with slots spaced 100mm (4 in.) on center



Toolless Joiner

The toolless joiners are used to connect ducts, elbows, tees, crosses and reducers.

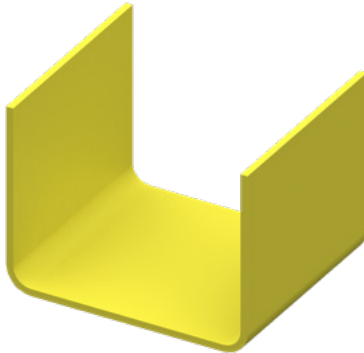
Part Number	Description
LW-JND05-05	50mm x 50mm (2 x 2 in.)
LW-JND10-05	100mm x 100mm (4 x 4 in.)
LW-JND20-05	200mm x 100mm (8 x 4 in.)
LW-JND30-05	300mm x 100mm (12 x 4 in.)



Manual Joiner

Manual joiners use nut/bolt hardware and tools to connect duct, elbows, tees, crosses and reducers.

Part Number	Description
LW-JNH05-05	50mm x 50mm (2 x 2 in.)
LW-JNH10-05	100mm x 100mm (4 x 4 in.)
LW-JNH20-05	200mm x 100mm (8 x 4 in.)
LW-JNH30-05	300mm x 100mm (12 x 4 in.)



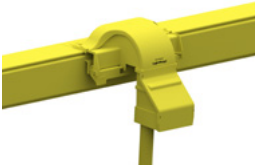
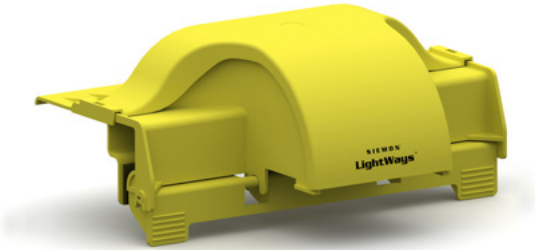


Waterfall Outlet

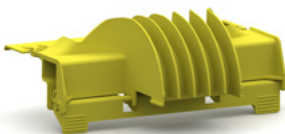
Low-profile Waterfall Outlets are easily placed over the sidewall of any new or existing straight duct to create a radius-controlled vertical drop off from a horizontal run.

Part Number	Description
LW-TES10-05	100mm (4 in.)*
LW-TES20-05	200mm (8 in.)
LW-TES30-05	300mm (12 in.)

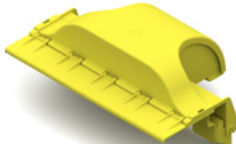
\*Can be used with 50mm x 50mm (2 x 2 in.) duct but cover will extend slightly past duct.



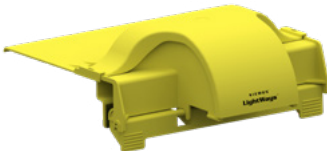
Waterfall with outlet adapter and conduit



Front View No Cover



Rear View



Front View w/ extended cover

Outlet Opening Trumpet

Outlet trumpet maintains proper bend radius of fiber exiting the waterfall outlet.

Part Number	Description
LW-TR110-05	Used with 100mm (4 in.), 200mm (8 in.) or 300 mm (12 in.) Waterfall Outlets

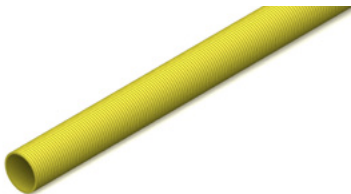


Outlet Opening Trumpet attached to Waterfall Outlet

Split Flexible Conduit

For use with outlet adapters, split flexible conduit is easy to install and used to protect fiber traversing from drops into racks and cabinets.

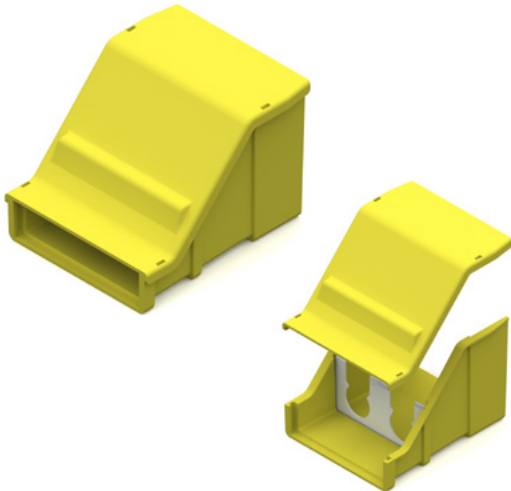
Part Number	Description
LW-CNL32-05	Yellow, 32mm (1¼ in)



Outlet Adapter

Adapters are used to better transition cables vertically. An open adapter provides additional protection for the fiber drop, while split conduit adapters secure the conduit to guard the entire fiber.

Part Number	Description
LW-EA05-132-05	50mm x 50mm (2 x 2 in.) Outlet Adapter to One 32mm (1.25 in.) Flexible Split Conduit
LW-EA10-232-05	100mm x 100mm (4 x 4 in.) Outlet Adapter to Two 32mm (1.25 in.) Flexible Split Conduit
LW-EA05-S-05	50mm x 50mm (2 x 2 in.) Outlet Adapter, Open
LW-EA10-S-05	100mm x 100mm (4 x 4 in.) Outlet Adapter, Open

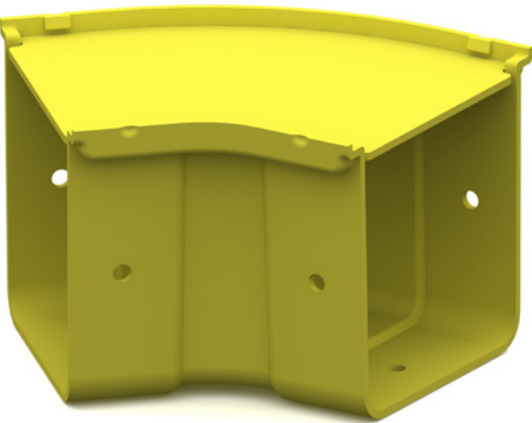


45 Degree Horizontal Elbows

45-degree horizontal elbows are used for creating bends that change the direction of horizontal routes of LightWays routing on a 45-degree angle.

Elbow with Cover

Part Number	Description
LW-BNH45-05-05C	50mm x 50mm (2 x 2 in.)
LW-BNH45-10-05C	100mm x 100mm (4 x 4 in.)
LW-BNH45-20-05C	200mm x 100mm (8 x 4 in.)
LW-BNH45-30-05C	300mm x 100mm (12 x 4in.)



Elbow without Cover

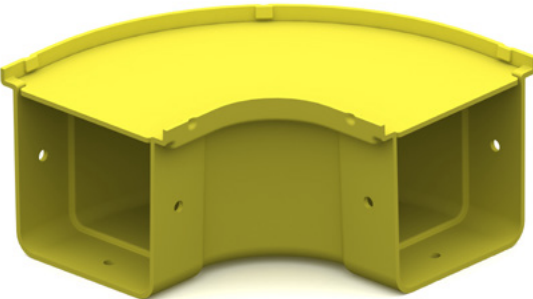
Part Number	Description
LW-BNH45-05-05N	50mm x 50mm (2 x 2 in.)
LW-BNH45-10-05N	100mm x 100mm (4 x 4 in.)
LW-BNH45-20-05N	200mm x 100mm (8 x 4 in.)
LW-BNH45-30-05N	300mm x 100mm (12 x 4in.)

90-Degree Horizontal Elbows

90-degree horizontal elbows are used for making left- or right-hand bends in horizontal routes of LightWays.

Elbow with Cover

Part Number	Description
LW-BNH90-05-05C	50mm x 50mm (2 x 2 in.)
LW-BNH90-10-05C	100mm x 100mm (4 x 4 in.)
LW-BNH90-20-05C	200mm x 100mm (8 x 4 in.)
LW-BNH90-30-05C	300mm x 100mm (12 x 4in.)



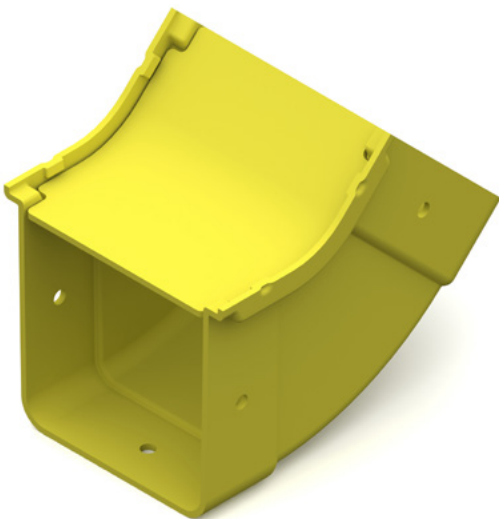
Elbow without Cover

Part Number	Description
LW-BNH90-05-05N	50mm x 50mm (2 x 2 in.)
LW-BNH90-10-05N	100mm x 100mm (4 x 4 in.)
LW-BNH90-20-05N	200mm x 100mm (8 x 4 in.)
LW-BNH90-30-05N	300mm x 100mm (12 x 4in.)



45-Degree Vertical Up (Inside) Elbows

These elbows create a 45-degree vertical transition and place the cover on the inside of the bend.



Elbow with Cover

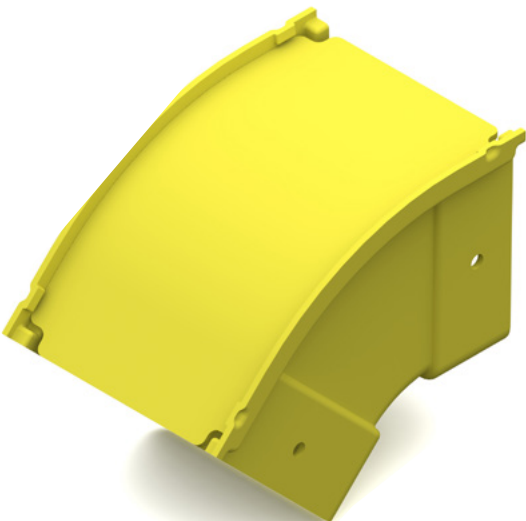
Part Number	Description
LW-BNU45-05-05C	50mm x 50mm (2 x 2 in.)
LW-BNU45-10-05C	100mm x 100mm (4 x 4 in.)
LW-BNU45-20-05C	200mm x 100mm (8 x 4 in.)
LW-BNU45-30-05C	300mm x 100mm (12 x 4in.)

Elbow without Cover

Part Number	Description
LW-BNU45-05-05N	50mm x 50mm (2 x 2 in.)
LW-BNU45-10-05N	100mm x 100mm (4 x 4 in.)
LW-BNU45-20-05N	200mm x 100mm (8 x 4 in.)
LW-BNU45-30-05N	300mm x 100mm (12 x 4in.)

45-Degree Vertical Down (Outside) Elbows

These elbows create a 45-degree vertical transition and place the cover on the outside of the bend.



Elbow with Cover

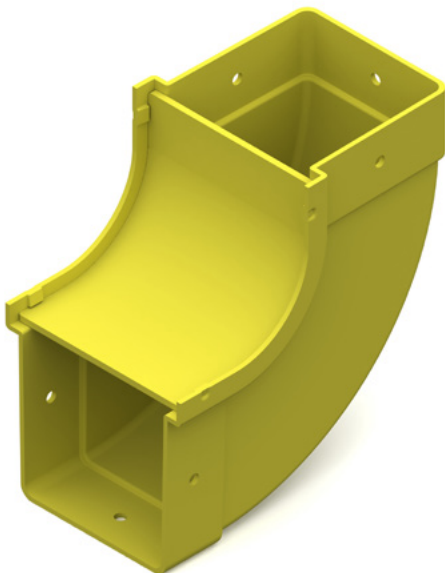
Part Number	Description
LW-BND45-05-05C	50mm x 50mm (2 x 2 in.)
LW-BND45-10-05C	100mm x 100mm (4 x 4 in.)
LW-BND45-20-05C	200mm x 100mm (8 x 4 in.)
LW-BND45-30-05C	300mm x 100mm (12 x 4in.)

Elbow without Cover

Part Number	Description
LW-BND45-05-05N	50mm x 50mm (2 x 2 in.)
LW-BND45-10-05N	100mm x 100mm (4 x 4 in.)
LW-BND45-20-05N	200mm x 100mm (8 x 4 in.)
LW-BND45-30-05N	300mm x 100mm (12 x 4in.)

90-Degree Vertical Up (Inside) Elbows

These elbows create a 90-degree vertical transition and place the cover on the inside of the bend.



Elbow with Cover

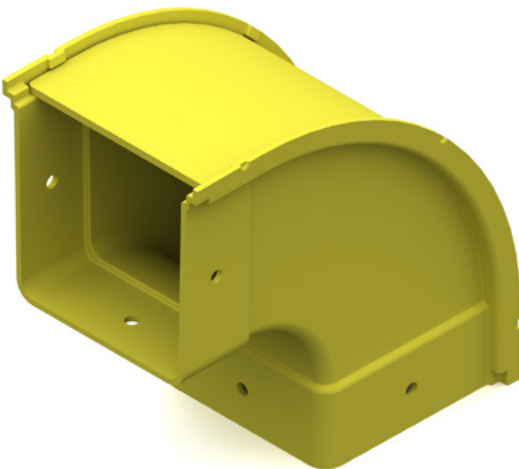
Part Number	Description
LW-BNU90-05-05C	50mm x 50mm (2 x 2 in.)
LW-BNU90-10-05C	100mm x 100mm (4 x 4 in.)
LW-BNU90-20-05C	200mm x 100mm (8 x 4 in.)
LW-BNU90-30-05C	300mm x 100mm (12 x 4in.)

Elbow without Cover

Part Number	Description
LW-BNU90-05-05N	50mm x 50mm (2 x 2 in.)
LW-BNU90-10-05N	100mm x 100mm (4 x 4 in.)
LW-BNU90-20-05N	200mm x 100mm (8 x 4 in.)
LW-BNU90-30-05N	300mm x 100mm (12 x 4in.)

90-Degree Vertical Down (Outside) Elbows

These elbows create a 90-degree vertical transition and place the cover on the outside of the bend.



Elbow with Cover

Part Number	Description
LW-BND90-05-05C	50mm x 50mm (2 x 2 in.)
LW-BND90-10-05C	100mm x 100mm (4 x 4 in.)
LW-BND90-20-05C	200mm x 100mm (8 x 4 in.)
LW-BND90-30-05C	300mm x 100mm (12 x 4in.)

Elbow without Cover

Part Number	Description
LW-BND90-05-05N	50mm x 50mm (2 x 2 in.)
LW-BND90-10-05N	100mm x 100mm (4 x 4 in.)
LW-BND90-20-05N	200mm x 100mm (8 x 4 in.)
LW-BND90-30-05N	300mm x 100mm (12 x 4in.)



Horizontal Tees

Horizontal tees are used to branch off from main horizontal routes to matching sized routes.

Horizontal Tee with Cover

Part Number	Description
LW-TEH05-05-05C	50mm x 50mm (2 x 2 in.)
LW-TEH10-10-05C	100mm x 100mm (4 x 4 in.)
LW-TEH20-20-05C	200mm x 100mm (8 x 4 in.)
LW-TEH30-30-05C	300mm x 100mm (12 x 4in.)

Horizontal Tee without Cover

Part Number	Description
LW-TEH05-05-05N	50mm x 50mm (2 x 2 in.)
LW-TEH10-10-05N	100mm x 100mm (4 x 4 in.)
LW-TEH20-20-05N	200mm x 100mm (8 x 4 in.)
LW-TEH30-30-05N	300mm x 100mm (12 x 4in.)

Horizontal Tee Reducers

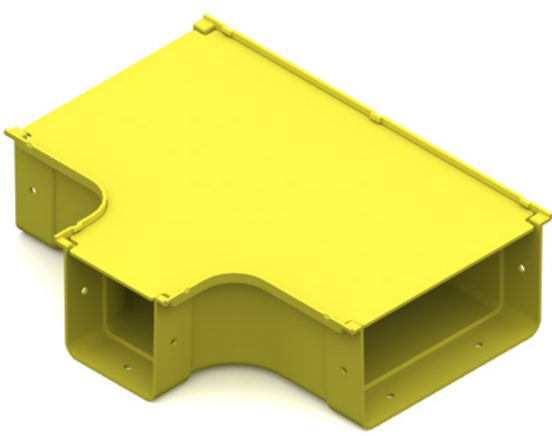
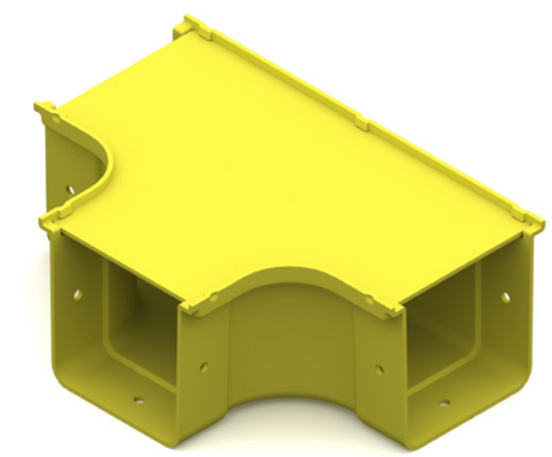
Horizontal tee reducers enable branching off from larger to smaller horizontal routes

Horizontal Tee Reducer with Cover

Part Number	Description
LW-TEH10-05-05C	100mm x 100mm (4 x 4in.) to 50mm x 50mm (2 x 2 in.)
LW-TEH20-10-05C	200mm x 100mm (8 x 4in.) to 100mm x 100mm (4 x 4 in.)

Horizontal Tee Reducer without Cover

Part Number	Description
LW-TEH10-05-05N	100mm x 100mm (4 x 4in.) to 50mm x 50mm (2 x 2 in.)
LW-TEH20-10-05N	200mm x 100mm (8 x 4in.) to 100mm x 100mm (4 x 4 in.)



Vertical Tees

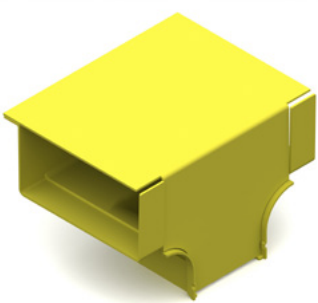
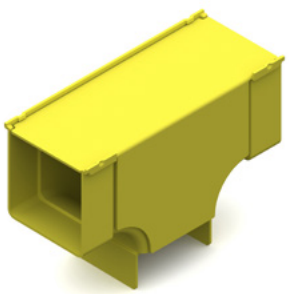
Vertical tees are used to branch off vertically from main horizontal routes of the same size, while vertical tee reducers allow for branching off vertically to smaller duct.

Vertical Tee with Cover

Part Number	Description
LW-TEV05-05-05C	50mm x 50mm (2 x 2 in.)
LW-TEV10-10-05C	100mm x 100mm (4 x 4 in.)

Vertical Tee Reducer with Cover

Part Number	Description
LW-TEV20-10-05C	200mm x 100mm (8 x 4 in.) to 100mm x 100mm (4 x 4 in.)
LW-TEV30-10-05C	300mm x 100mm (12 x 4 in.) to 100mm x 100mm (4 x 4 in.)



Straight Reducers

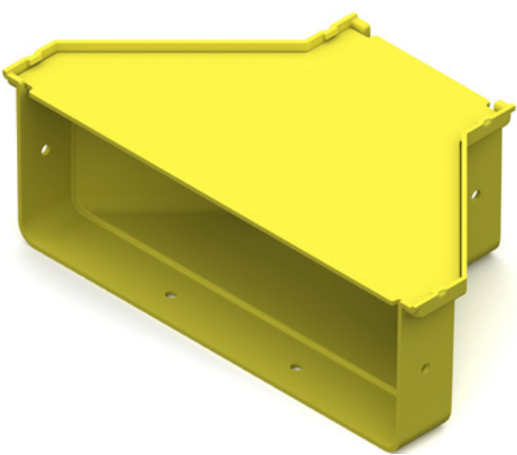
Straight reducers are used for joining horizontal ducts of different sizes.

Straight Reducer with Cover

Part Number	Description
LW-RES10-05-05C	100mm x 100mm (4 x 4 in.) to 50mm x 50mm (2 x 2 in.)
LW-RES20-10-05C	200mm x 100mm (8 x 4 in.) to 100mm x 100mm (4 x 4 in.)
LW-RES30-10-05C	300mm x 100mm (12 x 4 in.) to 100mm x 100mm (4 x 4 in.)
LW-RES30-20-05C	300mm x 100mm (12 x 4 in.) to 200mm x 100mm (8 x 4 in.)

Straight Reducer Without Cover

Part Number	Description
LW-RES10-05-05N	100mm x 100mm (4 x 4 in.) to 50mm x 50mm (2 x 2 in.)
LW-RES20-10-05N	200mm x 100mm (8 x 4 in.) to 100mm x 100mm (4 x 4 in.)
LW-RES30-10-05N	300mm x 100mm (12 x 4 in.) to 100mm x 100mm (4 x 4 in.)
LW-RES30-20-05N	300mm x 100mm (12 x 4 in.) to 200mm x 100mm (8 x 4 in.)





4-Way Crosses

4-way horizontal crosses are used to establish 4-way intersections in straight routes of matching specs.

4-Way Cross with Cover

Part Number	Description
LW-CR05-05-05C	50mm x 50mm (2 x 2 in.)
LW-CR10-10-05C	100mm x 100mm (4 x 4 in.)
LW-CR20-20-05C	200mm x 100mm (8 in. x 4 in.)
LW-CR30-30-05C	300mm x 100mm (12 in. x 4 in.)

4-Way Cross without Cover

Part Number	Description
LW-CR05-05-05N	50mm x 50mm (2 x 2 in.)
LW-CR10-10-05N	100mm x 100mm (4 x 4 in.)
LW-CR20-20-05N	200mm x 100mm (8 in. x 4 in.)
LW-CR30-30-05N	300mm x 100mm (12 in. x 4 in.)

4-Way Cross Reducers

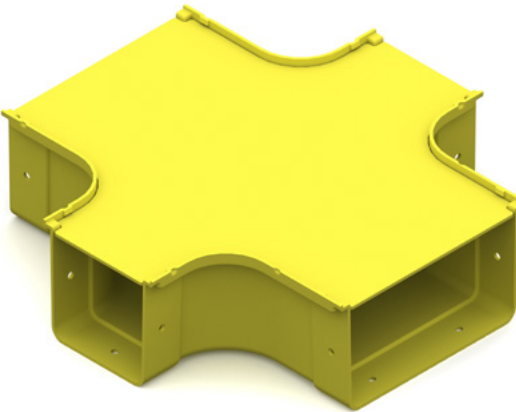
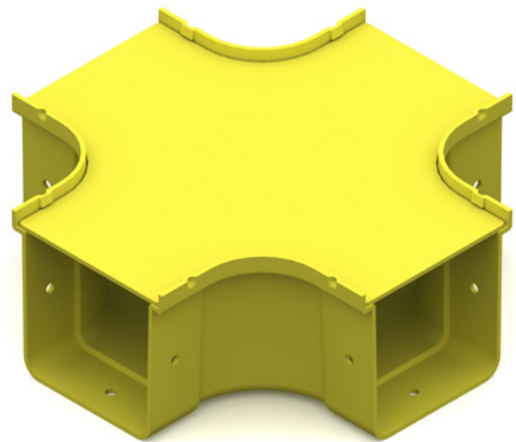
4-way horizontal cross-reducers enable crossing of larger and smaller routes.

4-Way Cross Reducer with Cover

Part Number	Description
LW-CR20-10-05C	200mm x 100mm (8 in. x 4 in.) to 100mm x 100mm (4 in. x 4 in.)

4-Way Cross Reducer without Cover

Part Number	Description
LW-CR20-10-05N	200mm x 100mm (8 in. x 4 in.) to 100mm x 100mm (4 in. x 4 in.)



Trumpets

Trumpets maintain proper bend radius of fiber exiting any horizontal duct, fitting or outlet. Slotted channel trumpets are used for maintaining proper bend radius of fiber exiting from slotted duct.

3-Sided Trumpet

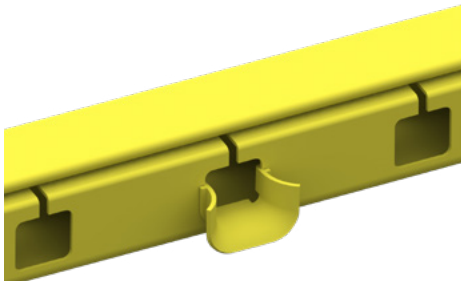
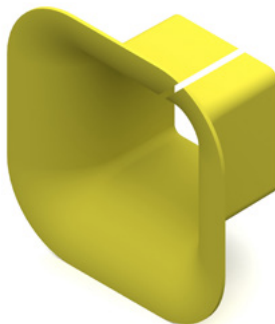
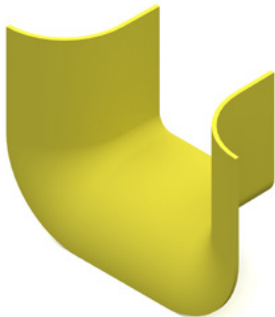
Part Number	Description
LW-TR305-05	50mm x 50mm (2 x 2 in.)
LW-TR310-05	100mm x 100mm (4 x 4 in.)
LW-TR320-05	200mm x 100mm (8 in. x 4 in.)

4-Sided Trumpet

Part Number	Description
LW-TR405-05	50mm x 50mm (2 x 2 in.)
LW-TR410-05	100mm x 100mm (4 x 4 in.)
LW-TR420-05	200mm x 100mm (8 in. x 4 in.)

Slotted Channel Trumpet

Part Number	Description
LW-TR210-05	Used with 50mm x 50mm (2 x 2 in.) and 100mm x 100mm (4 x 4 in.) Slotted Duct



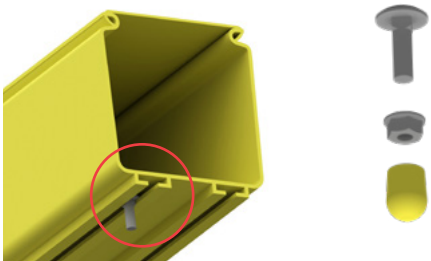


Hardware and Brackets

To support the LightWays Fiber Routing System, we offer a comprehensive range of fixtures and fittings, all designed to support your system no matter the deployment requirements.

Nuts and Bolts

Part Number	Description
LW-HWA-20	M6 x 20mm Coach Bolt and Nut Kit, Pack of 100
LW-HWC-05	Protective Cap, Pack of 100

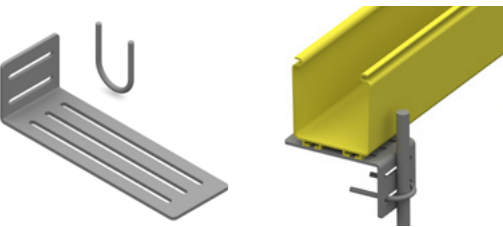


The duct features a slotted channel that accepts the coach bolt to provide a quick and easy mounting assembly.

Underfloor Mounting Kits

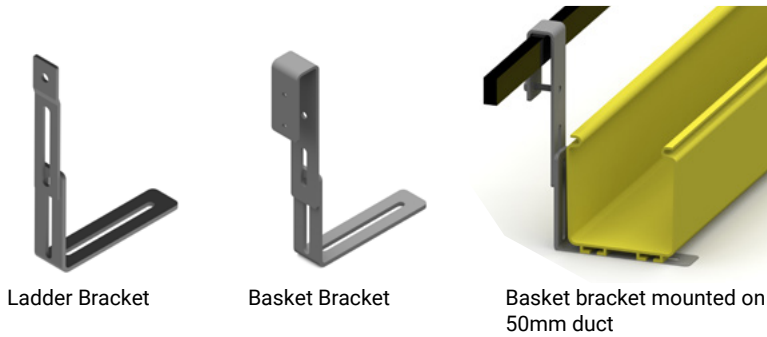
Part Number	Description
LW-BRF-C-25	Under Floor, Kit, Short*
LW-BRF-B-25	Under Floor, Kit, Long*

\* Maximum rod size is 25mm with given hardware.



Ladder Rack and Basket Tray Brackets

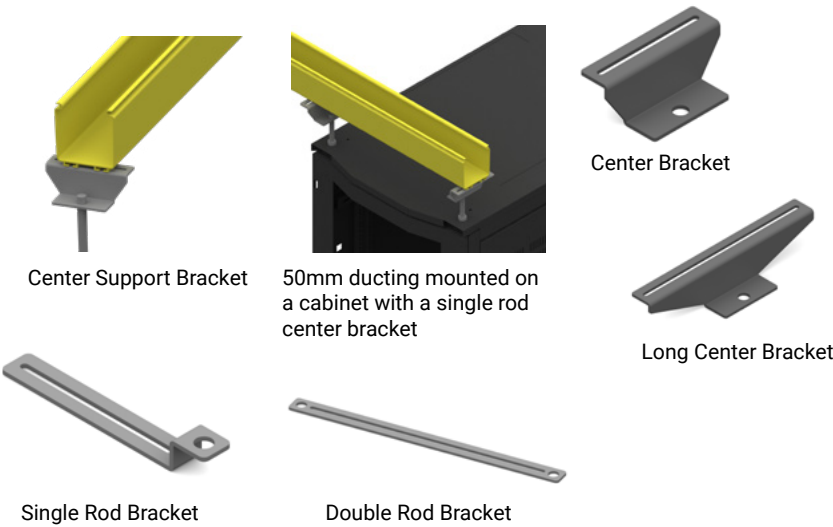
Part Number	Description
LW-BRL-B	Ladder Bracket Kit, Long
LW-BRL-C	Ladder Bracket Kit, Short
LW-BRB-C	Basket Tray Bracket Kit, Short*



Threaded Rod Mounting Brackets

Part Number	Description
LW-BRC-B	Center Support Bracket, Long
LW-BRC-C	Center Support Bracket, Short
LW-BRR-C	Single Rod Support Bracket, Short
LW-BRR-B	Double Rod Support Bracket, Long

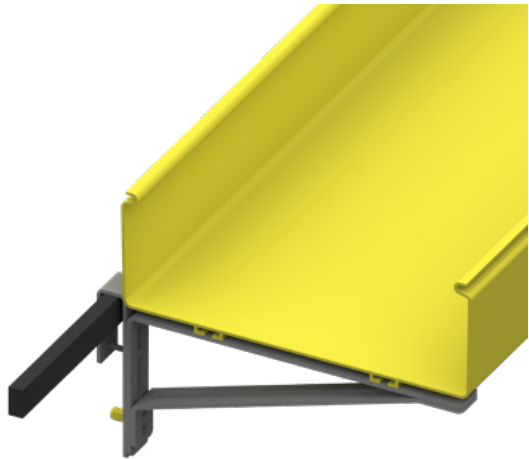
\* Maximum rod size is 16mm with given hardware.



Universal Brackets

Part Number	Description
LW-BRU-B	Universal Bracket Kit, Long
LW-BRU-D	Universal Bracket Kit, Medium*
LW-BRU-C	Universal Bracket Kit, Short
LW-BRU-S	Universal Support Brace, Long

\* Medium size includes one long and one short bracket



When using 200mm ducting with more than 25% cable fill and 300mm ducting with more than 20% cable fill the use of the strength bracket is recommended..

Hardware Mounting Guide

Part Number	Description	Duct Size mm (in.)			
		50x50 (2x2)	100x100 (4x4)	200x100 (8x4)	300x100 (12x4)
LW-BRF-C-25	Under Floor Bracket, 130mm	YES	YES	NO	NO
LW-BRF-B-25	Under Floor Bracket, 230mm	YES	YES	YES	YES
LW-BRC-B	Center Bracket, Long	YES	YES	YES	YES
LW-BRC-C	Center Bracket, Short	YES	YES	NO	NO
LW-BRR-C	Single Rod Bracket, Short	YES	YES	NO	NO
LW-BRR-B	Single Rod Bracket, Long	YES	YES	YES	YES
LW-BRL-B	Ladder Bracket, Long	YES	YES	YES	YES
LW-BRL-C	Ladder Bracket, Short	YES	YES	NO	NO
LW-BRB-C	Basket Bracket, Short	YES	YES	NO	NO
LW-BRU-B	Universal Bracket, Long	YES	YES	YES	YES
LW-BRU-D	Universal Bracket, Medium	YES	YES	YES	YES
LW-BRU-C	Universal Bracket, Short	YES	YES	NO	NO
LW-BRU-S	Support Brace, Long	YES	YES	YES	YES





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