

Density correction and fan selection

TAHVIEH HAMOON performance tables are based on the standard air density of 0.075 lbs./ cu. Ft. this density is based on air at 70° F at 29.92° Hg barometric pressure (sea level).

DENSITY CORRECTION PROCEDURE

To use performance tables for densities other than 0.075, determine the density ratio from the graph at right using the actual static pressure by the density ratio to establish standard static pressure.

Then use standard static pressure to determine fan RPM from the tables in this catalog.

Multiply BHP found in the performance tables by the density ratio to determine actual BHP.

ALTERNATE DENSITY CORRECTION PROCEDURE

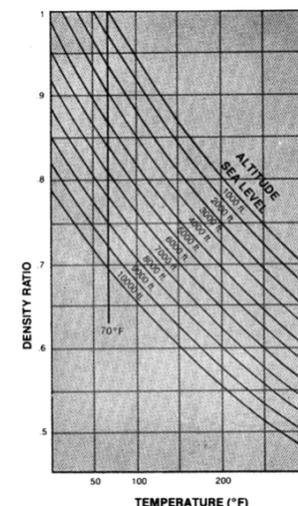
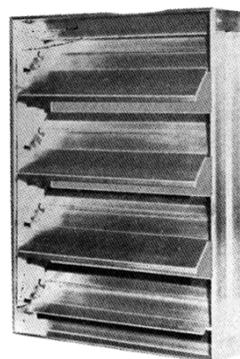
Make adjustments using the following equations:

$$\text{Actual density} = 0.075 \left(\frac{530}{\text{actual temp. of } +460} \right) \left(\frac{\text{actual barometric pressure in HG}}{29.92} \right)$$

$$\text{Equivalent SP} = \text{Actual SP} \left(\frac{0.075}{\text{actual density}} \right)$$

Find the required CFM and equivalent SP on performance tables. Adjust the BHP using the following equation:

$$\text{Actual BHP} = \text{table BHP} \left(\frac{\text{actual density}}{0.75} \right)$$



Accessories

ACCESS DOORS

Access doors are designed to provide easy inspection of the wheel and fan interior. All access doors are the quick opening design featuring hinged doors and thumbscrew closures. Access doors are available on all size TAHVIEH HAMOON fans, with all available special coatings. Standard locations are 3 o'clock, depending on rotation.

DRAINS

Drains are available on all fans except those with bottom horizontal or down blast discharges. Drains are located at the lowest point of the scroll and are 3/4" NPT external threads.

BELT GUARDS

Belt guards are standard on models TS-1 through TS-10 and consist of a solid one-piece steel sheet that covers the entire end of the motor compartment.

WEATHER COVERS

Weather covers are recommended for protection of the shaft, motor and drive if the fan is exposed to weather or excessive dirt.

Weather covers are either one or two pieces and are easily installed by only one person.

Shaft seals

Shaft seals are available on all TAHVIEH HAMOON fans. The aluminum retainer plate is bolted to the fan housing.

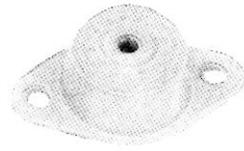
Optionally a heat resistant material is used for the seal.

INLET VANES

Variable inlet vanes allow for efficient operation of the fan at all operating points. Inlet vanes are externally mounted and are suitable for either manual or automatic control. The cantilevered design has no central hub to restrict airflow. Inlet vanes are available on all TAHVIEH HAMOON fans.

DISCHARGE SHUTTERS

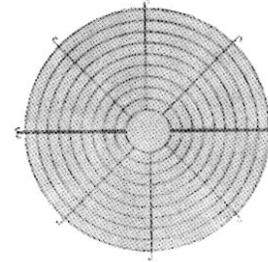
Gravity operated shutters open when the fan is running and close when the fan is not running. They shut out weather and back drafts but do not control airflow. Motorized shutters for volume control are also available. Shutters are not suitable for down blast or angular down discharge positions, and they are limited to a maximum of 200° F.



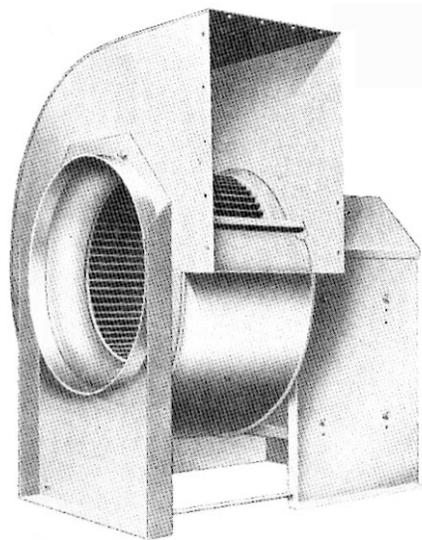
RUBBER-IN-SHEAR
VIBRATION MOUNTS



FORWARD
CURVED WHEEL FOR
UTILITY FANS



INLET SCREEN



Belt Driven Utility Sets





5
UTILITY
FANS



TAHVIEH HAMOON

Accessories

DISCHARGE DAMPERS

Discharge dampers are more heavily constructed than shutters. Discharge dampers can be used to control airflow in addition to shutting out weather and backdrafts. They are suitable for either manual or automatic control and can be used with all discharge positions except downblast and angular down discharges.

VIBRATION MOUNTS, RAILS & HANGERS

Vibration mounts, rails and hangers are available for all TAHVIEH HAMOON fans. They are properly sized for each individual unit to assure maximum vibration isolation and correct deflection.

SPECIAL COATINGS

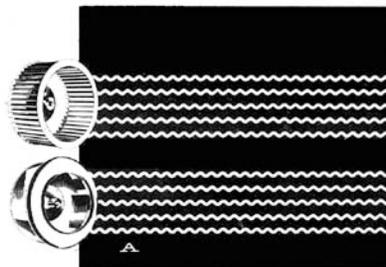
TAHVIEH HAMOON standard paint is a rough, corrosion resistant paint, but utility sets often require special coatings. Meets these needs by offering asphaltum, thin PVC vinyl, chlorinated rubber, epoxy, zinc coating, synthetic resin, elastomer and air dried phenolic. Coating manufacturers' surface preparation and application instructions are strictly followed. Red oxide and zinc chromate, two popular primer coats, are also offered.

INLET AND DISCHARGE SCREENS

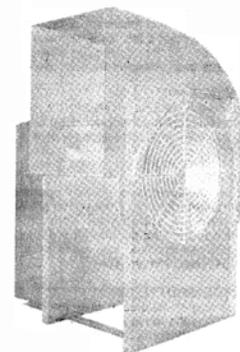
Screens are recommended wherever there is an open inlet or discharge. They protect personnel from injury and guard against foreign objects entering the fan. Inlet screens are heavy gauge zinc plated steel wire. Discharge screens are heavy gauge galvanized wire.

FLANGES

Inlet and discharge flanges are available on all models, but discharge flanges are not available on downblast or angular down discharges. All flanges come pre-punched.



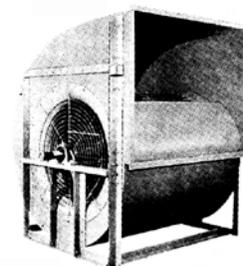
TAHVIEH HAMOON
**UTILITY BLOWER
AND
FAN CABINET**



For
SUPPLY

AND
EXHAUST

SYSTEM



MODEL TS 600-82000 C.F.M

MODEL TD 1200-150000 C.F.M

