

## Raceway Solutions for Healthcare Applications

Wallduct Raceway Systems are high capacity raceways for use in walls or ceilings. They can be mounted to the wall surface or flush with the wall to meet equipment layout and room designs. The lay-in feature for enclosure of wire and cable is ideal for use in healthcare rooms, under raised floors, or as a large capacity feeder for perimeter raceway. The cover plates are easily removed for wire and cable access. Wallduct Raceway Systems can also be used with Trenchduct to carry wire and cables from cabinets to egress points anywhere on the floor or wall. Wallduct Raceway Systems are also available in aluminum for applications that require nonferrous metal raceways such as X-ray and MRI scan rooms.



Aluminum Wallduct installed in an MRI Room.

### FEATURES & BENEFITS

- **Constructed of galvanized steel.** The 14-gauge galvanized steel has a material thickness of .0785, provides extra corrosion resistance, and is easily painted to match any room interior.
- **Available in non-magnetic aluminum material.** Meets requirements for MRI facilities in accordance with equipment manufacturer's specifications.
- **Interior couplings.** Offer improved aesthetics when surface mounted.
- **Complete line of fittings.** Lowers installation costs with fittings that can address field conditions and require minimal field modifications.
- **Bodies and covers shipped unassembled.** No disassembly required before starting system installation.
- **10" [254mm] and 18" [457mm] stock.** Readily available warehouse stock provides for immediate shipment of customer orders.
- **AutoCAD® capabilities for detailing project drawings.** Provides high quality detailing information with the option of electronic communication for a quicker, more accurate exchange of information.
- **Three standard widths.** Provide cable and wire requirements for most applications.
- **UL Listed (UL File E4376 Base and Cover, E41751 Fittings).** Product matches equipment supplier's specifications.



Wallduct Raceway bodies are available in multiple widths and with flush and surface cover options.



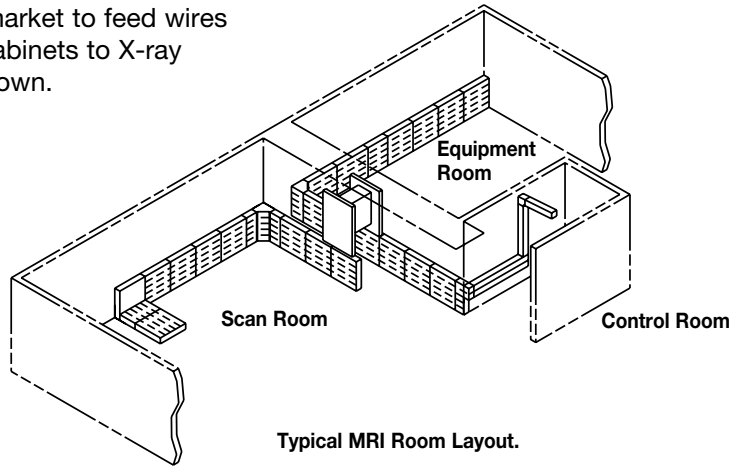
Wallduct Steel or Aluminum Raceway with lay-in features for enclosure of wire and cable.

## Wallduct Series Raceway System Layout

Wallduct is commonly used in the healthcare market to feed wires and cables from electric and communication cabinets to X-ray and MRI equipment. See typical application shown.

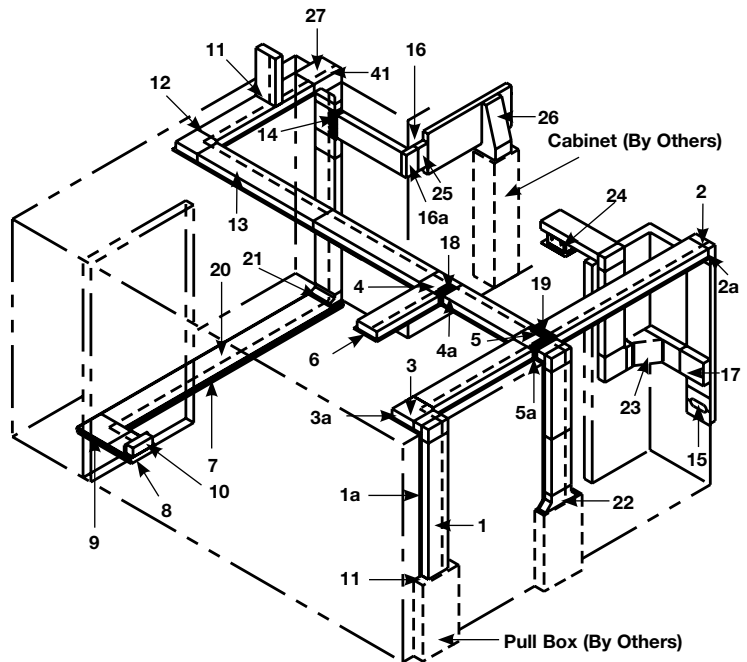
Because some healthcare equipment requires nonmetallic material in the surrounding area, aluminum Wallduct is used in scan rooms.

The equipment and control rooms generally use steel Wallduct.



Wallduct and Trenchduct Legend		
Item	Catalog No.	Description
1	WD10W350-60	5'-0" [1524mm] Straight Length.
1a	CP10-F30	30" [762mm] L Flush Cover Plate.
2	WD10W350-IL	Internal Wallduct Elbow.
2a	CP10-ILF	Internal Wallduct Elbow Cover Flush.
3	WD10W350-HL	Horizontal Wallduct Elbow.
3a	CP10-HLF	Horizontal Wallduct Elbow Cover Flush.
4	WD10W350-T	Wallduct T-Unit.
4a	CP10-TF	Wallduct T-Unit Cover Flush.
5	WD10W350-X	Wallduct X-Unit.
5a	CP10-XF	Wallduct X-Unit Cover Flush.
6	WD10W350-ECF	Wallduct End Closure.
7	VA12W250H-5	VA Style Trenchduct 12" Wide x 2 1/2" Deep [304mm x 63mm].
8	VA12W250H-EC	VA Style Trenchduct End Closure.
9	VA12W250H-LL	VA Style Trenchduct Horizontal Elbow (Left Hand).
10	VA12W-VR10	VA Style Trenchduct Vertical Riser.
11	WD10W350-CC/DO	Wallduct Cabinet Connector.
12	WD350-CP	Corner Partition.
13	WD350-P60	Straight Partition.
14	WD10W350-TUN	T-Unit Straight Tunnel.
15	WD10-ACPF	Access Cover Plate With Grommet.
16	WD10W350-EL	Wallduct External Elbow.
16a	CP10W350-ELF	Wallduct External Elbow Cover Flush.
17	WD10W350-FST	Wallduct Flush to Surface Transition.
18	WD10W350-LTUN	T-Unit Left Hand Tunnel.
19	WD10W350-XTUN	X-Unit Tunnel.
20	T250HZP-5	Trenchduct Partition.
21	VA12W-VL10	Trenchduct Vertical Riser
22	WD10W350-FCCF	Flanged Cabinet Connector Flush.
23	WD10W350-SWTS	Sweep Surface Tee.
24	WD-10CDO	Ceiling Drop Out.
25	WD350-R04	Wallduct Reducer.
26	WD18W350-SWCCS	Sweep Cabinet Connector Surface.
27	WD10W350-SES	Sweep Elbow Surface.

Wallduct can be installed in the wall exposing only the cover plate, or it can be wall mounted exposing the entire surface. Wallduct may also be installed overhead to connect cables/wires between rooms. Trenchduct can be used in combination with Wallduct as a feeder or for access points in the floor to feed equipment. Diagram below is for illustration only. It does not portray typical installation of products



## Wallduct Series Raceway Product Notes

To attach Wallduct Series Raceway to Trenchduct, use vertical risers as shown in the current version of ED738. All field cut openings in Wallduct Series Raceway should be grommeted as needed to protect edges from cutting cables and wires. Order Catalog # 686039-100FT.

Contact factory for availability of other sizes of Wallduct Series Raceway.

## Wallduct Series Raceway Bodies and Covers Ordering Information

Catalog No./Item	Description/Specifications	
<p><b>Bodies</b></p> <p><b>WD06W350-60</b>    6"    [152mm]</p> <p><b>WD10W350-60</b>    10"   [254mm]</p> <p><b>WD18W350-60</b>    18"   [457mm]</p> <p><b>Surface Covers</b></p> <p><b>CP06-S30</b>        6"    [152mm]</p> <p><b>CP10-S30</b>        10"   [254mm]</p> <p><b>CP18-S30</b>        18"   [457mm]</p> <p><b>Flush Covers</b></p> <p><b>CP06-F30</b>        8"    [203mm]</p> <p><b>CP10-F30</b>        12"   [305mm]</p> <p><b>CP18-F30</b>        20"   [508mm]</p>	<p><b>“A”</b></p> <p><b>“B”</b></p> <p><b>“B”</b></p>	<p><b>Straight Wallduct With Removable Cover Plates –</b>                      Bodies include two coupling angles and assembly screws.                      Bodies are 5' [1.3m] long and can be field cut to length.                      Surface flush covers are 30" [762mm] long. Two covers required per body. See page 10 for wire/cable fill capacity information.</p>
<p>A – End View (Flush Cover Shown)</p>		

**NOTE:** To order aluminum products, add the letter “A” to the beginning of the catalog number.

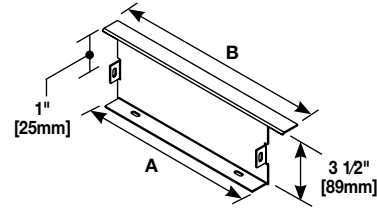
## Wallduct Series Raceway Body Accessories Ordering Information

Catalog No./Item	Description/Specifications	Catalog No./Item	Description/Specifications
<p><b>WD350-P60</b></p>	<p><b>Straight Partition –</b>                      Used to separate services.                      Includes assembly screws for field installation.</p>	<p><b>“A”</b></p> <p><b>WD06-WR</b>    6" [152mm]</p> <p><b>WD10-WR</b>    10" [254mm]</p> <p><b>WD18-WR</b>    18" [457mm]</p>	<p><b>Wire Retainer –</b>                      Used to hold wires in place during installation and to close gap between cover plates if more than 1/8" [3.2mm]. Snap in place prior to installing cover plates.</p>
<p><b>WD350-CA</b></p>	<p><b>Coupling Angle –</b>                      Used for connecting two pieces of Wallduct. Includes assembly screws. Two coupling angles included with every straight body assembly.</p>	<p><b>WD350-CP</b></p>	<p><b>Corner Partition –</b> Used in horizontal elbow to form corner partition. Assembly screws included. Two wire retainers are included with every straight body assembly.</p>

**NOTE:** To order aluminum products, add the letter “A” to the beginning of the catalog number.

## Wallduct Series Raceway End Closure Ordering Information

Catalog No./Item			Description/Specifications
<b>Surface End Closures</b>	<b>"A"</b>	<b>"B"</b>	<b>End Closure</b> – Used to close off end of Wallduct run. Includes assembly screws.
WD06W350-ECS	6" [152mm]	6" [152mm]	
WD10W350-ECS	10" [254mm]	10" [254mm]	
WD18W350-ECS	18" [457mm]	18" [457mm]	
<b>Flush End Closures</b>	<b>"A"</b>	<b>"B"</b>	
WD06W350-ECF	6" [152mm]	8" [203mm]	
WD10W350-ECF	10" [254mm]	12" [305mm]	
WD18W350-ECF	18" [457mm]	20" [508mm]	



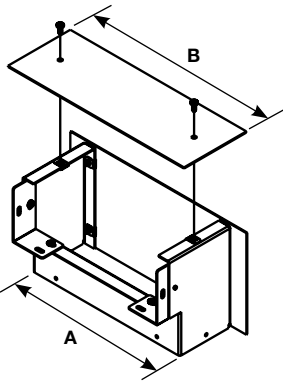
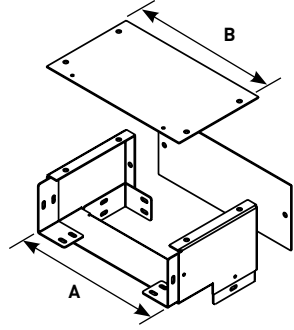
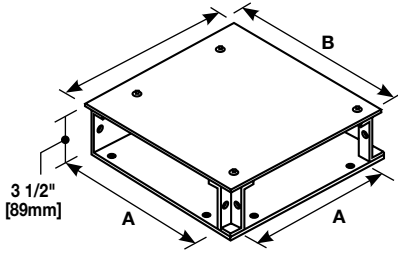
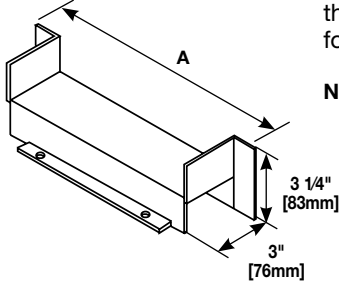
NOTE: To order aluminum products, add the letter "A" to the beginning of the catalog number.

## Wallduct Series Raceway Fittings Ordering Information

Catalog No./Item			Description/Specifications
<b>Bodies</b>	<b>"A"</b>		<b>45° Elbow</b> – Used to change direction of Wallduct runs 45° on same plane. Includes one pair of coupling angles, one retainer, and assembly screws. Complete unit requires one body and one cover plate.
WD06W350-HL45	6" [152mm]		
WD10W350-HL45	10" [254mm]		
WD18W350-HL45	18" [457mm]		
<b>Surface Covers</b>	<b>"A"</b>		<p>The diagram shows a 45-degree elbow fitting. Dimension 'A' is the length of the straight sections. A vertical dimension on the right side indicates a height of 3 1/2 inches [89mm].</p>
CP06-HLS-45	5 5/8" [143mm]		
CP10-HLS-45	7 1/4" [185mm]		
CP18-HLS-45	10 1/2" [270mm]		
<b>Flush Covers</b>	<b>"A"</b>		
CP06-HLF-45	6" [153mm]		
CP10-HLF-45	7 3/4" [196mm]		
CP18-HLF-45	11" [280mm]		
<b>Bodies</b>	<b>"A"</b>		<b>Horizontal Elbow</b> – Used to change direction of Wallduct runs 90° on same plane. Includes one pair of coupling angles, one retainer, and assembly screws. Complete unit requires one body and one cover plate.
WD06W350-HL	6" [152mm]		
WD10W350-HL	10" [254mm]		
WD18W350-HL	18" [457mm]		
<b>Surface Covers</b>	<b>"B"</b>		<p>The diagram shows a horizontal elbow fitting. Dimension 'A' is the length of the straight sections, and dimension 'B' is the width of the elbow. A vertical dimension on the left side indicates a height of 3 1/2 inches [89mm].</p>
CP06-HLS	7" [178mm]		
CP10-HLS	11" [279mm]		
CP18-HLS	19" [482mm]		
<b>Flush Covers</b>	<b>"B"</b>		
CP06-HLF	8" [203mm]		
CP10-HLF	12" [305mm]		
CP18-HLF	20" [508mm]		
<b>Bodies</b>	<b>"A"</b>		<b>Internal Elbow</b> – Used to connect vertical and horizontal run at 90° when cover plates are on inside of run. Includes one pair of coupling angles, wire retainer, and assembly screws. Complete unit requires one elbow body and one cover plate.
WD06W350-IL	6" [152mm]		
WD10W350-IL	10" [254mm]		
WD18W350-IL	18" [457mm]		
<b>Surface Covers</b>	<b>"B"</b>		<p>The diagram shows an internal elbow fitting. Dimension 'A' is the length of the straight sections, and dimension 'B' is the width of the elbow.</p>
CP06-ILS	6" [152mm]		
CP10-ILS	10" [254mm]		
CP18-ILS	18" [457mm]		
<b>Flush Covers</b>	<b>"B"</b>		
CP06-ILF	8" [203mm]		
CP10-ILF	12" [305mm]		
CP18-ILF	20" [508mm]		

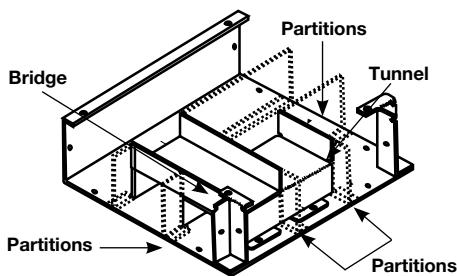
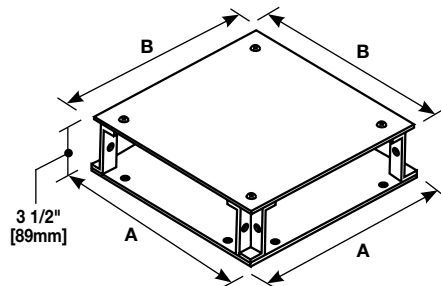
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## Wallduct Series Raceway Fittings Ordering Information

Catalog No./Item			Description/Specifications
<b>Bodies</b> WD06W350-EL WD10W350-EL WD18W350-EL	"A" 6" 10" 18"	[152mm] [254mm] [457mm]	 <p><b>External Elbow</b> – Used to connect vertical and horizontal run at 90° angle when cover plates are on outside of run. Includes attached coupling angles, wire retainer, and assembly screws. Complete unit requires one elbow body and two cover plates. Flush and surface cover catalog numbers include two covers.</p>
<b>Surface Covers</b> CP06W350-ELS CP10W350-ELS CP18W350-ELS	"B" 6" 10" 18"	[152mm] [254mm] [457mm]	
<b>Flush Covers</b> CP06W350-ELF CP10W350-ELF CP18W350-ELF	"B" 8" 12" 20"	[203mm] [304mm] [508mm]	
<b>Bodies</b> WD06W350-IEL WD10W350-IEL WD18W350-IEL	"A" 6" 10" 18"	[152mm] [254mm] [457mm]	 <p><b>Internal External Elbow</b> – Internal elbow used to change direction 90° while also allowing for a change in coverplate orientation. Complete unit requires one body and one cover plate.</p>
<b>Surface Covers</b> CP06W350-IELS CP10W350-IELS CP18W350-IELS	"B" 6" 10" 18"	[152mm] [254mm] [457mm]	
<b>Flush Covers</b> CP06W350-IELF CP10W350-IELF CP18W350-IELF	"B" 8" 12" 20"	[203mm] [304mm] [508mm]	
<b>Bodies</b> WD06W350-T WD10W350-T WD18W350-T	"A" 6" 10" 18"	[152mm] [254mm] [457mm]	 <p><b>T-Unit</b> – Used to connect a second run of Wallduct at 90° angle to first run. Includes one pair of coupling angles, one wire retainer, and assembly screws. Complete unit requires one body and one cover plate.</p>
<b>Surface Covers</b> CP06-TS CP10-TS CP18-TS	"B" 7" 11" 19"	[178mm] [279mm] [482mm]	
<b>Flush Covers</b> CP06-TF CP10-TF CP18-TF	8" 12" 20"	[203mm] [304mm] [508mm]	
WD10W350-TUN WD18W350-TUN	11 7/8" 19 7/8"	[301mm] [504mm]	 <p><b>T-Unit Straight Tunnel</b> – Provides 3" [76mm] straight through compartment for one service with crossover for a second service. Assembly screws included.</p> <p><b>NOTE:</b> Not available for 6" [162mm] wide Wallduct.</p>

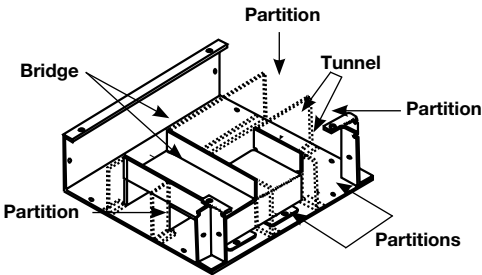
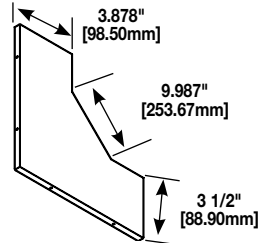
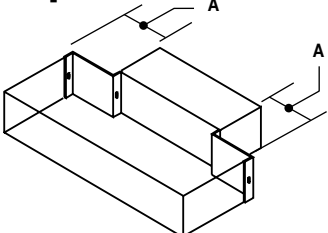
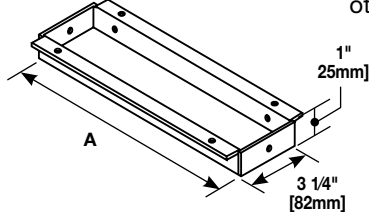
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## Wallduct Series Raceway Fittings Ordering Information (Continued)

Catalog No./Item	Description/Specifications	
<b>WD10W350-RTUN</b> <b>WD18W350-RTUN</b>	<p style="text-align: center;">"A"</p> <p>7 7/8" [200mm]                      15 7/8" [403mm]</p> <p style="text-align: center;">3 1/4" [83mm]</p> <p style="text-align: center;">3" [76mm]</p>	<p><b>Right Hand Tunnel</b> – Used in conjunction with straight partition to form a 90° angle – 3" [76mm] compartment with crossover in T-Unit. Assembly screws included.</p> <p><b>NOTE:</b> Not available for 6" [162mm] wide Wallduct.</p>
<b>WD10W350-LTUN</b> <b>WD18W350-LTUN</b>	<p style="text-align: center;">"A"</p> <p>7 7/8" [200mm]                      15 7/8" [403mm]</p> <p style="text-align: center;">3 1/4" [83mm]</p> <p style="text-align: center;">3" [76mm]</p>	<p><b>Left Hand Tunnel</b> – Used in conjunction with straight partition to form a 90° angle – 3" [76mm] compartment with crossover in T-Unit. Assembly screws included.</p> <p><b>NOTE:</b> Not available for 6" [162mm] wide Wallduct.</p>
<b>WD10W350-3TUN</b> <b>WD18W350-3TUN</b>	 <p style="text-align: center;">Partitions Tunnel Partitions Partitions</p>	<p><b>T-Unit Tunnel</b> – Provides three equal compartments for separation of services in T-Unit. Assembly screws included.</p> <p>Purchase partition Catalog No. WD350-P60 separately to complete installation.</p> <p><b>NOTE:</b> Not available for 6" [162mm] wide Wallduct.</p>
<p><b>Bodies</b></p> <b>WD06W350-X</b> <b>WD10W350-X</b> <b>WD18W350-X</b>	<p style="text-align: center;">"A"</p> <p>6" [152mm]                      10" [254mm]                      18" [457mm]</p>	<p><b>X-Unit</b> – Used to connect two intersecting runs of Wallduct at a 90° angle. Includes one pair of coupling angles, one wire retainer, and assembly screws. Complete unit requires one body and one cover plate.</p>
<p><b>Surface Covers</b></p> <b>CP06-XS</b> <b>CP10-XS</b> <b>CP18-XS</b>	<p style="text-align: center;">"B"</p> <p>8" [203mm]                      12" [304mm]                      20" [508mm]</p>	 <p style="text-align: center;">3 1/2" [89mm]</p>
<p><b>Flush Covers</b></p> <b>CP06-XF</b> <b>CP10-XF</b> <b>CP18-XF</b>	<p style="text-align: center;">"B"</p> <p>8" [203mm]                      12" [305mm]                      20" [508mm]</p>	
<b>WD10W350-XTUN</b> <b>WD18W350-XTUN</b>	<p style="text-align: center;">"A"</p> <p>6 7/8" [174mm]                      14 7/8" [377mm]</p> <p style="text-align: center;">1" [25mm]</p> <p style="text-align: center;">3 1/4" [83mm]</p> <p style="text-align: center;">3" [76mm]</p>	<p><b>X-Unit Crossover</b> – Used to provide a 90° angle – 3" [76mm] compartment with crossover in X-Unit. Assembly screws included.</p> <p><b>NOTE:</b> Not available for 6" [162mm] wide Wallduct.</p>

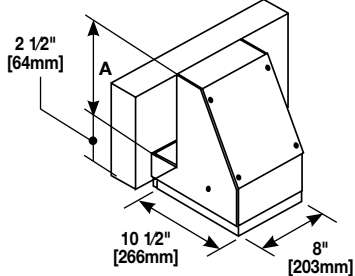
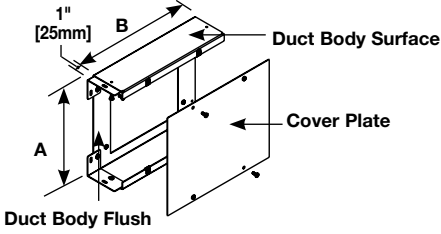
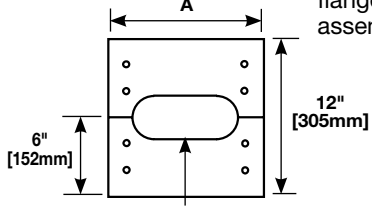
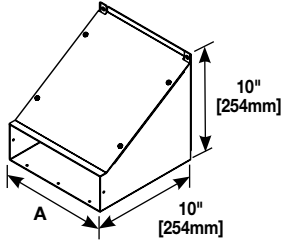
**NOTE:** To order aluminum products, add the letter "A" to the beginning of the catalog number.

## Wallduct Series Raceway Fittings Ordering Information (Continued)

Catalog No./Item	Description/Specifications
<p>WD10W350-3TUN WD18W350-3TUN</p>	<p><b>X-Unit Tunnel</b> – Provides three equal compartments for separation of services in X-Unit. Assembly screws included.</p> <p>Purchase partition, Catalog No. WD350-P60 separately to complete installation. Complete X-Unit assembly requires two X-unit tunnel units.</p> <p><b>NOTE:</b> Not available for 6" [162mm] wide Wallduct.</p>
<div style="display: flex; align-items: center;"> <div style="flex: 1;"> <p>WD06W350-SES WD10W350-SES WD18W350-SES</p> </div> <div style="flex: 1;"> <p style="text-align: center;"><b>"A"</b></p> <p style="text-align: center;">6" [152mm] 10" [254mm] 18" [457mm]</p> </div> <div style="flex: 1;"> <p><b>Sweep Elbow</b> – Used to connect vertical and horizontal runs of Wallduct at a 90° angle with a 45° internal sweep radius. Includes one pair of coupling angles and assembly screws. For partition use Catalog No. WD350-PSE Series.</p> <p><b>NOTE:</b> Not available in flush cover version.</p> </div> </div>	<div style="text-align: center;">  <p>Two tunnels shown.</p> </div>
<p>WD350-PSE</p>	<p><b>Internal Sweep Elbow Partition</b> – Used with past #WDXWX-SES to partition elbow.</p>
<div style="display: flex; align-items: center;"> <div style="flex: 1;"> <p>WD350-RO2 WD350-RO4</p> </div> <div style="flex: 1;"> <p style="text-align: center;"><b>"A"</b></p> <p style="text-align: center;">2" [51mm] 4" [102mm]</p> </div> <div style="flex: 1;"> <p><b>Reducer Coupling</b> – Used to reduce Wallduct width by 4" [102mm] or 8" [204mm]. Two piece unit allows 18" [457mm] wide Wallduct to be reduced to 10" [254mm] wide, or 10" [254mm] wide to be reduced to 6" [152mm] wide. Can also be used on other sizes as needed. Assembly screws included.</p> </div> </div>	<div style="text-align: center;">  </div>
<div style="display: flex; align-items: center;"> <div style="flex: 1;"> <p>WD06W350-CC/DO WD10W350-CC/DO WD18W350-CC/DO</p> </div> <div style="flex: 1;"> <p style="text-align: center;"><b>"A"</b></p> <p style="text-align: center;">5 3/4" [146mm] 9 3/4" [247mm] 17 3/4" [450mm]</p> </div> <div style="flex: 1;"> <p><b>Cabinet Connector/Drop Out</b> – Used to connect ends of Wallduct run to panel/cabinet. Also used to connect two runs of Wallduct at a 90° angle when one run butts up to the bottom or top of the other. Assembly screws included.</p> </div> </div>	<div style="text-align: center;">  </div>
<div style="display: flex; align-items: center;"> <div style="flex: 1;"> <p>WD06W350-CC/DO WD10W350-CC/DO WD18W350-CC/DO</p> </div> <div style="flex: 1;"> <p style="text-align: center;"><b>"A"</b></p> <p style="text-align: center;">5 3/4" [146mm] 9 3/4" [247mm] 17 3/4" [450mm]</p> </div> <div style="flex: 1;"> <p><b>Cabinet Connector/Drop Out</b> – Used to connect ends of Wallduct run to panel/cabinet. Also used to connect two runs of Wallduct at a 90° angle when one run butts up to the bottom or top of the other. Assembly screws included.</p> </div> </div>	<div style="text-align: center;">  </div>

**NOTE:** To order aluminum products, add the letter "A" to the beginning of the catalog number.

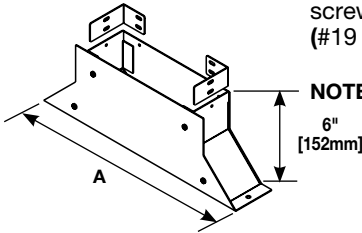
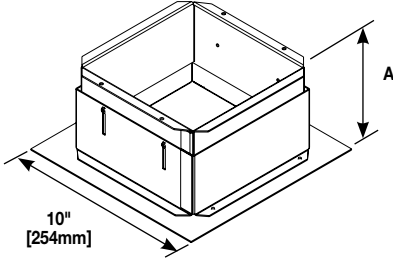
## Wallduct Series Raceway Accessories Ordering Information

Catalog No./Item		Description/Specifications
<b>WD06W350-SWCCS</b> <b>WD10W350-SWCCS</b> <b>WD18W350-SWCCS</b>	<p style="text-align: center;"><b>"A"</b></p> <p>6" [152mm]            10" [254mm]            18" [457mm]</p>	<p><b>Sweep Cabinet Connector</b> – For use with GE medical equipment. Attaches to 6" x 3 1/2" [152mm x 89mm], 10" x 3 1/2" [254mm x 89mm], or 18" x 3 1/2" [457mm x 89mm] horizontal surface Wallduct.</p> <p style="text-align: right;"><b>NOTE: Not available in aluminum.</b></p>
		
<b>WD06W350-FST</b> <b>WD10W350-FST</b> <b>WD18W350-FST</b>	<p style="text-align: center;"><b>"A"</b></p> <p>6" [152mm]            10" [254mm]            18" [457mm]</p> <p style="text-align: center;"><b>"B"</b></p> <p>8" [203mm]            12" [304mm]            20" [508mm]</p>	<p><b>Transition</b> – Used to form a junction between flush and surface Wallduct at a 90° angle. Includes assembly screws, clips, one wire retainer and two coupling angles.</p>
		
<p><b>Surface Covers</b></p> <b>WD06-ACPS</b> <b>WD10-ACPS</b> <b>WD18-ACPS</b>	<p style="text-align: center;"><b>"A"</b></p> <p>6" [152mm]            10" [254mm]            18" [457mm]</p>	<p><b>Access Cover Plate</b> – Two-piece cover with grommeted hole in center. Can be installed at any location by match drilling eight holes in duct body flanges and attaching speed nuts. Includes assembly screws and grommet.</p>
<p><b>Flush Covers</b></p> <b>WD06-ACPF</b> <b>WD10-ACPF</b> <b>WD18-ACPF</b>	<p style="text-align: center;"><b>"A"</b></p> <p>7" [178mm]            11" [279mm]            19" [482mm]</p>	
 <p style="text-align: center;">3" x 8" [76mm x 203mm] Hole.            For 6" [152mm] Access Plate, hole size is 3" x 4" [76mm x 102mm]</p>		
<p><b>Sweep Tee</b></p> <b>WD06W350-SWTS</b> <b>WD10W350-SWTS</b> <b>WD18W350-SWTS</b>	<p style="text-align: center;"><b>"A"</b></p> <p>6" [152mm]            10" [254mm]            18" [457mm]</p>	<p><b>Sweep Tee</b> – Used to connect horizontal and vertical runs of Wallduct at a 90° angle with sweep radius. Includes one pair of coupling angles and assembly screws.</p> <p style="text-align: right;"><b>NOTE: Not available in flush cover version.</b></p>
		

**NOTE:** To order aluminum products, add the letter "A" to the beginning of the catalog number.




## Wallduct Series Raceway Accessories Ordering Information (Continued)

Catalog No./Item		Description/Specifications
<b>Flanged Connector</b> WD06W350-FCCS WD10W350-FCCS WD18W350-FCCS  WD06W350-FCCF WD10W350-FCCF WD18W350-FCCF	<p style="text-align: center;"><b>"A"</b></p> 16" [406mm] 22" [559mm] 24" [610mm]  18" [457mm] 24" [610mm] 26" [660mm]	<p><b>Flanged Cabinet Connector</b> – Used to connect end of Wallduct run to panel cabinet. Assembly screws included. Use .166" [4.2mm] diameter (#19 drill) for assembly.</p> <p><b>NOTE:</b> Not available in aluminum.</p>
		
<b>Ceiling Drop Out</b> WD-10CDO WD-10CDOD	<p style="text-align: center;"><b>"A"</b></p> 4" [102mm] to 5 3/4" [146mm] 5 1/2" [140mm] to 7 1/4" [184mm]	<p><b>Ceiling Drop Out</b> – Used to drop cables and wires from Wallduct in ceiling to imaging equipment. Available in 10" [254mm] width only. Units have adjustable depth.</p>
		

**NOTE:** To order aluminum products, add the letter "A" to the beginning of the catalog number.

## Wallduct Series Raceway Replacement Hardware Ordering Information

Part No:	Description/Specifications
1002412	<b>Wallduct Replacement Hardware</b> – Hardware bag with twelve (12) 10/32 x 7/8" pan head screws.
1000883	<b>Wallduct Replacement Hardware</b> – Hardware bag with eight (8) 10/32 x 1/4" pan head screws.
1002414	<b>Wallduct Replacement Hardware</b> – Hardware bag with twelve (12) cover clips.
686039-100FT	<p><b>Wallduct Grommet</b> – Applied to edges of Wallduct and fittings where cables egress to protect against damage to cable insulation. Packed 100' of grommet per unit.</p> 

Wallduct is ideal for use in medical scan rooms.



## Wallduct Series Raceway Wire Fill Capacity

Use these steps to determine wire fill capacity in Wallduct.

**Step 1:** Determine the internal raceway area by multiplying the overall width by the overall depth (subtract material thickness).

**Example:** Assume a raceway 10" wide by 4" deep. Subtract the material thickness from each dimension (see below). This results in internal raceway dimensions of 9.844" (10" - 0.156") wide by 3.922" (4" - 0.078"). The internal area for this raceway size would be 38.6 sq. in. (9.844" x 3.922").

Maximum Raceway Width (In.)	Deduct for Material Thickness Left & Right	Deduct for Material Thickness (Bottom)
6" – 18" Steel	0.156"	0.078"
20" – 30" Steel	0.216"	0.108"
6" – 18" Aluminum	0.200"	0.100"
20" – 30" Aluminum	0.250"	0.125"

**Step 2:** Determine the number of conductors allowed inside the raceway for a given type and size (types THHN and THWN are shown in Table 1) of the conductor by multiplying the internal area (calculated in Step 1) by the number of conductors allowed per square inch (see table 1).

**Example:** Calculate how many No. 6 AWG (THHN) conductors you are allowed to place in the 10" x 4" raceway in Step 1 at 40% wire fill capacity. Multiply the internal area of the raceway by the maximum number of wires allowed per square inch, from table 1. This results in 304 allowable cables (38.6 sq. in. x 7.89).

A 20% fill should be used for systems utilizing fittings that have sharp 90° turns. The derating factors of NEC article 310.15(B)(2)(a) shall apply to conductors installed if the amount of current-carrying conductors exceeds 30 in number, or the sum of the cross-sectional area of all conductors exceeds 20% of the interior cross-sectional area of the raceway. When tunnels are utilized, the internal cross-sectional area must be further reduced by 50%. When partitions are utilized, the internal cross-sectional area must be calculated for each individual compartment.

**Table 1 – Steel Wallduct Wire Fill Capacities for Power**

WIRE SIZE AWG	DIAMETER		AREA (In <sup>2</sup> )		40% FILL (Per Sq. In.)	20% FILL (Per Sq. In.)
	In.	[mm]	Sq. In.	[Sq. mm]		
14	0.111	[2.8]	0.0097	[6.3]	41.24	20.62
12	0.130	[3.3]	0.0133	[8.6]	30.08	15.04
10	0.164	[4.2]	0.0211	[13.6]	18.96	9.48
8	0.216	[5.5]	0.0366	[23.6]	10.93	5.46
6	0.254	[6.5]	0.0507	[32.7]	7.89	3.94
4	0.324	[8.2]	0.0824	[53.2]	4.85	2.43
3	0.352	[8.9]	0.0973	[62.8]	4.11	2.06
2	0.384	[9.8]	0.1158	[74.7]	3.45	1.73

**Table 2 – Steel Wallduct Wire Fill Capacities for Data/Communications**

	CABLE/WIRE SIZE	DIAMETER		AREA (In <sup>2</sup> )		40% FILL (Per Sq. In.)	20% FILL (Per Sq. In.)
		In.	[mm]	Sq. In.	[Sq. mm]		
UNSHIELDED TWISTED PAIR	4-Pair, Cat 5e	0.220	[5.6]	0.0381	[24.6]	10	5
	4-Pair, Cat 6	0.250	[6.4]	0.0491	[31.7]	14	7
TELEPHONE	2-Pair, 24 AWG	0.140	[3.5]	0.0154	[9.9]	20	13
	4-Pair, 24 AWG	0.190	[4.8]	0.0263	[18.2]	14	7
	25-Pair, 24 AWG	0.410	[10.4]	0.1321	[85.2]	3	1
COAXIAL	RG58/U	0.195	[4.9]	0.0298	[19.2]	13	6
	RG59/U	0.242	[6.1]	0.0459	[29.6]	9	4
	RG6/U	0.270	[6.8]	0.0572	[36.9]	7	3
SHIELDED TWISTED PAIR	TYPE 1	0.390	[9.9]	0.1194	[77.0]	3	1
	TYPE 2	0.465	[11.8]	0.1698	[109.5]	2	1
	TYPE 3	0.245	[6.2]	0.0471	[30.4]	0	4
FIBER OPTIC	2-STRAND	0.180	[4.6]	0.0254	[16.4]	10	8
	4-STRAND	0.190	[4.8]	0.0263	[15.3]	14	7
	6-STRAND	0.210	[5.3]	0.0346	[22.3]	11	5
	FIBER ZIP CORD	0.110	[2.8]	0.0095	[6.1]	42	21

**NOTE:** Wire diameters can vary depending on manufacturer. Verify diameter and adjust fill capacities as required. Values are per one square inch of Wallduct area.

## Wallduct Series Raceway Take-Off Sheet

Project Name: \_\_\_\_\_

Location: \_\_\_\_\_

1. Enter the correct size and width of each part number (WD"6"W"350"-60).
2. Provide correct covers, dividers, tunnels, hardware, fittings as required.
3. Provide correct part number of covers per bodies of WallDuct (two covers per WallDuct body).

	Run #		Run #
WD W -60 Body		WD W -60 Body	
CP W -S30 Surface Cover		CP W -S30 Surface Cover	
CP W -F30 Flush Cover		CP W -F30 Flush Cover	
WD -P60 Straight Partition		WD -P60 Straight Partition	
WD -CA Coupling Angle		WD -CA Coupling Angle	
WD -WR Wire Retainer		WD -WR Wire Retainer	
WD -CP Corner Partition		WD -CP Corner Partition	
WD W -ECS Surface End Closure		WD W -ECS Surface End Closure	
WD W -ECF Flush End Closure		WD W -ECF Flush End Closure	
WD W -HL45 45° Elbow Body		WD W -HL45 45° Elbow Body	
CP -HLS-45 45° Elbow Surface Cover		CP -HLS-45 45° Elbow Surface Cover	
CP -HLF-45 45° Elbow Flush Cover		CP -HLF-45 45° Elbow Flush Cover	
WD W -HL Horizontal Elbow Body		WD W -HL Horizontal Elbow Body	
CP -HLS Horizontal Surface Cover		CP -HLS Horizontal Surface Cover	
CP -HLF Horizontal Flush Cover		CP -HLF Horizontal Flush Cover	
WD W -IL Internal Elbow Body		WD W -IL Internal Elbow Body	
CP -ILS Internal Elbow Surface Cover		CP -ILS Internal Elbow Surface Cover	
CP -ILF Internal Elbow Flush Cover		CP -ILF Internal Elbow Flush Cover	
WD W -EL External Elbow Body		WD W -EL External Elbow Body	
CP W -ELS External Elbow Surface Cover		CP W -ELS External Elbow Surface Cover	
CP W -ELF External Elbow Flush Cover		CP W -ELF External Elbow Flush Cover	
WD W -T T-Unit Body		WD W -T T-Unit Body	
CP -TS T-Unit Surface Cover		CP -TS T-Unit Surface Cover	
CP -TF T-Unit Flush Cover		CP -TF T-Unit Flush Cover	
WD W -TUN Straight Tunnel		WD W -TUN Straight Tunnel	
WD W -RTUN Right Hand Tunnel		WD W -RTUN Right Hand Tunnel	
WD W -LTUN Left Hand Tunnel		WD W -LTUN Left Hand Tunnel	
WD W -3TUN T-Unit Tunnel		WD W -3TUN T-Unit Tunnel	
WD W -X X-Unit Body		WD W -X X-Unit Body	
CP -XS X-Unit Surface Cover		CP -XS X-Unit Surface Cover	
CP -XF X-Unit Flush Cover		CP -XF X-Unit Flush Cover	
WD W -XTUN X-Unit Crossover		WD W -XTUN X-Unit Crossover	
WD W -3TUN X-Unit Tunnel		WD W -3TUN X-Unit Tunnel	
WD W -SES Sweep Elbow		WD W -SES Sweep Elbow	
WD -RO2 Reducer Coupling		WD -RO2 Reducer Coupling	
WD -RO4 Reducer Coupling		WD -RO4 Reducer Coupling	
WD W -CC/DO Cabinet Connector Drop Out		WD W -CC/DO Cabinet Connector Drop Out	
WD W -SWCCS Sweep Cabinet Connector		WD W -SWCCS Sweep Cabinet Connector	
WD W -FST Transition		WD W -FST Transition	
WD -ACPS Surface Access Cover Plate		WD -ACPS Surface Access Cover Plate	
WD -ACPF Flush Access Cover Plate		WD -ACPF Flush Access Cover Plate	
WD W -SWTS Sweep Tee		WD W -SWTS Sweep Tee	
WD W -FCCS Flanged Cabinet Connector		WD W -FCCS Flanged Cabinet Connector	
WD W -FCCF Flanged Cabinet Connector		WD W -FCCF Flanged Cabinet Connector	
WD-10CDO Ceiling Drop Out		WD-10CDO Ceiling Drop Out	
WD-10CDOD Ceiling Drop Out		WD-10CDOD Ceiling Drop Out	

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