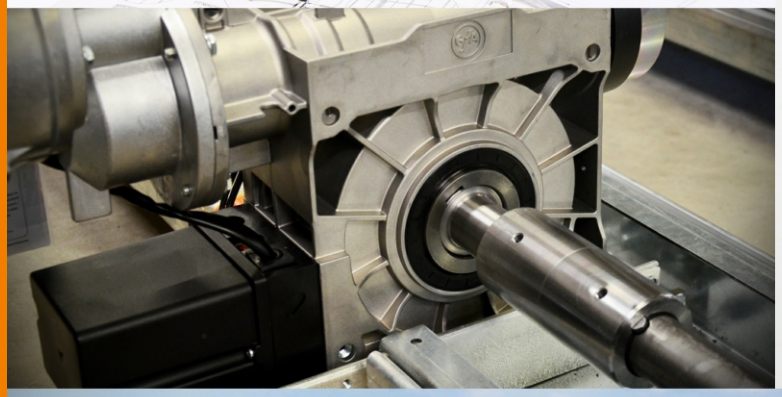
www.hangardoor.eu

HANGAR DOOR barduva

TECHNICAL INFORMATION



FABRIC HANGAR DOORS

CABLE GEAR

About Hangar Doors

Doors are made of aluminum and PVC fabric. Are lightweight but perfectly suitable for use in aggressive, corrosive environment, extreme weather conditions. These doors are resistant to wind, salt, temperature changes, as well as protection from sand and dust, mold and rot.

Each of fabric doors are designed to meet specific project requirements. Our engineers will design doors to fulfill specific customer requirements, and calculate the wind loads for this design.

Doors can close a big opening, but are very light, so the building will receive minimum loads. In some cases, we recommend to divide a large opening into several smaller ones, using risible pylons system. This system for your building may be more effective than a single large leaf frame.

Fabric doors are made of aluminum and PVC sheet and is very light, but perfectly suitable for use in aggressive, corrosive atmosphere, extreme weather conditions. These doors fit tightly on both sides of the frame and lower beam, are impervious to dust, sand, resistant to wind loads.

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Fabric doors basic structural and functional components

- **Frame thickness**

185 or 295 mm

- **Suspension components**

Rope cable system

- **Gate Material**

High resistance polyester fabric coated with PVC.
Sheet materials - polyester H5551 HEYTex. (Accordance with DIN 75200 standard)
Flame braking - max. 100 mm / min. (ISO 3795).
Resistance to tear lengthwise/crosswise - 500/500 N. (DIN 53363).
Temperature resistance: -30 °C/70 °C (DIN EN 1876-1).
Resistant to UV rays, mold or rotting.
Resistant to icing and building construction deformations.
Wind load - available on request.

- **Bottom profile**

Galvanized steel profiles (colored) with (EPDM) sealing.
Side guide rails - aluminum profiles.

- **Lifting ropes**

Rope thickness - 6 or 5mm.
Velocity - 0.2 meters per second.

- **Control unit**

Digital control panel, the voltage of 3x400 V/N/PE, control voltage 24V DC.
Standard controls - 3 buttons control unit (open – stop – close).
The lift cycle counter - yes
Emergency control - manual.

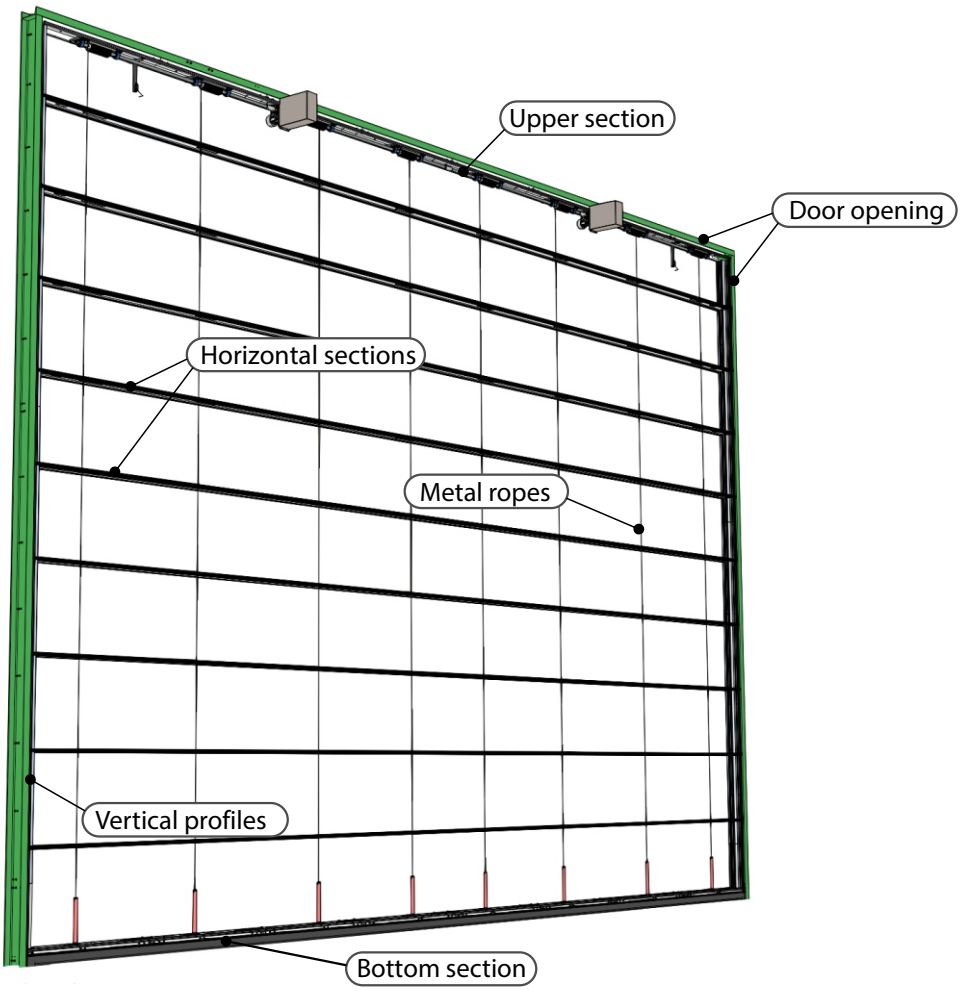
- **Standard safety devices**
- Safety switch for each rope
- Engine is fitted with built-in brakes
- Protection against finger crushing from the inside and outside
- Protection from falling gate in case of ruptured rope

Main components of fabric door

Door construction is made of aluminum and galvanized steel profiles. Combining these materials with each other, we are able to offer the optimum door weight and structural stability. A moving part of the door consist of double sheet of PVC fixed on the sides of intermediate sections. Fabric material on the top and bottom of the door is fixed with self-tapping screws. The upper section and guide rails are fixed to the building construction with screws with metric thread. Fabric door rises and descends by metal ropes, attached to the bottom section profile. There are mechanical safety door brakes, which perform two functions:

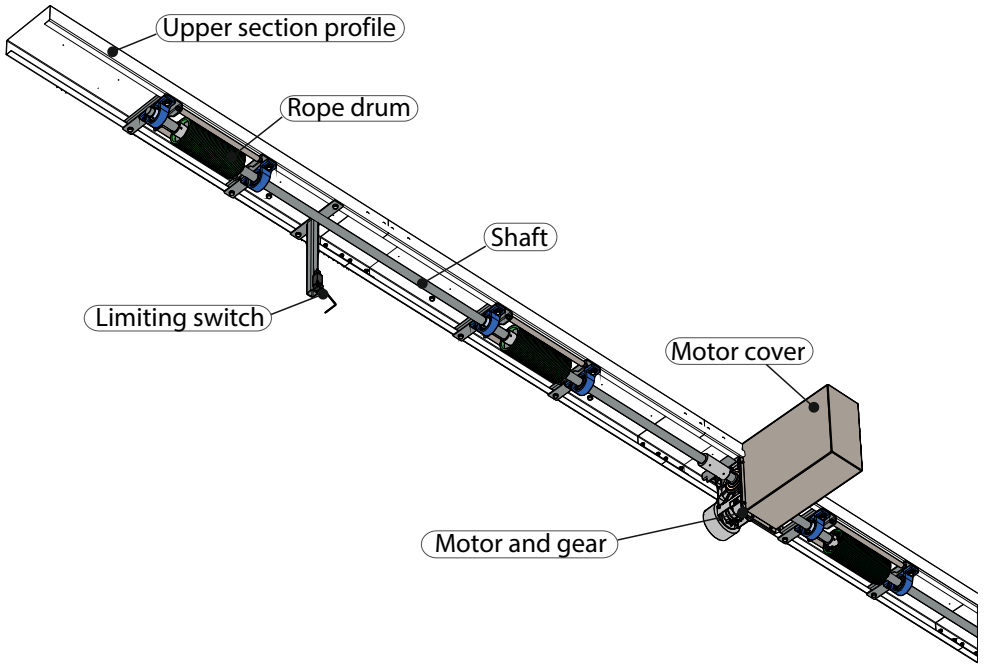
Safety brake – mounted on the doors are locked, when the doors are fully closed. Brakes are used to stop the movement of the door leaf.

Emergency manual operation system - door opens manually.



Top section box

The upper profile holds the door lifting mechanism. That includes motor with gear, shafts with rope drums and door upper limit swithes. The gear motor can be installed on inside or outside of the building and could be protected protected by a metal casing.



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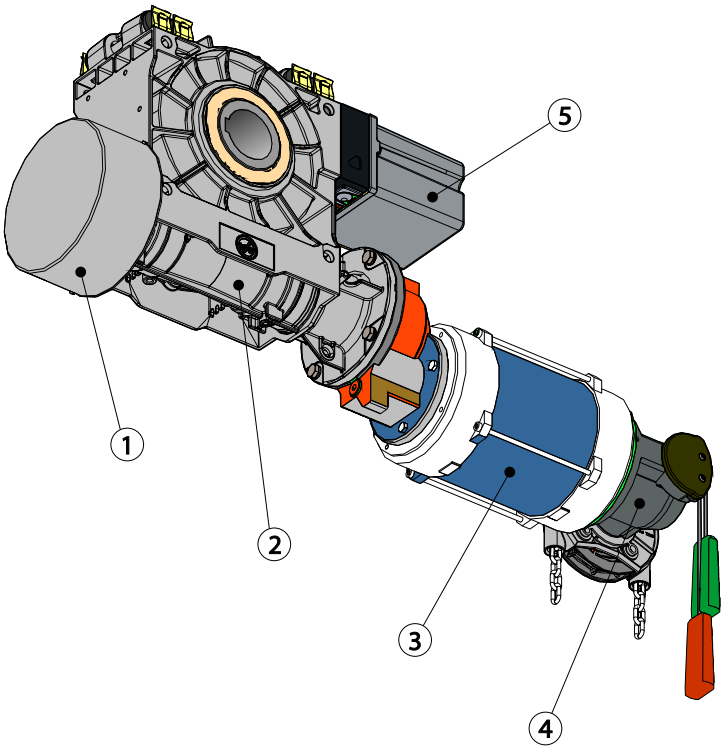
Drive motor and gear

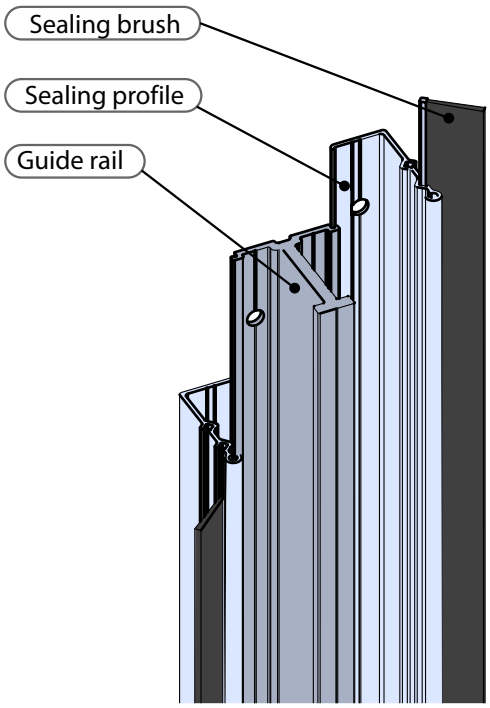
The drive mechanism transmits torque to the shaft and rope drum attached on it.
The main components of the mechanism is:

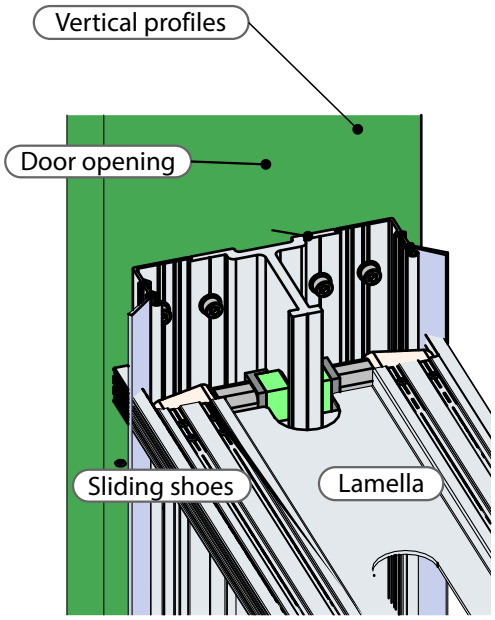
1 Electromagnetic spring operated brake with manual release
2 Worm gear within safety brake
3 Electric motor
4 Emergency manual operating device
5 Terminal limiting switches.



Aluminum guide rails

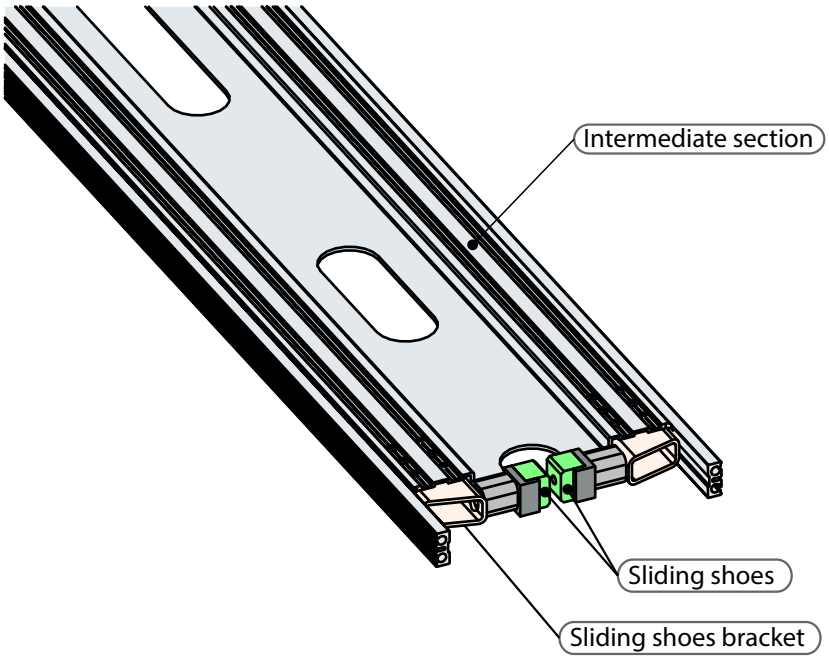
Aluminum guide consists of two parts: main guide rail and side sealing profiles with attached sealing brushes. That protect the inner spaces from external weather conditions as wind, dust, sand and etc.

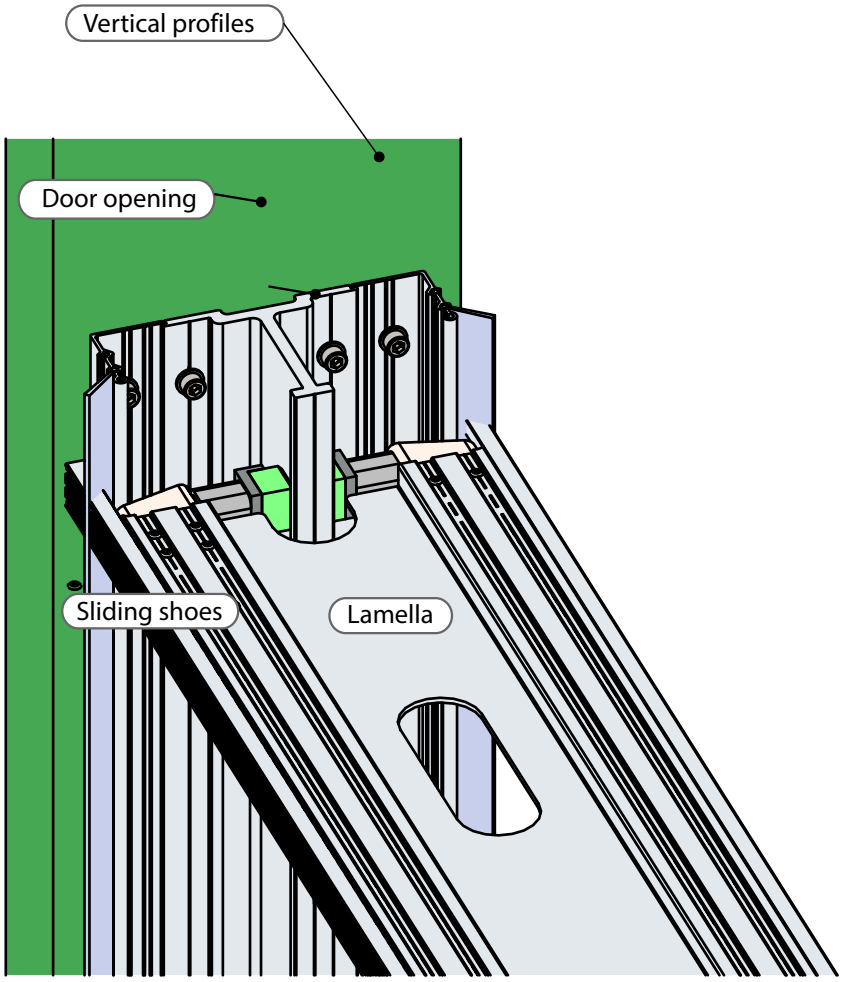




Forming plates (lamellas)

HANGARDOOR doors plane made from fabric strips. Strips are tightly attached to the lamellas edges and provide a barrier between the inner and outer frabric walls. In case of damaged fabric, it is not necessary to change whole fabric over gate area. It is enought to remove only specific band of demaged tissue and replace it with a new one. Meanwhile, doors can operate freely even without fabric. At both end of the forming plates there are sliding blocks moving up and down, which ensures a quiet door opening and closing.





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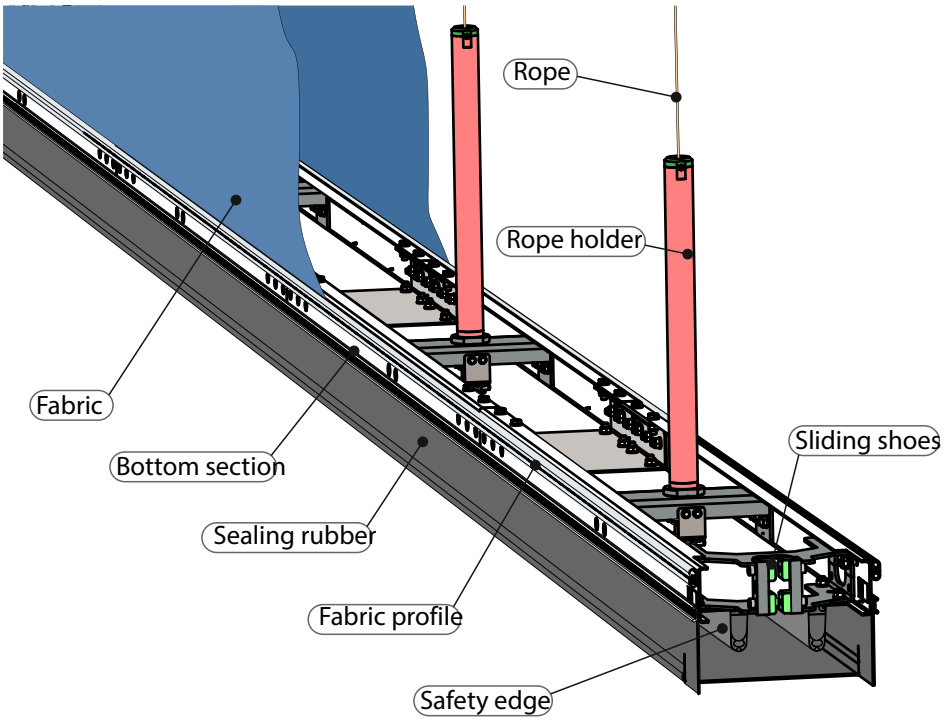
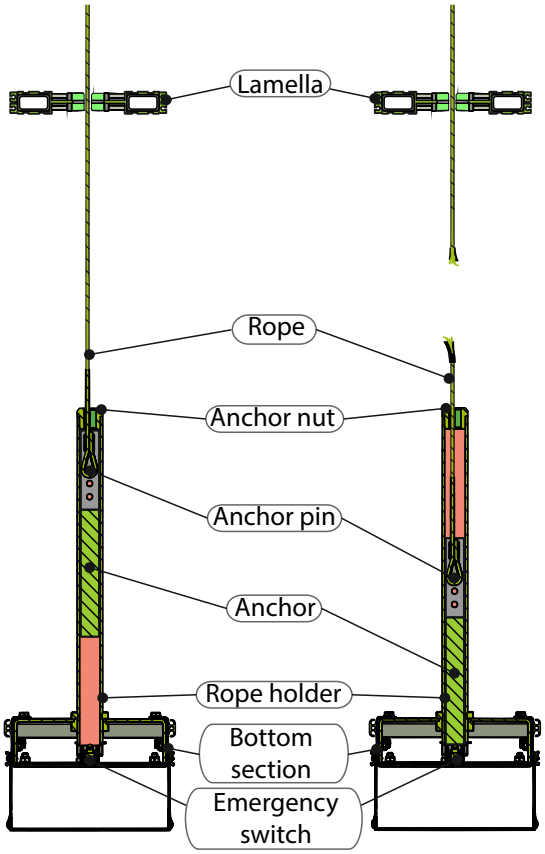
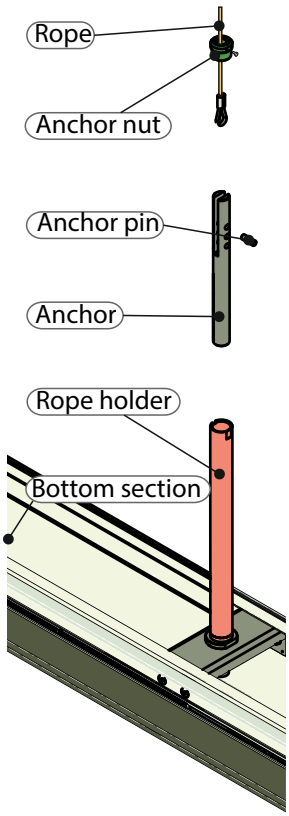


Bottom section

The lower beam is made of galvanized metal. Fabric door rises and descends by metal ropes attached to bottom section. The bottom profile is sealed with a heavy duty rubber and safety edges.

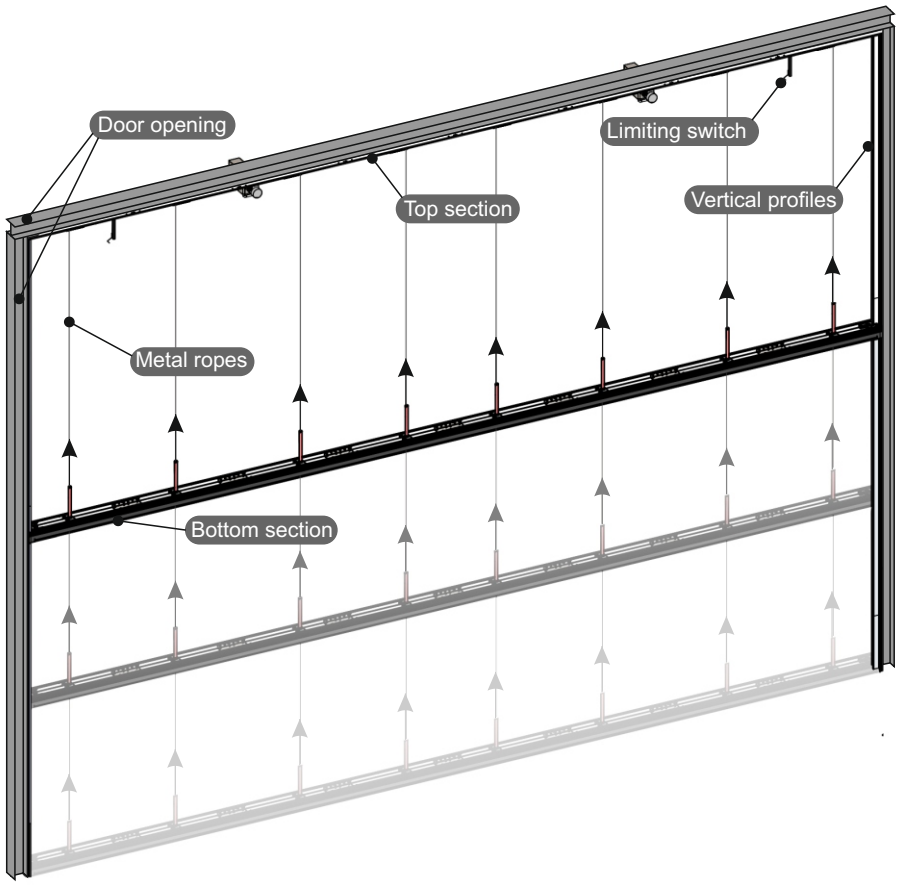




Safety device

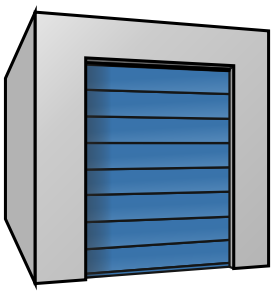
In case of loosening the rope, anchor will drop down and push the emergency switch, which is mounted to rope holder. The door wil stop. If one rope will broken another ropes will assume his function and prevents the door from falling.

Steel Rope gear lifting scheme

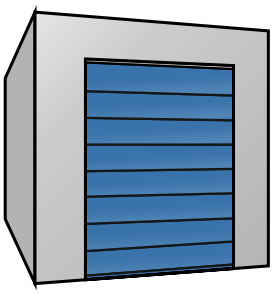


Mounting options of fabric doors

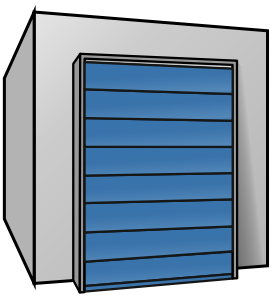
Barduva fabric doors does not require much space at the top of the building. Because of particular and well thought out design, door folds very compactly when rises. You lose no headroom, which means smaller building construction costs! Door can be installed inside the building (1), in the opening (2) or the outer part of the building (3).



Inside the building



In the opening



Outer part of the building

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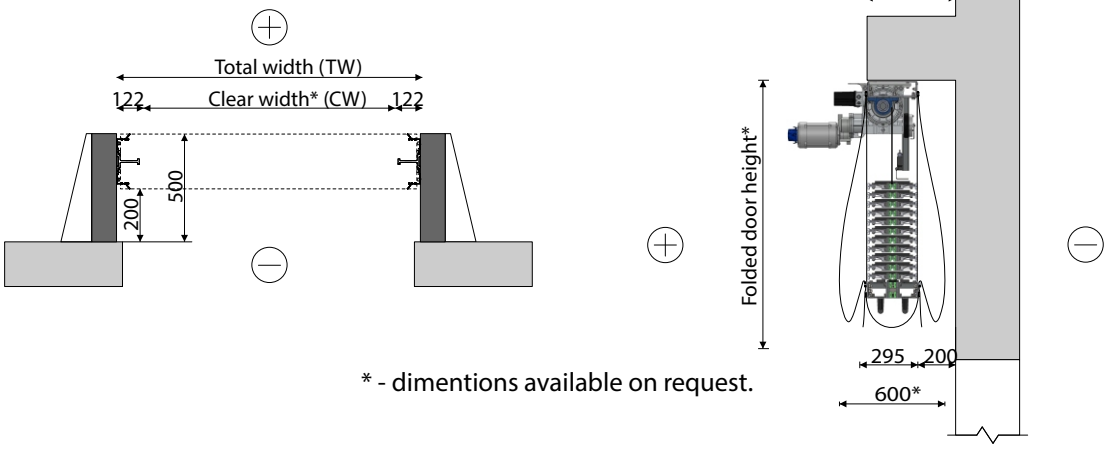
Inside of the building (example only)

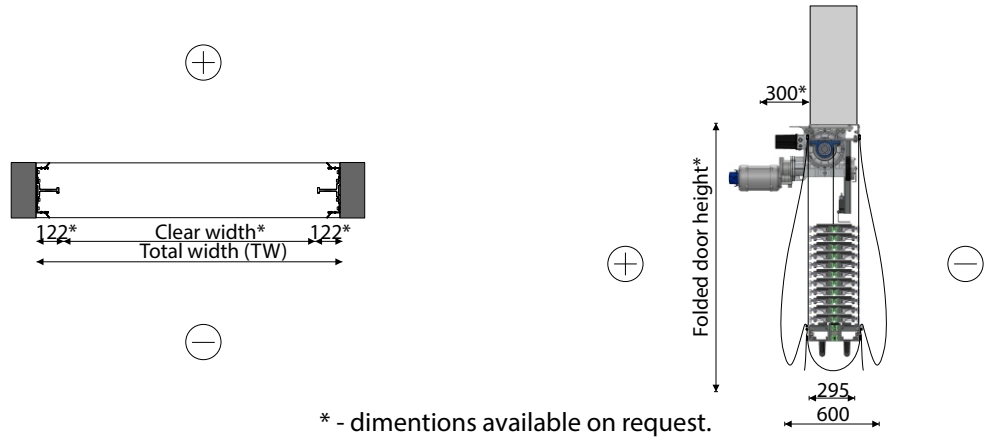
Clear door opening is equal to building clear opening
Technical service is provided from inside the building



* - dimentions available on request.

In the building opening (example only)

Do not occupy much usable space
Technical service is provided from inside or outside the building
Motor can be mounted inside or outside of the building
Very simple frame structure.



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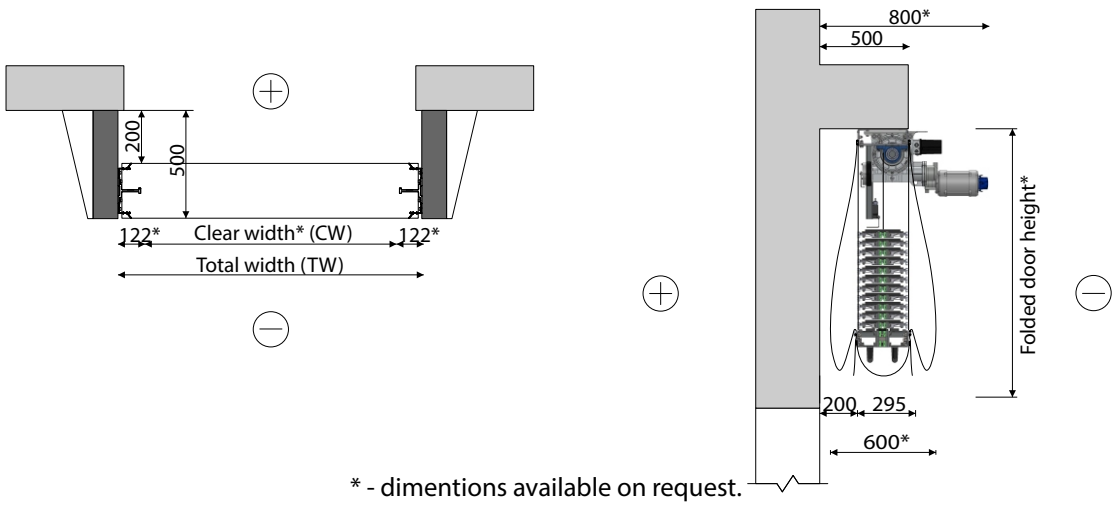
On the outside of the building (example only)

Achieve usable space
Clear door opening is equal to building clear opening
Technical service is provided from the outside of the building



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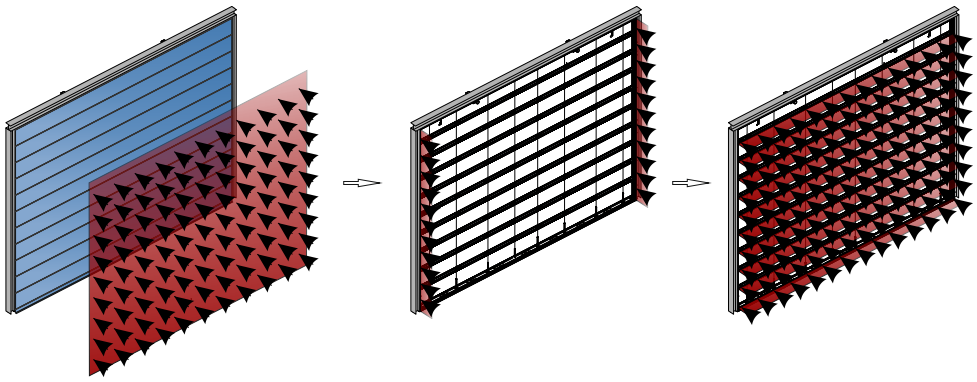
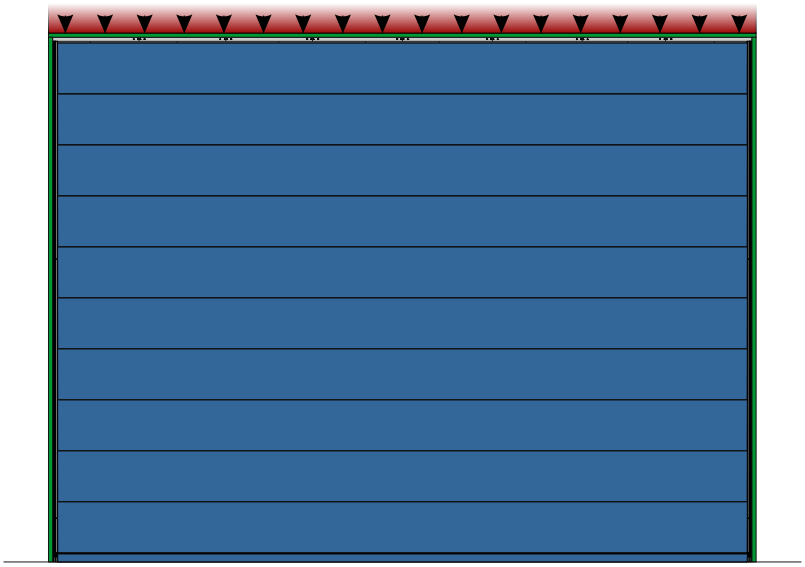
Wind load scheme

Wind pressure load on the gate sheet that transfers the load to the lamellas (intermediate plates). Aluminum lamellas ensures stiffness and strength of the door plane. Deflections comply with the technical requirements of the standards.



The building frame loading scheme – closed door

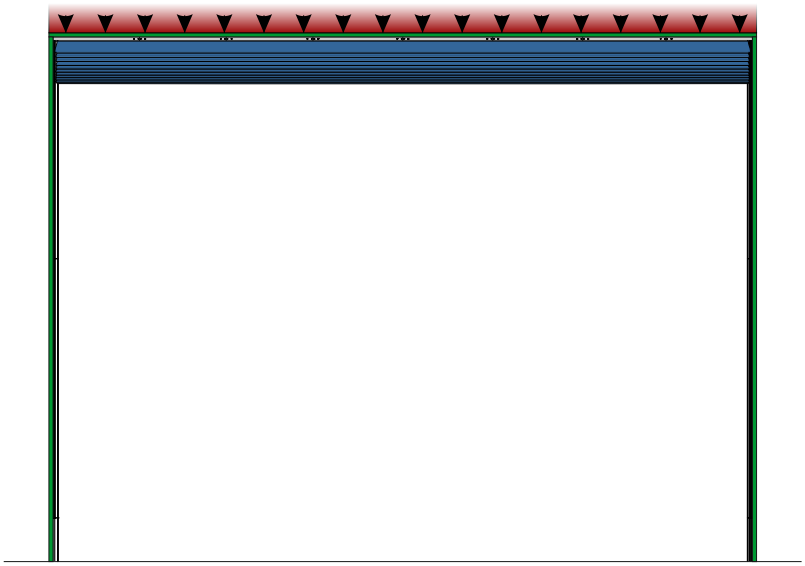
In case the door is closed or lifted up - the door's weight is evenly distributed across the upper door opening.



Closed

The building frame loading scheme – opened door

Opened door focuses concentrated load to side pulley and decreases evenly distributed loads to the building opening.



Open

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ABOUT BARDUVA COMPANY

Barduva was founded in 1996, the companys main activity is the manufacture of lifting doors. Continous improvement, production capacity expansions, modern technology and skilled workers efforts provide an opportunity to introduce our product - hangar door BARDUVA.
This is modern, safe, reliable and economically attractive hangar doors. Designed using modern technologies, long-term manufacturing and installation experience, using only quality materials. While working on complex construction projects, our skilled engineers work in close cooperation with our and customers company employees.
Our competent experts are always ready to advice construction project managers, foremen, customers, how to avoid mistakes during the construction and operation of the doors.

The main levers of our business - quality, professionalism and integrity.

We are always ready to answer your questions and provide necessary drawings to ensure that hangar doors **BARDUVA** would suit your new or renovated building.
We pursue customer satisfaction and long-term partnership while ensuring product reliability and quality at each design, technology development, product and service chain. We care about our reputation.
The main levers of our business - quality, professionalism and integrity. We try to do so, that company's customers, partners and employes would feel the goodwill and projects would meet time and quality requirements.
BARDUVA efficiency of activity leads to a responsible and professional team, which is not afraid to take greater responsibilities in the implementation of interesting and challenging projects, which requires constant look for a new ideas and new solutions.
While living today, we continuously thinking about tomorow, because we know that the success belongs to those, who best predicts the needs of future consumers.
We love challenges. We are ready to fulfill customer orders more quickly than others and to carry out such orders, the others can not.
Periodic training of personel, equipment and tool monitoring, verification and other procedures must ensure product compliance with the requirements of the EU products.

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