

## Construction Features

### Housing

All fans are constructed of heavy-gauge steel and continuously welded for strength and rigidity. All fans are provided with punched inlet and outlet flanges as standard. Housings are enamel coated as standard.

### Wheel

Wheels are the non-overloading centrifugal backward inclined type and are designed for maximum efficiency and quiet operation. All wheels contain a matching inlet venturi for optimum unit performance. Sizes 90 through 270 are constructed of aluminum and sizes 300 through 490 are constructed of steel.

### Belt Tube

A belt tube encloses the belts and drive components, protecting them from the airstream on Models TCLB and TCLBR.

### Inlet and Outlet Flanges

Inlet and outlet flanges with prepunched mounting holes are standard on all sizes to provide a bolted connection to ductwork.

### Extended Lube Lines

Lube lines with grease fittings are extended to the outside of the fan housing on all models. Nylon lines are standard on Model TCLB. Model TCLBR features copper lube lines.

### Drain (TCLBR)

A two inch drain allows drainage of grease to the lowest point of the fan. Drain is located 180° from the motor on vertical fans and at the lowest point of the housing on horizontal fans. A grease box with drain connection is an available option.

### Clean Out Doors (TCLBR)

Two cleanout doors are located 180° apart, providing access to the wheel for cleaning.

### Bearings

Bearings are selected to exceed the L-10 life of 80,000 hours at the maximum operating speed. Heavy-duty re-greaseable pillowblock ball type bearings are specifically designed for air handling applications.

### Mechanical Run Test & Final Vibration Check

All fans are assembled for a mechanical run test and final balance prior to shipment. Vibration readings are taken on both fan bearings in the axial, horizontal, and vertical directions at the specified speed. Fans are balanced to 0.15 in./sec. peak or less.

### Adjustable Motor Base

A heavy-duty adjustable motor base provides easy and positive adjustment of belt tension.

### Shaft

Shaft diameters sized to have a first critical speed of at least 125% of the fan's maximum operating speed.



ROOF TOP  
O/M?

TCLBR  
Restaurant Exhaust



Wheel Size 90 - 270

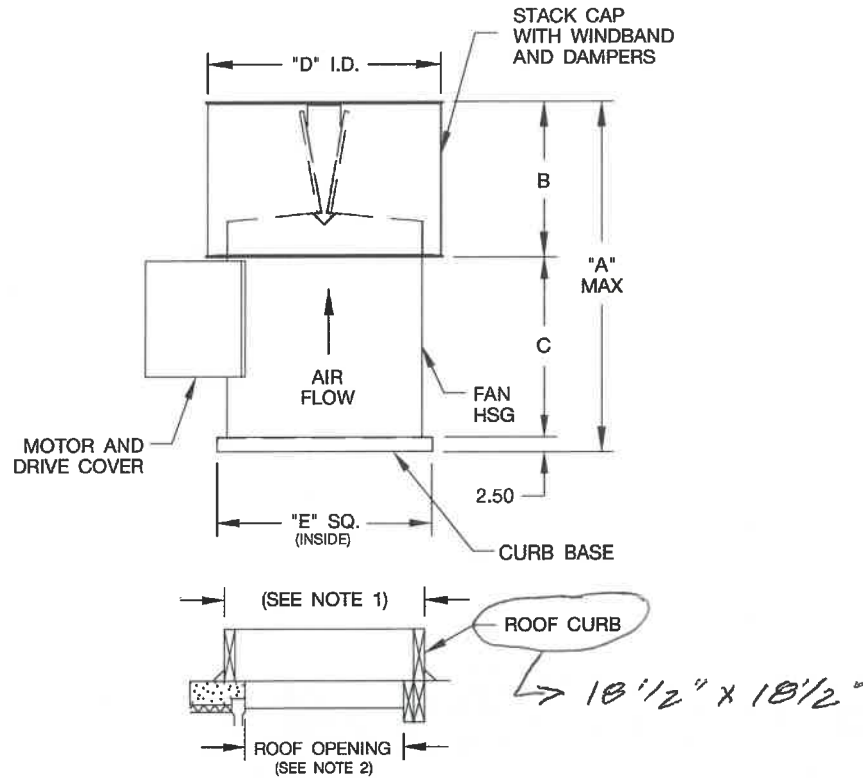


Wheel Size 300 - 490

Fans & Blowers  
**Twin City**

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# Vertical Roof Mounted



| FAN SIZE | A      | B     | C     | D     | E     | STD. ROOF CURB SIZE | SHAFT DIA (IN.) |         | MAX. MOTOR FRAME |         | AVERAGE SHIP WT. (LBS.) |         |
|----------|--------|-------|-------|-------|-------|---------------------|-----------------|---------|------------------|---------|-------------------------|---------|
|          |        |       |       |       |       |                     | LEVEL 1         | LEVEL 2 | LEVEL 1          | LEVEL 2 | LEVEL 1                 | LEVEL 2 |
| 90/105   | 39.13  | 17.75 | 18.88 | 22.25 | 20.00 | 18.50 x 18.50       | 0.750           | 1.000   | 56               | 145T    | 197                     | 215     |
| 122      | 41.13  | 18.75 | 19.88 | 24.31 | 22.00 | 20.50 x 20.50       | 0.750           | 1.000   | 143T             | 184T    | 229                     | 299     |
| 135      | 45.13  | 20.25 | 22.38 | 27.63 | 25.00 | 23.50 x 23.50       | 0.750           | 1.000   | 145T             | 184T    | 262                     | 342     |
| 150      | 46.13  | 20.25 | 23.38 | 27.63 | 26.00 | 24.50 x 24.50       | 0.750           | 1.000   | 184T             | 215T    | 280                     | 355     |
| 165      | 48.88  | 22.00 | 24.38 | 31.00 | 28.00 | 26.50 x 26.50       | 0.750           | 1.188   | 184T             | 215T    | 363                     | 378     |
| 182      | 56.13  | 25.25 | 28.38 | 37.13 | 34.00 | 32.50 x 32.50       | 1.000           | 1.188   | 184T             | 215T    | 474                     | 530     |
| 200      | 60.88  | 27.00 | 31.38 | 40.38 | 37.00 | 35.50 x 35.50       | 1.000           | 1.438   | 215T             | 215T    | 531                     | 592     |
| 222      | 64.63  | 28.75 | 33.38 | 43.38 | 40.00 | 38.50 x 38.50       | 1.000           | 1.438   | 215T             | 215T    | 645                     | 730     |
| 245      | 69.13  | 30.25 | 36.38 | 46.00 | 43.00 | 41.50 x 41.50       | 1.000           | 1.438   | 215T             | 256T    | 760                     | 845     |
| 270      | 73.88  | 32.00 | 39.38 | 49.63 | 47.00 | 45.50 x 45.50       | 1.188           | 1.438   | 215T             | 256T    | 857                     | 1024    |
| 300      | 80.88  | 35.00 | 43.38 | 55.63 | 52.00 | 50.50 x 50.50       | 1.188           | 1.688   | 215T             | 284T    | 1092                    | 1225    |
| 330      | 87.38  | 36.50 | 48.38 | 59.63 | 55.00 | 53.50 x 53.50       | 1.438           | 1.938   | 215T             | 284T    | 1316                    | 1460    |
| 365      | 92.88  | 38.50 | 51.88 | 62.25 | 58.00 | 56.50 x 56.50       | 1.438           | 2.188   | 256T             | 286T    | 1478                    | 1598    |
| 402      | 99.88  | 42.00 | 55.38 | 68.25 | 64.00 | 62.50 x 62.50       | 1.688           | 2.438   | 256T             | 286T    | 1670                    | 1891    |
| 445      | 108.63 | 46.75 | 59.38 | 73.25 | 70.00 | 68.50 x 68.50       | 1.938           | 2.438   | 284T             | 324T    | 2048                    | 2208    |
| 490      | 115.13 | 49.75 | 62.88 | 79.25 | 76.00 | 74.50 x 74.50       | 2.188           | 2.438   | 284T             | 326T    | 2294                    | 2674    |

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Dimensions shown are in inches unless otherwise indicated.

Dimensions are not to be used for construction.

**NOTES:**

1. Outside dimensions of roof curb should be 1" to 1.50" less than inside curb base dimension 'E', depending on thickness of flashing material used.
2. Roof opening is 7.50" less than curb base 'E'.