



**DYNACO**  
High Performance Doors



# DYNACO D-311 CLEANROOM

**Gravity  
driven**

low friction technology



inside door

# DYNACO D-311 CLEANROOM

The Dynaco D-311-Cleanroom LF is designed for inside applications requiring a limitation of leak flow and is ideal for interlocks. Its perfect sealing properties provide environmental control and protect your environment against drafts, dust and dirt.

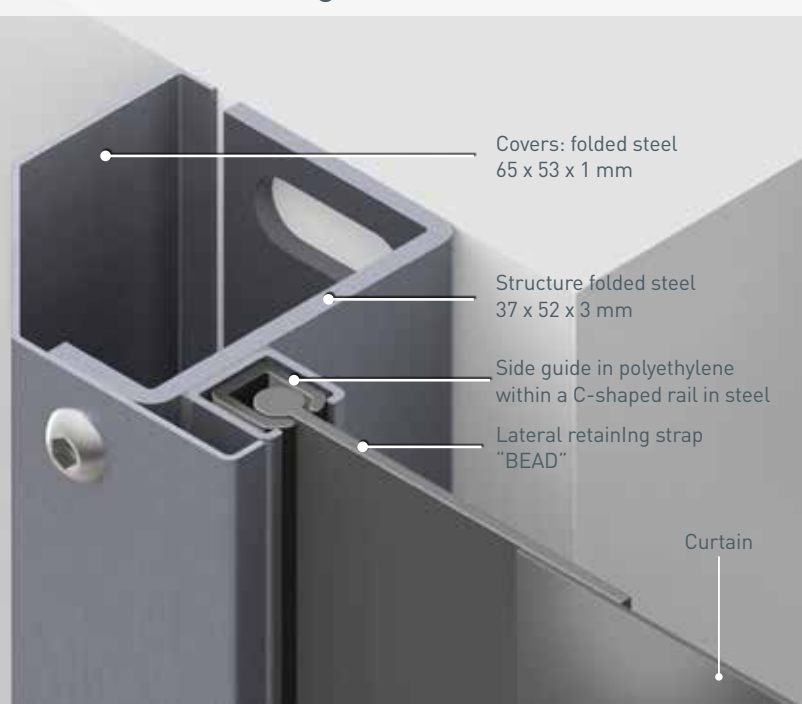
The patented «LF» (Low Friction) technology, combined with a frequency inverter driven motor, assures a smooth and silent operation for more user comfort.

- **OPENING SPEED:**  
Up to 2,0 m/s.
- **PERFECT SEAL:**  
Patented side guides and «BEAD» technology limit leak flow and allow energy savings.
- **SELF-REINSERTING WITHOUT INTERVENTION:**  
The curtain automatically reinserts itself when dislodged. No repair costs, no production down time.
- **USER SAFETY:**  
Flexible curtain without rigid elements.
- **COMFORT OF USE:**  
DYNACO wireless detector at the bottom.
- **ADVANCED DRIVE:**  
Frequency driven motor and encoder for smooth operation and reliability. Wearing elements are reduced to a minimum.
- **DYNALOGIC CONTROL BOX:**  
User-friendly control box with self-diagnosis.
- **CONFORM TO EN13241-1**

Pressure resistant



Low friction side guide



# Gravity driven

low friction technology



inside door

























## EN13241-1 STANDARDS

| Standard              | Ref.     | Test acc. | Results                                 |
|-----------------------|----------|-----------|---|
| Water permeability    | EN 12425 | EN 12489  | Class 2                                 |
| Wind load             | EN 12424 | EN 12444  | Class 1*                                |
| Wind permeability     | EN 12426 | EN 12427  | 3 (overpressure**)<br>1 (underpressure) |
| Safe openings         | EN 12453 | EN 12445  | Pass                                    |
| Mechanical resistance | EN 12604 | EN 12605  | Pass                                    |
| Unintended movements  | EN 12604 | EN 12605  | Pass                                    |
| Thermal transmittance | EN 12428 | EN 12428  | 6,02 W/m <sup>2</sup> K                 |
| Performance (cycles)  | EN 12604 | EN 12605  | 1.000.000                               |

\* Interior applications only

\*\* Valid for a door of 3500 x 3500mm

## CHARACTERISTICS

|   |  |                |   |               |   |                |   |              |   |             |   |               |   |              |   |               |   |
|---|--|----------------|---|---------------|---|----------------|---|--------------|---|-------------|---|---------------|---|--------------|---|---------------|---|
| <b>Max. dimensions</b>  | W 4.000 mm x H 4.000 mm  |                |   |               |   |                |   |              |   |             |   |               |   |              |   |               |   |
| <b>Opening speed</b><br><b>Closing speed</b>                        | up to 1,2 m/s (optional 2,0 m/s)<br>0,5 m/s  |                |   |               |   |                |   |              |   |             |   |               |   |              |   |               |   |
| <b>Structure</b>  | Folded steel 37 x 52 x 3 mm, galvanised before cutting and folding. Full covers standard.<br>Option: stainless steel   |                |   |               |   |                |   |              |   |             |   |               |   |              |   |               |   |
| <b>Drum</b>   | Steel - Ø 102 x 2 mm.  |                |   |               |   |                |   |              |   |             |   |               |   |              |   |               |   |
| <b>Side guides</b>  | Reinforced polyethylene (PE-UHMW1000)  |                |   |               |   |                |   |              |   |             |   |               |   |              |   |               |   |
| <b>Motor</b>  | 2 poles, without brake.<br>Power 0,75 kW.<br>IP rating: IP 65  |                |   |               |   |                |   |              |   |             |   |               |   |              |   |               |   |
| <b>Control box</b>  | DYNALOGIC provided with: Circuit breaker, general divider, adjustable timer, push button for opening and reset and emergency stop.<br>IP rating: IP 54.<br>Frequency inverter.   |                |   |               |   |                |   |              |   |             |   |               |   |              |   |               |   |
| <b>Standard detectors</b>   | Infrared barrier: 300 mm from the floor.<br>Wireless DYNACO detector (WDD)<br>DBD: correct unwinding detector  |                |   |               |   |                |   |              |   |             |   |               |   |              |   |               |   |
| <b>Power supply</b><br><b>Frequency</b>                             | Single phase 230 V - 14 A.<br>Frequency: 50-60 Hz  |                |   |               |   |                |   |              |   |             |   |               |   |              |   |               |   |
| <b>Advised operating temperature</b>                                | + 5 °C up to + 40 °C   |                |   |               |   |                |   |              |   |             |   |               |   |              |   |               |   |
| <b>Available colours</b><br>comparable with:                        | <table border="0"> <tbody> <tr> <td>Yellow RAL1003</td> <td></td> <td>Green RAL6005</td> <td></td> </tr> <tr> <td>Orange RAL2004</td> <td></td> <td>Grey RAL7035</td> <td></td> </tr> <tr> <td>Red RAL3000</td> <td></td> <td>White RAL9010</td> <td></td> </tr> <tr> <td>Blue RAL5002</td> <td></td> <td>Black RAL9005</td> <td></td> </tr> </tbody> </table> | Yellow RAL1003 |  | Green RAL6005 |  | Orange RAL2004 |  | Grey RAL7035 |  | Red RAL3000 |  | White RAL9010 |  | Blue RAL5002 |  | Black RAL9005 |  |
| Yellow RAL1003  |   | Green RAL6005  |  |               |   |                |   |              |   |             |   |               |   |              |   |               |   |
| Orange RAL2004  |   | Grey RAL7035   |  |               |   |                |   |              |   |             |   |               |   |              |   |               |   |
| Red RAL3000   |   | White RAL9010  |  |               |   |                |   |              |   |             |   |               |   |              |   |               |   |
| Blue RAL5002  |   | Black RAL9005  |  |               |   |                |   |              |   |             |   |               |   |              |   |               |   |
| [Actual colours may deviate. Colour samples available upon request] |  |                |   |               |   |                |   |              |   |             |   |               |   |              |   |               |   |

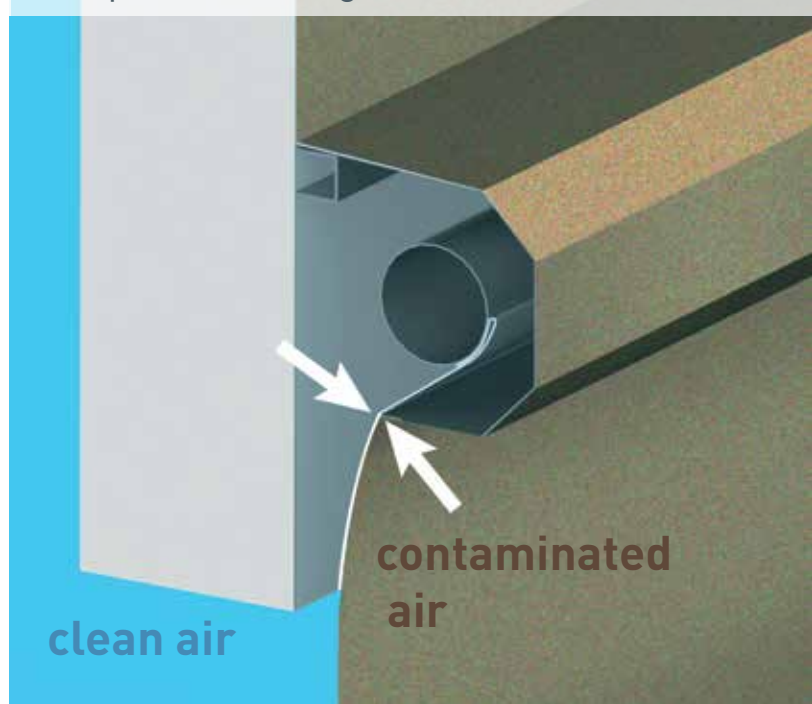
\*\* Overpressure - underpressure

overpressure

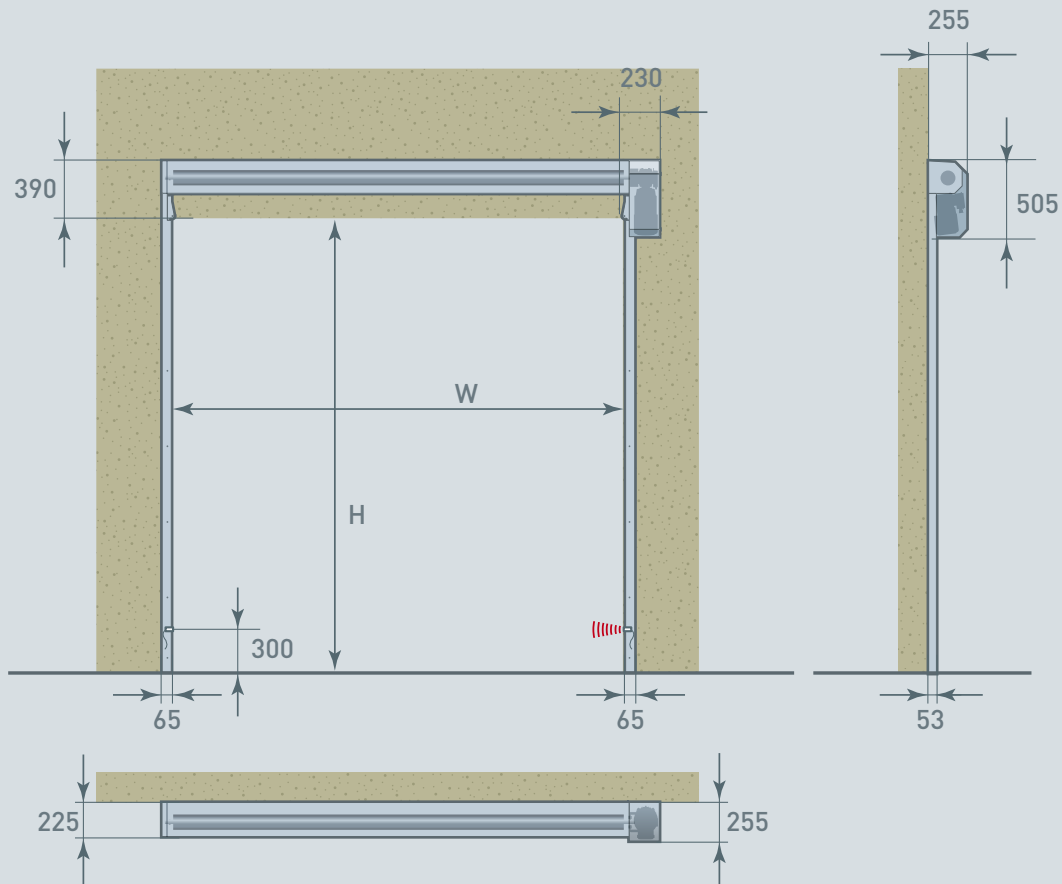
underpressure



Improved sealing



## Dimensions and installation requirements Dynaco D-311 Cleanroom



All indicated dimensions are based on exact width and height dimensions only. The space necessary for mounting and maintenance has to be provided.

REMARK: Based on the risk analysis of the environment, extra push buttons, detectors and covers might be required.



ENTREMATIc BELGIUM NV  
Waverstraat 21  
B-9310 Moorsel-Aalst (Belgium)  
Tel. +32 53 72 98 98  
Fax. +32 53 72 98 50  
info.dynaco.eu@entrematic.com  
www.dynacodoor.com

### About Dynaco

Founded in 1987, the Dynaco brand has a strong heritage and a wealth of expertise in high performance doors. Dynaco is committed to achieving excellence in quality and performance through a certified and dedicated network of partners, providing outstanding service to customers worldwide. Furthermore we trust our USA division and our licensed partners in Russia, Japan, China, Vietnam and Brazil to deliver on our customer promises. Dynaco is part of Entrematic—the home to some of the world's most innovative and leading brands within the entrance automation industry. The comprehensive range of product brands includes Ditec, Normstahl and em/Entrematic.