

CONCENTRIC DUCT KITS (For 3 - 12.5 Ton) Models DRC/DRG/DRH/DBC/DBG/DBH LIGHT COMMERCIAL ROOFTOP UNITS INSTALLATION INSTRUCTIONS

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ATTENTION INSTALLING PERSONNEL

As a professional installer, you have an obligation to know the product better than the customer. This includes all safety precautions and related items.

Prior to actual installation, thoroughly familiarize yourself with this Instruction Manual. Pay special attention to all safety warnings. Often during installation or repair, it is possible to place yourself in a position which is more hazardous than when the unit is in operation.

Remember, it is your responsibility to install the product safely and to know it well enough to be able to instruct a customer in its safe use.

Safety is a matter of common sense, a matter of thinking before acting. Most dealers have a list of specific good safety practices, follow them.

The precautions listed in this Installation Manual are intended as supplemental to existing practices. However, if there is a direct conflict between existing practices and the content of this manual, the precautions listed here take precedence.

SAFETY CONSIDERATIONS

Installation and servicing of air conditioning equipment can be hazardous due to system pressure and electrical components. Only trained and qualified service personnel should install, repair, or service air conditioning equipment. All operations should be performed by trained service personnel. When working on air conditioning equipment, observe precautions in the literature, tags and labels attached to the unit or accessory, and other safety precautions that may apply.

Follow all safety codes. Wear safety glasses and work gloves.



WARNING

Before installing accessories or performing maintenance, turn off main power switch to unit. Electrical shock can cause injury or death. There may be more than one disconnect switch.

Small Concentric Duct Kits Information

Unpack and inspect concentric duct kits for damage and missing parts. If any parts are missing contact MicroMetl for replacement parts. All parts sent in kit are used for installation. Curb adaptors are to be installed before the unit is set. Concentric Duct Kits are to be installed after the roof curb is set.

Concentric Duct Kits for 3 to 6 Ton Models		
Part Number	QTY	Description
0270L01602	1	Concentric diffuser 24 x 48 with 16" dia collars
0270L01603	1	Concentric diffuser 24 x 48 with 18" dia collars
0270L01335	1	Concentric adaptor for curb - 16" dia.
0270L01338	1	Concentric adaptor for curb - 18" dia.

Concentric Duct Kits for 7.5 to 12.5 Ton Models		
Part Number	QTY	Description
0221L00011	1	Concentric diffuser 30 x 48 with 20" dia collars (7.5, 8.5 ton)
0221L00012	1	Concentric diffuser 42 x 42 with 15 x 34 collars (10 ton)
0221L00013	1	Concentric diffuser 48 x 48 with 18 x 36 collars (12.5 ton)
0270L01336	1	Concentric adaptor for curb - 20" dia.
0270L01768	1	Concentric adaptor for curb - 15 x 34 collars
0270L01769	1	Concentric adaptor for curb - 18 x 36 collars



WARNING

ONLY PERSONNEL THAT HAVE BEEN TRAINED TO INSTALL, ADJUST, SERVICE OR REPAIR (HEREINAFTER, "SERVICE") THE EQUIPMENT SPECIFIED IN THIS MANUAL SHOULD SERVICE THE EQUIPMENT. THE MANUFACTURER WILL NOT BE RESPONSIBLE FOR ANY INJURY OR PROPERTY DAMAGE ARISING FROM IMPROPER SERVICE OR SERVICE PROCEDURES. IF YOU SERVICE THIS UNIT, YOU ASSUME RESPONSIBILITY FOR ANY INJURY OR PROPERTY DAMAGE WHICH MAY RESULT. IN ADDITION, IN JURISDICTIONS THAT REQUIRE ONE OR MORE LICENSES TO SERVICE THE EQUIPMENT SPECIFIED IN THIS MANUAL, ONLY LICENSED PERSONNEL SHOULD SERVICE THE EQUIPMENT. IMPROPER INSTALLATION, ADJUSTMENT, SERVICING OR REPAIR OF THE EQUIPMENT SPECIFIED IN THIS MANUAL, OR ATTEMPTING TO INSTALL, ADJUST, SERVICE OR REPAIR THE EQUIPMENT SPECIFIED IN THIS MANUAL WITHOUT PROPER TRAINING MAY RESULT IN PRODUCT DAMAGE, PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

PROP 65 WARNING FOR CALIFORNIA CONSUMERS



WARNING

Cancer and Reproductive Harm -
www.P65Warnings.ca.gov

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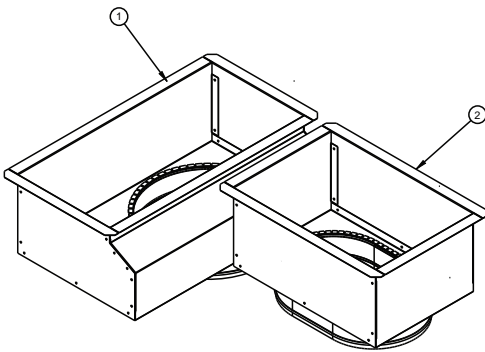


LOCATION

The location for the duct kits is inside the roof curb. The kits are to make the connection from the unit to the room diffuser. Parts are shipped to the field knockdown and to be assembled onsite. Before installation double check all locations for any interference of when duct is dropped through the roof. Concentric duct kits can be installed on both hard duct and flex ducts.

ROUND TO SQUARE ADAPTORS

Once curb is installed drop square to round duct adaptor into curb. When adaptor is set into curb finish assembling curb and put insulated panels on top of panel. See Illustration below.



**Illustration- Curb Adaptor: (1) Return Adaptor
(2) Supply Adaptor**

DIFFUSER INSTALLATIONS

Installation of the diffuser is in the space where air is leaving the rooftop unit. This is to be installed into the ceiling grid. The ceiling grid is in the room drop ceiling of a space. Diffusers are used to either supply or return air only. Flush mount diffusers can take supply air on the perimeter and intake return air back into the middle and return it to the unit. This gives the ability to supply the air to all portions of the room. See Illustration below of diffuser.

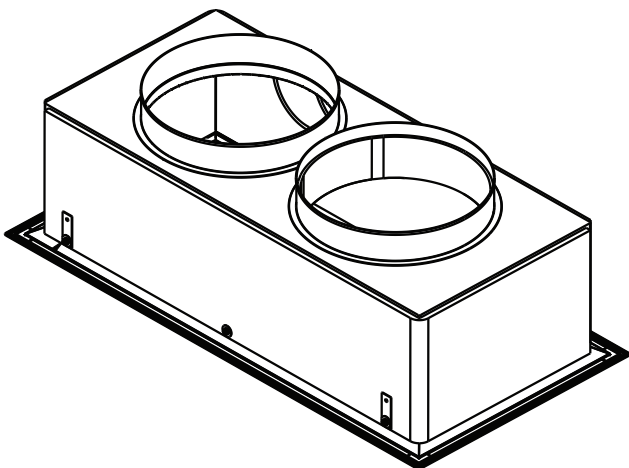


Illustration- Room Diffuser

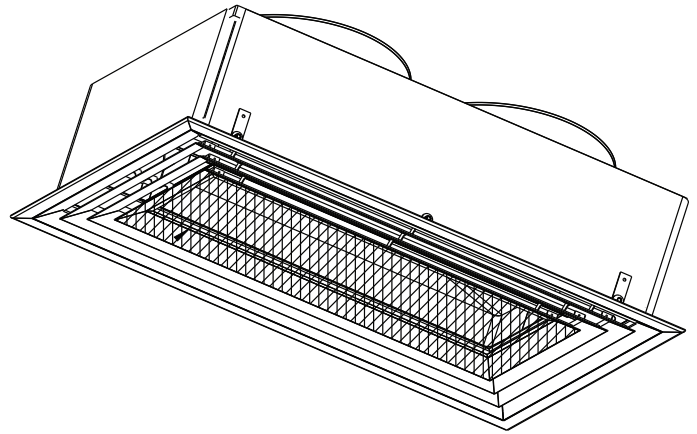
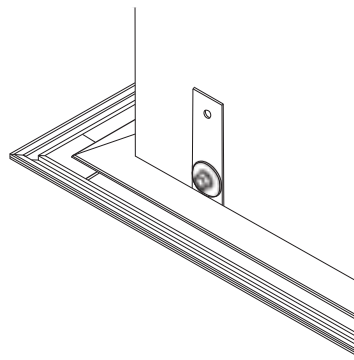


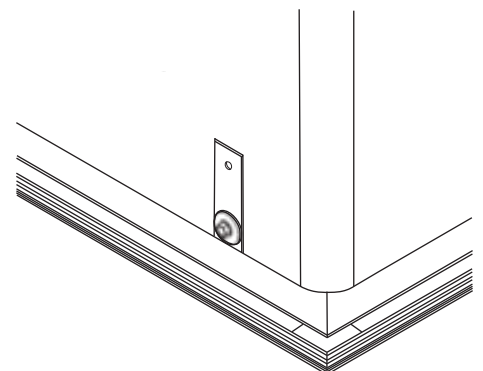
Illustration- Room Diffuser and Ceiling Grid

DROP TYPE DIFFUSERS ATTACHED WITH FLEX DUCT INTO CEILING

When installing into a drop ceiling, push the diffuser through the ceiling grid. For Diffusers that are installed independently in the field, the diffuser box needs to be supported by hanging from the ceiling joists. After the diffuser is through the ceiling, use supplied clips to hang the diffuser from the ceiling rafters. When hanging the diffuser box, do not use the ceiling grid or flex duct connection as support. The clips needed to hang the diffusers in the field are supplied in the hardware bag. See Illustration below. When installing the flex duct into the diffuser, make sure to put the supply and return duct connection into the right connections. Supply connections are on the outside of the diffuser and the return is in the middle of the diffuser.

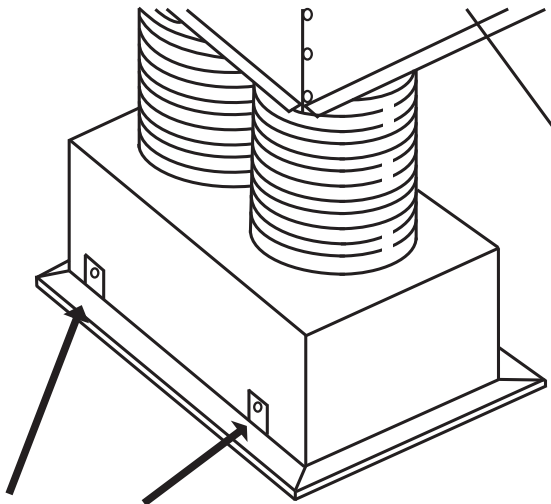


Illustrations- Isometric View Hanger Bracket



DROP TYPE DIFFUSERS ATTACHED WITH HARD DUCT INTO CEILING

When installing the diffuser into the ceiling, install in the same order as the flex duct connection. Ensure that the connection is fastened to the ceiling joists. The Clips needed to hang the diffuser box are supplied in the hardware bag. When installing the duct into the diffuser, there is a flange that runs the perimeter of the hard duct to fasten to the ceiling diffuser. The flange will sit on top of the diffuser which is connected to the rafters. As with flex duct installation, be sure to connect the ducts to the correct supply and return portions of the diffuser for correct airflow. When connecting the ducts to the diffuser, connect and seal the return air section first. After connection of the flange, seal the duct at the connection point. Once the return air duct is completed, connect the supply duct connection and seal so there is no air leakage.



Clip Hangers to secure in ceiling grid

Illustration- Flex Duct with Hanging Clips

GASKET MATERIAL

Prior to fastening the duct connections to the curb, place a gasket between the connection points and the curb. The Gaskets should encircle the perimeter of the opening and should be cut and butted together at the corners to prevent leakage. Do NOT slide unit across the duct opening. If the unit is slid across the opening, it could damage the seal(s). Set the unit straight down onto the curb. When the unit is set onto the curb, it will compress the gasket and create a tight fit between the curb, the duct connections, and the unit.

p/n	0270L01602
CFM	DIFFUSER DP
2200	0.07
2600	0.10
3000	0.13
3400	0.17
3800	0.20
4200	0.26
4600	0.32
5000	0.40
5400	0.48
5800	0.58
6200	0.68

p/n	0221L00011
	0221L00012
	0221L00013
CFM	DIFFUSER DP
2200	0.07
2600	0.10
3000	0.13
3400	0.17
3800	0.20
4200	0.25
4800	0.36
5200	0.44
5800	0.57
6200	0.68

p/n	0270L01603
CFM	DIFFUSER DP
1000	0.03
1200	0.04
1600	0.07
1800	0.07
2000	0.09
2200	0.10
2400	0.14
2800	0.15
3000	0.17

DAIKIN PN	AIR	STATIC PRESSURE (in w.c.) AT THESE CFM					
		1,200	1,600	2,000	2,400		
0270L01335	Supply	0.09	0.17	-	-	-	-
	Return	-	-	-	-	-	-
0270L01338	Supply	-	-	0.15	0.22	-	-
	Return	-	-	0.04	.06	-	-

DAIKIN PN	AIR	STATIC PRESSURE (in w.c.) AT THESE CFM					
		2,750	3,000	3,500	4,000	4,500	5,000
0270L01336	Supply	0.38	0.45	0.61	-	-	-
	Return	0.04	0.08	0.12	-	-	-
0270L01768	Supply	-	-	0.25	0.36	0.46	0.57
	Return	-	-	0.00	0.01	0.01	0.01
0270L01769	Supply	-	-	-	0.43	0.55	0.69
	Return	-	-	-	0.02	0.01	.011

CUSTOMER FEEDBACK

Daikin is very interested in all product comments.
Please fill out the feedback form on the following link:

<https://daikincomfort.com/contact-us>

You can also scan the QR code on the right to be directed to the feedback page.

