

$$Q_{Latent} = .68 \times Flow \times (w_{Entering} - w_{Leaving})$$

Where:

Q_{Latent} = Latent load in Btu/hr

.68 = Units conversion constant

$Flow$ = Air flow in cubic feet per minute

$(w_{Entering} - w_{Leaving})$ = Humidity ratio change across the process in grains of water per pound of dry air. Note that there are 7,000 grains per pound.