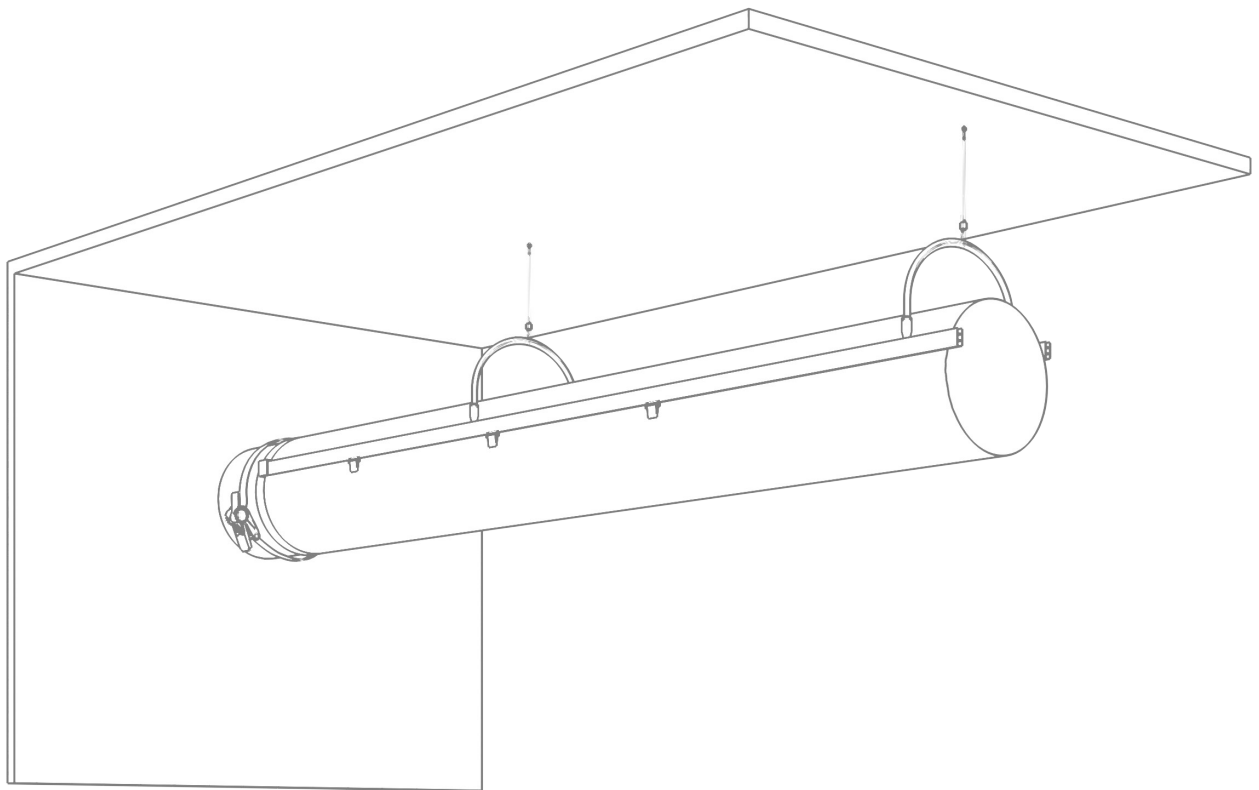


Type 13

Installation Manual



Type 13 is a suspension method for round fabric ducts, which makes use of two H-Rails joined by a factory bent aluminum hoop. Each hoop requires only a single point connection to the structure. This double rail suspension method prevents the duct from twisting that may occur with unbalanced distribution, while maintaining the simplicity of install of a single-point suspension method. Type 13 is not compatible with shape retaining hardware (All-in-One, Internal 360° Hoops).



Animation

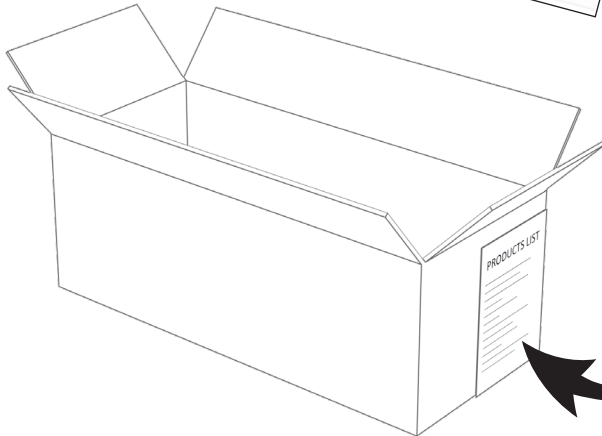
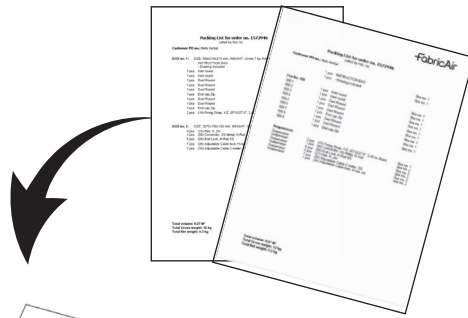
Content

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 - 1.2 Type 13 suspension components.....5
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1.0 OPENING PACKAGE



Video



Box 1 includes all project documentation:

- System Drawing(s)
- Installation Guide
- Packing List (by box)
- Packing List (by positions)

Box number and contents list visible on external box label.

ORDER NO. : 1473677
FabricAir

Contents of box NO. 1/2:
Instruction bag 1 pcs
Drawing included 1 pcs

Distribution Ducts
Tag. no. 100.1 Inlet
Tag. no. 100.2 Inlet

Suspensions
(05) Stretcher
(14) Cable lock
(18) Fixing

FabricAir			
Packing List for order no. 1572946			
Listed by Pos. no.			
Customer PO no.: Nate Verbal			
	1 pcs	INSTRUCTION BAG	Box no. 1
	1 pcs	- Drawing included	Box no. 1
Pos No. 100			
100.1	1 pcs	Inlet round	Box no. 1
100.2	1 pcs	Inlet round	Box no. 1
100.3	1 pcs	Duct Round	Box no. 1
100.4	1 pcs	Duct Round	Box no. 1
100.5	1 pcs	Duct Round	Box no. 1
100.6	1 pcs	End cap Zip	Box no. 1
100.7	1 pcs	Duct Round	Box no. 1
100.8	1 pcs	Duct Round	Box no. 1
100.9	1 pcs	End cap Zip	Box no. 1
Suspensions			
Suspension	2 pcs	(18) Fixing Strap, Y/Z, Ø710/27.9", 2.46 m, Black	Box no. 1
Suspension	1 pcs	(06) Connector, SS Metal, H-Rail	Box no. 2
Suspension	6 pcs	(08) End Lock, H-Rail SS	Box no. 2
Suspension	4 pcs	(21) Rail, H, 2m	Box no. 2
Suspension	7 pcs	(38) Adjustable Cable 2 meter, SS	Box no. 2
Suspension	7 pcs	(36) Adjustable Cable lock, H-rail, SS	Box no. 2
Total volume: 0.07 M³ Total Gross weight: 12 kg Total Net weight: 9.3 kg			

FabricAir			
Packing List for order no. 1572946			
Listed by Box no.			
Customer PO no.: Nate Verbal			
BOX no. 1: SIZE: 590x210x275 mm, WEIGHT: Gross 7 kg. Net 5.9 kg.			
INSTRUCTION BAG			
- Drawing included			
1 pcs	Inlet round	Tag No. 100.1	
1 pcs	Inlet round	Tag No. 100.2	
1 pcs	Duct Round	Tag No. 100.3	
1 pcs	Duct Round	Tag No. 100.4	
1 pcs	Duct Round	Tag No. 100.5	
1 pcs	End cap Zip	Tag No. 100.6	
1 pcs	Duct Round	Tag No. 100.7	
1 pcs	Duct Round	Tag No. 100.8	
1 pcs	End cap Zip	Tag No. 100.9	
2 pcs	(18) Fixing Strap, Y/Z, Ø710/27.9", 2.46 m, Black	Suspension	
BOX no. 2: SIZE: 2070x150x100 mm, WEIGHT: Gross 5 kg. Net 3.45 kg.			
4 pcs	(21) Rail, H, 2m	Suspension	
1 pcs	(06) Connector, SS Metal, H-Rail	Suspension	
6 pcs	(08) End Lock, H-Rail SS	Suspension	
7 pcs	(36) Adjustable Cable lock, H-rail, SS	Suspension	
7 pcs	(38) Adjustable Cable 2 meter, SS	Suspension	
Total volume: 0.07 M³ Total Gross weight: 12 kg Total Net weight: 9.3 kg			

- There are two packing lists – by box and by position. Each box may contain either suspension components or ducting. Each duct section/component has a Tag number (Tag No. XXX.X). Suspension elements have part ID numbers. Example: (21) H-Rail, 2 m. In this case, (21) is part ID.
- Tag numbers are marked in assembly sequence. Assembly of ducting should start with Tag No. XXX.1 and continue accordingly.

1.1 Understanding components table (located on system drawing)

COMPONENTS								
Tag#	Fabric	Color	Flow model			Suspension		
			Primary	Placement	Secondary	Type	Strap length	Material
350404600025	Combi 70	Black 3004			FabFlow		0	GV
100.1	Combi 70	Black 3004			FabFlow		0	GV
100.2	Combi 70	Black 3004	SonicFlow SonicFlow SonicFlow SonicFlow SonicFlow	2:00 3:00 4:00 5:00 6:00	FabFlow	Type 01 AiO	50 mm [2"]	GV

THE CHART SHOWN ABOVE IS AN EXAMPLE

Tag#: the unique number for that section, this is the identifying/unique number for that section.

Tag 3504...##..25: this part is the FabricAir flow straightener that helps manage turbulence and can be zipped into any joint.

Fabric: the fabric selected for this project.

Color: the color selected (standard meaning to select from the standard color chart for that fabric).

Flow model primary: primary dispersion method.

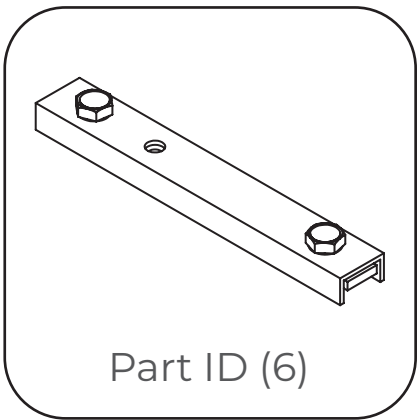
Placement: position of the holes; direction of airflow based on looking in the direction of airflow with the air hitting you from behind.

Flow model secondary: FabFlow for permeable fabrics.

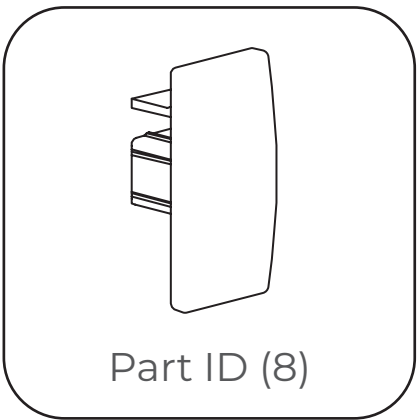
Suspension type: the suspension model selected for the project.

Strap length: the length of the strap from the top of the duct to the suspension.

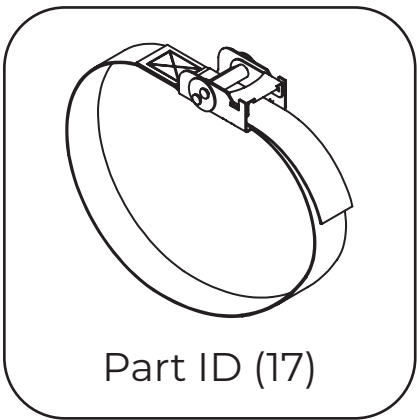
1.2 Type 13 suspension components (located on packing lists)



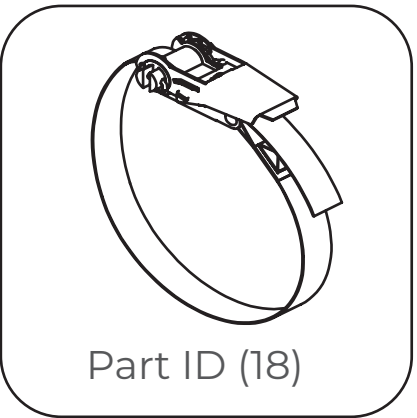
H-Rail connector



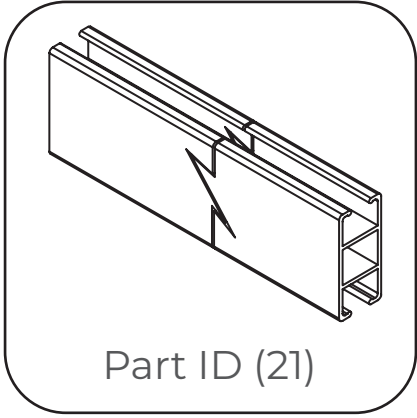
H-Rail endcap



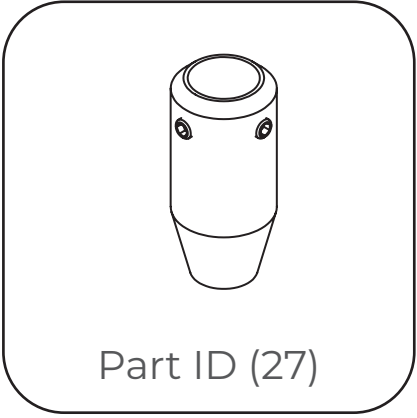
Fixing strap for duct
Ø < 508 mm [20"]



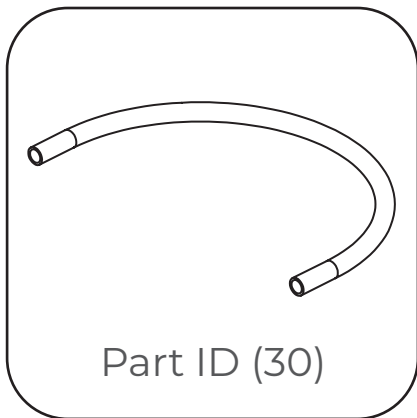
Fixing strap for duct
Ø > 508 mm [20"]



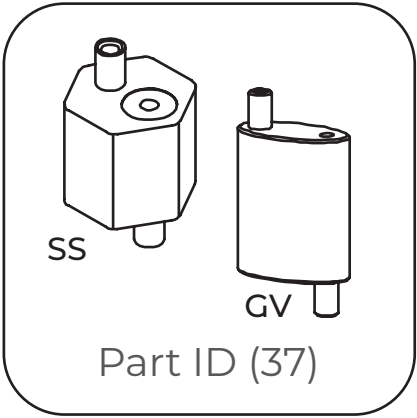
H-Rail profile



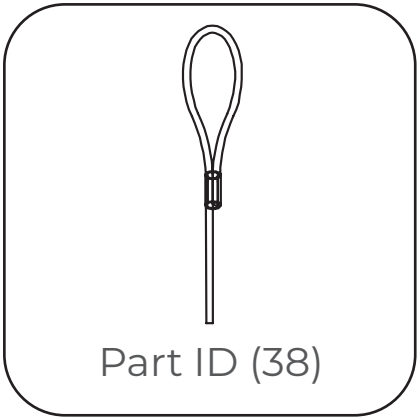
Rod end connector



Bent rod

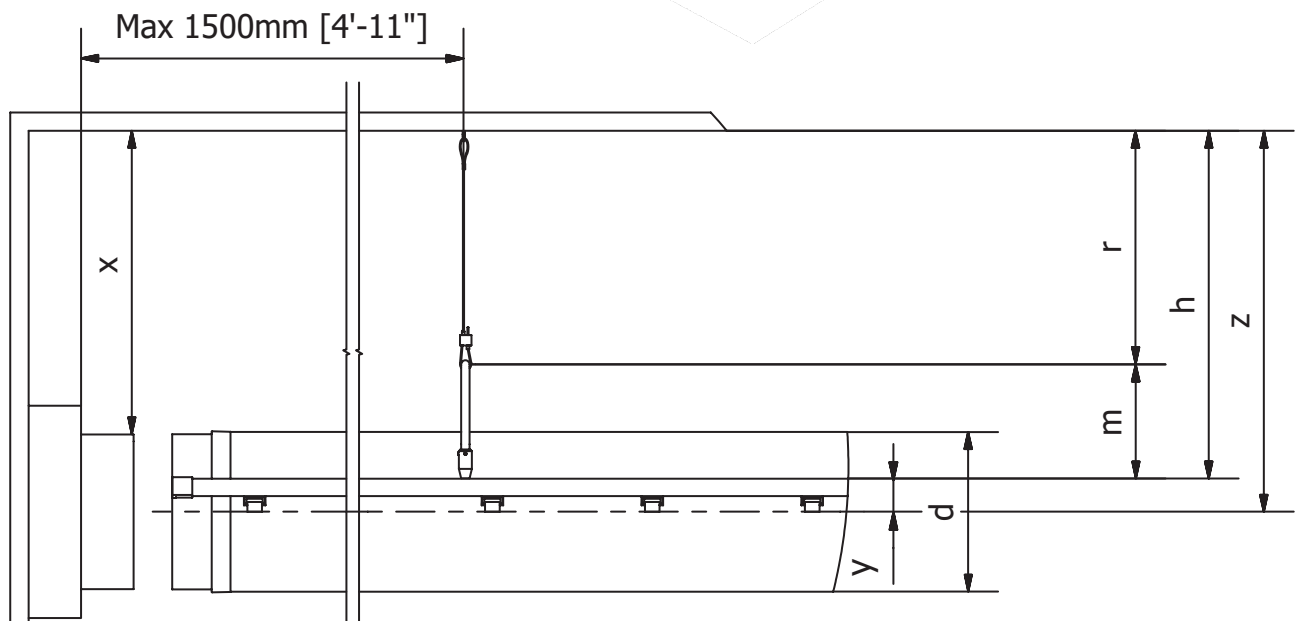
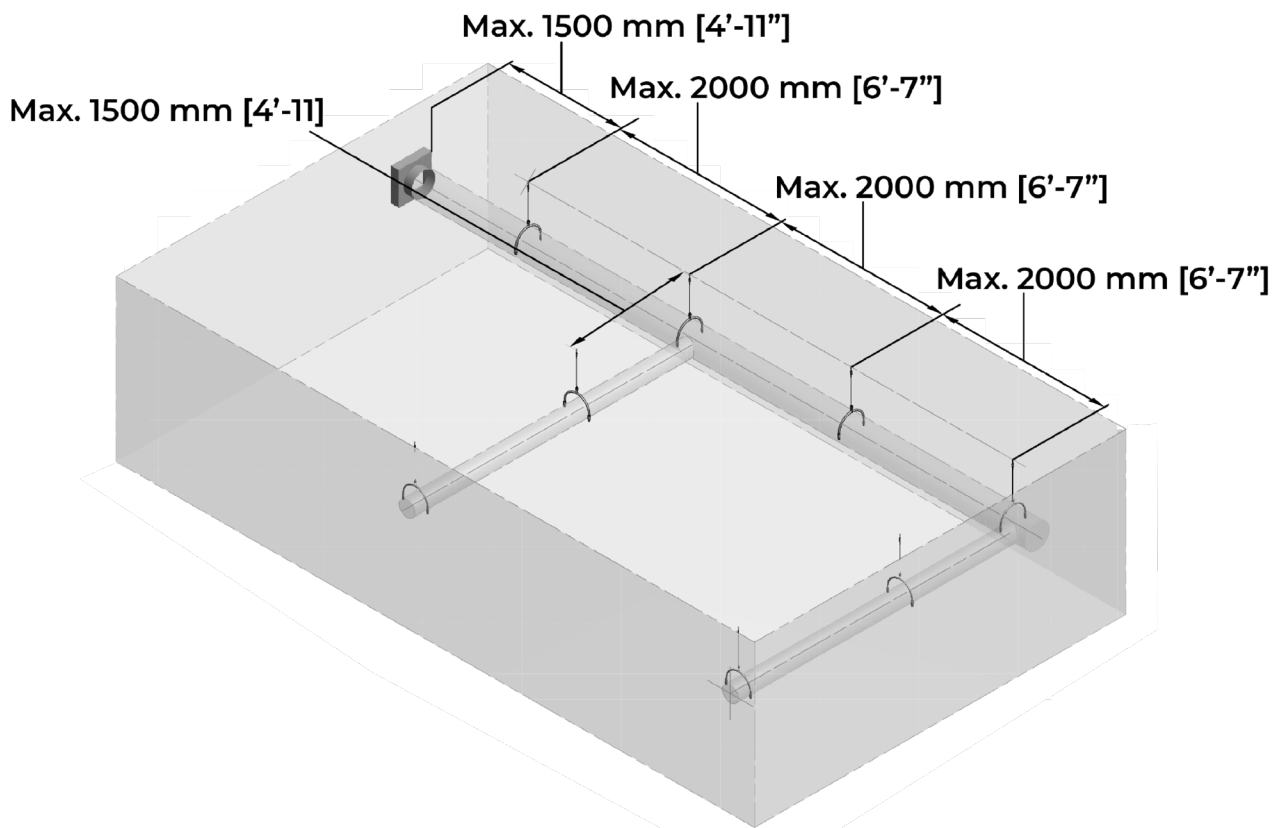


Adjustable cable lock
for vertical hangers
Available in
2 options – GV and SS



Adjustable cable with
loop

2.0 SUSPENSION INSTALLATION



Dimensions given in squares (□) can be found in system drawings packed in the shipping box.

$$x = z - 1/2d$$

$$r = h - m$$

$$h = z - Y$$

$$Y = S + 33 \text{ mm [1.3"]}$$

m = see next page

Standard:

Y classic = 63 mm [2.5"]

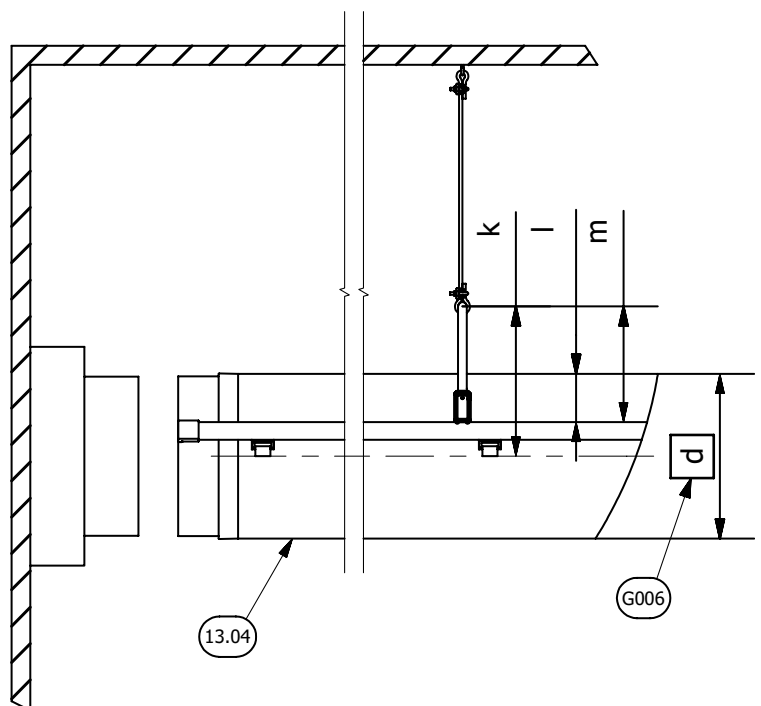
Y RapidSlider = 58 mm [2.25"]

S classic = 30 mm [1.2"] minimum length

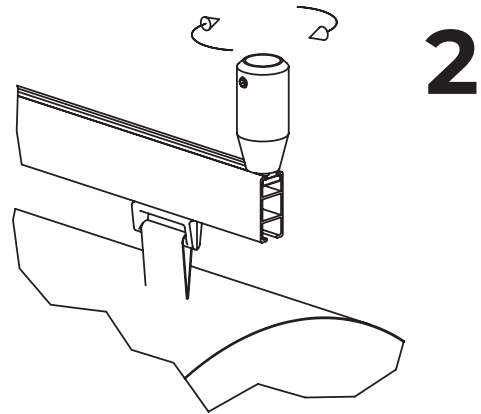
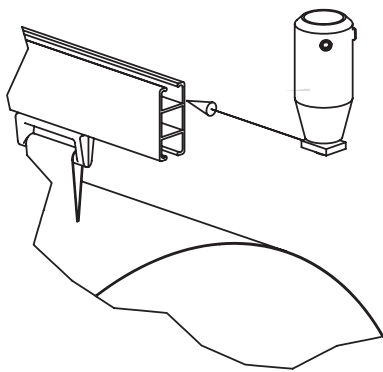
S RapidSlider = 17,5 mm [0.7"]

Strap lengths (classic) may be extended on Type 13 suspension, as needed to allow ducts to hang more than 30 mm [1.2"] below rail.

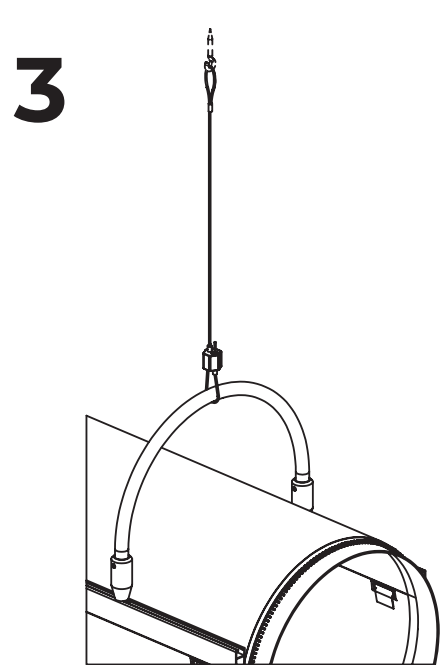
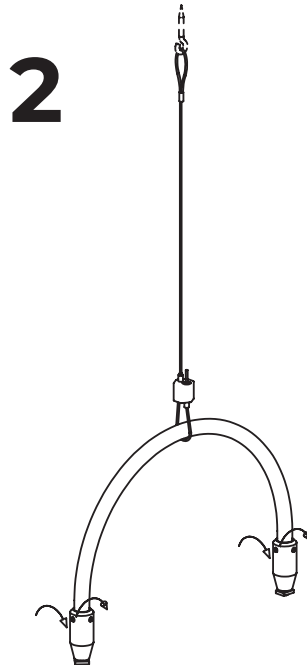
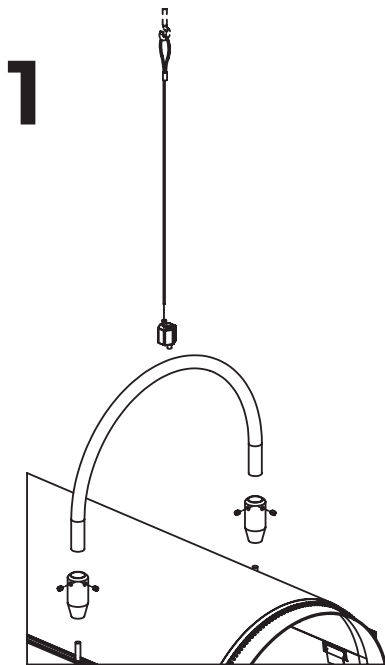
d-Duct Diam. [inch]	d-Duct Diam. [mm]	k	l	m
	100	-	-	-
	160	205	17	142
	200	225	37	162
8	205	228	40	165
	250	250	62	187
10	255	253	65	190
	300	275	87	212
12	305	278	90	215
	315	283	95	220
14	360	305	117	242
	400	325	137	262
16	410	330	142	267
	450	350	162	287
18	460	355	167	292
	500	375	187	312
20	510	380	192	317
22	560	405	217	342
	600	425	237	362
24	610	430	242	367
	630	440	252	377
26	660	455	267	392
	710	480	292	417
28	715	483	295	420
30	765	508	320	445
	800	525	337	462
32	815	533	345	470
34	865	558	370	495
	900	575	387	512
36	915	583	395	520
38	965	608	420	545
	1000	625	437	562
40	1020	635	447	572
42	1070	660	472	597
	1100	675	487	612
44	1120	685	497	622
46	1170	710	522	647
	1200	725	537	662
48	1220	735	547	672
	1250	750	562	687
50	1270	760	572	697
	1300	775	587	712
52	1320	785	597	722
	1400	825	637	762
56	1425	838	650	775
58	1480	865	677	802
	1500	875	687	812
60	1525	888	700	825
62	1580	915	727	852
	1600	925	737	862
64	1630	940	752	877
66	1680	965	777	902
	1700	975	787	912
68	1730	990	802	927
70	1780	1015	827	952
	1800	1025	837	962
72	1830	1040	852	977
	1900	1075	887	1012
76	1930	1090	902	1027
	2000	1125	937	1062
80	2035	1143	955	1080



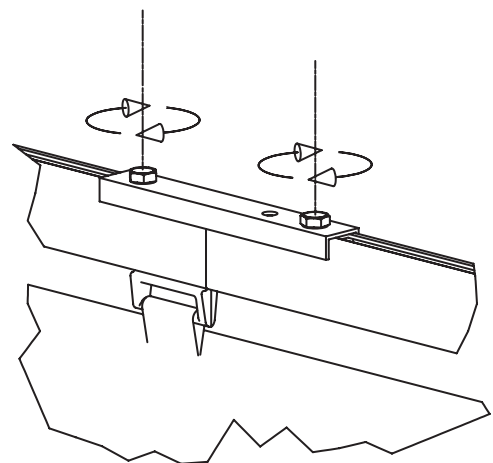
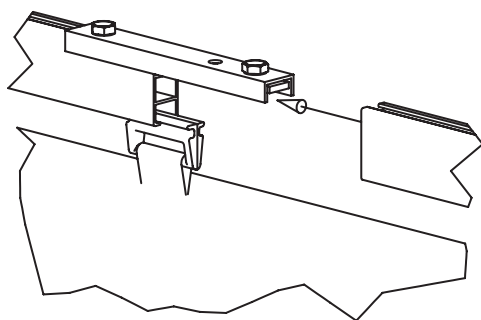
2.1 Insert the spacer rod fasteners



2.2 Connect the rails using the spacer rods and fasteners



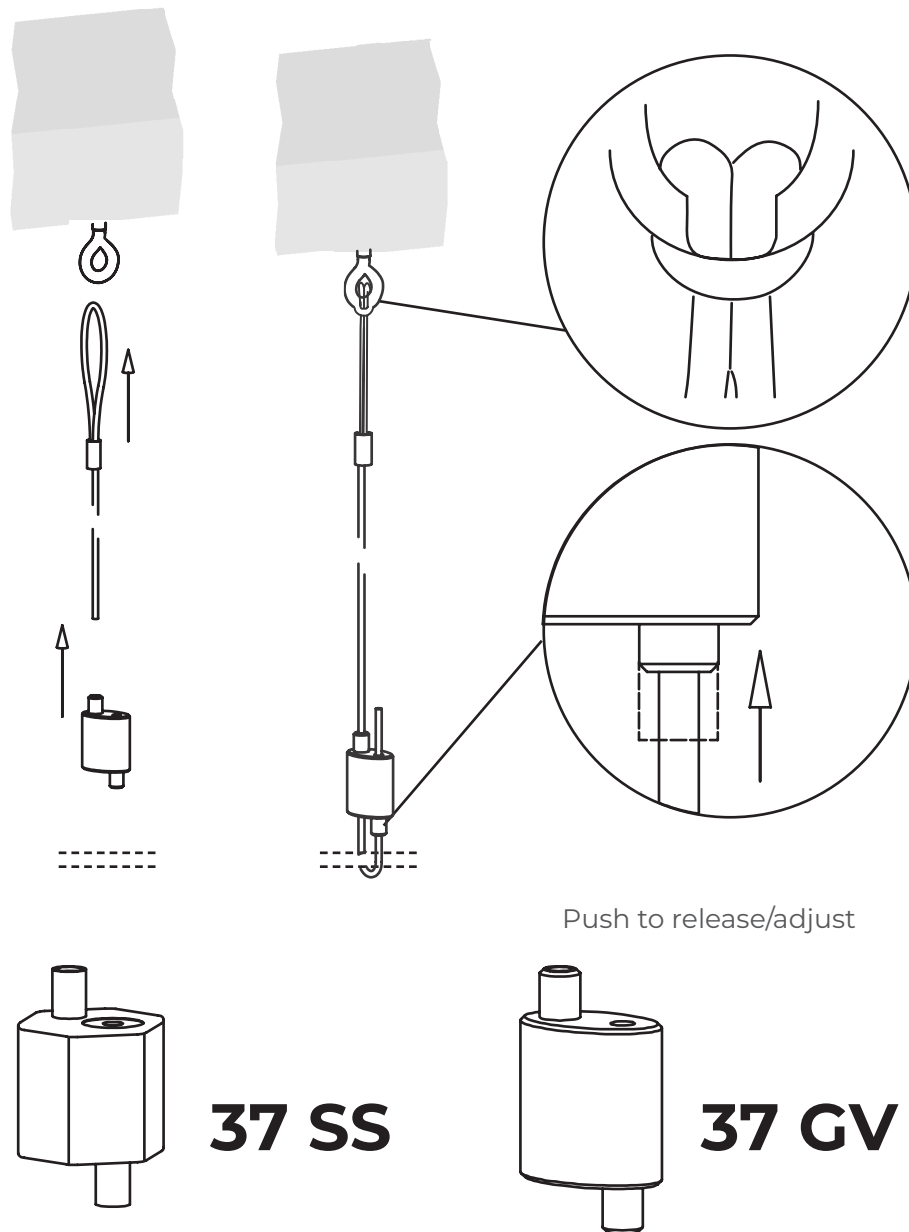
2.3 Joining profiles



- Duct will have sliders or a bulb edge to slide into H-Rail.
- Systems with elbows are provided with H-Rail bent to match the exact angles necessary.

2.4 Vertical hangers

- Connection to ceiling structure shall be supplied by the contractor.
- Adjustable cable with loop – available in 2/5/10 m [7'/16'/32'] length.

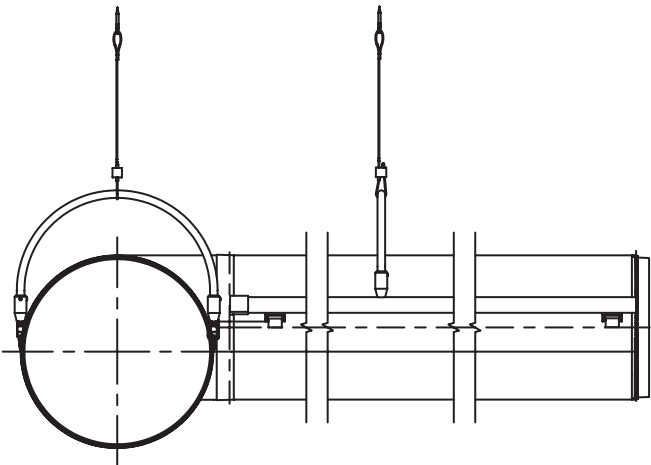
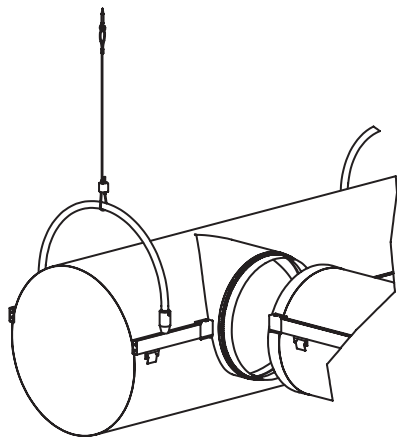


- The weight of a FabricAir system is < 3 kg/m [< 2 lbs/ft]. Anchors to the structure may be selected accordingly (5:1 safety factor is always recommended).
- In corrosive areas we recommend sealing all connections to walls/ceilings, to prevent corrosion of the structure. Always use approved paint/sealant.

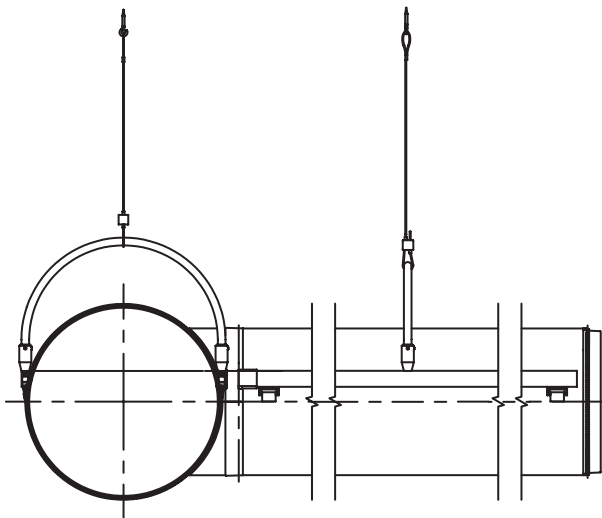
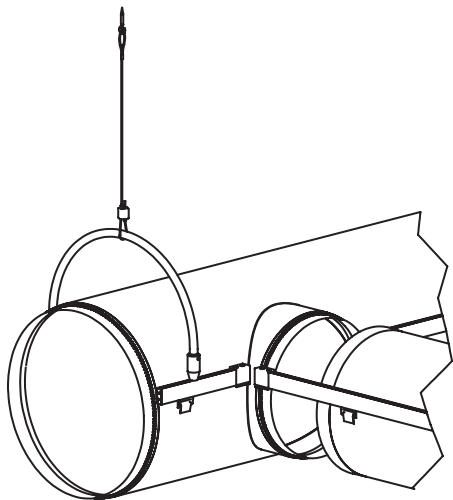
NOTE! Hardware quantities for vertical hangers are calculated based on 2 m [6'-7"] spacing. Installer must request additional hardware if vertical anchor spacing is to be less than 2 m [6'-7"].

2.5 Branches

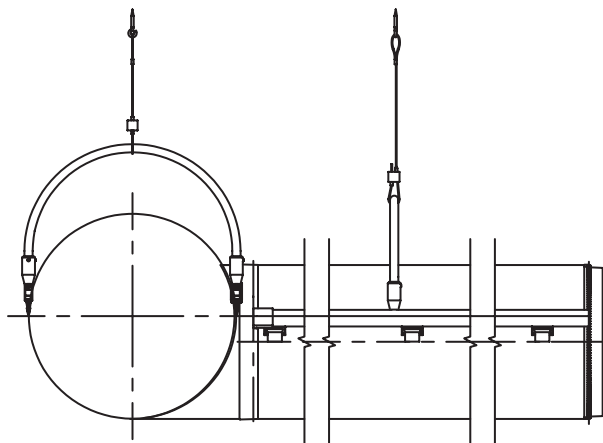
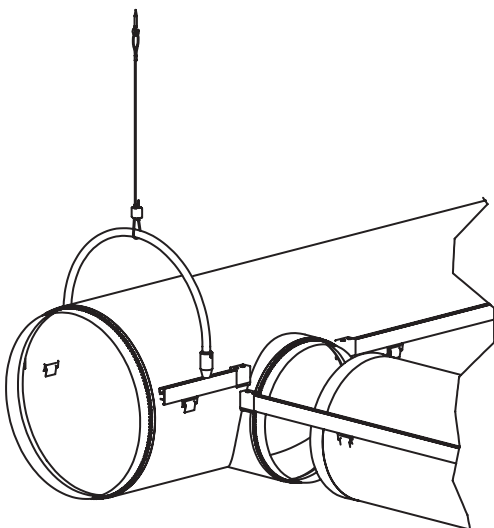
Top aligned branch



Middle aligned branch with extended strap length

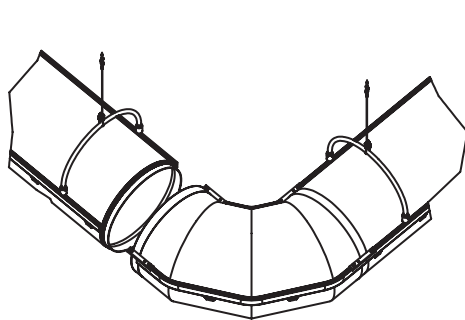


Bottom aligned branch with extended strap length



2.6 Detailed suspension installation details

Use QR code for more detailed information for each type.

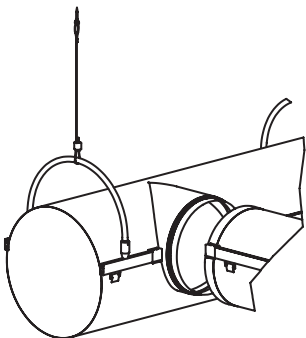


Bendings and elbows
All degrees and sizes

Drawings



Click or Scan

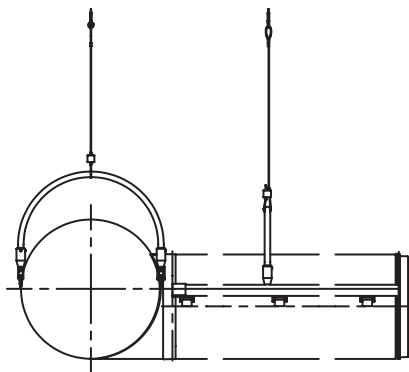


Branches
Top/center/bottom aligned

Drawings



Click or Scan

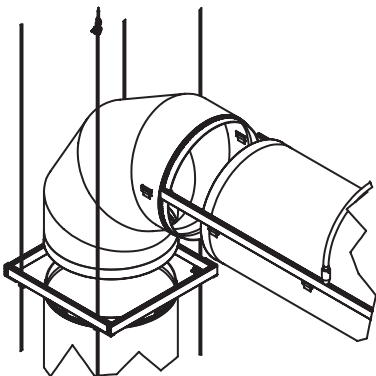


Reductions
Top/center/bottom aligned

Drawings



Click or Scan



**Vertical duct
suspension methods**

Drawings



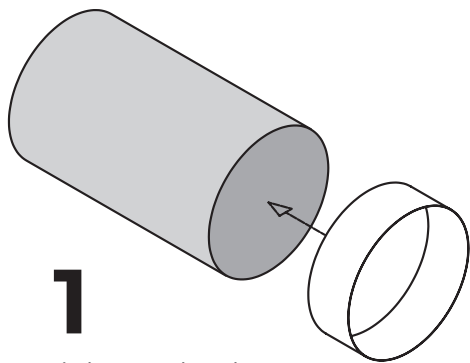
Click or Scan

3.0 INSTALLING THE FABRIC

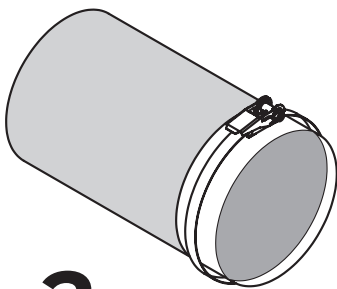
3.1 Connection to sheet metal part with fixing strap

	Basic inlet	Cover inlet	Smart inlet
Min. metal duct length required	50 mm [2"]	50 mm [2"]	75 mm [3"]
Inlet length	Min. 50 mm [2"] Std. 100 mm [4"]	Min. and std. 100 mm [4"]	Min. and std. 100 mm [4"]

Basic inlet

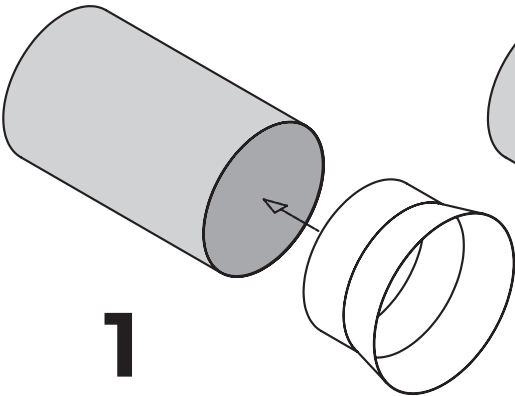


Put inlet on the duct

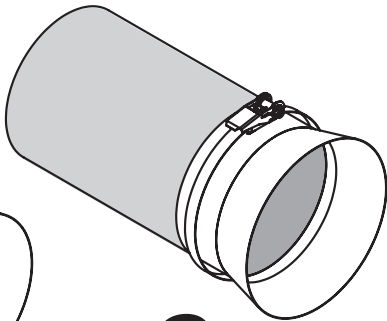


Put and tighten the fixing strap

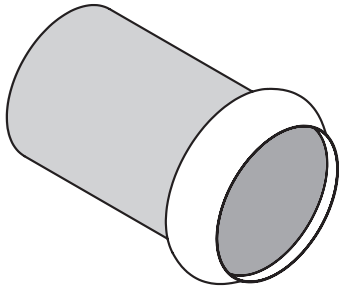
Cover inlet



Put inlet on the duct

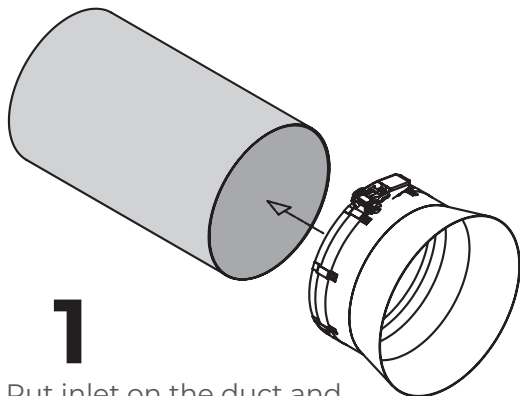


Put and tighten the fixing strap

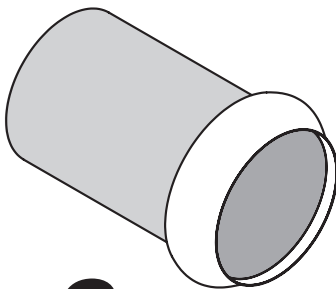


Close the cover

Smart inlet



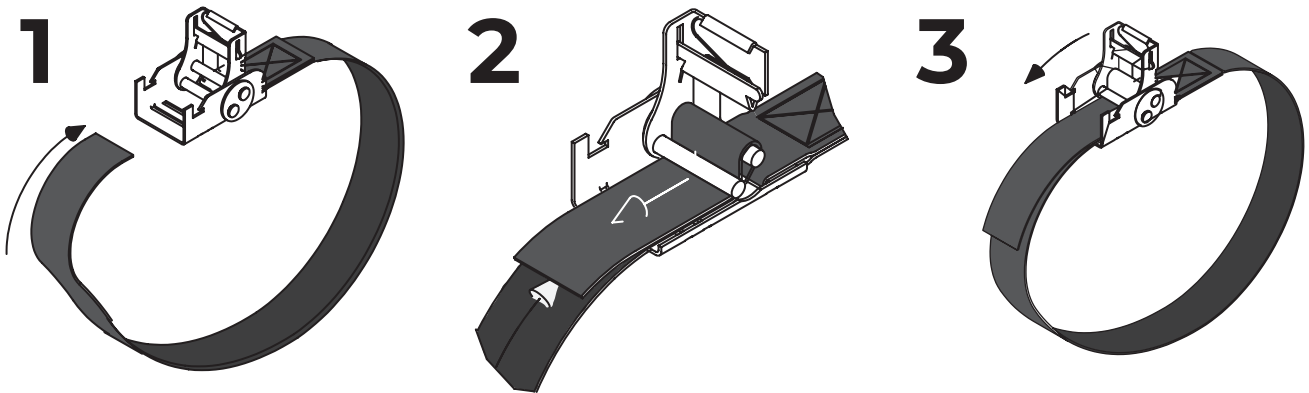
Put inlet on the duct and
tighten the fixing strap



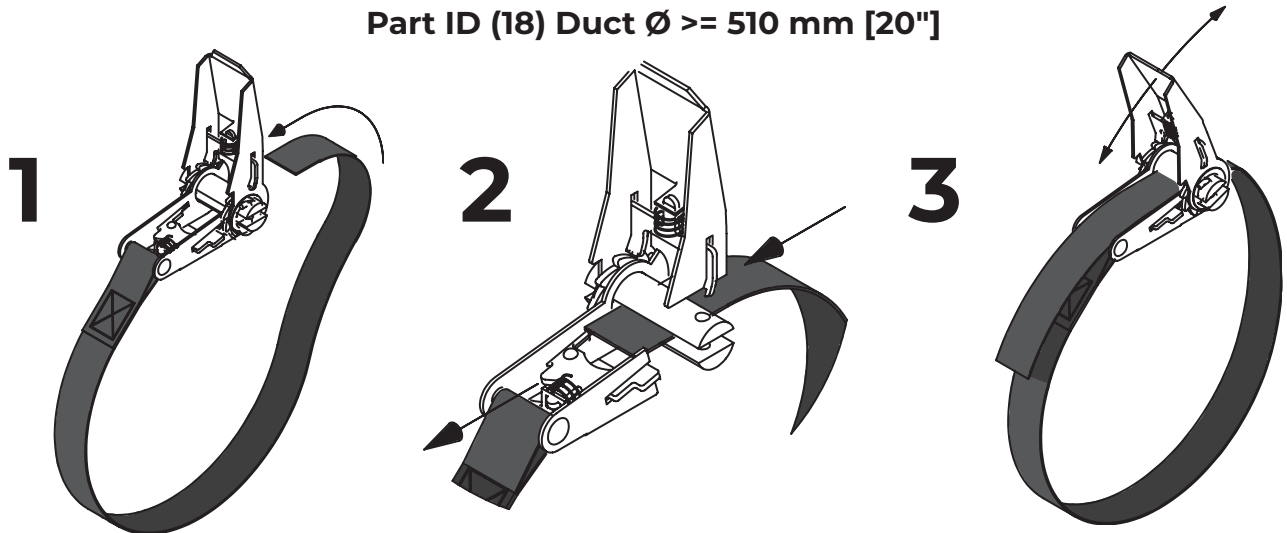
Close the cover

3.2 Fixing straps

Part ID (17) Duct $\varnothing < 510$ mm [20"]

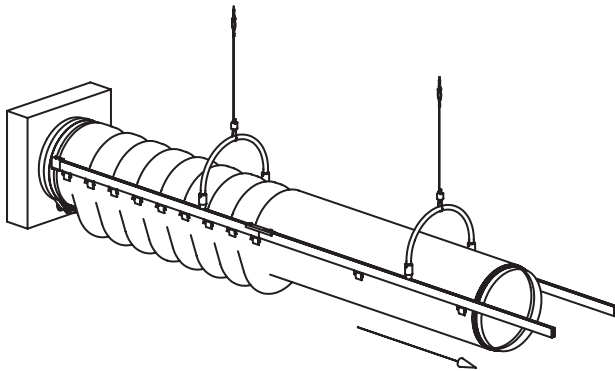


Part ID (18) Duct $\varnothing \geq 510$ mm [20"]



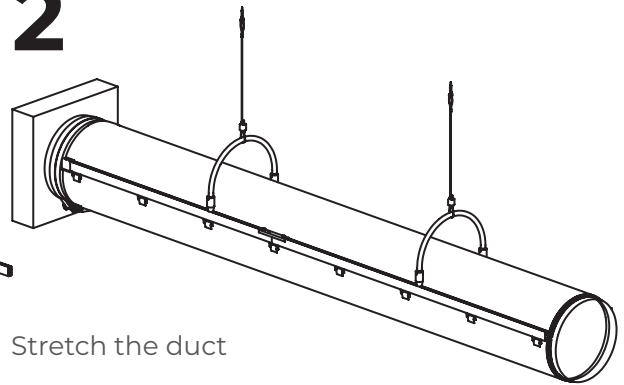
3.3 Installation of duct on H-Rail

1



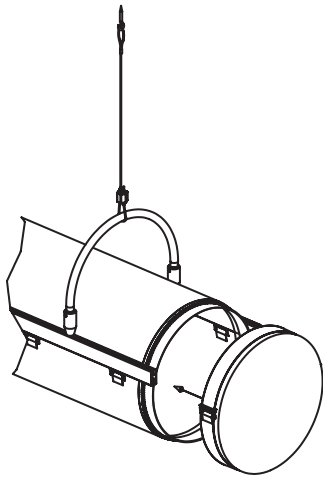
Hang ducting first

2



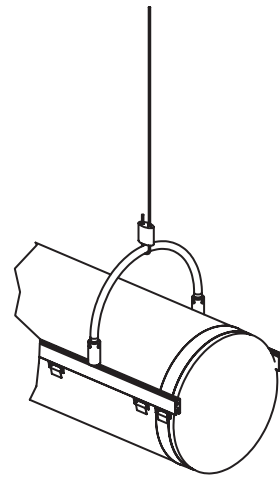
Stretch the duct

3



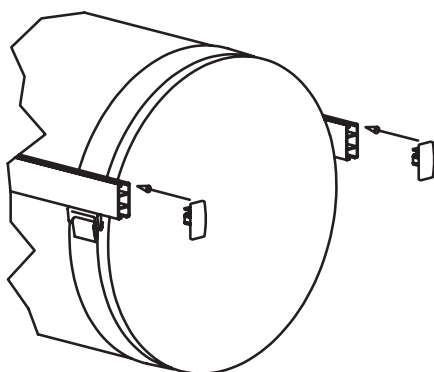
Insert endcap in the rail

4



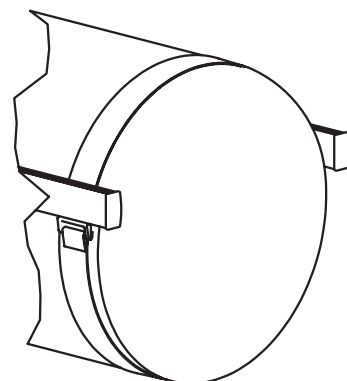
Slide endcap to the end of the duct. Zip it

5



Secure duct by inserting H-Rail endcap

6



Finished installation

H-Rail endcap creates a strong and tight interference fit connection.

Securing with a self-drilling screw (not part of FabricAir delivery) via $\varnothing 2,2$ mm hole of the H-Rail endcap at the top is optional.



fabricair.com/contacts

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210104173-017 (2024-MAR ENG)