WIREMOLD

legrand®

Data-Fense™
Secure Raceway System

Enhanced Protection of Critical Networks
For Government, Financial Institutions, and R&D Facilities

Information technology professionals in the Department of Defense, government agencies, corporations, R&D facilities, and financial institutions agree that enhanced physical security of wire and cable management systems is crucial to the overall reliability of high assurance networks. Within the government, physical security of classified networks is typically accomplished using a hardened carrier Protective Distribution System (PDS) for use as a protected pathway for these critical data networks.

The Data-Fense™ Secure Raceway System from Wiremold/Legrand is designed to address the primary objectives: provide a modular, scalable raceway design that provides enhanced aesthetics above and beyond EMT, minimize the deployment cost and complexity for secure networks or SCIF facilities, and enhance the security of and ability to defend high assurance networks through multiple classification areas.

Data-Fense Secure Raceway System with a DOD approved lock provides security and protection for high assurance networks.

Features & Benefits

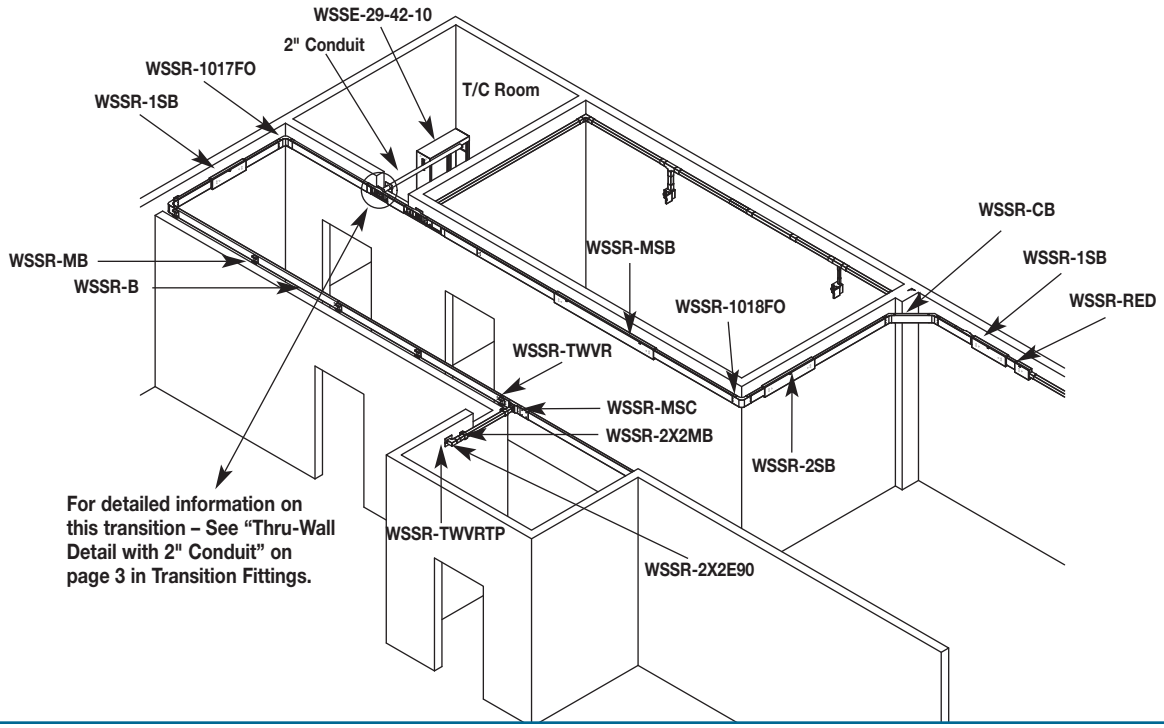
- **Structurally locking base and cover design.** Superior protection against overt, covert, and surreptitious attacks. Eliminates the need for distributed locking mechanisms.
- **Seams located on the front of the raceway.** Improves visual detection of attempts to penetrate the raceway along the base or cover. Speeds system inspections.
- **Mounting brackets offset raceway from wall.** Provides full 360° visual inspection of the raceway system and speeds system inspections.
- **Limited access.** Only access points to the system are through cable pull boxes or access enclosures that are secured by GSA approved hardened padlocks.
- **Fittings overlap.** Raceway covers slide onto base assemblies and overlap the “male-ended” fittings providing additional protection at every seam.
- **Universal fittings.** 2X2 and 1X1 Raceways have universal tee and elbow fittings reducing the number of components needed and speeding installation time.
- **Feeder channels.** In addition to the 4 3/4" x 1 3/4" [121mm x 44mm] raceway, Data-Fense Secure Raceway System also includes two sizes of feeder channels with a full selection of fittings that provide a higher level of system-wide protection, are easier to inspect, and are more aesthetically pleasing than conduit.
- **2" [51mm] bend radius.** All systems retaining 2" [51mm] bend radius compliance for use with multiple cable types.
- **Aesthetically pleasing.** Stocked color is fog white. Custom colors for Data-Fense Secure Raceway System match the colors offered for 4000 Series Raceway.
- **Durable and Secure.** Raceway, channels, fittings and enclosures of the Data-Fense Secure Raceway System are constructed of durable heavy gauge steel that meets hardened carrier Protection Distribution System (PDS) guidelines for use in protective pathways for critical data networks.
- **Factory-welded raceway adapters.** Enclosures have factory-welded raceway adapters which provide more security and speeds inspection time by eliminating the need to open enclosures for inspections.

NOTE: DoD locks, epoxy, and mounting hardware supplied by others. Secure Solutions Raceway System evaluated with Sargent & Greenleaf, DoD lock, and 3M Epoxy. Custom colors available. Consult the factory or your local Wiremold representative.

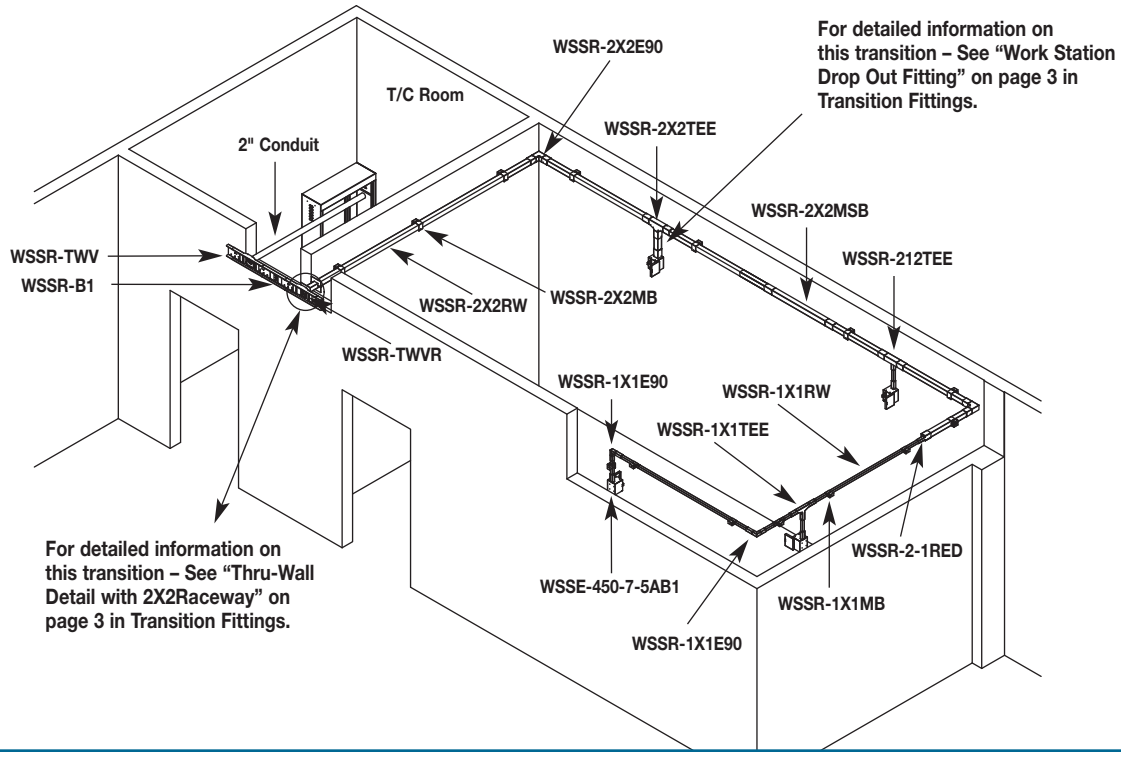
Data-Fense Secure Raceway System Configurability

While the standard product offering of Data-Fense™ Secure Raceway System will meet the requirements for most installations, custom-designed fittings and options are also available. Consult the factory or your local Wiremold/Legrand representative for more information on the custom options available.

Data-Fense Secure Raceway System Header Layout

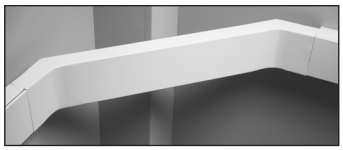


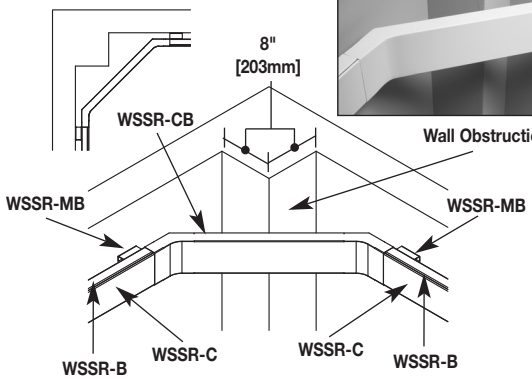
Data-Fense Secure Raceway System Feeder Layout



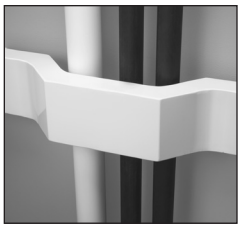
Data-Fense Secure Raceway System Obstacle Avoidance Fittings

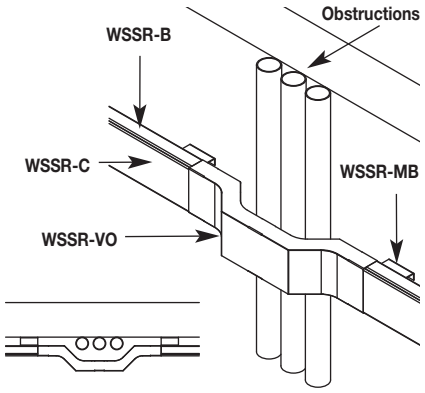
CORNER BRIDGE



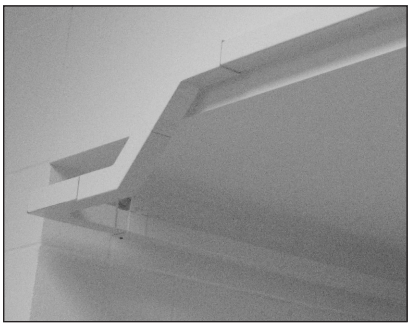


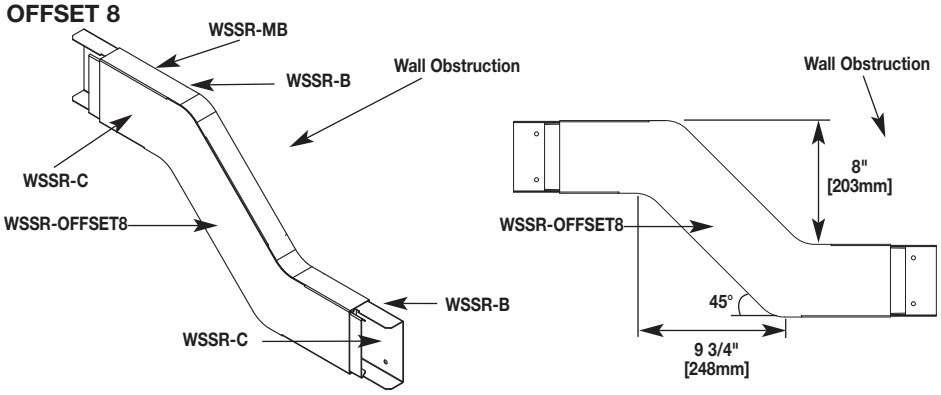
VERTICAL OFFSET





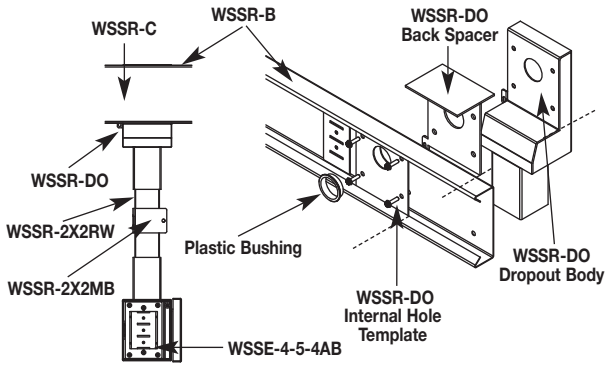
OFFSET 8



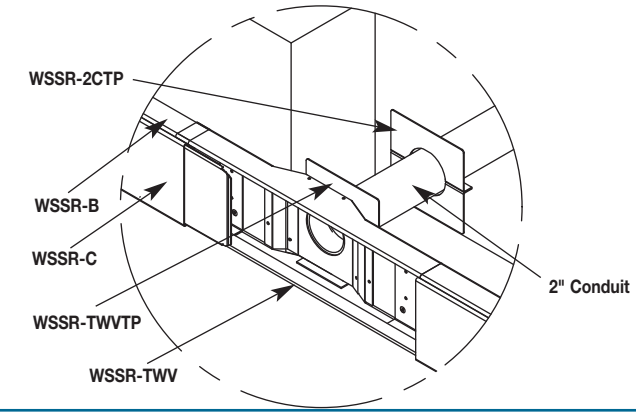


Data-Fense Secure Raceway System Transition Fittings

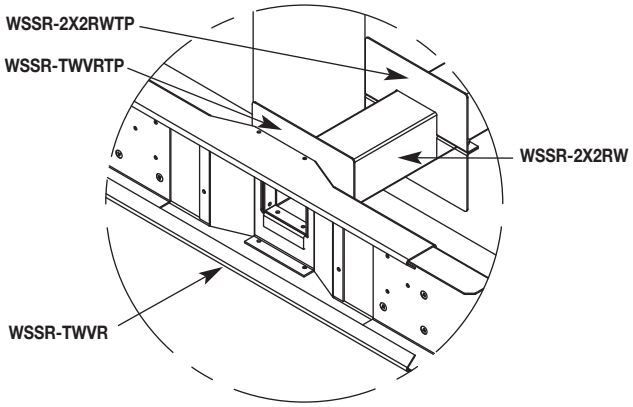
WORKSTATION DROP OUT FITTING



THRU-WALL DETAIL WITH 2" CONDUIT



THRU-WALL DETAIL WITH 2X2 RACEWAY



Data-Fense Secure Raceway System Wire Fill Capacity Charts

NOTE: This product is intended for data and communications only. It is not intended, nor should it be used for power applications.

4 3/4" [121mm] Raceway Wire Fill Capacities for Communications

CABLE TYPE	CATEGORY/ DESIGNATION	O.D. Inches	O.D. [mm]	40% FILL
UNSHIELDED TWISTED PAIR	4-pair, 24 AWG Cat 3	0.190	[4.8]	101
	4-pair, 24 AWG Cat 5e	0.210	[5.3]	83
	4-pair, 24 AWG Cat 6	0.250	[6.3]	58
	4-pair, 24 AWG Cat 6a*	0.354	[9.0]	29
	25-pair, 24 AWG	0.410	[10.4]	21
COAXIAL	RG6/U	0.270	[6.9]	50
FIBER	ZipCord	0.118 x 0.236	[3 x 6]	103
	Round 4 Strand Fiber	0.187	[4.8]	104
	Round 6 Strand Fiber	0.256	[6.5]	55

** Category 6 Augmented cable for 10 gigabit ethernet – max allowed cable diameter per Addendum 11 to ANSI/TIA-568-B.2.*

2" [51mm] Raceway Wire Fill Capacities for Communications

CABLE TYPE	CATEGORY/ DESIGNATION	O.D. Inches	O.D. [mm]	40% FILL
UNSHIELDED TWISTED PAIR	4-pair, 24 AWG Cat 3	0.190	[4.8]	50
	4-pair, 24 AWG Cat 5e	0.210	[5.3]	41
	4-pair, 24 AWG Cat 6	0.250	[6.3]	29
	4-pair, 24 AWG Cat 6a*	0.354	[9.0]	14
	25-pair, 24 AWG	0.410	[10.4]	10
COAXIAL	RG6/U	0.270	[6.9]	25
FIBER	ZipCord	0.118 x 0.236	[3 x 6]	51
	Round 4 Strand Fiber	0.187	[4.8]	52
	Round 6 Strand Fiber	0.256	[6.5]	28

** Category 6 Augmented cable for 10 gigabit ethernet – max allowed cable diameter per Addendum 11 to ANSI/TIA-568-B.2.*

1" [25mm] Raceway Wire Fill Capacities for Communications

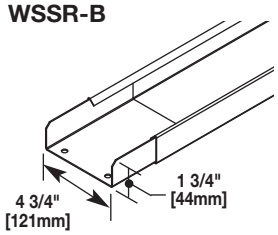
CABLE TYPE	CATEGORY/ DESIGNATION	O.D. Inches	O.D. [mm]	40% FILL
UNSHIELDED TWISTED PAIR	4-pair, 24 AWG Cat 3	0.190	[4.8]	11
	4-pair, 24 AWG Cat 5e	0.210	[5.3]	9
	4-pair, 24 AWG Cat 6	0.250	[6.3]	6
	4-pair, 24 AWG Cat 6a*	0.354	[9.0]	3
	25-pair, 24 AWG	0.410	[10.4]	2
COAXIAL	RG6/U	0.270	[6.9]	5
FIBER	ZipCord	0.118 x 0.236	[3 x 6]	12
	Round 4 Strand Fiber	0.187	[4.8]	12
	Round 6 Strand Fiber	0.256	[6.5]	6

** Category 6 Augmented cable for 10 gigabit ethernet – max allowed cable diameter per Addendum 11 to ANSI/TIA-568-B.2.*

Data-Fense Secure Raceway System Ordering Information

All components of Data-Fense Secure Raceway System are manufactured from 18 gauge galvannealed (satin coat) steel.

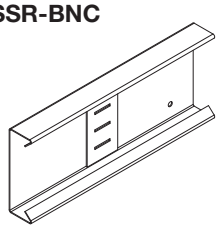
WSSR-B



Raceway Base – Includes welded coupling on one end of each section of base.

PART NUMBER	LENGTH Inches	[mm]
WSSR-B	120"	[3.0m]
WSSR-B1	12"	[305.0mm]
WSSR-B2	24"	[610.0mm]
WSSR-B5	60"	[1.5m]

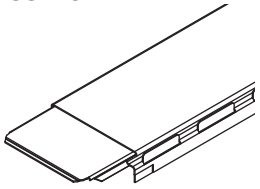
WSSR-BNC



Raceway Base – Base section without welded coupling. For connecting a fitting and a section of base with coupling or between two fittings to avoid field cutting.

PART NUMBER	LENGTH Inches	[mm]
WSSR-BNC	120"	[3.0m]
WSSR-B1NC	12"	[305.0mm]
WSSR-B2NC	24"	[610.0mm]
WSSR-B5NC	60"	[1.5m]

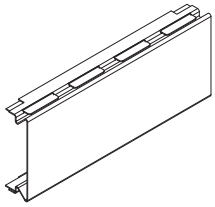
WSSR-C



Raceway Cover – Includes welded overlap on one end of each section of cover.

PART NUMBER	LENGTH Inches	[mm]
WSSR-C	5'	[1.5m]
WSSR-C1	1'	[305.0mm]
WSSR-C2	2'	[610.0mm]

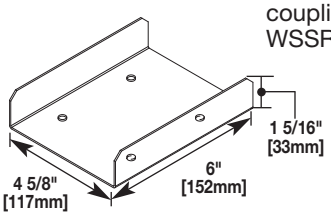
WSSR-CNO



Raceway Cover – Cover section without welded overlap. For connecting a fitting and a section of cover with coupling or between two fittings to avoid field cutting.

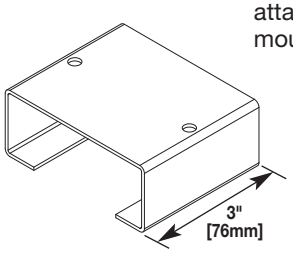
PART NUMBER	LENGTH Inches	[mm]
WSSR-CNO	5'	[1.5m]
WSSR-C1NO	1'	[305.0mm]
WSSR-C2NO	2'	[610.0mm]

WSSR-CP

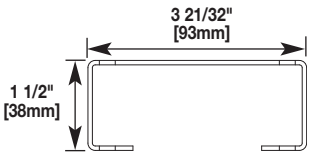


Coupling – Used to connect two sections of WSSR-B when two sections meet with no attached coupling or when coupling field cut WSSR-B sections together.

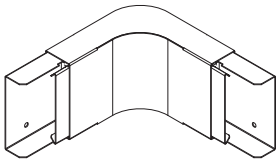
WSSR-MB



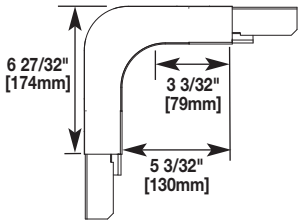
Mounting Bracket – Used to attach WSSR-B Raceway Base to mounting surface.



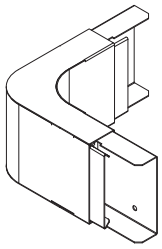
WSSR-1017FO



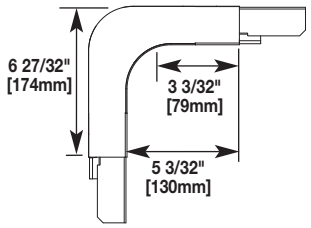
Bend Radius Inside 90° Elbow – 2" [51mm] bend radius compliant inside 90° elbow.



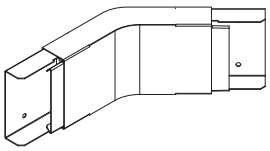
WSSR-1017FOR



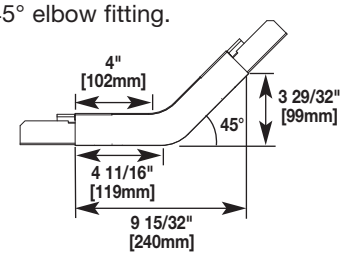
Inside/Outside Elbow – To transition Data-Fense Secure Raceway System from an inside surface to an outside surface.



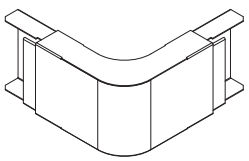
WSSR-1017FOE45



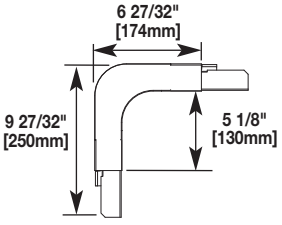
Bend Radius Inside Elbow – 2" [51mm] bend radius compliant 45° elbow fitting.



WSSR-1018FO



Bend Radius Outside Elbow – 2" [51mm] bend radius compliant outside 90° elbow fitting.



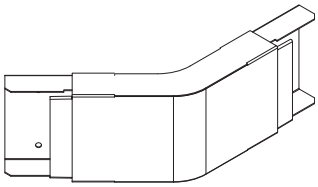
Data-Fense Secure Raceway System Ordering Information (continued)

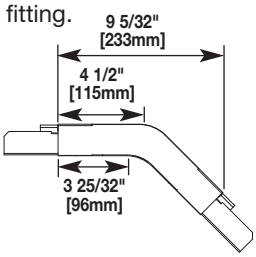
Catalog No./Item	Description/Specifications

All components of Data-Fense Secure Raceway System are manufactured from 18 gauge galvannealed (satin coat) steel.

WSSR-1018FOE45

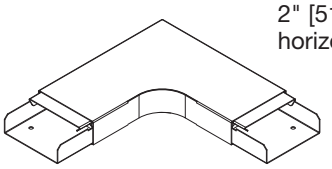
Bend Radius Outside Elbow – 2" [51mm] bend radius compliant 45° elbow fitting.

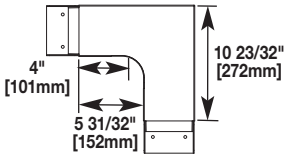




WSSR-1011FO

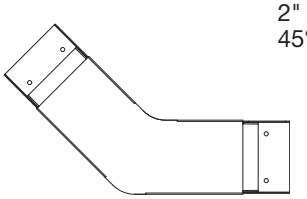
Bend Radius Flat Elbow – 2" [51mm] bend radius compliant horizontal 90° elbow fitting.

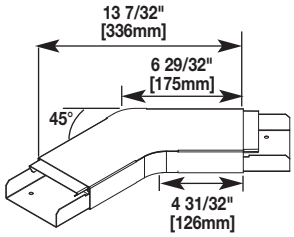




WSSR-1011FOE45

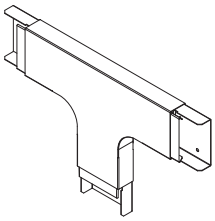
Bend Radius Flat Elbow – 2" [51mm] bend radius compliant 45° elbow fitting.

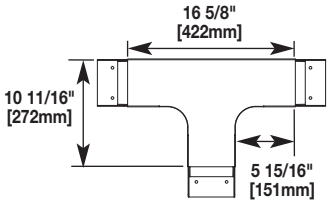




WSSR-1015FOH

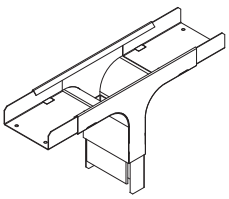
Bend Radius Horizontal Tee – 2" [51mm] bend radius compliant horizontal tee fitting.

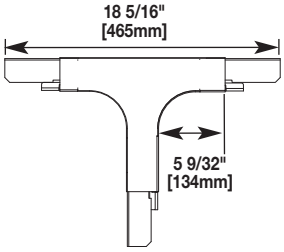




WSSR-1015FOV

Bend Radius Vertical Tee – 2" [51mm] bend radius compliant vertical tee fitting.

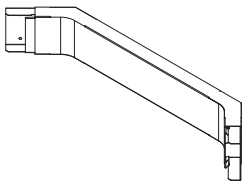


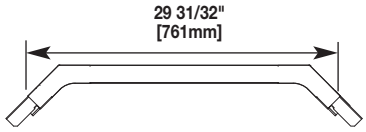


Catalog No./Item	Description/Specifications

WSSR-CB

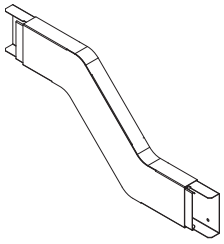
Corner Bridge Fitting – 2" [51mm] bend radius compliant corner bridge fitting.

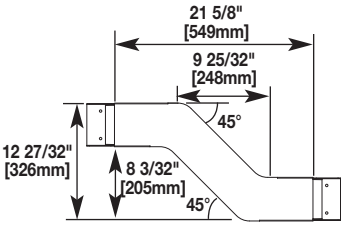




WSSR-OFFSET8

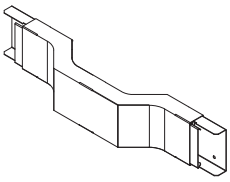
8" [205mm] Offset Fitting – Used for obstacle avoidance.

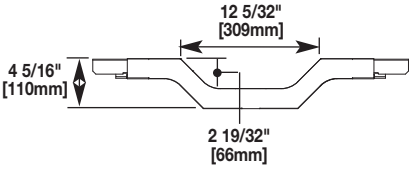




WSSR-VO

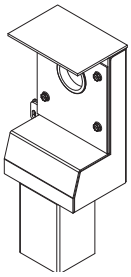
Bend Radius Vertical Offset – 2" [51mm] bend radius compliant fitting to bridge existing fixtures or conduits.

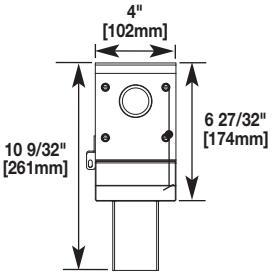




WSSR-DO

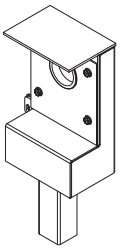
Vertical Raceway Dropout – Work station drop out fitting from 4 3/4" x 1 3/4" [121mm x 44mm] " Raceway to 2" x 2" [51mm x 51mm] secure channel.

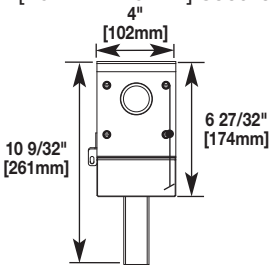




WSSR-DO1

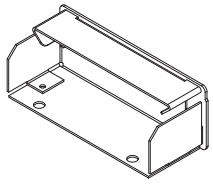
Vertical Raceway Dropout – Drop out fitting from 4 3/4" x 1 3/4" [121mm x 44mm] Raceway to 1" x 1" [25mm x 25mm] secure channel.

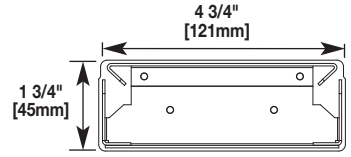


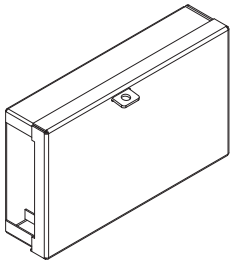


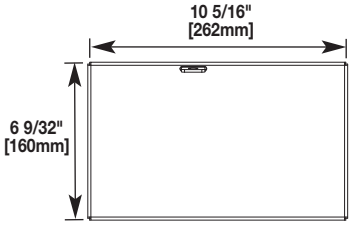
Data-Fense Secure Raceway System Ordering Information (continued)

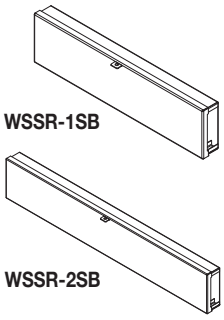
Catalog No./Item	Description/Specifications
All components of Data-Fense Secure Raceway System are manufactured from 18 gauge galvannealed (satin coat) steel.	
WSSR-EC	**End Cap** – Used to close off end of Data-Fense Secure Raceway System.
WSSR-ETERM	**End Termination Unit** – End termination box.
WSSR-1SB **WSSR-2SB**	**Cable Access Slack Box** – WSSR-1SB is used to install 1' [305mm] covers. WSSR-2SB is used to install 1' [305mm] and 2' [610mm] covers.
WSSR-MSB	**Cable Access Midspan Box** – WSSR-MSB is used to install 1' [305mm] , 2' [610mm], and 5' [1525mm] covers.
WSSR-MSC	**Midspan Coupling** – Used to couple raceway sections crossing hallways, where there is no mounting surface available.

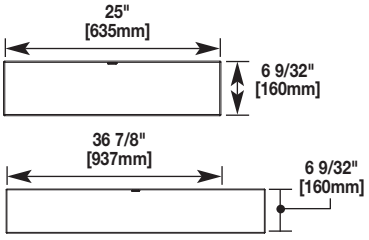


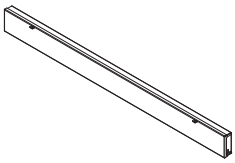


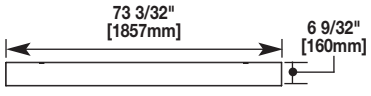


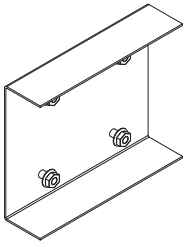


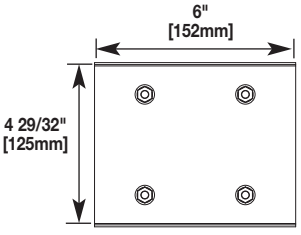




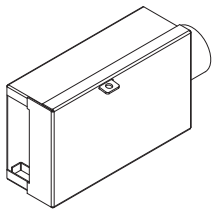


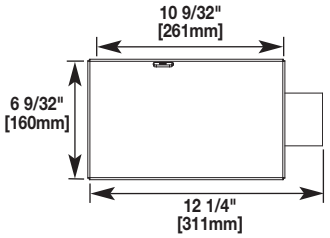


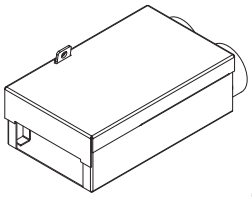


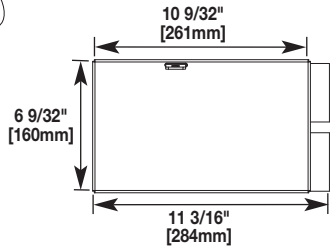


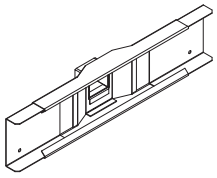
Catalog No./Item	Description/Specifications
WSSR-TWH	**Horizontal Thru-Wall Fitting** – Used to connect one 2" EMT conduit to 4 3/4" x 1 3/4" [121mm x 44mm] Raceway system.
WSSR-TWH-2	**Horizontal Thru-Wall Fitting** – Used to connect two 2" EMT conduits to 4 3/4" x 1 3/4" [121mm x 44mm] Raceway system.
WSSR-TWVR	**Through Wall Fitting** – Used to connect one 2" x 2" [51mm x 51mm] Secure Raceway when continuing or feeding system from other side or surface.
WSSR-TWVRTP	**Through Wall Trim Plate** – Suitable for use with 2" x 2" [51mm x 51mm] Secure Raceway fittings.
WSSR-TWV	**Vertical Thru-Wall Fitting** – Used to connect one 2" EMT conduit when continuing or feeding system from other side of surface.

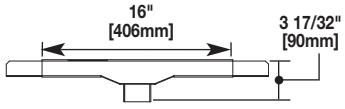


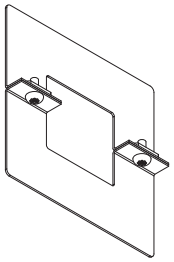


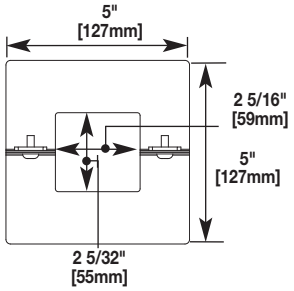


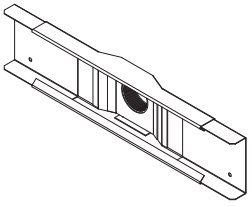


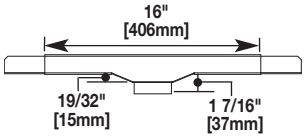






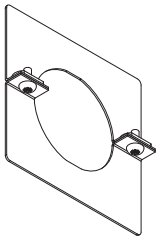


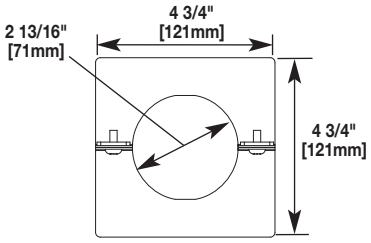


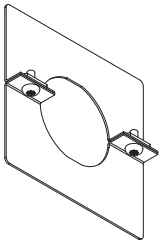


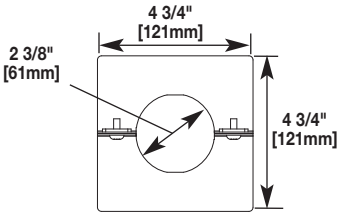
Data-Fense Secure Raceway System Ordering Information (continued)

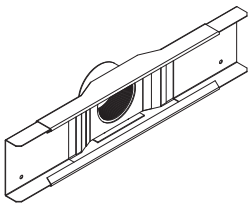
Catalog No./Item	Description/Specifications
All components of Data-Fense Secure Raceway System are manufactured from 18 gauge galvannealed (satin coat) steel.	
WSSR-TWVTP	**Trim Plate** – Trim plate for 2" [51mm] conduit coupling on WSSR-TWV fitting.
WSSR-2CTP	**2" Conduit Trim Plate** – Used where 2" trade size conduit passes through a wall
WSSR-TWV3	**Vertical Through Wall Fitting** – Vertical through wall fitting for 3" [76mm] conduit feed.

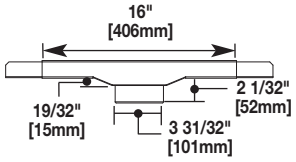




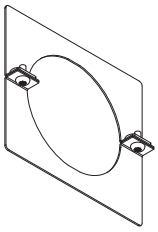


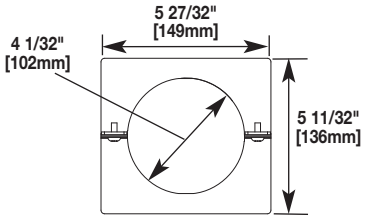


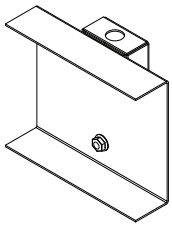


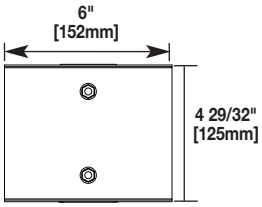


Catalog No./Item	Description/Specifications
All components of Data-Fense Secure Raceway System are manufactured from 18 gauge galvannealed (satin coat) steel.	
WSSR-TWV3TP	**Through Wall Trim Plate** – For use with 3" [76mm] conduit feed.
WSSR-TRH	**Threaded Rod Hanger** – For use with WSSR-B.









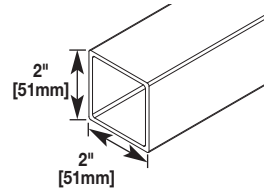
Data-Fense Secure Raceway System 2X2 Raceway Ordering Information

Catalog No./Item	Description/Specifications

Data-Fense Secure Raceway System 2X2 Raceway is manufactured from 16 gauge 409 stainless steel. Components of Data-Fense Secure Raceway System 2X2 Raceway are manufactured from 16 gauge galvannealed (satin coat) steel.

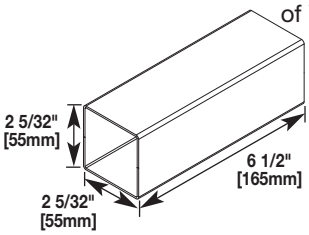
WSSR-2X2RW

2" x 2" Raceway – 2" [51mm] raceway. Sold in 10' [3m] lengths.



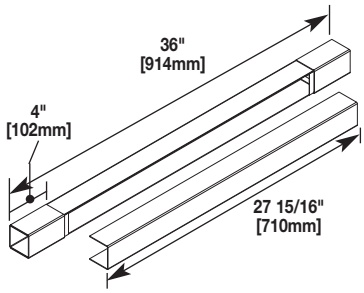
WSSR-2X2C

2" x 2" Raceway Coupling – Fitting to join together two sections of WSSR-2X2RW.



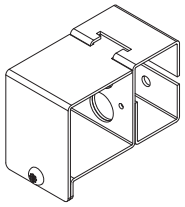
WSSR-2X2SB

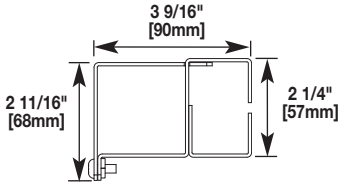
Cable Access Slack Box – Used to assist in pulling cables in longer raceway runs.



WSSR-2X2MB

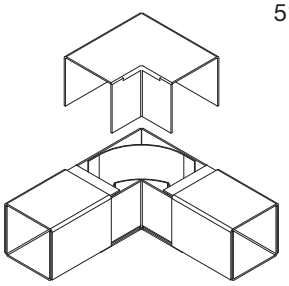
Mounting Bracket – 2" [51mm] raceway bracket. Used to attach WSSR-2X2RW to mounting surface.

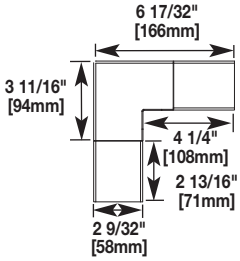




WSSR-2X2E90

Universal Elbow – 2" [51mm] bend radius compliant 2" x 2" [51mm x 51mm] raceway elbow fitting.

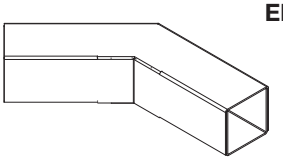


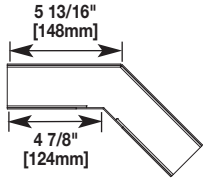


Catalog No./Item	Description/Specifications

WSSR-2X2E45

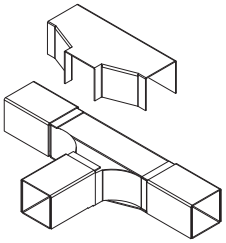
Bend Radius Compliant 45° Elbow Fitting –

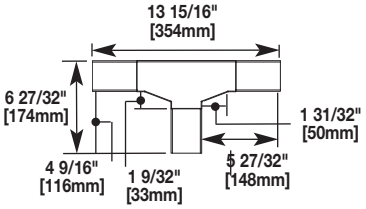




WSSR-2X2TEE

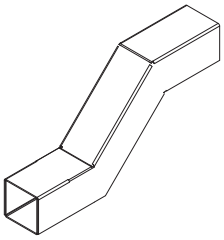
Universal Tee Fitting – Used to join sections of WSSR-2X2 Raceway and to connect to cabinets, etc.

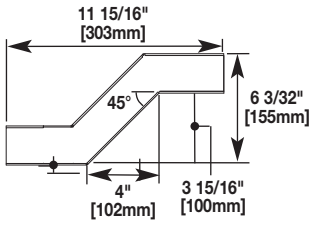




WSSR-2X2VO

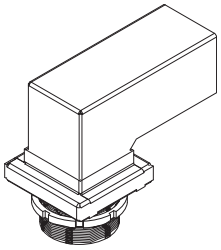
2X2 Offset Fitting – Used for vertical or horizontal offset. Contact factory for custom offset requirements.

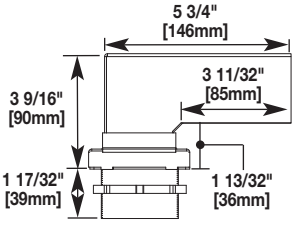




WSSR-2X2CA90

Conduit or Cabinet Connector – Used to connect 2X2 Raceway to cabinets, 2" conduit etc.





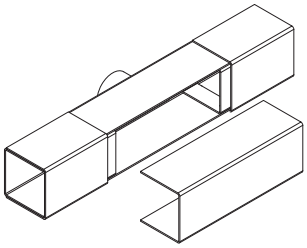
Data-Fense Secure Raceway System 2X2 Raceway Ordering Information (continued)

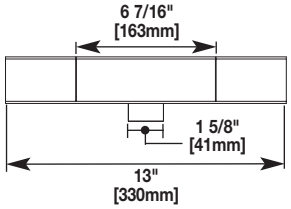
Catalog No./Item	Description/Specifications

Data-Fense Secure Raceway System 2X2 Raceway is manufactured from 16 gauge 409 stainless steel. Components of Data-Fense Secure Raceway System 2X2 Raceway are manufactured from 16 gauge galvannealed (satin coat) steel.

WSSR-2X2TWV1C

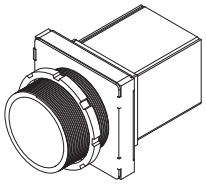
Through Wall Fitting – Used to backfeed system by connecting 1" trade size conduit to WSSR-2X2RW.

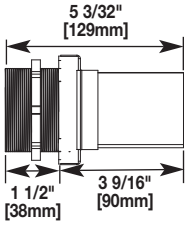




WSSR-2X2CA

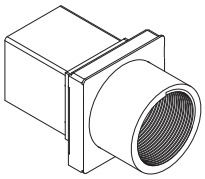
2X2 Raceway Conduit Adapter – Adapter to connect 2" [51mm] raceway to 2" [51mm] EMT conduit or attach to enclosure. Includes lock nut.

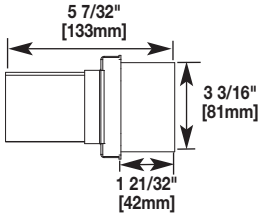




WSSR-2X2CATW

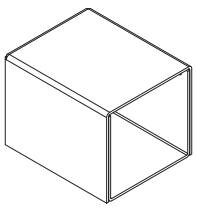
2X2 Raceway Conduit Adapter – Adapter to connect 2" [51mm] raceway to 2" [51mm] EMT conduit for thru-wall applications. Adapter has internal thread that accepts standard conduit reducers.

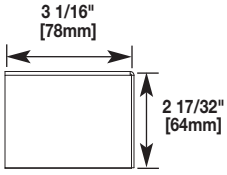




WSSR-2X2EC

Raceway End Cap – Used to close off end of WSSR-2X2 Raceway.

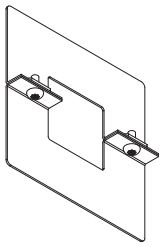


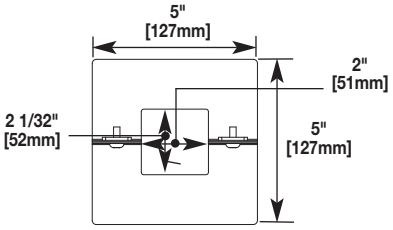


Catalog No./Item	Description/Specifications

WSSR-2X2RWTP

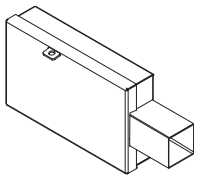
Raceway Trim Plate – Adapter to connect 2" [51mm] raceway to 2" [51mm] EMT conduit or attach to enclosure. Includes lock nut.

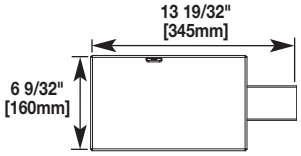




WSSR-RED

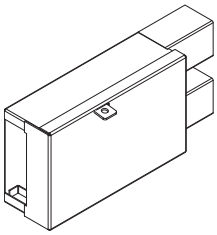
Channel Reducer Fitting – 1 3/4" x 4 3/4" [121mm x 44mm] reduced to 2" x 2" [51mm x 51mm] Raceway.

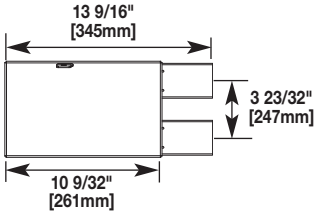




WSSR-4-2SPLIT

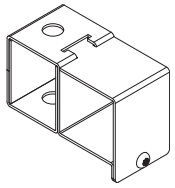
2X2 Raceway Split Fitting – Splits 4 3/4" x 1 3/4" [121mm x 44mm] Secure Solution Series Raceway into two 2X2 Raceways.

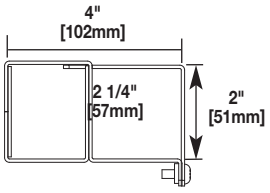




WSSR-2X2TRH

Threaded Rod Hanger – For supporting 2X2 Raceway where no mounting surface is available. For use with 1/2" or 3/8" threaded rod.



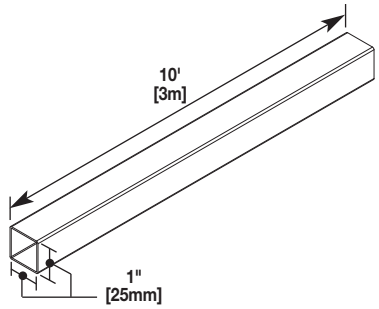


Data-Fense Secure Raceway System 1X1 Raceway Ordering Information (continued)

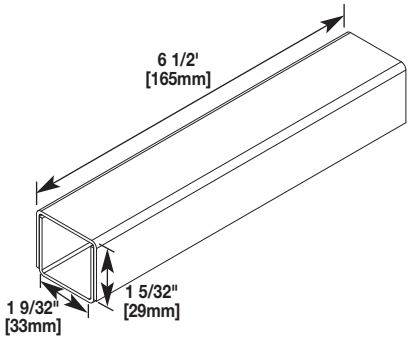
Catalog No./Item	Description/Specifications

Data-Fense Secure Raceway System 1X1 Raceway is manufactured from 18 gauge 304 stainless steel. Components of Data-Fense Secure Raceway System 1X1 Raceway are manufactured from 16 gauge galvannealed (satin coat) steel.

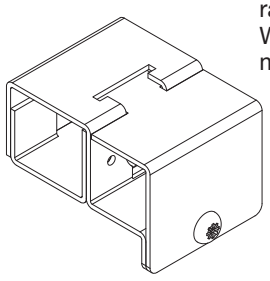
WSSR-1X1RW — **Raceway** – 1" x 1" [25mm x 25mm] raceway. Sold in 10' [3m] lengths.

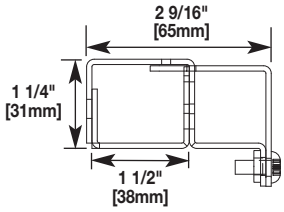


WSSR-1X1C — **Raceway Coupling Fitting** – To join two sections of WSSR-1X1RW.

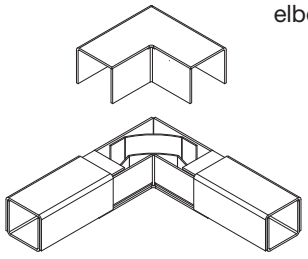


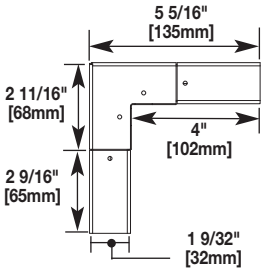
WSSR-1X1MB — **Mounting Bracket** – 1" [25mm] raceway bracket. Used to attach WSSR 1X1 raceway to mounting surface.





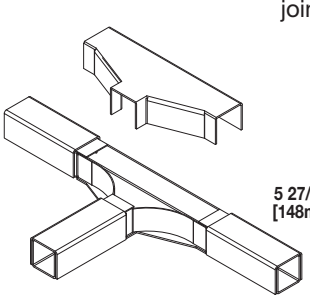
WSSR-1X1E90 — **Universal Elbow** – 2" bend radius compliant 1X1 raceway elbow fitting.

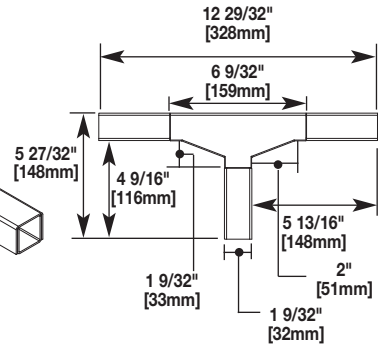




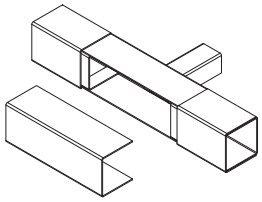
Catalog No./Item	Description/Specifications

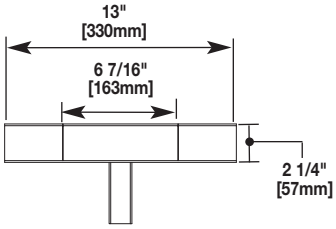
WSSR-1X1TEE — **Universal Tee Fitting** – To join two sections of WSSR-1X1RW.



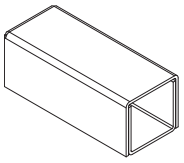


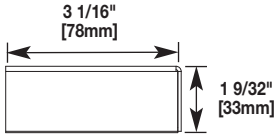
WSSR-212TEE — **Universal Transition Fitting** – Used to transition from WSSR-2X2RW to WSSR-1X1RW. Epoxied on cover.



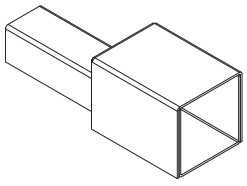


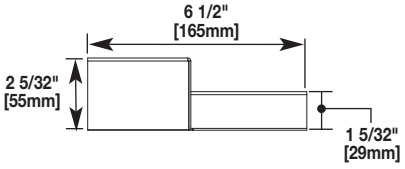
WSSR-1X1EC — **1" x 1" [25mm x 25mm] Raceway End cap** – Used to close off end of WSSR-2X2RW.





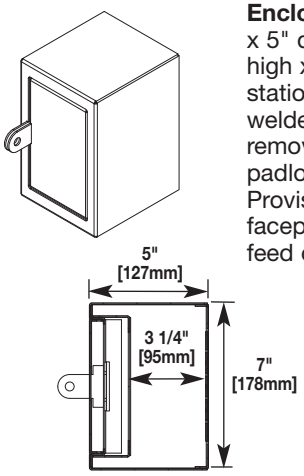
WSSR-2-1RED — **Reducer Fitting** – 2X2 to 1X1 reducer.

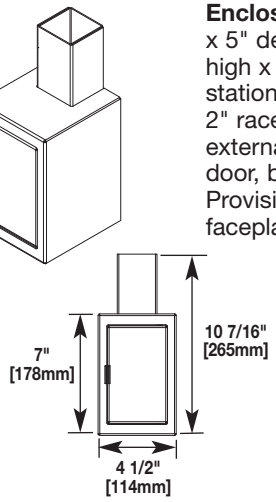




Data-Fense Secure Raceway System Enclosures Ordering Information

Catalog No./Item	Description/Specifications
All the Data-Fense Secure Raceway System Enclosures on this page are manufactured from 16 gauge galvannealed (satin coat) steel.	
WSSE-450-7-5	**Secure Work Station Access Enclosure** – 4 1/2" wide x 7" high x 5" deep [114mm wide x 178mm high x 127mm deep] secure work station access enclosure. Solid welded external seams with removable door with built-in padlock hasp. Painted ivory. Provisions for one commercial faceplate. Requires field-installed feed opening.
WSSE-450-7-5AB	**Secure Work Station Access Enclosure** – 4 1/2" wide x 7" high x 5" deep [114mm wide x 178mm high x 127mm deep] secure work station access enclosure with 2" x 2" raceway adapter. Solid welded external seams with removable door, built-in padlock hasp. Provisions for one commercial faceplate. Painted ivory.

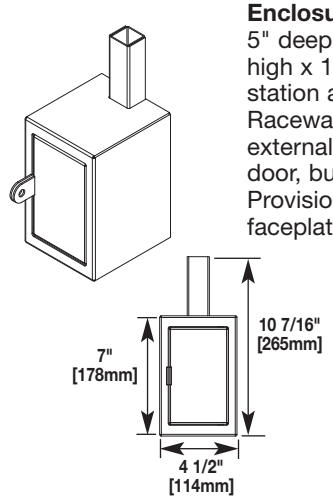


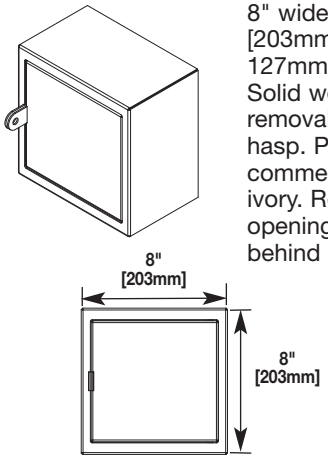


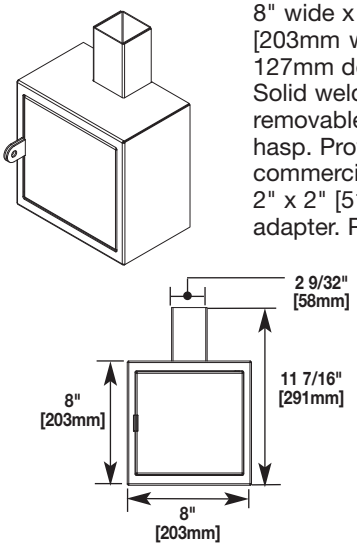
NOTE: Data-Fense Secure Raceway System Enclosures accommodate the new Ortronics Secure/Keyed pre-polished LC Multimode Connectors.

Other enclosure configurations are available. Consult the factory or your local Wiremold representative.

Catalog No./Item	Description/Specifications
WSSE-450-7-5AB1	**Secure Work Station Access Enclosure** – 4 1.2" wide x 7" high x 5" deep [114mm wide x 178mm high x 127mm deep] secure work station access enclosure with 1X1 Raceway adapter. Solid welded external seams with removable door, built-in padlock hasp. Provision for one commercial faceplate. Painted ivory.
WSSE-8-8-5	**Secure Enclosure** – 8" wide x 8" high x 5" deep [203mm wide x 203mm high x 127mm deep] secure enclosure. Solid welded external seams with removable door, built-in padlock hasp. Provisions for two commercial faceplates. Painted ivory. Requires field-installed feed opening. 3 1/4" [95mm] depth behind device plate.
WSSE-8-8-5AB	**Secure Enclosure** – 8" wide x 8" high x 5" deep [203mm wide x 203mm high x 127mm deep] secure enclosure. Solid welded external seams with removable door, built-in padlock hasp. Provisions for two commercial faceplates and one 2" x 2" [51mm x 51mm] raceway adapter. Painted ivory.

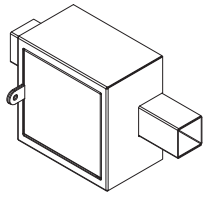


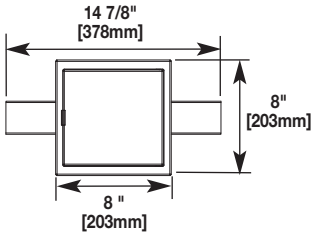


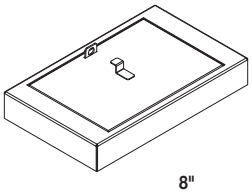


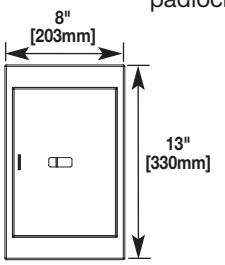
Data-Fense Secure Raceway System Enclosures Ordering Information (continued)

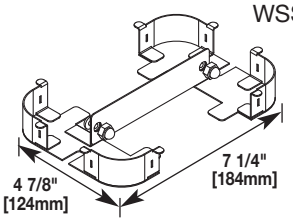
Catalog No./Item	Description/Specifications
All the Data-Fense Secure Raceway System Enclosures on this page are manufactured from 16 gauge galvannealed (satin coat) steel.	
WSSE-8-8-5AB-PB	**Secure Enclosure Pull Box** – 8" wide x 8" high x 5" deep [203mm wide x 203mm high x 127mm deep] secure enclosure. Solid welded external seams with removable door, built-in padlock hasp. Provisions for two commercial faceplates and two 2" x 2" [51mm x 51mm] raceway adapters. Painted ivory.
WSSE-8-13-2	**Secure Work Station Access Enclosure** – 8" wide x 13" high x 2" deep [203mm wide x 330mm high x 51mm deep] secure work station access enclosure. Solid welded external seams with removable hinged door with padlock hasp. Painted ivory.
WSSE-DTFB	**Work Station Desk Top Fiber Loop Bracket** – Used with WSSE-8-13-2. Painted ivory.



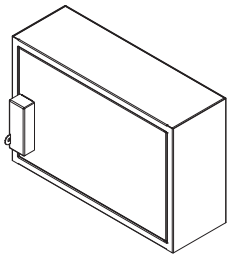


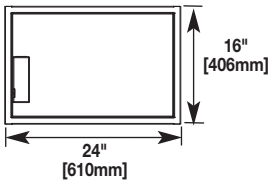


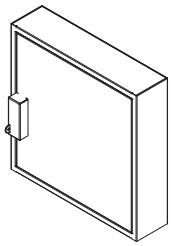


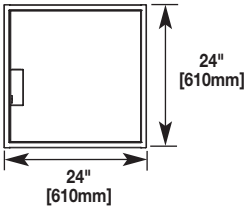


Catalog No./Item	Description/Specifications
WSSE-24-16-8	**Secure Enclosure** – 24" wide x 16" high x 8" deep [610mm wide x 406mm high x 203mm deep].Solid welded external seams with removable hinged door. 3-point L-Handle with built-in padlock hasp. Painted ivory.
WSSE-24-24-6	**Secure Enclosure** – 24" wide x 24" high x 6" deep [610mm wide x 610mm high x 152mm deep] Solid welded external seams with removable hinged door. 3-point L-handle with built-in padlock hasp. Painted ivory.





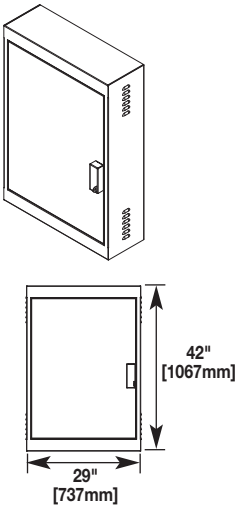
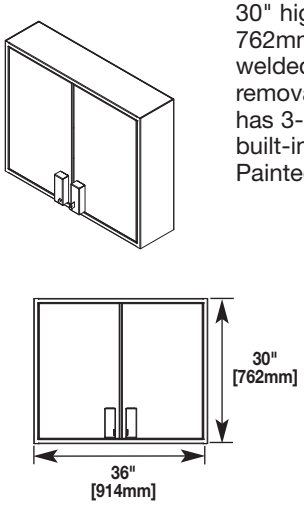


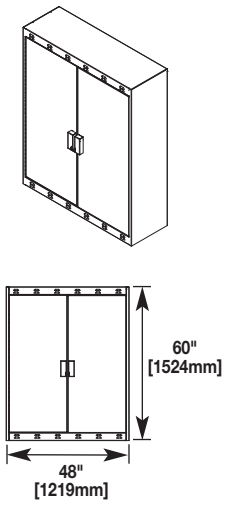


NOTE: Data-Fense Secure Raceway System Enclosures accommodate the new Ortronics Secure/Keyed pre-polished LC Multimode Connectors.

Other enclosure configurations are available. Consult the factory or your local Wiremold representative.

Data-Fense Secure Raceway System Enclosures Ordering Information (continued)

Catalog No./Item	Description/Specifications
All the Data-Fense Secure Raceway System Enclosures on this page are manufactured from 14 gauge galvannealed (satin coat) steel.	
WSSE-29-42-10 	**Secure Enclosure** – 29" wide x 42" high x 10" deep [737mm wide x 1067mm high x 254mm deep]. Solid welded external seams, side ventilation louvers. Single removable door has 3-point locking L-Handle with secure handle cover. Painted ivory. Supplied with two 36" [914mm] adjustable shelf standards, one pair of 6" [152mm] shelf brackets, 2 pairs of 4" [102mm] pivoting shelf brackets. All brackets have mounting hole pattern for Ortronics Clarity® 19" [482mm] Patch Panels.
WSSE-36-30-9 	**Secure Enclosure** – 36" wide x 30" high x 9" deep [914mm wide x 762mm high x 229mm deep] Solid welded external seams with double removable hinged doors, Each door has 3-point locking L-Handle with built-in padlock hasps. Painted ivory.

Catalog No./Item	Description/Specifications
WSSE-48-60-16 	**Secure Enclosure** – 48" wide x 60" high x 16" deep [1219mm wide x 1524mm high x 406mm deep]. Solid welded external seams, front ventilation louvers. Two fixed hinge doors with 3-point locking L-Handles with secure handle covers. Painted ivory. Supplied with two sets of 36" [914mm] adjustable shelf standards, three (3) 18" [457mm] wide x 10" [254mm] deep shelves.
WSSR-PAINT	**Touch-Up Paint** – Touch-up paint to match Data-Fense Secure Raceway System standard Ivory color. Bottle contains 6 ounces of paint.

NOTE: **Data-Fense Secure Raceway System *Enclosures accommodate the new Ortronics Secure/Keyed pre-polished LC Multimode Connectors.***

Other enclosure configurations are available. Consult the factory or your local Wiremold representative.

Notes

Notes

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