WHAT IS CLAIMED IS:

1. An integrated basement ventilation apparatus comprising:

   an air supply fan installed in an air supply inlet of each floor along an air supply shaft of the basement structure;

   an air exhaust fan installed in an air exhaust outlet in each floor while facing an air exhaust shaft of the basement structure;

   a plurality of connecting fans supported on a ceiling of each floor of the basement structure to form a plurality of air flow paths from the air supply fan to the air exhaust fan; and

   a controller receiving electrical signals from the sensors evenly distributed in the ceiling of each floor of the basement structure for generally controlling the air supply fan, the air exhaust fan and the plurality of connecting fans,

   wherein the air supply fan and the air exhaust fan includes a cylindrical fan supported in a polygonal column-shaped frame, and
   wherein at least one of the air supply fan and the air exhaust fan is additionally provided with a fire-fighting damper which is opened or closed depending on whether the fan operates or not and which can be forcedly closed through a temperature-dependently operated fuse.

2. The integrated basement ventilation apparatus according to claim 1, wherein at least one of the air supply fan and the air exhaust fan is additionally provided with spray nozzles which suck in water by means of negative pressure generated due to the air blowing to finely spray the water.

3. The integrated basement ventilation apparatus according to claim 2, wherein the sensors detect at least one of a temperature, humidity, concentration of harmful gas and amount of fine dust, and the controller keeps the temperature, humidity, concentration of harmful gas and amount of fine dust in the basement structure below a set reference value.

4. The integrated basement ventilation apparatus according to claim 1, wherein the connecting fans are supported on the ceiling of the basement structure through aim angle-adjusting means controllable with respect to two or more axes.

5. The integrated basement ventilation apparatus according to claim 2, wherein a plurality of the spray nozzles are provided radially equidistantly spaced from each other along a periphery of a discharge port of the cylindrical fan, and a water supply pipe is connected to each spray nozzle.

6. The integrated basement ventilation apparatus according to claim 2, wherein a plurality of the spray nozzles are provided in a filtering net consisting of a plurality of concentric circle-shaped pipes and cross-shaped pipes, and a water supply pipe is connected to each spray nozzle.

7. The integrated basement ventilation apparatus according to claim 1, wherein the air supply fan is additionally provided with anion generators, and supplied air is mixed with anions.

8. The integrated basement ventilation apparatus according to claim 1, wherein the fire-fighting damper comprises:

a plurality of blades horizontally arranged in multiple

stages, each of which has opposite rotation shafts penetrating the frame and rotatably supported thereby and is provided with a weight;

a connecting link which integrally connects link arms each fixed to one side of corresponding one of a plurality of the rotation shafts and keeps degrees of opening of the plurality of blades the same;

a lock plate which is rotatably supported on other side of any one of a plurality of the rotation shafts and has a catch hook formed at one side of the lock plate and an angle control ring of ring shape formed over a predetermined circumferential section;

a catch element which is fixed to an end of the rotation shaft supporting the lock plate and is rotated integrally with the shaft and which protrudes in a normal direction, corresponding to the angle control ring;

a fuse which engages the catch hook of the lock plate to restrain the rotation of the lock plate while remaining in a solid state below a predetermined temperature and which is molten to allow the rotation of the lock plate when the predetermined temperature is exceeded; and

elastic elements for resiliently rotating the lock plate.

9. The integrated basement ventilation apparatus according to claim 8, wherein the blades are bent at an end portion opposite to the weight and thus deflect a horizontal flow of air upwards, and the blades are gradually longer as they are disposed closer to a bottom of the frame.