





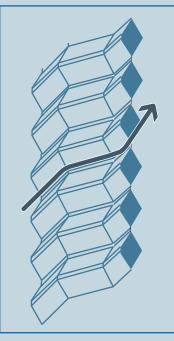
At optimum performance points, the Paharpur XCEL Drift Eliminators outperform competitive designs by nearly 45:1.

Paharpur's **patented** XCEL Drift Eliminators represent a radical leap forward in drift eliminator design. These are manufactured in two basic cell sizes and couple maximum surface area with drift rate & pressure drop reductions that are unapproached by competitive designs.

No need for **XCEL Eliminators**  High degree of structural rigidity:

Installing XCEL is relatively easy since they are shipped to the job site in lightweight, preassembled bundles. These bundles "nest" together in the tower providing an automatic seal against drift by pass. XCEL bundles have a high degree of structural rigidity, which prevents the sagging and displacement between support points that is common on blade type and wave form type eliminators. With XCEL you get the most superior design available in the market - at a competitive price. Given credit for the superior job that it does - and the power savings that it returns -XCEL is the least expensive drift eliminator on the market - by far.





The power to perform comes from being prepared for the most demanding challenges. Every component in a Paharpur product is designed in-house and is produced to deliver reliable performance even in the roughest conditions.

### Fire-retardant design:

XCEL Drift Eliminators are made of fire-retardant, thermo-formed PVC - and have been granted Factory Mutual approval. With XCEL, you need not equip your cooling tower with a fire protection sprinkler system, as may be necessary with other types.

### Reduce Drift up to 0.0005% of water flow rate:

Paharpur provides two kinds of drift eliminator configurations – 3-pass and 6-pass, that reduce drift down to 0.005% and 0.0005% respectively. 6-pass drift eliminators are provided for applications where curbing water loss is of critical importance.

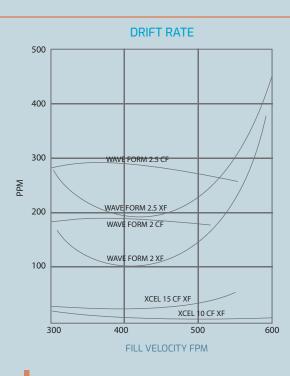
#### XCEL outperforms competitive designs by 45:1:

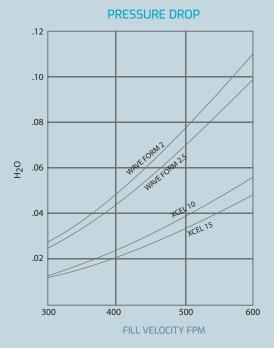
At the wave form eliminator's optimum performance points, curves show that XCEL outperforms it by at least 4:1. At higher air velocities, the XCEL advantage can approach 45:1. Regardless of your design air velocity, XCEL's performance benefits are significant - and you get them at a competitive price.

# Avoid spotting, icing, corrosion & biological damage:

Low drift rate is the primary objective of eliminator design. Drift exceeding 100 pounds of water per million pounds of air flow (100 ppm) become noticeable and cause spotting on nearby cars, buildings and equipment. Of greater concern is the potential icing, corrosion, or biological damage brought about by excessive drift. With Paharpur's XCEL Drift Eliminators, you get significant control over water loss and can expect reliable performance.

The bar graphs provide pressure drop and drift rate comparisons (at 600 fpm air velocity) of XCEL 10 and XCEL 15 vs. wave form type eliminators in the normal 2" and 21/2 spacing. As can be seen, the wave form eliminator performs much better in counterflow (CF) than it does in cross flow (XF) towers, but in no case does it begin to approach XCEL's capability in either configuration.







Customised designs reduce fan power consumption:

Low drift rate at the expense of fan power is no bargain at all – the two concerns go hand in hand. XCEL is the only drift eliminator which satisfies both concerns to the optimally by utilizing superior design and precision manufacturing.

#### Resistance to Airflow:

Paharpur's XCEL Drift Eliminators provide less than half the resistance to airflow imposed by competitive designs.
This means that the use of XCEL, in lieu of a wave form type, would result in from 6% to 10% less required fan horsepower.
Compared to other more restrictive types, the horsepower savings are even greater. Conversely, if fan pitch is not changed to reduce the horsepower, the XCEL-equipped cooling tower would produce colder

water - by virtue of increased airflow. In many operating cases, the value of colder water may exceed that of reduced horsepower.

### Angle Of Discharge:

A subtle but significant feature of the XCEL Drift Eliminator is the angle of air discharge, which warrants two separate eliminator designs - one each for crossflow and counterflow cooling towers. Tests reveal that the air direction leaving

the eliminator is crucial and imperfect designs create additional work for the fan. This factors into either increased fan horsepower - or reduced cooling lower performance. By virtue of smarter design, XCEL does not reduce but improve thermal efficiency and overall economy of the cooling operation.

# PRESSURE DROP **SURFACE AREA** XCEL 15 XCEL 10 XCEL 19 XCEL 15 **—** WAVE FORM 2.5 WAVE FORM 2.5 WAVE FORM 2 WAVE FORM 2 DRIFT RATE XCEL 10 CF XF■ XCEL 15 CF XF WAVE FORM 2 CF WAVE FORM 2.5 CF WAVE FORM 2 XF 2.5 XF

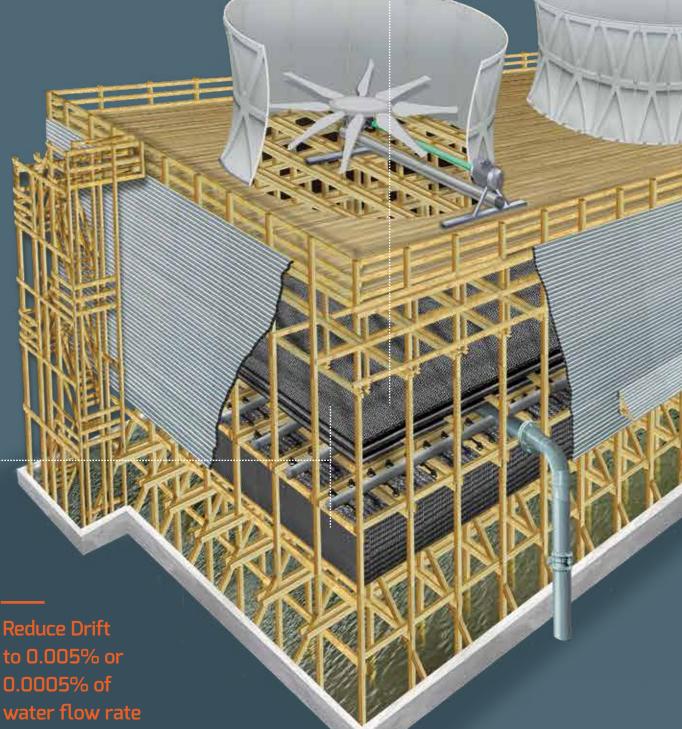
Switch to XCEL from waveform type and reduce 6-10% fan power



In Paharpur's Class 400 Counterflow Industrial cooling tower.

# MAXIMISE OVERALL EFFICIENCY:

XCEL Drift Eliminators are designed to be most effective at the air velocities at which the corresponding FIll is most effective.





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