

### PRODUCT SPECIFICATION

The media is to be manufactured by Brentwood Industries, or equal and will meet the following specifications:

### 1. Scope:

ACCU-PAC CF-1900 (Cross-Fluted) high-density film media designed for cooling of power plant, petrochemical, HVAC and other process cooling waters.

#### 2. Material of Construction:

#### A. General

The media shall be fabricated from rigid, corrugated PVC sheets that are conducive to cooling water and UV protected. The media modules shall be resistant to rot, fungi, bacteria and inorganic/organic acids and alkalies as commonly found in cooling towers.

### **B. PVC SHEETS**

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

PROPERTY	PERTY TEST METHOD UNIT		TYPICAL VALUE
Specific Gravity	D792	gm./cu.cm.	1.45 max.
Tensile Strength	D638/D882	psi	6,000 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 PVC 175 min HPVC
Flame Spread Rating	E-84		less than 5
Flammability	D635		self extinguishing less than 5 sec.



### C. Chemical

Resistance to Grease Excellent ASTM D722-45

Fats, Oils

Resistance to Acids Excellent ASTM D543
Resistance to Alkalies Excellent ASTM D543

The PVC sheets shall be of uniform thickness and free from holes, air bubbles, foreign matter, undispersed raw material or other manufacturing defects which may adversely affect their performance.

#### D. Fill Modules

- 1) The fill modules shall be fabricated from PVC sheets of quality stated above and formed in a pattern to provide "vertical flow" between the adjacent sheets. The height of each corrugation as measured at the pack's edge shall be 1.5 inches. All flow cavities (flutes) formed between adjacent sheets shall allow air and water to flow freely along the each sheet to provide flow equalization.
- 2) The fill modules shall ensure adequate contact between the water and air by providing for a suitable microstructure for the liquid path.
- 3) The fill modules shall measure up to 24" (610mm) wide, 23-5/8" (600mm) high and up to 10 ft. (3050mm) long and provide a minimum surface area of 47.0 ft2/ft3 (154 m2/m3)
- 4) Modules shall have stiffening indentations (scallops), dedicated glue bosses and edge bonding to form a structurally rugged honeycomb and meet the structural loading requirements without any edge crimping or deformation of sheets at the design load.



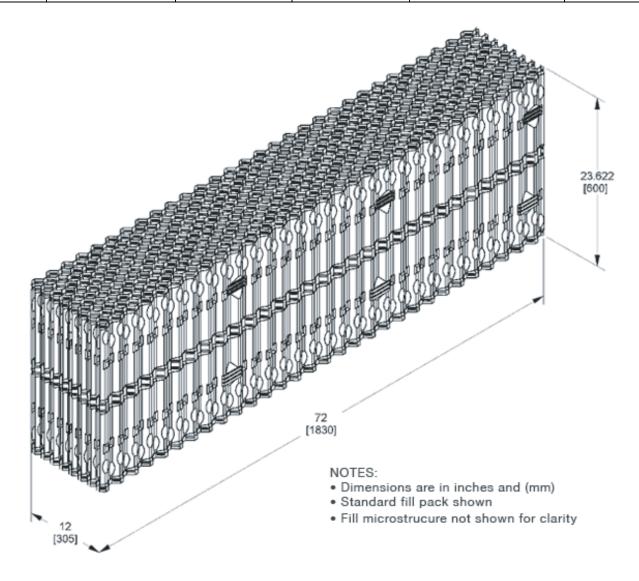
### 3. Installation:

The media shall be installed as per the recommendation of the media manufacturer and in accordance with the engineer's specification, which shall include the following:

- A. The media modules shall be carefully cut or trimmed to fit within 1/4 inch (or less) of any obstruction or sidewall to prevent air bypass.
- B. The media shall be conveyed to the top of the tower by mechanical conveyor or crane. Cranes shall be used or conveyors shall be constructed as necessary to transport the media to the working level inside the tower, and the media modules shall be moved by hand for final placement.
- C. The shaping, cutting and trimming of the media modules may be done in the tower provided that precaution is taken by the Contractor to prevent any chips, broken pieces, or debris from falling into the media by using canvas tarpaulins or similar working materials to cover the media modules. All media modules shall be cleared of any such fallen material before a new layer of media is added. The top layer of media should also be completely protected from damage and such falling material due to any subsequent work until the "start up" of the system.
- D. The media module edges should be protected from damage due to workmen walking on them. To prevent such damage, the Contractor shall use plywood, pegboard or other suitable temporary planking.
- E. The media modules shall be placed in the tower to provide the closest possible fit with adjacent modules without damaging the modules. The module packing arrangement shall be as recommended by the cooling tower manufacturer and shown on the installation drawings. Media modules within each layer shall be installed such that the sheets of all modules are parallel to each other. Modules in respective layers shall be installed at right angles to the layer immediately below and above.
- F. The media modules in the bottom layer shall be centered over the media support system.



SURFACE AREA	SHEET SPACING	FLUTE ANGLE	SHEETS PER FT.	MEDIA PACK SIZES: Depth (D), Width (W), Length (L)			
				Minimum Maximum		Standard	
47 ft2/ft3 (154 m2/m3))	19 mm	0°	16	D: 11.8 in (300 mm) W: 6 in (153 mm) L: 1 ft (305 mm)	D: 35.4 in (900 mm) W: 24 in (610 mm) L: 12 ft (3660 mm)	D: 23.6 in (600 mm) W: 12 in (305 mm) or 24 in (610 mm) L: 4 ft (1220 mm), 6 ft (1829 mm), 8 ft (2439 mm). or 10 ft (3048 mm)	



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