

PRODUCT SPECIFICATION

1. Scope:

V-Bar Splash Fill is designed for cooling of power plant, petrochemical, HVAC and other process cooling waters in crossflow cooling towers.

2. Material of Construction:

A. General

The V-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.
Flame Spread Rating	E-84		5 or less
Flammability	D635		Self-extinguishing less than 5 sec.

C. Chemical

Resistance to Grease Fats, Oils	Excellent	ASTM D722-45
Resistance to Acids	Excellent	ASTM D543
Resistance to Alkalies	Excellent	ASTM D543

D. V-Bar

The V-Bar shall be extruded from PVC of quality stated above into an inverted "V" and completely and continuously perforated with diamond shaped holes running the full length and width of the part. The size and spacing of these perforations as well as other pertinent geometry are noted on V-Bar drawing No. ANJ-0022.

The V-Bar shall be extruded directly into its final formed profile. Extruding flat and re-forming shall not be allowed as this diminishes the dimensional stability of the 'V' profile.

The center or apex of the V-Bar shall be designed with a center stiffening leg to strengthening the V-Bar under normal operating water and ice over-loads.

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

The V-Bar shall be installed into wire mesh using injection molded clips to hold the V-Bar in place, thereby maintaining its structural integrity and shape and reducing wear of the wire hangers due to vibration.

The V-Bar material gauge shall be 50 mils \pm 5 mils for standard duty applications and 80 mils \pm 10 mils for towers that may expect heavy loading, such as dirty water applications and/or ice loads.

The V-Bar shall be manufactured of PVC that is self -extinguishing and has a flame spread rating of 5 or less as tested according to ASTM E-84.