

### PRODUCT SPECIFICATION

#### 1. Scope:

TURBOsplash PAC fill is designed for cooling of power plant, petrochemical, HVAC and other process cooling waters in crossflow or counterflow cooling towers where a high efficiency non-fouling, splash fill is required.

#### 2. Material of Construction:

##### A. General

TURBOsplash PAC shall be fabricated from a polypropylene copolymer that is conducive to cooling water and UV protected. The fill material shall be resistant to rot, fungi, bacteria and inorganic/organic acids and alkalies as commonly found in cooling towers.

##### B. Polypropylene Material

The polypropylene shall be heat-stabilized copolymer, with good impact resistance at low temperatures with the following properties:

PROPERTY	TEST METHOD	UNIT	TYPICAL VALUE
Specific Gravity	D 792	gm/cu.cm.	0.905
Tensile Strength	D 638	psi	3,500 min.
Flexural Modulus	D 790	psi	220,000 min.
Elastic Modulus	D 638/D 882	psi	360,000 min.
Izod Impact	D 256	ft.lbs./in.	2.5 min
Rockwell Hardness	D 785	R-Scale	79.0
Heat Deflection	D 648	°F(66 psi)	230 °F min.

##### C. Chemical

Resistance to Grease Fats, Oils	Excellent	ASTM D722-45
Resistance to Acids	Excellent	ASTM D534
Resistance to Alkalies	Excellent	ASTM D534

### D. TURBOsplash PAC

The individual TURBOsplash PAC panels shall be injection molded into rectangular panels of nominally 12" x 24" overall size. The exact nature of the panel is shown on the drawing CTPGA-017.

Panels shall be completely preassembled into packs at the factory and be knocked down for shipment to the jobsite. The volume reduction shall be approximately 6:1. The packs shall be easily expanded to their full-specified length at the jobsite for ease of installation. Fill that requires field assembly shall not be acceptable.

The individual panels shall have integral molded-in saddles for attachment to intermediate pipe supports, to allow multiple layers to be easily installed. The panels shall have interlocking hinges to prevent the panels from detaching and pre-installed straps to maintain the proper panel-to-panel dimensions (4" for SF-100 & 6" for SF-150).

The TURBOsplash panels shall have 38 inclined panes per panel to allow turbulent air-water mixing for efficient heat transfer. Each panel shall have 3ft<sup>2</sup> (0.3m<sup>2</sup>) of heat transfer surface area. Other physical data are shown in the table below.

Item	Product	
	SF-100	SF-150
Nominal spacing of panels	4" (100mm)	6" (150mm)
No. panels per linear ft (300mm) (expanded pack)	6	4
No. panels per linear ft (300mm) (nested pack bundle)	32	32
Strap length	4.375" (111mm)	5.0" (127mm)
Pack width (nominal)	24" (610mm)	24" (610mm)
Pack height (nominal)	12" (305mm)	12" (305mm)
Pack weight/linear ft (300mm) w/straps	4.85lbs (2.2 kg)	3.25 lbs. (1.5 kg)
Pack weight/unit volume w/straps	2.4 lbs/ft <sup>3</sup> (39 kg/m <sup>3</sup> )	1.6 lbs. (26 kg/m <sup>3</sup> )
Surface area per unit volume	9 ft <sup>2</sup> /ft <sup>3</sup> (29.5m <sup>2</sup> /m <sup>3</sup> )	6ft <sup>2</sup> /ft <sup>3</sup> (19.7m <sup>2</sup> /m <sup>3</sup> )

### E. Installation

Please refer to TURBOsplash installation guidelines for the correct installation methods & recommendations.