

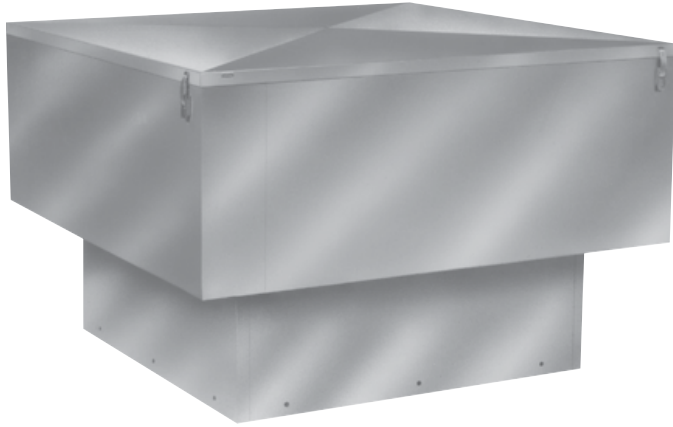


ROMLAIR

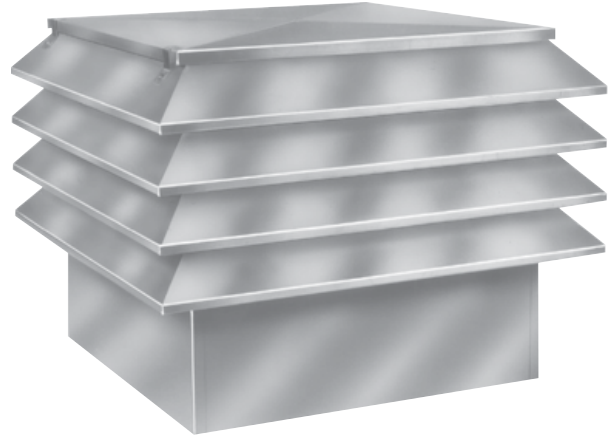
9668 Heinrich Hertz Dr # D, San Diego, CA 92154
PH. 619-946-1224

**MODEL RCF and RCF-T
Centrifugal Filtered Supply Fans**

Installation, Operation and Maintenance Manual

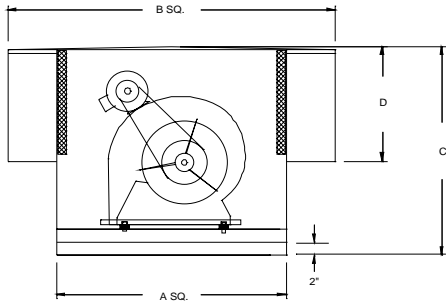


Model RCF

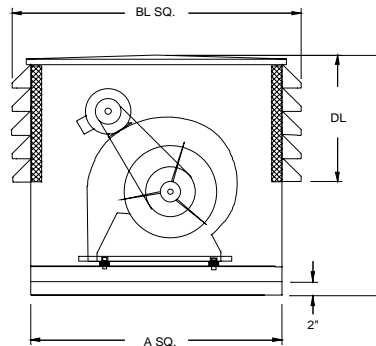


Model RCF-T

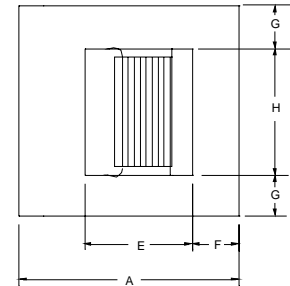
Romlair Models RCF and Model RCF-T fans are inspected and test run at the factory. A careful check should be made for shipping damages before installing a PRV. Filters should be checked for perforation and filter rails should be checked for dents or other damages. Blowers should be checked for free rotation and any concealed damage. If damage is found, file a claim immediately with the carrier. Check that all accessory items are accounted for.



RCF

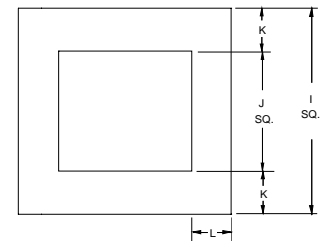


RCF-T



BASE OF UNIT

FAN SIZE	A SQ.	B SQ.	BL SQ.	C	D	DL	E	F	G	H	I SQ.	J SQ.	K	L	NOMINAL FILTERS	WT.
9	24.38	32.38	28.38	24.38	10.25	14.50	10.25	7.06	6.28	11.81	22.50	12.25	5.13	5.13	(4) 10 X 20	230
20	28.38	38.5	36.38	28.25	12.25	14.50	11.38	8.50	7.63	13.13	26.50	14.25	6.13	6.13	(4) 12 X 24	250
12	32.38	42.63	40.38	31.38	16.50	19	13.44	9.47	8.38	15.63	30.50	16.25	7.13	7.13	(4) 16 X 25	290
15	32.38	42.63	40.38	31.38	16.50	19	15.88	10.25	6.88	18.63	30.50	20.25	5.13	7	(4) 16 X 25	330
18	36.38	48.31	44.38	37.25	20.75	23.50	18.88	11.50	7.25	21.88	34.50	24.25	5.13	7.50	(4) 20 X 15	450
20	44.38	64	52.38	49	27	28	24.75	5.19	9.81	24.75	42.50	30.25	6.13	3.375	(4) 16 X 25 (4) 20 X 20	700



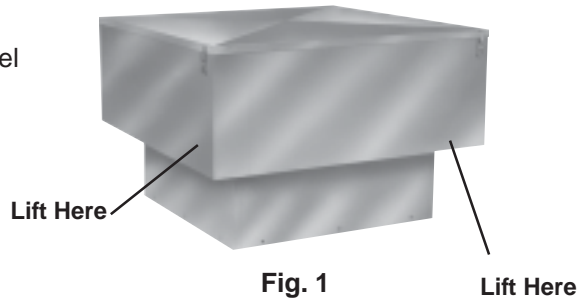
OPTIONAL DUCT ADAPTER

All dimensions are in inches

Lifting

Lifting the Model RCF and RCF-T fans has to be done with extreme care to avoid damage to the housing. On the Model RCF it is recommended that four lifting devices that should be a minimum of 3.5" wide, be placed under the outer housing where the gussets attach to the hood (Fig.1). Do not lift near the center of the hood.

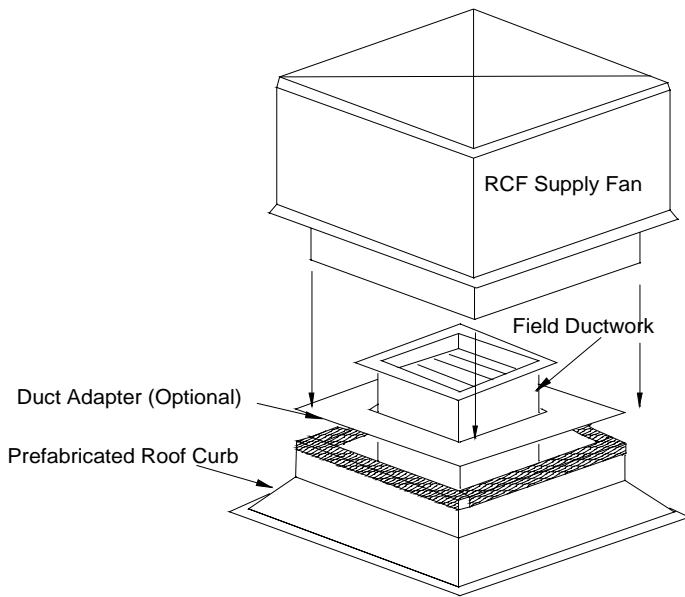
On the Model RCF-T, it is recommended that four lifting devices be attached under the exterior louver panel, near the corners.



Installation

Move fan to its desired location and fasten securely to the roof curb. Use fasteners to suit construction and material. Fasteners are not supplied by Romla Ventilator Company. On ducted applications, Romla can provide an optional duct adapter which holds the ductwork in place prior to installing the fan. The illustration shows a typical installation with a factory provided roof curb and duct adapter.

TYPICAL INSTALLATION



FAN	TYPE CF CURB DIM	RECOM. ROOF OPENING	DUCT SIZE ID	DAMPER SIZE (NOMINAL)
RCF-9/RCF-T-9	22.5X22.5	15	12	12X12
RCF-10/RCF-T-10	26.5X26.5	17	14	14X14
RCF-12/RCF-T-12	30.5X30.5	19	16	16X16
RCF-15/RCF-T-15	30.5X30.5	23	20	20X20
RCF-18/RCF-T-18	34.5X34.5	27	24	24X24
RCF-20/RCF-T-20	42.5X42.5	33	30	30X30

All dimensions are in inches.
Recommended curb size is the OD curb dimension without roofing

Electrical Connection

The motor's amperage and voltage rating must be checked for compatibility to the supply voltage prior to final electrical connection. The electrical supply normally will come up from the roof opening. The conduit will then be secured to a NEMA1 disconnect switch (optional) or directly to the motor junction box. If the wiring has to be routed through the outside enclosure, the wiring is to be routed through an opening in the unit enclosure which is slightly larger than the conduit fittings. Please note that the opening in the outer enclosure through which the conduit would pass, should be below the opening of the motor junction box where the conduit would be installed.

Important Note: To comply with all local, state, and federal codes, make sure all wiring, guarding precautions and intended usage at the PRV unit(s) are checked for applicable codes.

Pre Start-Up Checks

WARNING!

LOCK OUT ALL THE PRIMARY AND SECONDARY POWER SOURCES PRIOR TO INSPECTION OR SERVICING. FAILURE TO COMPLY COULD RESULT IN SERIOUS INJURY OR DEATH

Inspect fasteners and setscrews. Rotate the blower wheel by hand to be sure it turns freely and is centered. Inspect belt tension and pulley alignment. Improper belt tension or misaligned pulleys frequently cause premature belt failures. See Figure 2.

The adjustable fan pulley is pre-set at the factory according to the specified fan RPM. If required, the fan speed can be increased by closing the adjustable motor pulley, or decreased by opening the adjustable pulley. Multiple groove pulleys must be adjusted equally. Adjusting fan speeds will increase or decrease the horsepower required. After adjustment it is very important to check and compare motor load amperes with nameplate rating.

Direction of wheel rotation is critical. Reversed rotation will result in poor air performance, motor overloading and possible burnout. Rotation should correspond to the rotation arrow located on the fan wheel.

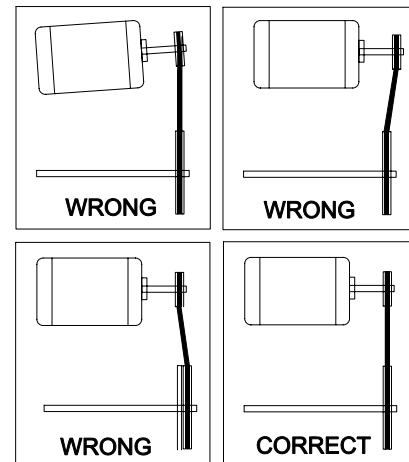


Fig. 2

Important Note: RCF and RCF-T fans should be operated only when attached to the completed system. Without proper static pressure loading, the motor may be overloaded and burnout may occur. Verify motor load amperes with nameplate rating

Care and Maintenance

Filter Cleaning

Filters are standard 1" permanent recleanable type aluminum filters. For efficient performance, filters should be cleaned on a regular basis. To clean the filters, flush with a stream of water, or wash in a mild detergent solution. After cleaning and draining, the filters should be coated with a filter coat adhesive for maximum efficiency. Filter coat adhesive is available from Research Products, Inc. or most filter distributors.

The filters are removeable by removing the fan hood cover. This is accomplished by releasing the four latches that hold down the cover.

Belts

Improper belt tension or misaligned pulleys frequently cause premature belt failures. The V-belt tension should be at the lowest tension where the belts will not slip at peak load. For proper tension, a deflection of approximately 1/4" per foot of center distance should be obtained by firmly pressing the belt. Refer to Figure 3

Belt tension should be checked during the first 24 hours of operation and re-adjusted if required. Fasteners attaching the motor to the motor plate must be loosened in order to adjust the belt.

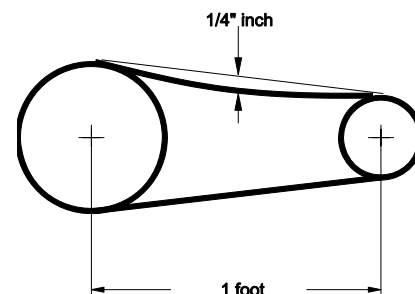


Fig. 3

Care and Maintenance-Continued

Lubrication

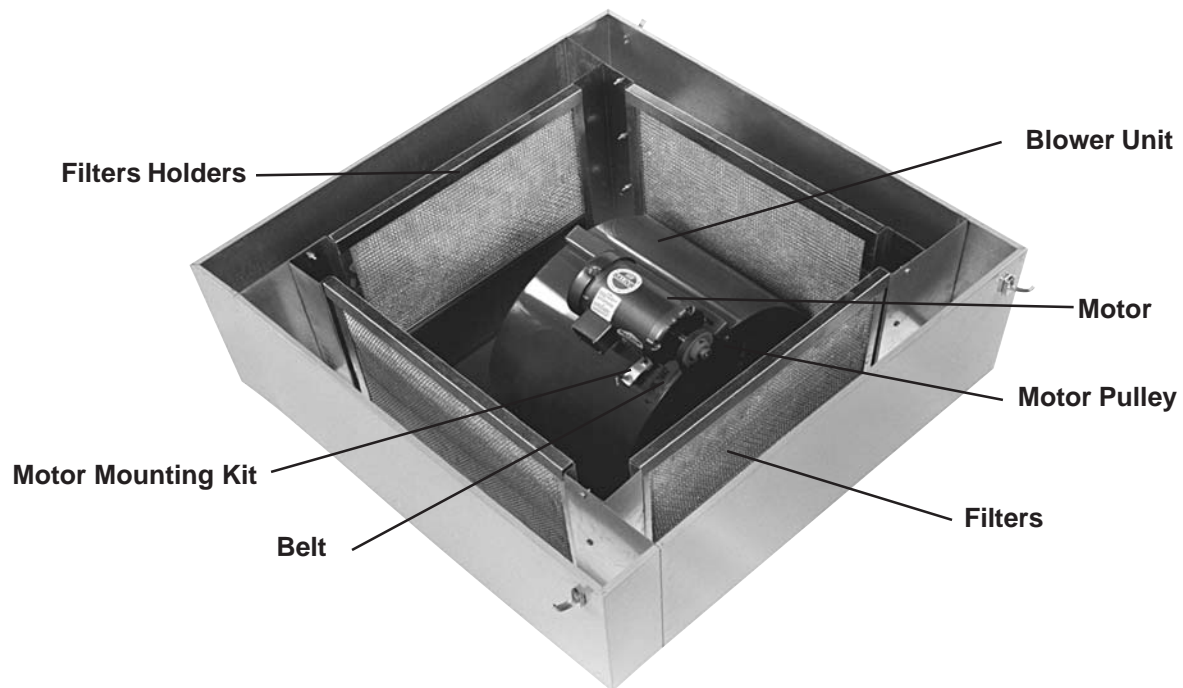
Model RCF and RCF-T use standard pillow block bearings that are prelubricated at the factory and require no scheduled maintenance when used in normal service. Motors used on these fans are also lubricated for life at the factory and require no scheduled maintenance.

Periodic Cleaning

It is recommended that both the fan motors and fan wheel receive a periodic cleaning to remove dust and dirt which may accumulate with use. Only clean the exterior surfaces of the motor, and never spray with water or solvents. Cleaning the motor will help keep the motor cool.

Removing accumulated dust and dirt from the blower wheel will assist in high air performance, and help avoid possible damaging vibration from an unbalanced blower wheel.

PARTS LIST



VENTILATION PRODUCTS

9668-D Heinrich Hertz Drive, San Diego, CA 92154 PH: 619-946-1224