

**FRONT SECURITY BV**

is one of the main producers of shutters and folding gates in The Netherlands. We are experienced in developing customized shutters (according to the conditions of our costumers). Our Research and Development Department uses the most advanced products.

# Transparent Safety Shutters for Passenger Boarding Bridges

**Characteristics:**

- Excellent safety for the operator
- Protection against all kinds of weather and noise
- Brings more light into the bridge-head



## FULL TRANSPARENT LATERAL CURTAIN

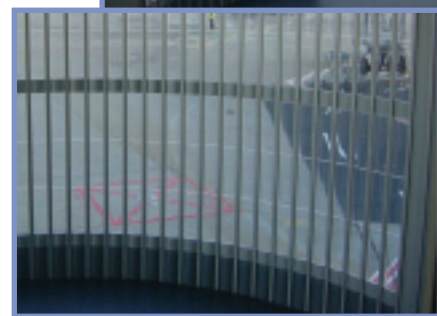
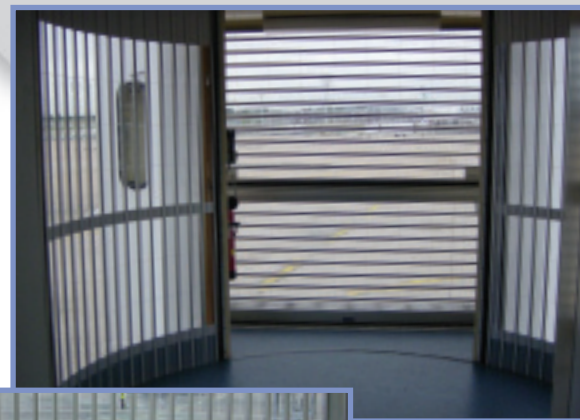


### FULL TRANSPARENT LATERAL CURTAIN

The Full Transparent Lateral Curtain has been designed as a safety device as well as a beautiful design feature.

The usual problem with other Passenger Boarding Bridges is the miserable sight the operator has when the bridge is driven towards or away from the airplane. The operator is unable to see what happens outside the bridge.

Our new design, which is made of materials we already used for the Front Shutters, will easily fit into the existing bridge as a replacement of the old system.



### TECHNICAL SPECIFICATIONS:

*The shutters are basically constructed from aluminium and polycarbonate. For the hinges we use high quality extruded and anodized aluminium. The see-through windows are made of polycarbonate, named Durolon® VR 2200, with special additives which protect against chemical solutions and UV stabilizer. After several years the light transmittance of the window will be 90% of the original value (89%). Also the guides and the enclosure are made of light grey coated aluminium.*



### FULL TRANSPARENT FRONT SHUTTER

This shutter is designed as a replacement of the existing shutter of door. It makes sure the operator has a clear view of what happens around and in front of him. Now the operator has the possibility to wait until the last moment before he opens the shutter. During the process, the operator will be well protected against all weather conditions.

## FULL TRANSPARENT FRONT SHUTTER

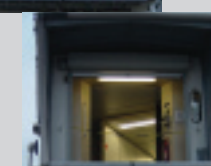
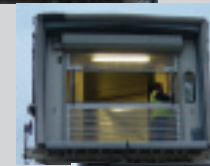


- The use of Transparent Shutters for your Passenger Boarding Bridges means:*
- EXCELLENT SAFETY FOR THE OPERATOR DURING THE INSTALLATION PROCESS
  - PROTECTION AGAINST ALL KINDS OF WEATHER AND NOISE
  - BRINGS MORE LIGHT INTO THE BRIDGE-HEAD

### FULL TRANSPARENT SEQUENTIAL OPENING SHUTTER

The Front Sequential Opening Shutter has been developed in coöperation with the Technical Department of Aeroport de Paris, ADP. The shutter consists of two parts connected with firm straps, and opens in two stages. At first, when the operator opens the upper part of the curtain, the lower part remains on its place. During the movement of the bridge towards the plane, the lower part of the curtain functions as a safety barrier. When the bridge is close enough to the plane, the lower part can easily be opened and the passengers can come trough.

The shutter is equipped with safety devices that prevent any pinching of feet, hands and fingers when the shutter is opened and closed. We can also supply the shutter with an automatic control unit with only two buttons for full control of all functions. Ask for details.



### FULL TRANSPARENT SEQUENTIAL OPENING SHUTTER



APPLICATION APPROVED BY THE FRENCH ORGANISATION FOR SAFETY AND HEALTH AT WORK (CRAMIF)



BUREAU VERITAS  
NF P08-301  
APPROVED