

# TechClean® Film Fill Specifications

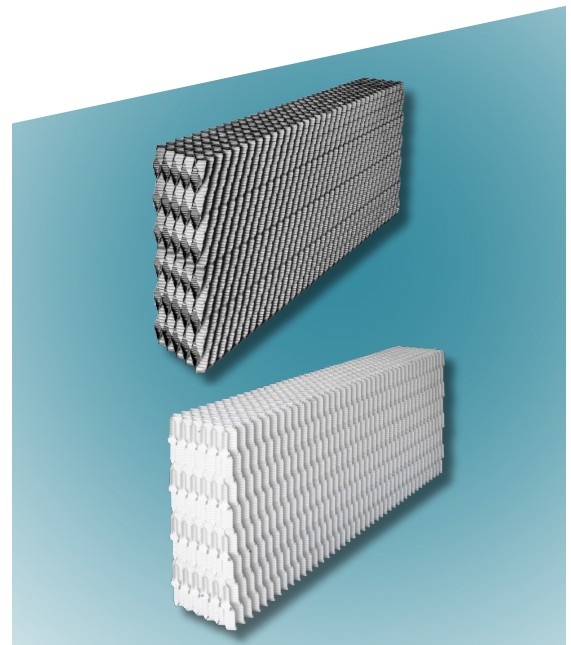
A result of EvapTech's constant Research & Development efforts and our commitment to Leading the Industry, the TechClean® film fill family provides superior thermal performance in a low fouling fill. Vertical offset flutes and textured sheets combine to strip away heat without leaving the solids behind. All versions of TechClean (TechClean, TechClean 214, TechClean 312, and TechClean 410) include the features and benefits shown below. However, each model has slight variations which are used to optimize thermal performance depending on the requirements of the cooling tower.

## TechClean® Features:

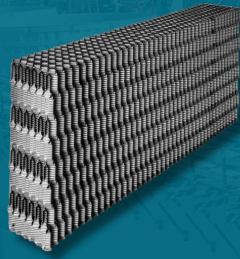
- **Thermal Performance** - Unique combination of low pressure drop and high wetted surface, enhanced by our patented bypass glue joint, means superior thermal performance, often exceeding that of cross-corrugated fills.
- **Fouling Resistance** - Offset vertical flutes resist fouling while delivering excellent thermal performance.
- **Durability** - PVC material is UV stabilized and impervious to chemicals and biological agents found in cooling towers.
- **CTI Standard Compliance** - Complies with Cooling Technology Institute (CTI) Standard 136.
- **Low Flame Spread** - TechClean PVC material is rated 25 flame spread or less per ASTM E84.

## TechClean® Benefits:

- **Less Fouling** - For plants with moderately dirty water, TechClean fill delivers excellent thermal performance with much lower risk of fouling than other film fills.
- **Maintenance Access** - Strong fill packs are suitable for supporting workers which makes maintenance and repair of water spray system easier.
- **Colder Water** - Convert splash bar or deck type fill to TechClean film fill for significant thermal performance increase, reduced parasitic power consumption, or both.
- **Fire Safety\*** - TechClean PVC film fill packs reduce the risk of fire propagation.
- **\*TechClean** is also available in a Zero Flame Spread formulation known as Franklin™ Fill. Franklin Fill is used in EvapTech's FM Approved Series ESP and Meridian cooling tower lines.



**Superior performance.  
Tested! Proven!**



# TechClean® Film Fill Specifications

**TechClean®** is a low fouling film fill with vertical offset flutes, to reduce fouling but with a high wetted surface area for maximum heat transfer. The sheets are manufactured from rigid PVC and meet CTI Standard 136. Solvent bonding produces modules that can withstand severe installation handling as well as operational and maintenance situations. TechClean is resistant to UV.

## Suggested Specification

Fill shall be vertically fluted, low fouling cellular film fill, thermoformed of PVC materials providing 10, 15 or 20 mil after forming as defined by CTI standard STD-136. The fill design shall be selected for the thermal design conditions and appropriate considering the fouling potential of the circulating water quality. For air travels exceeding 4', a second layer of fill may be added. Fill shall be supported on centers as required to accommodate operational loads and the specified live load. The fill modules shall be solvent welded at dedicated contact points for superior module strength.

## Pack Specifications

	TC	TC214	TC312	TC410
<b>Material</b>	Rigid PVC			
<b>Nominal Sheet Thickness</b>	10, 15 or 20 mils After Forming			
<b>Module Depth, Inches (All Widths)</b>	12", 24" or 48" (+/- 1/4)			
<b>Module Width, Inches</b>	12.0" (+/- 1/2)			
<b>Maximum Module Length, Inches</b>	120" (+/- 1/2)			
<b>Sheets/ft</b>	16	14	12	10
<b>Surface Area ft<sup>2</sup>/ft<sup>3</sup></b>	37.5	50.8	×47.4	39.8
<b>Flute Height Inches</b>	0.80	0.83	1	1.2
<b>Flute Width Inches</b>	1.09	1.71	1.71	2
<b>Density g/cm<sup>3</sup></b>	1.39 - 1.45			
<b>Tensile Strength (&lt;yield)</b>	5,500 psi min			
<b>Flexural Strength</b>	> 10,000 psi			
<b>Flexural Modulus</b>	> 350,000 psi			
<b>Gardner Impact Strength</b>	1.2 in-lb/ mil min			
<b>Heat Deflection</b>	162° F			
<b>Flammability</b>	Less than 5 seconds			
<b>Flame Spread Rate</b>	25 or less			