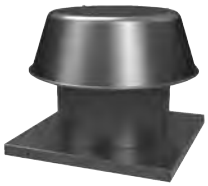
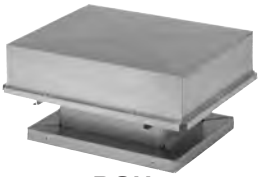
GRAVITY VENTILATORS SIZING



RCXII (sizes 6-20)

RCXII (sizes 24-36)

RCXII-SF



BGH

RLX

Sizing

The tables shown offer quick selections at common static pressure points. Selection choices vary widely due to field conditions and size choices. The following formulas are useful in making selections:

(A) Throat Area = $\frac{\text{CFM}}{\text{Velocity}}$

(B) Throat Velocity = $\frac{\text{CFM}}{\text{Throat Area}}$

(C) Velocity Pressure = $\left[\frac{\text{Throat Velocity}}{4005}\right]^2$

(D) Determine new static pressure when CFM is known:

$$SP_2 = SP_1 \times \left[\frac{CFM_2}{CFM_1}\right]^2$$

CFM_2 = Specified airflow
CFM_1 = Known CFM from table selection
SP_2 = Static pressure to be determined
SP_1 = Static pressure in table corresponding to CFM

(Ex.) Determine new unknown CFM when static pressure is known:

$$CFM_2 = CFM_1 \times \left[\sqrt{\frac{SP_2}{SP_1}}\right]$$

CFM_2 = Unknown
CFM_1 = Catalog CFM
SP_2 = New static pressure where CFM is unknown
SP_1 = Known static pressure from known CFM (CFM_1)