

# **Guidance for storage, handling, installation and using of HEPA filters**

## **1. Storage**

1.1 The HEPA filters should be stored in the original packing box in vertical. The label on the packing box should be upward and placed on the horizontal floor or pallet. Stacking height shall not exceed three floors.

1.2 The HEPA filters should be stored in dry, clean and cool places indoors.

1.3 No trampling or stacking heavy things on the HEPA filters.

1.4 Filter dumping should be avoided when stored.

## **2. Handling**

2.1 The HEPA filters should support the narrow surface (the frame surface of the HEPA filters) of the box in the handling process, and be carried in an upright manner to avoid external force or gravity on the wide surface of the box (the inlet and outlet wind surface of the HEPA filters) .

2.2 Knives is strictly prohibited when removing the inner packing of the HEPA filters. Latex gloves should be worn when operating.

2.3 The HEPA filters should be handled with latex gloves after the inner packing is removed.

2.4 Do not touch the filters paper during handling .

2.5 After removal of packaging, hold the four corners of the frame tightly for handling. It should be carried by translation to avoid distorting the filter.

2.6 When the carrying distance exceeds 630mm, two people are required to work together.

2.7 HEPA filters should be handled lightly during handling. Brutal operation is strictly prohibited.

## **3. Installation**

3.1 The outer packing of the HEPA filters should be removed in the purification buffer zone of the purification plant and the inner packing should be removed in the purification room.

3.2 After unpacking, first check the appearance of the product, whether there is any damage in the process of transportation.

3.3 Two or more people should work together to deliver and install the filters.

3.4 No distorting, no touching the filter membrane and no external force on the inlet and outlet wind surface when passing or installing HEPA .

3.5 In the process of transmission and installation of filters, the sealing gasket should be well protected to avoid friction between the sealing gasket and other objects .

3.6 The arrow direction on the label which attached to the filters outer frame indicates the direction of airflow. When installed, the direction of airflow should be consistent with the direction of arrow.

3.7 During installation, check whether the sealing surface is flat and make sure that the sealing gasket contacts with the sealing surface is evenly pressed.

3.8 When the filters are installed vertically, the crease direction of the filters paper should be perpendicular to the ground.

#### **4. Using**

4.1 The environmental humidity of ordinary HEPA filters should not exceed 80% in use , the humidity resistant HEPA filters should not exceed 95% .

4.2 Environmental temperature of ordinary HEPA filters should not exceed 80℃ (temperature of gel seal HEPA filters should not exceed 30℃), high-temperature resistant HEPA filters should not exceed 300℃ (see test report for details).

4.3 HEPA filters should be used below rated air capacity. The pressure difference should not exceed 450pa. The sudden change of pressure will affect the service life of HEPA filters.

4.4 HEPA filters is extremely forbidden to touch water and hydrofluoric acid.

4.5 It is recommended to replace the HEPA filters when the final resistance is about 2 times of the initial resistance.