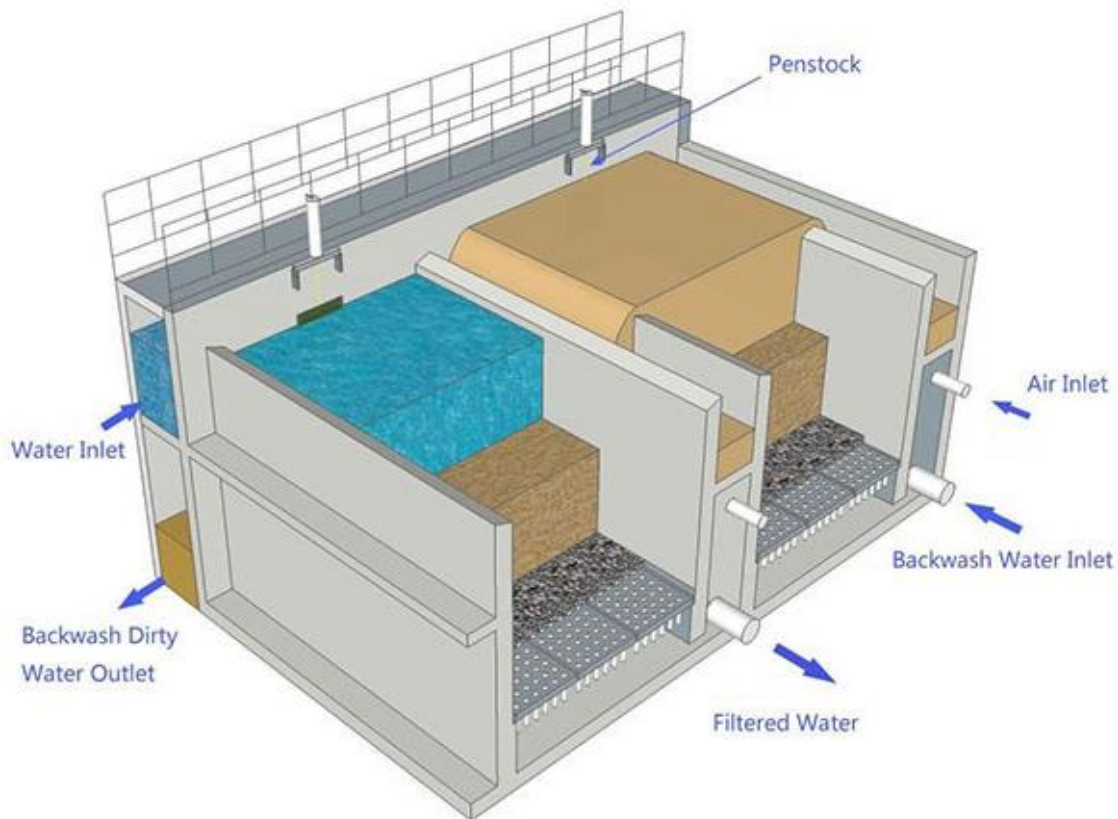


## Rapid Sand Filtration



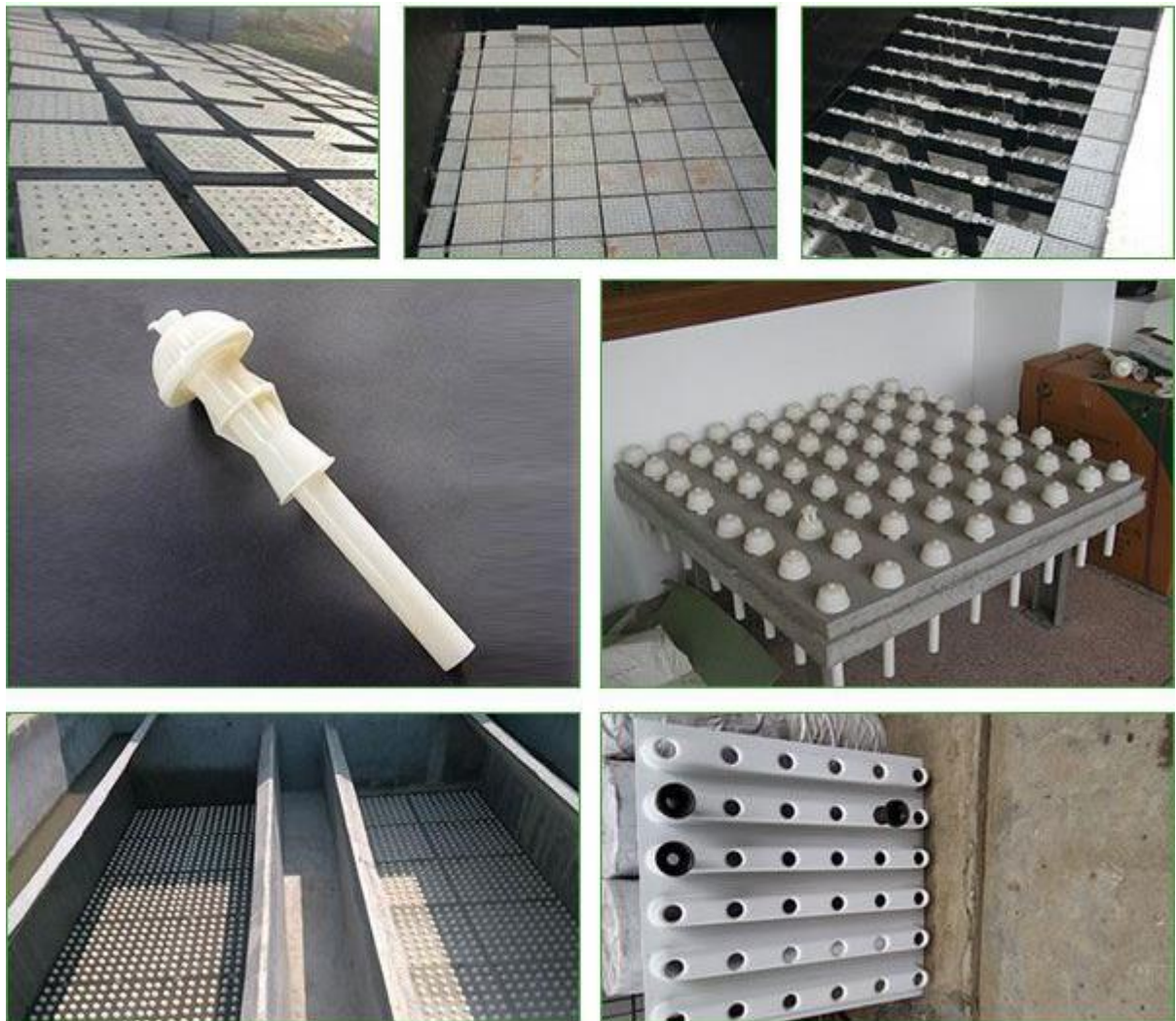
1.The Filter floor is a key device in the water treatment process. It plays a dual role in carrying out filtering and backwashing water distribution (air) in the filter.

2.The quality of Filter Floors, especially the flatness and accuracy of Filter Floors, is directly related to the water quality, water volume and long-term benefits after filtration.

### Equipment characteristics

The filter floor is made of vertical steel mold casting, water cement ratio, fine stone, quartz sand and other materials. According to the design requirements, the opening ratio is calculated. The pre buried ABS engineering plastic pre embedded casing and double direction double direction high quality thread steel bar are used. High standard cement, standard fine stone and quartz sand were prepared by mechanical stirring. The horizontal error of both sides of the Filter Floors is <math>< 1\text{mm}</math> per square meter. The filter installed in the filter reaches the accuracy of 5mm and high accuracy, and the four sides are neat and no warping. It completely meets the technical specification requirements of filter design.

In recent years, some water plants have carried out the small resistance transformation of the water distribution system with the common Rapid Sand Filtration which is similar to the structure of the V filter. Through the transformation, the treatment effect of the V filter is achieved. The V filter is cheap and easy to maintain, and its working characteristics determine its efficiency and energy saving. The V filter is constant water level constant speed filtration, the working state is balanced, the operation is stable, the running period is longer than the ordinary fast filter, the gas water combined backwashing method improves the washing effect, and realizes the water saving, electricity saving and emission reduction. The filter layer keeps the micro expansion state, avoids the wear and sand phenomenon between the sand and prevents the filter film loss. Bad and prolong the service life of filter sand; automatic control and unattended work, only need someone to patrol, save human resources 75%.



## Construction Process the Filter Floor.

According to the design size specifications and requirements, the bar is fastened and fixed, the filter head embedded parts are fixed, the C35 concrete and steel mould are mashed, vibrated and compacted, and no honeycombs and mashed faces are allowed,

and the prefabricated board can be moulded after sufficient maintenance period, and the steel plate template is used for the Filter Floors formwork. The special steel plate is set up by the specially processed filter head lock bolt and fixed nut, and the filter head lock mother is fixed in the concrete for prefabrication. When the strength of the filter plate concrete is up to 30%, the bolt is screwed out; the position of the steel bar in the filter plate should be fixed with the mortar pad and the filter is filtered. The slab concrete should be maintained on time. The curing time should be no less than 14d. After vibrating, the surface of the bolt head is exposed with a flat scale and the surface of the bolt head of the filter head is exposed in the compacting leveling 5. The permissible deviation of the Filter Floors is required: the plane size is less than + 2mm; the thickness of the plate is -2 to 2mm; the plate diagonal is less than + 2mm; the center position of the filter head is less than + 2mm; the evenness is less than 2mm.

Filter Floors ABS Filter Floors is used for installing adjustable filter head and can be used as a special plastic template for filtering the reinforced concrete filter plate in the filter.

## Technical parameters

Model, specification and technical parameters of ABS Filter Floors

Model	Plate size (mm)					Filter Head Preburied Pedestal	
	L(mm)	W(mm)	H(mm)	t(mm)	Φ (mm)	Hole Distance (mm)	
KFA	960	915	80	5	47	Vertical 165	
						Horizontal 150	
KFB	960	960	80	3	47	Vertical 135	
						Horizontal 135	

Mechanical Properties of ABS Filter Floors

Item	Unit	Index
Tensile strength	MPa	35-45
Impact strength	kJ/m <sup>2</sup>	9-30
Hardness	°	98-108

## Advantages of Air Filter ABS fume scrubber

The moulding board uses a corrugated plate made of ABS plastic to ensure the strength of the template, and a circular hole with a neck sleeve is used to fix the pre embedded seat of the adjustable filter. The surface of the template is smooth without cracks, shrinkage marks, bubbles and overflow edges. The template and the template superposition are bonded with ABS special adhesive. The template is fixed on the filter plate support with a 3 \* 30 cement steel nail. The template has a smooth installation, tight lap and no slurry. When the template load is 4KN/, the deflection of the template should be less than 1.2mm.



## Filter Nozzle

The base of the water treatment filter nozzle is designed to enhance the bottom seam, so that it has the advantages of no dead water area and no mud accumulation. Filter Nozzles have high mechanical strength, larger gap area and better stability in pure water.

