

PRODUCT SPECIFICATION

1. Scope:

PI-Bar splash fill is designed for cooling of power plant, petrochemical, HVAC and other process cooling waters in crossflow cooling towers where a heavy-duty, high-strength bar for long support spans and/or high icing or fouling loads is required.

2. Material of Construction:

A. General

The PI-BAR shall be fabricated from rigid PVC 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. PVC Material

The PVC sheet shall be prime, rigid PVC conforming to commercial standard ASTM D1784:12344B to 12454B with the following properties:

PROPERTY	TEST METHOD	UNIT	TYPICAL VALUE
Specific Gravity	D792	gm/cu.cm.	1.45 max.
Tensile Strength	D638/D882	psi	6000 min.
Flexural Modulus	D790	psi	425,000 min.
Flexural Strength	D790	psi	11,000 min.
Elastic Modulus	D638/D882	psi	360,000 min.
Izod Impact	D256	ft.lbs./in.	1.0 min
Impact Resistance	D4226	in. lbs./mil	0.8 min.
Heat Deflection	D648	°F(264 psi)	160 min.
Flammability	D635		Self-extinguishing less than 5 sec.

C. Chemical

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

D. PI-BAR

The PI-BAR shall be extruded from PVC of quality stated above into a profile with the overall dimensions of 1.525" tall x 1.735" wide with a wall thickness of 0.060". The exact nature of the profile is shown on the Brentwood Drawing No. 4501. PI-Bar can be ordered to any length to meet project requirements.

The top surface of the PI-BAR shall exhibit a slight crown to allow water to shed efficiently, keeping the top surface from reducing the impact energy of the water droplets.

The part shall be dimensionally straight and true across its entire developed length, without bow or twist.

The PI-BAR shall be installed in wire mesh hangers and may be held in place with stainless steel rings or retaining straps (cable ties), at least one per piece, through a hole in the PI-BAR (provided by Brentwood as an option or by the installer), thereby maintaining its position within the wire mesh hangers due to vibration.

The PI-BAR shall be manufactured of PVC that is self-extinguishing.

Splash surface area: 57.4 in²/lf

Weight: 0.22 lb/lf