

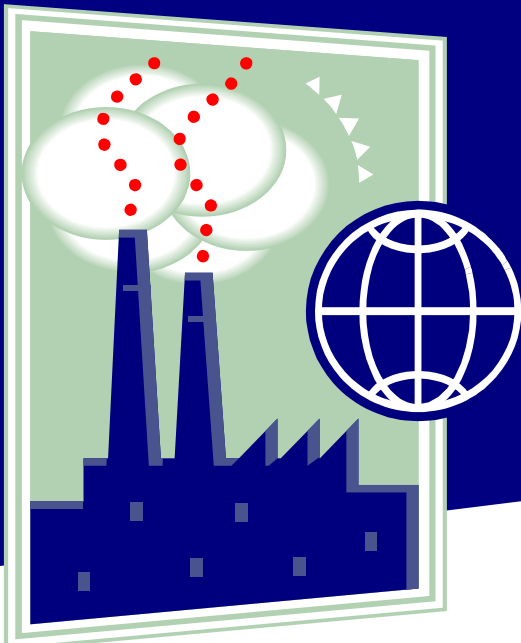
CAL-IN Technology Transfer, L.L.C. provides indoor air quality, technical and strategic consulting services and solutions to the U.S. Federal Government, and other state and local government agencies; institutions, such as hospitals, universities and non-profit companies; commercial and industrial customers, as well as international governments and businesses.

We help our Clients conceive, develop, implement and improve IAQ solutions that address complex environmental, scientific and technical issues.

The products we build and represent are utilized by many industries, including those associated with commercial, industrial and residential heating, ventilation and air conditioning systems, water treatment plants, pharmaceuticals, biotechnology, nuclear power and semi-conductor manufacturing.

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CAL-IN / COBEAL

Environmental and Technical Solutions



KOOL PAK PRODUCT SPECIFICATION

The fill shall be manufactured by CAL-IN Technology Transfer/Cobeal S.A. de C.V. or equal and shall meet the following specifications:

- Kool Pak degradation resistant film fill specially design for cooling towers for power plants, petrochemical, heating ventilation Air conditioning, and related process.
- The fill shall be fabricated from rigid, corrugated PVC sheets that are manufactured with the addition of a UV stabilizer and designed for cooling towers. The fill pack shall be resistant to UV light, rot, fungi, bacteria, corrosion, erosion, bacteria, inorganic & organic acids and alkaline commonly found under normal operation of cooling towers.
- Chemical resistance:

Resistance to grease	Excellent	ASTM D722-45
Fats and Oils	N/A	
Resistance to acids	Excellent	ASTM D543
Resistance to Alkaline	Excellent	ASTM D543
- Fill Modules shall be manufactured from PVC sheets of quality stated above and have vertically offset flutes arranged in a staggered pattern with adjacent sheets providing a continuous and horizontal distribution of air and water. The flute height for each corrugation shall be according to the needs in 6 mm, 12mm, 19mm with a sheet thickness of 1 mm and 1.2 mm.

The fill shall measure up to 20 inches wide, 12 inches (30.5 mm) high or 24 inches (610 mm) and up to 10 feet (3050 mm) long, and provide a minimum surface area of 48 square feet/cubic feet 157.44 square meter/cubic meter.

The self supporting fill modules shall be made from sheets of undulated configuration and have a specific number of chemicals bonds in each sheet. These sheets shall be bonded chemically together to provide a finite number of bonding points and form a strong fill module in a shape that resembles a honeycomb. Mechanically adhered fill modules shall not be allowed.

- The PVC sheets shall be manufactured with prime material, rigid PVC conforming to commercial standard ASTM D1784:12454B and



should be with uniform thickness and free from holes, air bubbles, foreign matter, and free from manufacturing defects, which may affect adversely the performance of the cooling media, and should comply with the following properties:

Properties	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
Flammability	D635	Self-extinguishing	

COMPANY HISTORY

Since 1962, CAL-IN engineers have developed and manufactured sophisticated and highly efficient mass transfer equipment for cooling towers and environmental equipment.

Our success is built on prompt and consistent customer care, multilingual and international support and services. From the procurement of materials to delivery of finished product, each phase of manufacturing is closely monitored to assure that customer specifications and performance requirements are satisfied or exceeded.

CAL-IN specialists are trained engineers and available to assist customers with even the most complex technical design questions.

CAL-INs headquarters is located in Roseville, California (USA) with our manufacturing facility and sales office in Mexico City and Cuernavaca, Morelos respectively.

For more information on our equipment for cooling towers and other IAQ products and services, please visit our Web site at www.calintec.com .