



andora
fire doors & rolling shutters

**FIRE RESISTANT
ROLLING SHUTTERS SYSTEMS**

andora FIRE RESISTANT DOOR SYSTEMS

andora fire shutters are manufactured according to customer demands in accordance fire resistance and specifically construction regulations. Production dimensions depending on customer demands ranges from small businesses to commercial companies and very large industrial structures. **andora** fire resistant automatic door systems are calculated and manufactured in our company's programs in the production stage, depending on the width and height dimensions.

Design and Support Structure of the System:

andora fire resistant shutter system is TS EN 1634-1 test report approved and fire resistant for 180 minutes. In the facade where the doors will be mounted, there shall be a blind frame to be made of 50 * 100 * 2.5 mm profile in accordance with the details given by our company and the **andora** doors should be mounted on the frame.

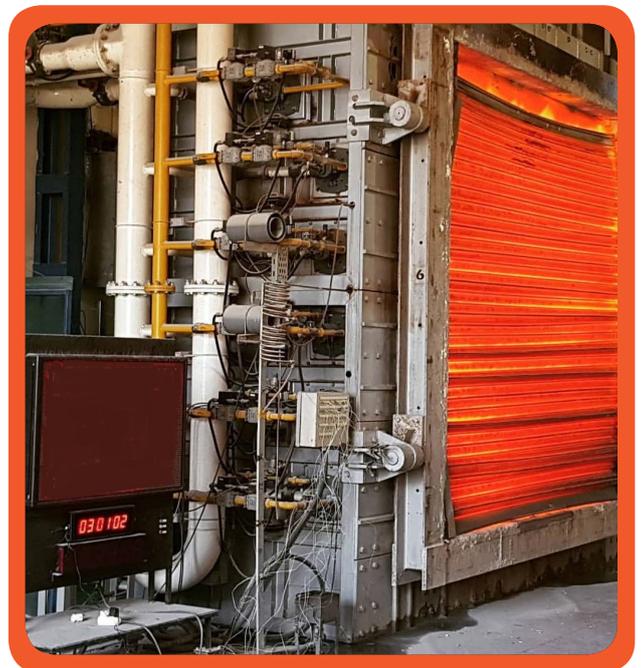
Intended Use

andora fire resistant shutter system provides security by not spreading the fire for 181 minutes in case of any fire that may occur inside or outside. Fire Resistant **andora** Automatic Shutter System should always be left open and closed only in case of fire. This system is not designed for daily use, as shutters are manufactured to close in the event of a fire.

In the event of an alarm during the fire, the doors are closed and prevent the spread of the fire and by means of the audible warning system, the doors provide information while closing. Due to the existing weights of the doors, the doors cannot be opened and closed as often as normal shutter systems, and the doors should be operated in emergencies such as fire, flood, terror etc.

Approvals - Certificates:

andora fire shutters were tested and evaluated by TSE and they are approved as fire resistance for 181 minutes. Also to ensure that standards are maintained during production and installation they have TSE has ISO 9001, ISO14001, OHSAS18001, TS EN 1634-1 and CE certificates.



When closing or opening trigger is given to **andora** fire-resistant door systems, it is important not to pass under it until the door completes its operation with the switch setting made and receives the stop command.

Engine System

In the **andora** Fire Resistant Shutter system functions of the doors to be produced such as width, height and weight and appropriate motor system between 600 NM - 800 NM -1000 NM -1300 NM Motors is used.

- The engine operating voltage should be 230 Vac \pm 10.50% Hz.
- Heat dissipation time should be approximately 4/5 minutes and the temperature should be 150°C.
- Operating temperature should be -10° / + 40°C.
- Maximum operation height should be 9 meters.
- In case of power failure, the motor must be able to work manually by means of a special gear system and be able to be moved up and down by chain system.
- Limit adjustment mechanism should be easy and precisely adjustable.
- Double safety switch must be used in limit setting mechanism.
- Protection class should be IP44.

Lifting Force (Kg)	Torque (NM)	Power (W)	Current (A)	Number of Cycle (Rpm)	Weight (KG)	Maximum Lifting Height (M)
600Kg	420Nm	500W	3.0A	5.3Rpm	12Kg	6M
800Kg	610Nm	540W	3.8A	4.6Rpm	12Kg	9M
1000Kg	760Nm	580W	4.2A	4.6Rpm	14Kg	9M
1300Kg	1050Nm	800W	1.7A	4.4Rpm	22Kg	9M

- 600 NM Chain Transfer Motor; The engine torque should be 410 Nm - the average operating speed should be 6.5 rpm.
- 800 NM Chain Transfer Motor; The engine torque should be 640 Nm - the average operating speed should be 5 rpm.
- 1000 NM Chain Transfer Motor; The engine torque should be 710 Nm - the average operating speed should be 5.5 rpm.
- 1300 -1400 NM Chain Transfer Motor; The engine torque should be 710 Nm - the average operating speed should be 6.4 rpm.

Engine Manual Hoist System:

There is a chain system in the engine cover on the side where the engine is installed. For security reasons it is left in bulk and short. In case of emergency (engine failure, power failure, etc.), manual opening and closing of the chain can be achieved.

Mode of Use

Use with Button Board: The up - down - stop buttons on the button command the system. When the Down key is pressed, the shutter automatically goes down and closes without additional commands. When the Up key is pressed, the shutter automatically raises and opens if no additional command is given. When the stop button is pressed while the shutter goes down or up, it stops the operation of the shutter with the command it gives to the system.

Use with the Controller: If the system is operated with the controller, the system is commanded by the two or four-button controller. The receiving card installed in the system detects the command of the key pressed from the controller. Opening, closing and stopping is performed with the button on the controller. Once the controller is pressed, if the shutter is open, it detects the down command and starts closing. If the key is pressed for the second time, the shutter receives the stop command and stops, and the third time the key is pressed, the shutter starts to operate in the opposite direction (The shutter that is stopped while opening, the shutter that is stopped while closing is opened.)

Flag:

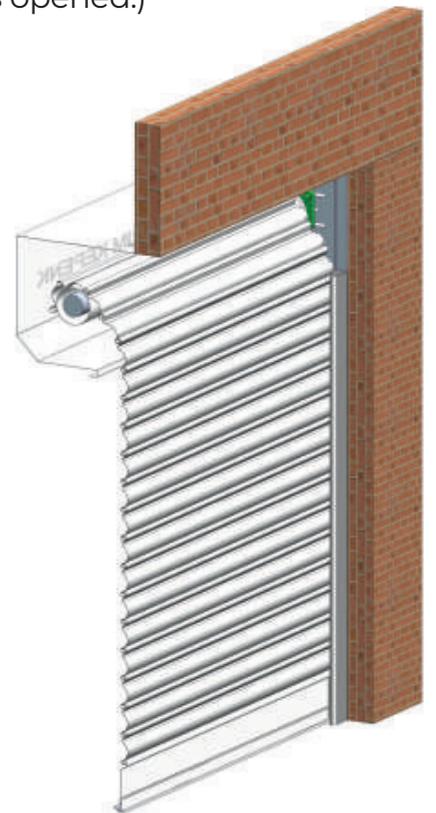
In **andora** door systems, carrier flag system is used with 4-5 mm wall thickness galvanized sheet and depending on door width and height as 400-450-500mm. Mounting is performed with min 2 and max 8 screws by considering differences in the facade where the flag system will be installed.

Pipe Diameter:

In the **andora** door systems the pipe diameter is determined according to the width and height measurements in the program and pipe diameter is min 77 and max 139 and it is used as galvanized.

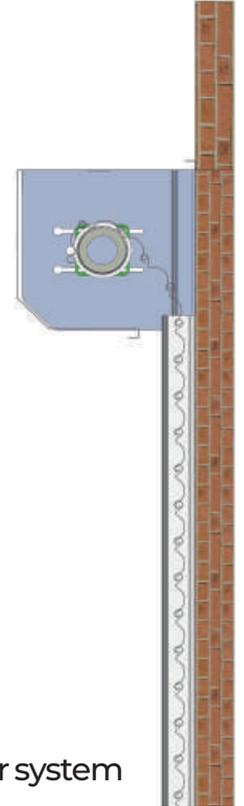
Kitchen Hood:

In order to increase the fire resistance and the visibility the part where the pallets are wrapped around the pipe in **andora** doors is closed by the box system. It is manufactured with min. 0,8 - max. 2 mm wall thickness and galvanized sheet metal system.



Side Channel

Side channels of *andora* door systems are manufactured between 70-100 mm and with min 1,5 - max 2.5 mm galvanized sheet metal. In order to avoid problems such as dislocation or slipping during working with the door pallets, the inner space of the pallets with the side channels varies between 0.5-1 cm.



Palette:

andora fire resistant door system is manufactured with 1,2 mm galvanized sheet. In the TS EN 1634-1 test report, the fire resistance was approved as 181 minutes and the test was stopped at the request of our company.

ADDITIONAL OPTIONAL PRODUCTS:

Radar: The door opens automatically with the movement detected by the radar system on the door during the passing. It is demanded optionally.

Safety Photocell: When the door detects movement or objects under the door during closing, the safety sensor ensures the safety of life and property by opening the door back. It is demanded optionally.

Controller: When the control system is connected to the door, opening - closing - stop operations can be provided with a single button. It is demanded optionally.

Encrypted - Card Pass: Access and Egress is provided by Encrypted - Card Pass. It is demanded optionally.

Fusible Link: *andora* doors will close automatically if a temperature of 75 degrees is detected. It is demanded optionally.

Ex-proof Motor: It is demanded optionally.

System Maintenance:

andora Fire Resistant Shutter System does not require additional maintenance.

Warranty

Damage to the door as a result of material forgetting under the door, crashing and impacting is not covered by the warranty.

Failures and damages that may occur due to natural disasters (earthquakes, floods, storms, hoses, landslides, tsunamis, etc.) at the door is not covered by our company warranty.

Doors that are sold and assembled by **andora** Automatic Door Systems are under 2 (two) year warranty.

