WHAT IS CLAIMED IS:

1. A filtering module, comprising:

a first reinforced aluminum side plate surrounding to form a first rectangular frame, the first reinforced aluminum side plate comprising a first top plate, a first connecting plate, a base plate and a first positioning plate, the first connecting plate connecting between the first top plate and the base plate, the base plate and the first top plate being substantially parallel with each other, the base plate having a treated flat surface away from the first top plate and configured to abut against a fan filtering unit, the first top plate having a first supporting surface away from the base plate, the first positioning plate being disposed perpendicularly on the first supporting surface and aligning with the first connecting plate; and

at least one first filtering mesh at least partially supported on the first supporting surface and at least partially abutting against the first positioning plate.

2. The filtering module of claim 1, wherein an edge of the first top plate facing to an inner side of the first rectangular frame defines a first vent, a dimension of the first filtering mesh is larger than a dimension of the first vent.

3. The filtering module of claim 1, wherein the first filtering mesh is a frameless filtering cloth.

4. The filtering module of claim 1, wherein the first supporting surface comprises a first subsidiary supporting surface and a second subsidiary

supporting surface, the first subsidiary supporting surface is farther away from the base plate than the second subsidiary supporting surface from the base plate, the first subsidiary supporting surface being adjacent with the second subsidiary supporting surface, the second subsidiary supporting surface being located at an inner side of the first rectangular frame relative to the first subsidiary supporting surface, the filtering module further comprises:

a first supporting bar disposed along a symmetrical line of the first rectangular frame, and two opposite ends of the first supporting bar respectively connect with the corresponding second subsidiary supporting surface,

wherein the first filtering mesh comprises two first subsidiary filtering meshes adjacent to each other, at least one of the first subsidiary filtering meshes is at least partially supported on the first subsidiary supporting surface and the first supporting bar.

5. The filtering module of claim 4, wherein each of the first subsidiary filtering meshes is a removable filtering mesh.

6. The filtering module of claim 4, wherein the first reinforced aluminum side plate further comprises a protruding portion, the protruding portion is connected with the first top plate and is located at an outer side of the first rectangular frame,

the filtering module further comprises:

at least one second reinforced aluminum side plate surrounding to form a second rectangular frame, the second reinforced aluminum side plate comprises a second top plate, a second connecting plate, a lower portion and a

second positioning plate, the second connecting plate is connected between the second top plate and the lower portion, the lower portion has a recessed portion aligning with the second connecting plate and configured to accommodate the first positioning plate, the second top plate has a second supporting surface away from the lower portion, the second positioning plate is disposed perpendicularly on the second supporting surface and aligns with the second connecting plate;

at least one second filtering mesh at least partially supported on the second supporting surface and at least partially abutting against the second positioning plate; and

a sealing element compressed between the protruding portion and the lower portion.

7. The filtering module of claim 6, wherein a quantity of the second rectangular frame is plural, the second rectangular frames are mutually stacked, the corresponding second positioning plate of one of the second rectangular frames is accommodated in the corresponding recessed portion of the adjacent one of the second rectangular frames.

8. The filtering module of claim 6, wherein an edge of the second top plate facing to an inner side of the second rectangular frame defines a second vent, a dimension of the second filtering mesh is larger than a dimension of the second vent.

9. The filtering module of claim 6, wherein the second supporting surface comprises a third subsidiary supporting surface and a fourth subsidiary supporting surface, the third subsidiary supporting surface is farther away from the lower portion than the fourth subsidiary supporting surface from the lower portion, the third subsidiary supporting surface is adjacent with the fourth subsidiary supporting surface, the fourth subsidiary supporting surface is located at an inner side of the second rectangular frame relative to the third subsidiary supporting surface, the filtering module further comprises:

a second supporting bar disposed along a symmetrical line of the second rectangular frame, and two opposite ends of the second supporting bar respectively connect with the corresponding fourth subsidiary supporting surface,

wherein the second filtering mesh comprises two second subsidiary filtering meshes adjacent to each other, at least one of the second subsidiary filtering meshes is at least partially supported on the third subsidiary supporting surface and the second supporting bar.

10. The filtering module of claim 6, wherein the first top plate and the base plate have a first distance therebetween, the second top plate and the first top plate have a second distance therebetween, the first distance is larger than the second distance.