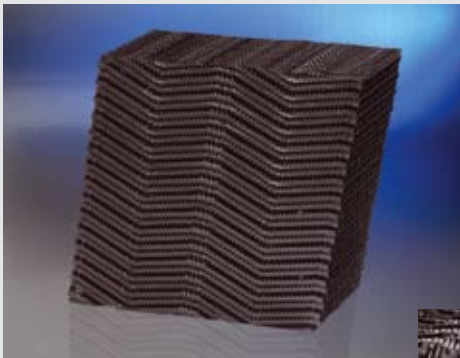
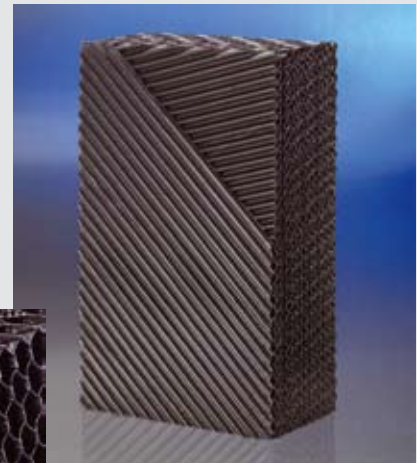


Product Profile

Fills for Cross-Flow Cooling Towers



2H- KSN 612



2H- FX12.12



2H- KSA



- ✓ **Optimal heat transfer properties**
- ✓ **Low pressure drop**
- ✓ **Fills especially designed for cross-flow cooling towers**
- ✓ **Fills with integrated inlet louvre and drift eliminator section**
- ✓ **Easy installation**
- ✓ **Long service life**
Due to chemical, bacterial and UV resistance of PP and PVC

Fills for Cross-Flow Cooling Towers

Technical Data

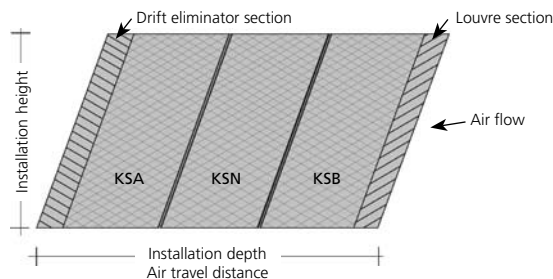
2H Type	FX12.12	KSN 612	KSN 619	KSN 627
				
Material	PVC	PP	PP	PP
Specific surface area [m ² /m ³]	243	240	150	125
Corrugation height [mm]	12	12	19	27
Max. installation height [mm]	2400	2200	2200	2200
Max. width [mm]	600	600	600	600
Installation depth [mm]	300 / 600 / 900	300 / 600	300 / 600	300 / 600
Max. application temp. [°C]	55	75	75	75
Void ratio [%]	> 97	> 97	> 97	> 97

Generally, every cross fluted fill could be cut to be installed in a cross-flow cooling tower. Such a fill, however, would not perfectly fit the requirements; therefore GEA 2H Water Technologies developed a special range of fill for this type of tower (FX12.12 or KSN with a drift eliminator section KSA and air inlet louvre section KSB).

Installation depths (air travel distance) and inclination vary with each brand of cooling tower. GEA 2H offers fill depths of 300 and 600 mm. Combinations of these allow different installation depths (e.g. 300 + 600 = 900 mm). In most cross-flow cooling towers the fills are vertically installed at a certain angle (e.g. 10°). The GEA 2H cross-flow cooling tower fills are cut to the required angle of inclination upon customer request.

Blocks with the integral drift eliminators (KSA) must be installed at the air outlet side (inside of the tower). The straight channels are directed upwards in the direction of flow. GEA 2H fills have been shown to meet all drift eliminator requirements at air speeds between 1 and approx. 3.5 m/s. To avoid any risk when operating above this air speed, it is suggested an extra drift eliminator be installed at a distance of 300 mm behind the KSA fill. The best type for this purpose is the TEP 130 drift eliminator. Blocks with the integral air inlet louvre (KSB) must be installed at the air inlet side of the tower. The straight channels are directed downwards in the direction of flow. Depending on installation depth in the cooling tower, a KSN type fill can be installed between KSA and KSB fill (see sketch). Due to its corrugation geometry the FX12.12 could be installed vertically without inclination. At air velocities higher than 3.2 m/s a small inclination of 2° is required.

Installation Example



General Remarks

- PVC material: Unplasticized (uPVC)
- PP material: Environmentally friendly; Impact- and erosion-resistant;
- PVC and PP material: UV stabilized; Resistant to rot, fungi and most dissolved chemicals; Also available in flame retardant and SANIPACKING® version
- Flammability: Products in flame retardant version according to American and European standards available on request. National regulations on fire protection should be taken into consideration before choosing a product.
- Support structure: Recommendations for optimum solution for each application available on request.
- Max. tolerances: On all dimensions +/- 20 mm or 2 %, whichever is the greater. Tighter tolerances by prior agreement.

This information has been put together with greatest care. However, any performance data given in this leaflet is subject to compliance with certain surrounding conditions and hence may vary from case to case. Further, we reserve the right to make changes at any time without notice. We strongly recommend (i) reconfirmation with GEA 2H whether this information is still fully valid, before using it for final designs and (ii) to verify performance data taking into account the actual surrounding conditions. GEA 2H takes no responsibility for any consequences due to non-compliance with these recommendations.



Thermal Engineering

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