# **Wall Duct**

Catalog 5250CT9201R9/08 **2009** Class 5250







## Wall Duct Contents

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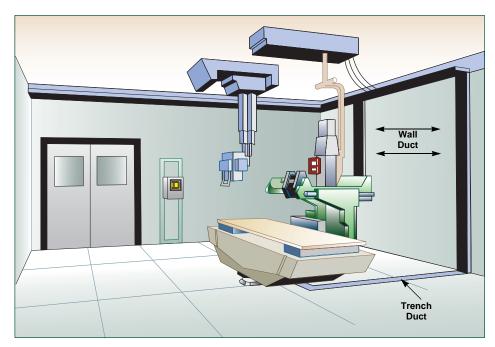
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## **Wall Duct Application**

### **Product Description**

Wall duct is a UL Listed, metal raceway used to enclose the wiring to diagnostic-imaging machines. Wall duct is used in combination with trench duct to provide a complete raceway system from the power and control consoles to the patient table. The raceway system enables a complete lay-in system. Cables can be installed by removing all covers and laying in the conductors. This is an important advantage due to the large diameter connectors used on the high voltage power cables. Whether these connectors are installed on the cable after "fishing and pulling" or factory-assembled into one customized unit, a lay-in system is necessary. Branch connection from the system is accomplished by pipe-nippling out of the covers or sides of the duct, or by removing sections of covers.

Each section of wall duct is furnished with covers. Customer selected variations can be flush or surface-mounted. Most applications will require a combination of each. The transition from one type to the other is accomplished by the use of a flush-to-surface device. The normal application has flush-mounted vertical duct connecting to a surface-mounted horizontal duct in the control rooms.



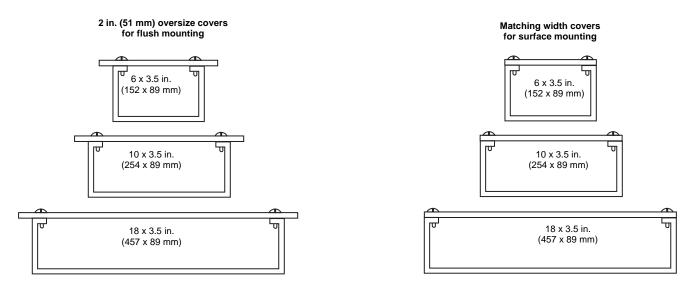
**NOTE:** Wall duct is shown surface-mounted on walls and in ceiling. Trench duct is shown installed flush with the finished floor.

## Wall Duct Wall Duct Application

#### **Economy and Flexibility**

Economy and flexibility are the keys to comparing wall duct and cable-conduit systems. Conduit installations are fixed location systems. Wall duct, with its continuous covers, provides removable points of access. Modifications can be made to the room and equipment lay-out utilizing the existing wall duct locations, reflecting the superior flexibility of the wall duct as compared to conduit. With the continuing advances in medical-imaging technology, wall duct installations serve well during economical changes.

#### **Standard Sizes and Types**



**NOTE:** Standard construction is 14-gauge steel with gray electrodeposition paint. Non-ferrous aluminum construction is also available—add "A" suffix to the catalog number.

## **Wall Duct Components**

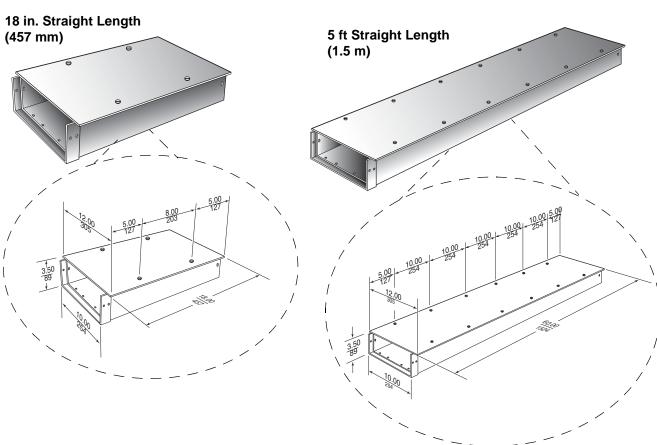
## **Straight Lengths**

Straight lengths are available in 5 ft (1.5 m) and 18 in. (457 mm) lengths.

#### Standard sizes are:

- 6 x 3.5 in. (152 x 89 mm)
- 10 x 3.5 in. (254 x 89 mm)
- 18 x 3.5 in. (457 x 89 mm)





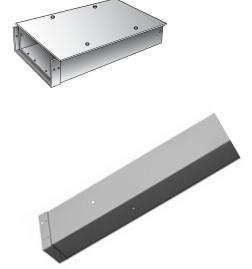
Covers are available for either flush- or surface-mounted installations.

- 5 ft (1.5 m) duct lengths require two 30 in. (762 mm) covers
- 18 in. (457 mm) duct lengths use one cover

Covers are field cut as required.

## Wall Duct Components

## **Straight Section (Flush or Surface-Mounted)**



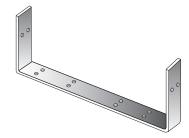
Dimensions	Catalog		Wei	ght
Width	Length	Number	lb	kg
6 in. (152 mm) with Flush Covers	18 in. (457 mm)	RWT06-S18	14.7	6.7
10 in. (254 mm) with Flush Covers		RWT10-S18	16.4	7.4
18 in. (457 mm) with Flush Covers		RWT18-S18	23.3	10.6
6 in. (152 mm) with Surface Covers		RWT06-S18S	14.6	6.6
10 in. (254 mm) with Surface Covers		RWT10-S18S	16.3	7.4
18 in. (457 mm) with Surface Covers		RWT18-S18S	23.2	10.5
6 in. (152 mm) with Flush Covers		RWT06-S60	33.4	15.1
10 in. (254 mm) with Flush Covers		RWT10-S60	39.2	17.8
18 in. (457 mm) with Flush Covers	E ft (1 E m)	RWT18-S60	62.2	28.2
6 in. (152 mm) with Surface Covers	5 ft (1.5 m)	RWT06-S60S	30.6	13.9
10 in. (254 mm) with Surface Covers		RWT10-S60S	38.4	17.4
18 in. (457 mm) with Surface Covers		RWT18-S60S	59.4	26.9

### Wire Retainer



Wire retainers are furnished for use at each duct joint. One additional retainer is furnished with each 5 ft (1.5 m) length to be field-installed in the center of the length at the cover plate joints. This is in order to close off any gaps between cover plates.

## **Coupling Device**

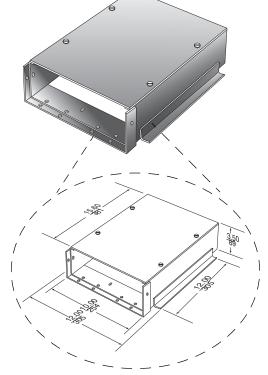


Coupling	Catalog	Wei	ght
Device Type	Number	lb	kg
6 in. (152 mm)	RWT06COUP	0.8	0.4
10 in. (254 mm)	RWT10COUP	1.2	0.5
18 in. (457 mm)	RWT18COUP	1.6	0.7

Each straight length is furnished with a coupling device attached to one end. When a full section of duct is cut to shorter lengths in the field, coupling holes can be field-drilled using the coupling device as a template. The coupling device forms a continuous electrical ground from one duct component to another.

NOTE: Extra coupling devices can be ordered for field-cut lengths.

## Flush-to-Surface Adapter

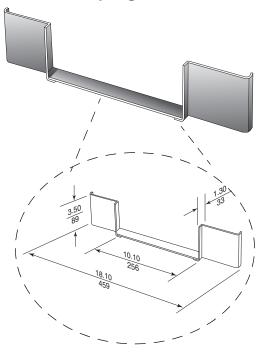


Adapter Type	Catalog Number	We	eight
Adapter Type	Catalog Number	lb	kg
10 in. (254 mm)	RWT10-FS	11.9	5.4
18 in. (457 mm)	RWT18-FS	16.4	7.4

Transitions from flush-to-surface mounted duct is made by the flush-to-surface adapter. The adapter mounts onto a flush-mounted cross. Flush-mounted straight lengths can be field modified to accept this adapter anywhere along a run.

## Wall Duct Components

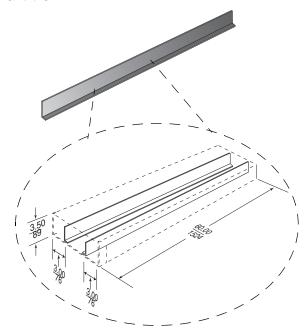
## **Reducer Coupling**



Reducer Coupling Type	Catalog	Wei	ght
Reducer Coupling Type	Number	lb	kg
10–6 in. (254–152 mm)	RWT06RC	1.5	0.7
18–10 in. (457–254 mm)	RWT-RC	2.1	0.9

Reducers are occasionally required. The reducer is a coupling that allows the reduction to be made at any duct joint.

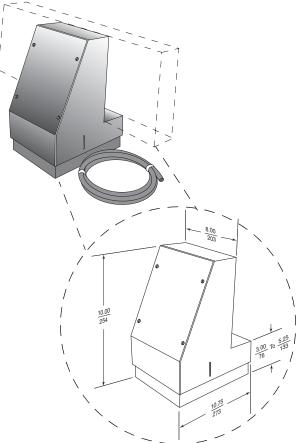
## **Partition**



Partition	Catalog	Weight	
Faithon	Number	lb	kg
5 ft Partition (1.5 m)	RWT-P60	0.9	0.4

Partitioning is often required in wall duct. A 5 ft (1.5 m) long straight partition is furnished for field installation. Holes are provided to mount the partition into the duct, forming a 3 in. (76 mm) wide compartment.

## **Elbow-Type Cabinet Connector**



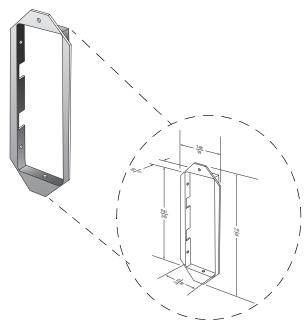
**NOTE:** All dimensions shown are for 10 in. (254 mm) wide duct with flush covers.

Catalog Number	Weight		
Catalog Number	lb kg		
RWT10-SWEECC	12.0	5.4	

The elbow-type cabinet connector is used where surface mounted wall duct is run horizontally on a wall above a cabinet requiring access from the top. Grommet material is supplied for cable protection around the field-cut openings.

### **Wall Duct Wall Duct Components**

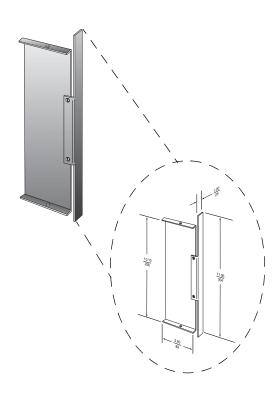
### **Cabinet Connector**



Cabinet Connector	Catalog Number	Wei	ght
Cabinet Connector		lb	kg
6 in. Duct (152 mm)	RWT06-CC	.9	0.4
10 in. Duct (254 mm)	RWT10-CC	1.3	0.6
18 in. Duct (457 mm)	RWT18-CC	2.4	1.1

The cabinet connector connects to the other devices in the same manner as a coupler.

## **End Cap**

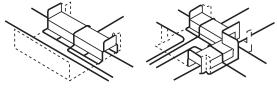


End Cap	Catalog	Weight	
Епа Сар	Number	lb	kg
6 in. Duct (152 mm)	RWT06-EC	1.0	0.4
10 in. Duct (254 mm)	RWT10-EC	1.3	0.6
18 in. Duct (457 mm)	RWT18-EC	1.8	0.8

The end cap connects to the other devices in the same manner as a coupler. The end cap has a cover plate extension for use on flush mounted installations. This provides the system with the 1 in. (25 mm) cover plate overlap of the wall material. The cover plate extension is discarded on surface mounted installations.

## Wall Duct Wall Duct Components

#### Tunnel

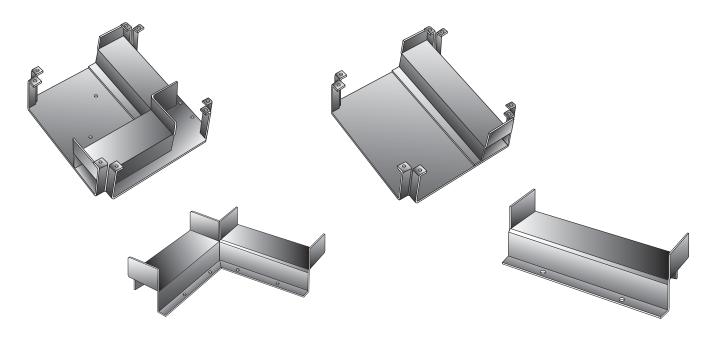


Straight Through Tunnel

90 Deg Elbow Tunnel

Tunnel Type	Catalog	Weight	
ruillei Type	Number		kg
Straight Through for Elbows—10 in. (254 mm)	RWT10-ST	2.9	1.3
Straight Through for Elbows—18 in. (457 mm)	RWT18-ST	3.8	1.7
90° Turn for Elbows—10 in. (254 mm)	RWT10-ET	3.2	1.4
90° Turn for Elbows—18 in. (457 mm)	RWT18-ET	5.1	2.3

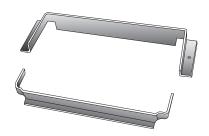
The hole pattern in the coupler locates the straight partition to form a 3 in. (76 mm) wide compartment on either side of the straight length. The 3 in. (76 mm) compartment width is matched by tunnels for horizontal elbows, tees, and crosses. Tunnels are designed to form a 3 in. (76 mm) compartment as well. Hardware for mounting these devices into the fittings are furnished with the tunnels.



## Wall Duct Elbows

#### **Elbows**

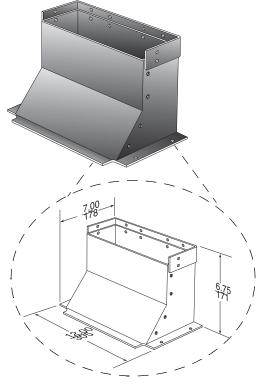
### **Trench Duct Vertical Elbow Adapter**



Adapter Type	Catalog Number	Weight	
Adapter Type	Catalog Number	lb	kg
6 in. Trench Duct to 6 in. Wall Duct (152 mm-152 mm)	RWT06-FTVE06	1.0	0.5
12 in. Trench Duct to 10 in. Wall Duct (305 mm–254 mm)	RWT10-FTVE12	1.1	0.5
12 in. Trench Duct to 18 in. Wall Duct (305 mm-457 mm)	RWT18-FTVE12	1.2	0.5
18 in. Trench Duct to 18 in. Wall Duct (457 mm-457 mm)	RWT18-FTVE18	1.3	0.6

The adapter elbow is a wall duct coupling device. The elbow is field mounted onto the trench duct, replacing 3.5 in. (89 mm) of a trench duct cover plate. Adapters are available for various combinations of connections.

#### **Sweep Floor Trench Vertical Elbow**

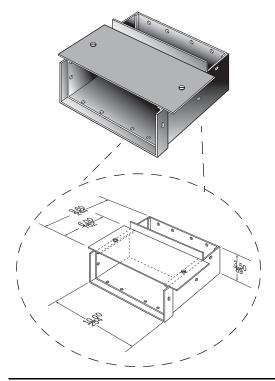


Elbow Type	Catalog Number	Weight	
Libow Type	Catalog Number	lb	kg
12 in. Trench Duct to 10 in. Wall Duct (305 mm-254 mm)	RWT10-SWFTVE12	7.0	3.2

The sweep elbow is a complete device with a sweep feature. It is used only where required to accommodate cables with large bending radii. The removable sweep cover extends out 3.5 in. (89 mm) from the floor and wall surfaces.

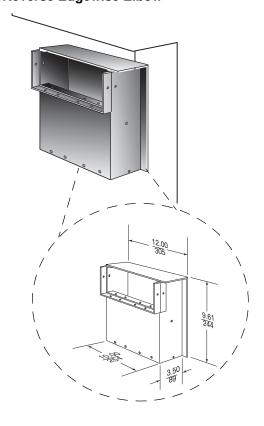
**NOTE:** All dimensions shown are for 10 in. (254 mm) wide duct with flush covers.

## **Edgewise Elbow (or Cabinet Flange)**



Elbaw Type	Catalog	Weight	
Elbow Type	Number	lb	kg
6 in. (152 mm) with Flush Covers	RWT06-EE	4.9	2.2
10 in. (254 mm) with Flush Covers	RWT10-EE	7.5	3.4
18 in. (457 mm) with Flush Covers	RWT18-EE	11.1	5.0
6 in. (152 mm) with Surface Covers	RWT06-EES	4.8	2.2
10 in. (254 mm) with Surface Covers	RWT10-EES	7.4	3.4
18 in. (457 mm) with Surface Covers	RWT18-EES	11.0	5.0

## **Reverse Edgewise Elbow**

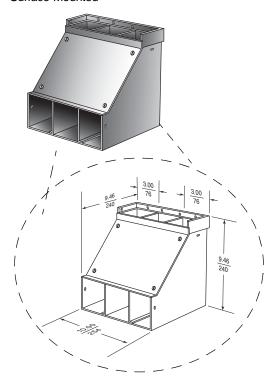


Elbow Type	Catalog	Weight	
Libow Type	Number	lb	kg
6 in. (152 mm) Duct with Flush Covers	RWT06-REE	4.8	2.2
10 in. (254 mm) Duct with Flush Covers	RWT10-REE	7.4	3.4
18 in. (457 mm) Duct with Flush Covers	RWT18-REE	11.0	5.0
6 in. (152 mm) Duct with Surface Covers	RWT06-REES	4.9	2.2
10 in. (254 mm) Duct with Surface Covers	RWT10-REES	7.5	3.4
18 in. (457 mm) Duct with Surface Covers	RWT18-REES	11.1	5.0

## Wall Duct Elbows

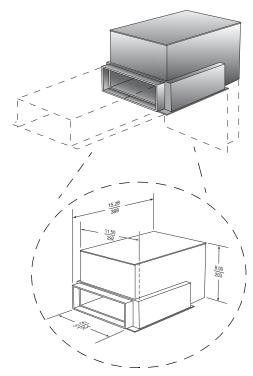
## **Sweep Edgewise Elbow**

### Surface-Mounted



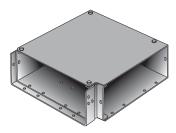
Elbow Type	Catalog Number	Weight	
Elbow Type	Catalog Number	lb	kg
6 in. (152 mm) Duct with Surface Covers	RWT06-SSEES	9.5	4.3
10 in. (254 mm) Duct with Surface Covers	RWT10-SSEES	11.8	5.4
12 in. (305 mm) Duct with Surface Covers	RWT12-SSEES	16.3	7.4

#### Flush-Mounted



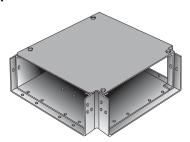
Elbow Type	Catalog Number	Weight	
Libow Type	Catalog Number	lb	kg
10 in. (254 mm) Duct with Flush Covers	RWT10-SFEE	12.0	5.4
18 in. (457 mm) Duct with Flush Covers	RWT18-SFEE	16.5	7.5

## Horizontal Elbow (Flush or Surface-Mounted)



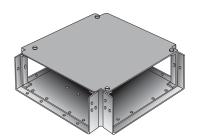
Elbow Type	Catalog Number	Weight	
Elbow Type	Catalog Number	lb	kg
6 in. (152 mm) with Flush Covers	RWT06-HE	5.9	2.7
10 in. (254 mm) with Flush Covers	RWT10-HE	9.3	4.2
18 in. (457 mm) with Flush Covers	RWT18-HE	24.9	11.2
6 in. (152 mm) with Surface Covers	RWT06-HES	5.1	2.3
10 in. (254 mm) with Surface Covers	RWT10-HES	7.3	3.3
18 in. (457 mm) with Surface Covers	RWT18-HES	23.7	10.8

## Tee (Flush or Surface-Mounted)



Tee Type	Catalog Number	Weight	
тее туре	Catalog Number	lb	kg
6 in. (152 mm) with Flush Covers	RWT06-TE	5.3	2.4
10 in. (254 mm) with Flush Covers	RWT10-TE	8.5	3.9
18 in. (457 mm) with Flush Covers	RWT18-TE	24.1	10.9
6 in. (152 mm) with Surface Covers	RWT06-TES	4.9	2.2
10 in. (254 mm) with Surface Covers	RWT10-TES	7.3	3.3
18 in. (457 mm) with Surface Covers	RWT18-TES	22.9	10.4

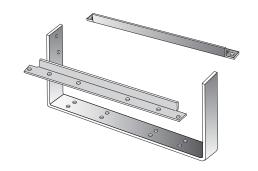
## **Cross (Flush or Surface-Mounted)**



Cross Type	Catalog Number	Weight	
Closs Type	Catalog Number	lb	kg
10 in. (254 mm) with Flush Covers	RWT10-XE	7.8	3.5
18 in. (457 mm) with Flush Covers	RWT18-XE	23.4	10.6
10 in. (254 mm) with Surface Covers	RWT10-XES	6.2	2.8
18 in. (457 mm) with Surface Covers	RWT18-XES	21.8	9.9

## **Wall Duct Additional Items**

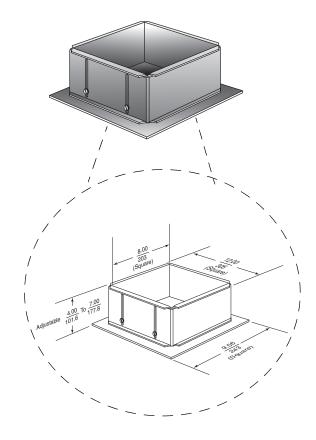
## **Edgewise Tee Kit**



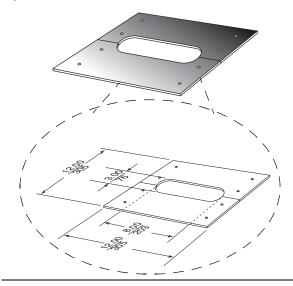
Edgewise Tee Kit Type	Catalog	Weight	
Eugewise Tee Kit Type	Number	lb	kg
10 in. (254 mm) Duct	RWT10-ETK	1.3	0.6
18 in. (457 mm) Duct	RWT18-ETK	2.1	0.9

### **Additional Items**

## **Ceiling Drop-Out**



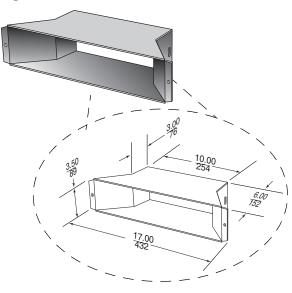
### **Split Cover**



Duct Type	Catalog	Weight	
Duct Type	Number	lb	kg
6 in. (152 mm) Flush Mounted	RWT06-ACP	2.4	1.1
10 in. (254 mm) Flush Mounted	RWT10-ACP	3.1	1.4
18 in. (457 mm) Flush Mounted	RWT18-ACP	4.8	2.2
6 in. (152 mm) Surface Mounted	RWT06-ACPS	2.6	1.1
10 in. (254 mm) Surface Mounted	RWT10-ACPS	3.3	1.5
18 in. (457 mm) Surface Mounted	RWT18-ACPS	5.0	2.3

The split cover is 12 inches long and is split down the middle of a 3 x 8 in. (76 x 203 mm) oblong opening. This allows installation of factory-terminated cables. The split covers are field installed where required and come complete with grommeting material to "bush" the opening to protect the installed cables.

#### **Flanged Cabinet Connector**

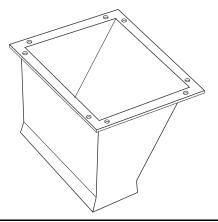


Connector Type	Catalog	Wei	ght
Connector Type	Number	lb	kg
10 in. (254 mm) Flush Mounted	RWT10-CUC	8.0	3.6
10 in. (254 mm) Surface Mounted	RWT10-CUCS	7.4	3.4

The flanged cabinet connector is an alternate method of connecting duct to a panel or cabinet when the application requires spreading of the cables prior to entry.

### **Wall Duct Additional Items**

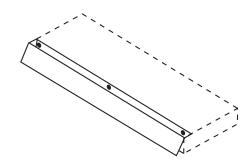
### Sweep Edgewise Tee Kit



Duct Type	Catalog	We	ight
Duct Type	Number	lb	kg
10 in. (254 mm) Duct	RWT10-SWET	7.0	3.2
18 in. (457 mm) Duct	RWT18-SWET	10.0	4.5

The sweep edgewise tee kit provides a larger radius surface around which to install cables with long bending radii.

## **Dust Cover**



Dust Cover Length	Catalog	V	Veight
Dust Cover Length	Number	lb	kg
5 ft (1.5 m)	RWTDCOV60	3.5	1.6

The dust cover keeps dust and debris from collecting on the top surface of horizontally-mounted surface duct.