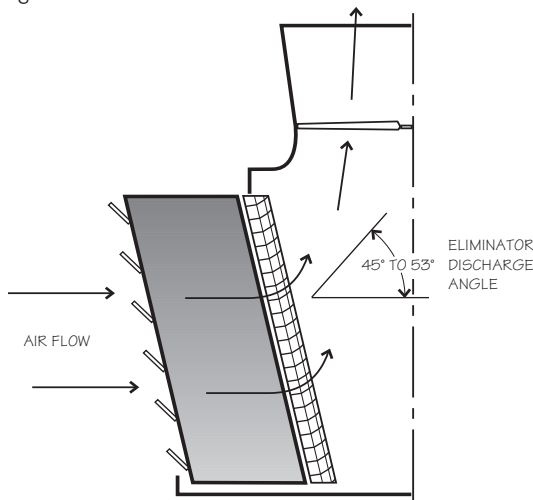


Drift Eliminators - A Turn For The Better

It is widely accepted throughout the air-handling industry that turning vanes significantly enhance the performance of any system that includes a major change in air flow direction. A crossflow cooling tower is such a system. Air enters the tower horizontally and must turn to the vertical before it can exit through the fan stack.

Some drift eliminator manufacturers overlook this fact and do not include turning vanes on their cellular drift eliminators. Serious performance problems can occur because of this oversight.



Marley XCEL TU Drift Eliminators

The directional changes incorporated in the Marley three-pass drift eliminator act as turning vanes to induce the discharge air flow through a gentle turn from the horizontal toward the vertical.

To be sure of efficient cooling tower performance, always demand that drift eliminators in large crossflow towers must provide a discharge angle (as defined by the angle of the last section of the eliminator itself) at least 40° from the horizontal. Otherwise, unnecessary and costly turning losses will occur in the plenum.

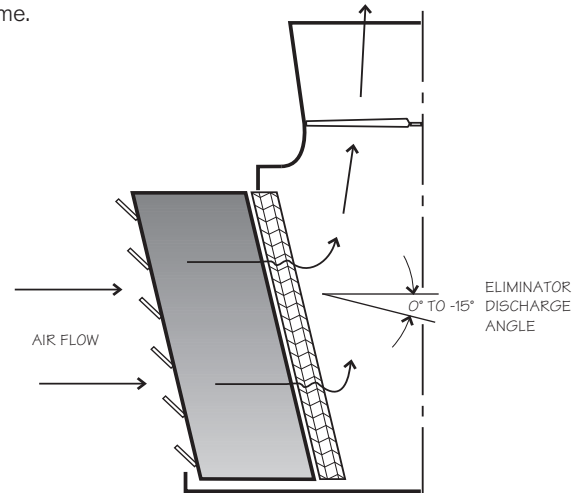
R & D investigations have demonstrated that some cellular drift eliminators in crossflow towers actually reduce thermal performance by 4% to 8%, because they direct the discharge air inefficiently.

Discharge air from some cellular drift eliminators actually enters the fan plenum at an angle below or near the horizontal.

The fan energy is wasted because it must force the air stream through a turn of more than 90°. This resultant increase in pressure loss reduces the total air flow through the tower. Reduced air flow means reduced thermal performance.

R & D studies have determined that these eliminators can increase the fan horsepower required for a given cold water temperature by as much as 25%—or the owner will be forced to accept an increase of up to 2°F in cold water temperatures.

Marley XCEL TU drift eliminators discharge air at an angle of 45° to 53° with respect to the horizontal. The exact angle depends on the specific eliminator and on the slope of the tower frame.



Other Cellular Drift Eliminators

Contact your Marley sales representative for final recommendations whenever you purchase or install drift eliminators on any job where efficient performance is important. For the name of the nearest Marley representative, call **913 664 7400** or check the internet at spxcooling.com