

## Overview

SPX Cooling Technologies offers three innovative solutions to increase the wind load capacity of Marley cooling tower fan cylinders:

- Reflex™ RTM Velocity Recovery Cylinders
- Anchorage Rings
- Bracing Rings\*

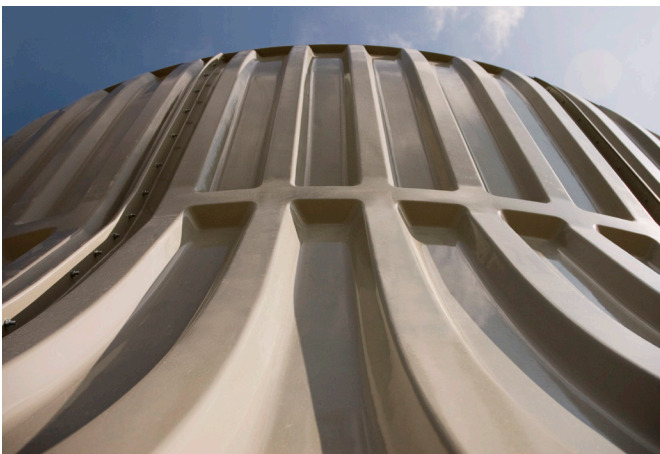
## Primary Benefits

- Provides greater protection from high wind events such as hurricanes, typhoons and tornadoes
- Shields mechanical equipment from flying debris
- Contributes to lower tower vibration levels
- Easily maintained and serviced
- Applies to new fiberglass or wood towers or existing tower retrofits, with additional structural reinforcement

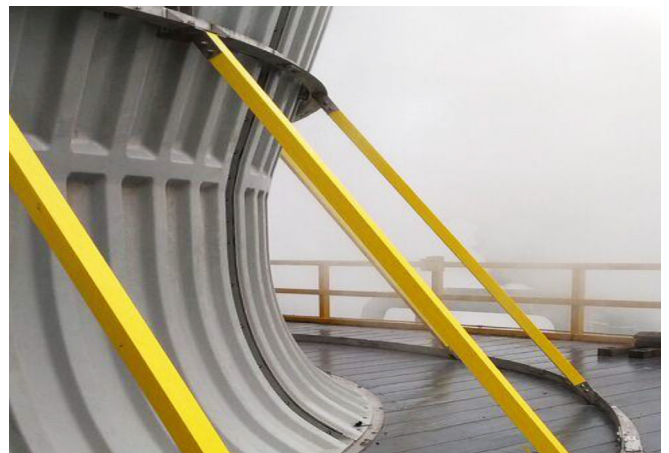
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Reflex RTM Fan Cylinder plus Anchorage Ring  
145 mph (233 kph) wind load capacity



Reflex RTM Fan Cylinder  
120 mph (194 kph) wind load capacity



Reflex RTM Fan Cylinder plus Anchorage Ring and Bracing Rings\*  
186 mph ( 300 kph) wind load capacity  
*\*patent pending*

## Benefit Detail

### Reflex RTM Velocity Recovery Cylinders

- Robust structural integrity and durability – up to 120 mph (193 kph) wind load capacity
- Resin transfer molding (RTM) process helps ensure accurate dimensions, consistent laminate thickness and weight, high quality finish
- Green closed-molding manufacturing process eliminates VOC emissions, hazardous chemical use and disposal

### Anchorage Ring

- Up to 145 mph (233 kph) wind load capacity
- Bolted to the tower structure at fan deck level
- Constructed of hot-dip galvanized (HDG) or stainless steel weldments for strength
- Conforms to the curvature of the fan cylinder opening

### Bracing Rings

- Up to 186 mph (300 kph) wind load capacity
- Constructed of hot-dip galvanized (HDG) or stainless steel weldments for strength
- Pultruded fiberglass reinforced polyester (FRP) tubes interconnect the rings on the fan cylinder and fan deck for increased stability
- Patent-pending design

## Specifications

### Reflex RTM Fan Cylinder

*Velocity recovery fan cylinders shall be constructed from fiberglass reinforced polyester (FRP) material, using a resin transfer molding (RTM) process. Each shall be 13'-9" tall, with eased inlets to promote smooth airflow at blade tips. The operating plane of the fan shall be at a level above the fan deck of at least 15% of the overall fan diameter. Fan tip clearance shall not exceed 0.5% of the fan diameter. The fan cylinders shall have a maximum flare angle of 12°, with a maximum assumed velocity recovery of 75% of the difference in average velocity pressure. Fan cylinder connection and anchorage hardware shall be 300 series stainless steel.*

### Anchorage Ring

*Each fan cylinder segment shall be through-bolted to an anchorage ring located at the fan deck level. The anchorage ring shall be constructed from hot-dip galvanized (HDG) or stainless steel weldments that conform to the curvature of the fan cylinder opening. The anchorage ring assembly shall be bolted to the tower structure using 300 series stainless steel hardware.*

### Bracing Ring

*Each fan cylinder segment shall be through-bolted to a bracing ring system. The bracing rings shall be constructed from hot-dip galvanized (HDG) or stainless steel weldments that conform to the curvature of the fan cylinder. A series of fiberglass reinforced polyester (FRP) tubes shall interconnect the bracing rings on the fan cylinder and the anchorage ring on the fan deck. The bracing ring assembly shall be bolted to the tower structure using 300 series stainless steel hardware.*

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