The alarm linkage control of smoke control system refers to the alarm linkage control of mechanical smoke control system.

According to the different parts of the setting, the mechanical pressurized air supply system can be divided into the mechanical pressurized air supply system in the stairwell and front room, the mechanical pressurized air supply system in the refuge layer and the mechanical pressurized air supply system in the refuge aisle.

Mechanical pressurized air supply system in the stairwell and front room:

Linkage control should be divided according to fire protection zones, including automatic, manual, chain start and other control methods.

In the automatic control mode, two independent fire detectors in the same fire zone alarm, or a fire detector and a manual alarm button alarm, should be linked to open the normally closed pressurized air outlet and the pressurized fan within 15 seconds.

And shall comply with the following provisions:

First, all the pressurized fan in the stairwell of the fire zone should be opened.

second, The normally closed air supply outlet of the fire layer and its adjacent upper and lower front rooms and shared front rooms in the fire prevention zone should be opened. And turn on the pressurized air blower at the same time.

The pressurized air outlet should be manually controlled on the fire linkage controller in the fire control room.

Manual control of mechanical pressurized air supply system.

It should be possible to manually control the opening of the air outlet and the start or stop of the pressurized air blower and other equipment on the fire linkage controller in the fire control room. The start and stop buttons of the pressurized air supply fan should be directly connected to the manual control panel set in the fire control room using a special line, and the start and stop of the smoke control fan should be directly manually controlled. There may be more than one pressurized air outlet in the same fire zone. You can set the partition control on the linkage controller and start all the pressurized air outlet in the same fire zone with one key.

The normally closed pressurized air outlet and pressurized fan should be equipped with on-site manual startup function.

Interlocking start is a direct multi-line start method, which should not be affected by the fault factors of the automatic fire alarm system.

When any normally closed pressurized air outlet in the system is opened, the pressurized fan should be able to start automatically, and the interlocking pressurized fan should be opened.

The action signals of the opening and closing of the air inlet and the starting and stopping of the pressurized air blower should be fed back to the fire linkage controller. The mechanical pressurized air supply system shall be equipped with pressure measuring devices and air pressure regulation measures.



The refuge floor and the refuge walkway have the same mechanical pressurized air supply system as the stairwells and front rooms mentioned above.

However, the linkage zones under automatic control are different.

In the automatic control mode, two independent fire detectors in the refuge floor or the floor served by the refuge floor in the same area, or a fire detector and a manual alarm button alarm, should be linked to open the normally closed pressurized air outlet and pressurized fan of the refuge floor within 15 seconds.

In the automatic control mode, the refuge walkway or the refuge walkway connected to the fire zone, two independent fire detector alarm or a fire detector and a manual alarm button alarm, should be in 15 seconds linkage open refuge walkway normally closed pressure air outlet and pressure fan.