DESCRIPTION

SUPERFIRE Z EI 120 is an Automatic Fire Curtain that in the case of fire, limits and controls the fire, reduces not only radiation emission but also heat transfer creating isolation from the fabric so that protection of people and goods is maximized, with classification EI 120.

The curtain is composed of two fabrics, one folds like a concertina and one flat fabric. They are both fibreglass fabric coated on both sides and seamed with reinforced steel wire and fixed to a steel roller of 78 mm in diameter; galvanized steel elements as headbox, side guides and bottom bar; irrigation system on the flat fabric side.

The system is driven by a 24 V tubular motor and controlled by an electronic board, CRM (Control and Regulation for Motor) with special gravity fail-safe system. The control panel for automatic curtains (CBM), with a nominal input voltage of 115 V or 220 V and output voltage of 24 V. Uninterruptible Power Supply (UPS System) with autonomy up to 6 hours exists in all control panels.

Tested in accordance with EN 1634-1 and classified in accordance with EN 13501-2.

CLASSIFICATION

EI 120

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superfire Z

OPERATION

The system can be activated by a SHEV, fire alarm contact, internal fire and smoke detection devices, or manual emergency buttons. In the event of a fire, the Control Panel (CBM), receives the signal alarm, and the automatic curtain deploys automatically, with the controlled and safe constant speed of descent even following total power loss on all curtains. A solenoid valve connected to the control panel can activate the irrigation system. If there is a false alarm the curtains return to stand-by position after manual resetting the alarm from the main Fire Management Systems. In case of main power loss, the curtain will remain fully retracted for up to 6 hours thanks to the battery backup system.

FABRIC

The fibreglass fabric has low radiation, high isolation properties and resists up to 1,100°C. All seams are done with reinforced stainless steel wires with a coating of Kevlar.

HEADBOX

Galvanized Steel headbox 1.2 mm thickness with different possibilities to adapt to different architectural spaces, and maintenance requirements.
Dimensions of the headbox vary depending on width and height of the curtain.

SIDE GUIDES

Galvanized Steel from 1.5 to 3 mm in thickness and different dimensions depending on the width and height of the curtain.

ROLLER

Galvanized Steel of 1.5 mm thickness and 78 mm diameter. Special slide system for fixing the fabric.

BOTTOM BAR

Galvanized Steel of 1.2 mm thickness.

ELECTRIC MOTOR

Tubular motor: 24 V.
Maximum power: 24 W/ 18 Nm.
Maximum current: 3 A.
Average linear speed: 0.10 m/s to 0.15 m/s.

CRM MOTOR REGULATION BOX

Polyester box IP56 with an electronic board inside to control the movement of the motor.
Dimensions (WxHxD): 120 x 160 x 75 mm.

CBM CONTROL PANEL

Receives the signal alarm from the Fire Management System and controls the movement of the curtains. Visual and acoustic alert system.
Dimensions (WxHxD): 400 x 600 x 310 mm.
Input: 115 or 220 V 50Hz.
Output: 24 V.
Battery: 2 x 12 V 7,5 Ah rechargeable (up to 6 hours autonomy).
Maximum capacity: up to 12 motors.

IRRIGATION SYSTEM PANEL

A solenoid valve connected to the control panel can activate the irrigation system with a delay of 3 minutes for standard. As an option, the solenoid valve can be dependent on a thermal sensor in order to avoid water spray in false alarm conditions, so even if there is a fire alarm the irrigation system doesn´t work until the sensor reaches 77°C. In this case and for safety reasons, the irrigation system will not be activated until the following conditions meet together:

01 Fire alarm;
02 3 minutes delay;
03 Thermal sensor above 77°C.

The number of sprinklers depends on the area of each system. The water conditions are the following:

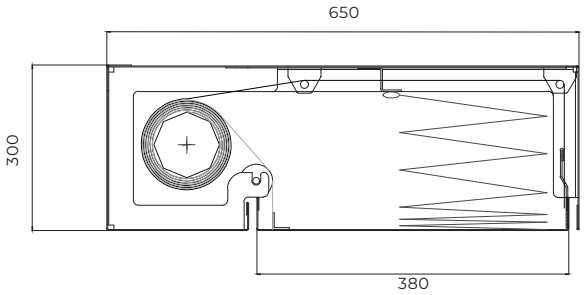
Water Flow: 4.4l/min·m^2;
Pressure: 4 bar.

OPTIONAL EXTRAS

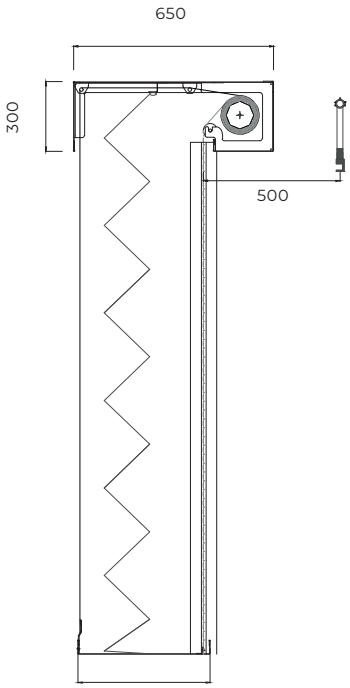
Irrigation system: hidden inside the headbox.
Thermal sensor: electronic sensor activates the solenoid at 77°C (for irrigation).
RAL coating: headbox, side guides, bottom bar.
Stainless steel elements: headbox, side guides, bottom bar, screws, rivets.
Headbox: customized set-up for specific architectural or special operational requirements.
Side guides: customized set-up for specific architectural or special operational requirements.
Bottom bar: aluminum profile painted RAL 9003 (white) for using with the false ceiling accessories.
False ceiling accessories: aluminum profiles painted RAL 9003 to hide the headbox over the false ceiling.
Electric motor: special 24 V motors up to 80 Nm without CRM. Special 230 V motors up to 120 Nm without CRM.
CBM control panel: special designs up to 48 motors in one control panel, additional information output, micro switches, communication with other devices, special battery backup, possibility of delaying curtain deployment.
Escape button: pushing this button the curtain goes up and the user can escape through the opening, the curtain deploys 30s later automatically.

Note: *other requirements and customized solutions on demand.*

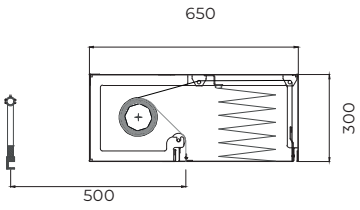
HEADBOX



HEADBOX DETAIL
FABRIC UP

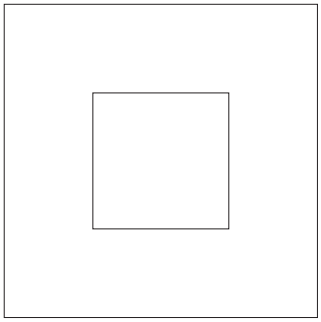


DETAIL A
FIRE ALARM MODE

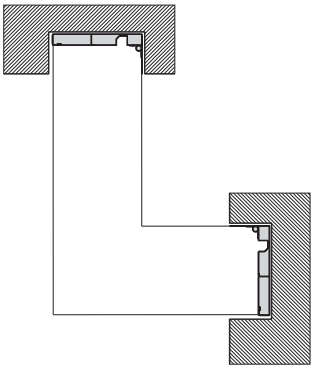


DETAIL A
SYSTEM ACTIVE MODE

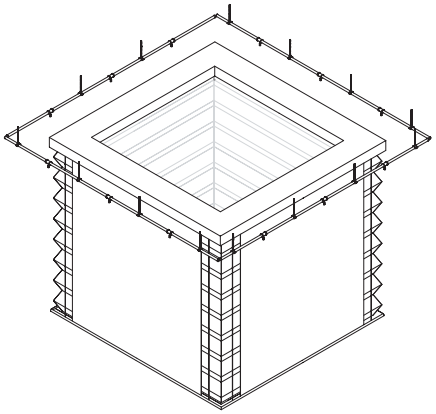
DIFFERENT GEOMETRIES



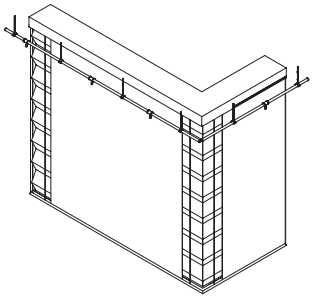
O SHAPE



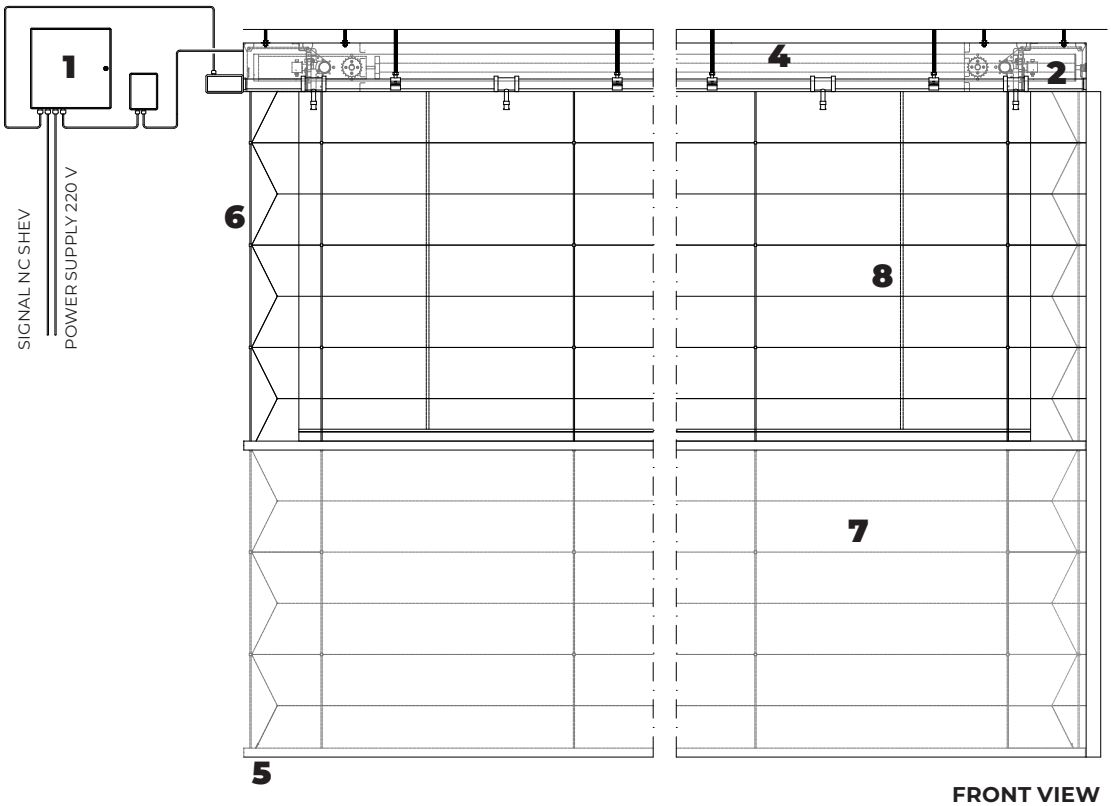
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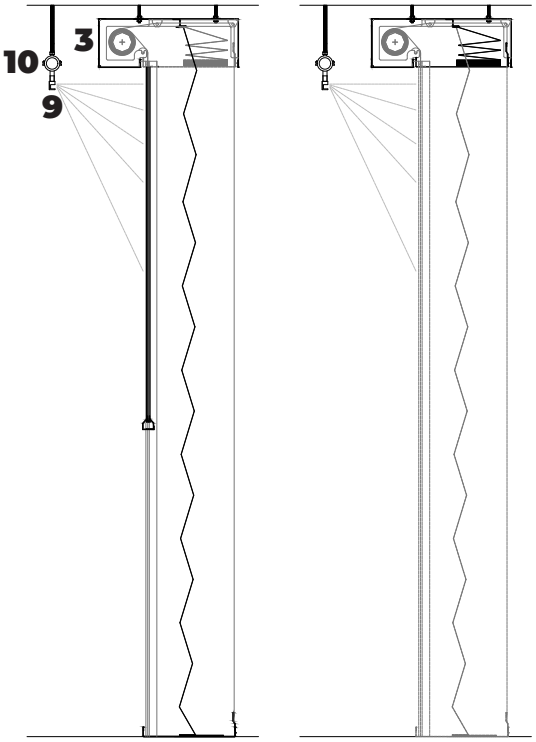


L SHAPE



FRONT VIEW

1. control panel CBM
2. tubular motor 24 V
3. galvanized steel headbox
4. galvanized steel roller
5. galvanized steel bottom bar
6. lifting steel strips
7. concertina fabric
8. flat fabric
9. sprinkler
10. solenoid valve



VERTICAL SECTION