

INSTALLATION AND MAINTENANCE MANUAL

Cambronero Industrias Metálicas, S.A.

Calle Alaún, 20, Plataforma Logística de Zaragoza (PLAZA)

50197 Spain



Dpto. Calidad

Table of Contents

INTRODUCTION	2
TAKING DELIVERY OF THE MATERIAL.....	3
PAINT	4
PRIMER	4
FINAL COAT	4
INSTALLATION	5
SCREWED INSTALLATION.....	5
SINGLE-LEAF DOORS.....	5
DOUBLE-LEAF DOORS.....	7
EMBEDDED INSTALLATION.....	10
VERIFICATIONS	10
MODIFICATIONS TO THE DOORS.....	10
TROUBLESHOOTING.....	10
INAPPROPRIATE USE.....	10
EVACUATION AND FIRE SAFETY	13
GENERAL TERMS AND CONDITIONS OF THE GUARANTEE PERIOD	13
GUARANTEE EXCLUSIONS.....	14
MAINTENANCE.....	15
RECOMMENDATIONS	17
MAINTENANCE LOG.....	18

INTRODUCTION

Follow this maintenance and instruction manual to guarantee the safety of people and the premises. CIMESA doors can only be installed and maintained by qualified technicians. Please keep this manual.



TAKING DELIVERY OF THE MATERIAL

- Make sure that you have the right unloading equipment to handle our product.



- If you are not going to install our doors at the time of delivery, make sure to protect them from the elements, especially sun, humidity, rain, etc.
 - Do not remove the transport and packing material.
 - Do not remove the separators between doors.
 - Do not remove the hardware that comes with the door from its packaging.
 - If condensation forms, you will need to clean all the components and keep them in a dry, sheltered environment. Lack of ventilation in conjunction with humidity can cause the door's interior insulation to deteriorate.



Consequences of improper storage include rippled/warped sheet metal, bulging on the door, and difficulty fitting hardware to the door. CIMESA will not be held responsible for defects caused by improper storage.

- Do not, under any circumstances, stack anything on top of the crate.
- Use the necessary tools (such as a hammer and crowbar) to open the crate containing our product. Remove the lid first, followed by the sides.



- Check the contents against the delivery note. If anything is missing, indicate this on the delivery note and send us a copy of it as soon as possible.
- Inspect the packaging for possible defects or tampering and indicate them on the delivery note, sending us a copy of the same with photos of the damage as possible.



If you believe the product is defective, do not install it. Contact us as soon as possible and CIMESA will advise you on the best solution to the problem.

PAINT

PRIMER

- The final coat of paint must be applied over primer for optimum protection against rust.
- Exterior doors or those exposed to habitually humid or salty environments require paint with a level of corrosion resistance appropriate to such conditions.
- If you decide not to paint over the primer, rust marks may appear on the door.
- Do not paint over door accessories or hardware. Paint can compromise the operation of mechanical elements such as locks, closer springs, electric strikes, hinge bearings, etc.



CIMESA will not be held responsible for mechanical, electrical or moving parts, such as locks, electric strikes, bolts, closer springs, bearings, etc., that have been painted over.



CIMESA takes no responsibility for rust spots that may appear on doors supplied with primer. The final paint applied over the primer must be appropriate to the environment in which the door is installed.

FINAL COAT

- Protect the door adequately while applying the paint.
- Avoid friction with floors and walls.
- Do not rest the leaf directly on the floor or against a wall.
- Protect the door from flying sparks to avoid flaws in the finish.
- If you order a door with the final coat of paint applied and notice that the paint has been damaged in transit, indicate this on the delivery note, save a copy and notify us as soon as possible.



No paint can withstand poor transport or installation. CIMESA will not be held responsible for damage due to these reasons.

INSTALLATION

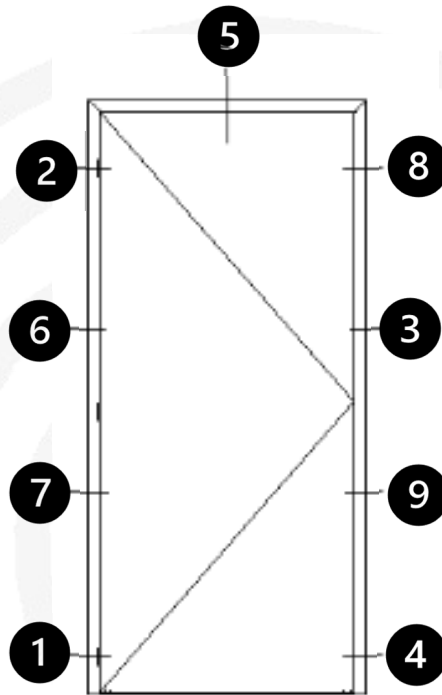
SCREWED INSTALLATION



The wall or structure must be firmly secured and anchored so that the surrounding masonry and frame will not move when the door is closed.

SINGLE-LEAF DOORS

fig. 1/ order of screws



- Check that the holes are properly aligned to fit the door in place.
- Make sure that the door opens in the right direction and that there are no obstacles in the leaf's path.
- On the single-leaf door, remove the jamb and prop it up in a vertical position, protecting the edges from possible dents or scratches.
- Fit the jamb inside the doorframe, making sure that it is perfectly plumb and level.
- Once the jamb is plumb, adjust the level of the hinge pins with screws 1 and 2 (see fig. 1). To keep the jamb from flexing, use shims to correct any gaps between jamb and doorframe.
- Lubricate the hinge pin and check that the bearings are on the leaf welded to the jamb.
- Gently hang the door on the jamb hinge.

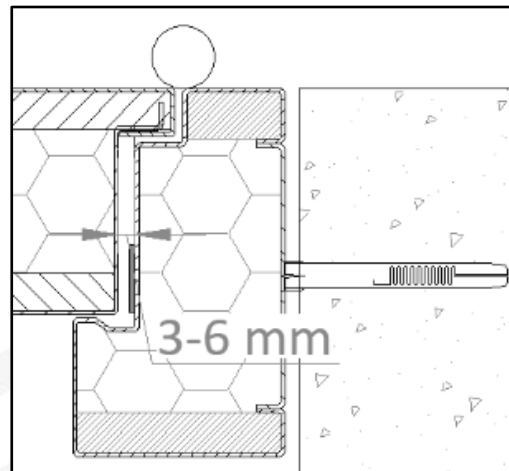


**MAKE SURE TO LUBRICATE THE HINGE
DO NOT USE THE HANDLE, PANIC BAR OR OTHER HARDWARE TO HELP YOU LIFT THE LEAF
GENTLY REST THE LEAF ON THE HINGE BEARING**

- Once the door is hung, close it gently, letting the leaf's weight adjust the closing mechanism.

- Verify that the gap between leaf and jamb is between 3 and 6 mm (see fig. 2).

fig. 2/ Leaf-jamb gap



- Continue to screw in the jamb, following the order indicated in fig. 1. Place additional shims between the jamb and the doorframe to prevent flexing of the former.
- If the door has a threshold plate, screw it to the floor once the jamb is completely screwed in and levelled.
- Check the clear opening width at the height of the upper hinge, latch(es) and lower hinge. These should all measure the same. If not, adjust the screws in the jamb to make the opening width as even as possible.
- Open and close the door to verify that the gap between the leaf and the floor or the metal threshold is at least 6 mm (figs. 3 and 4).

fig. 3/ Leaf-threshold gap

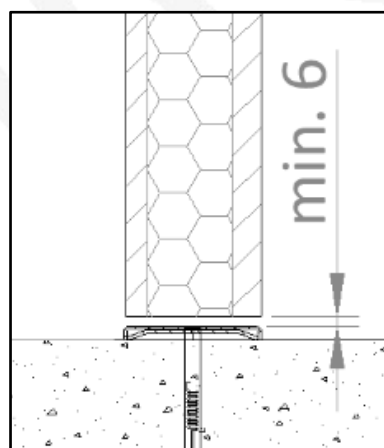
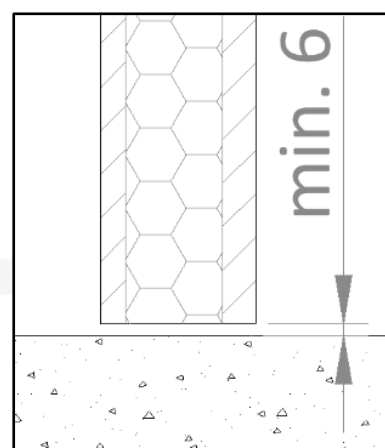


fig. 4/ Leaf-floor gap

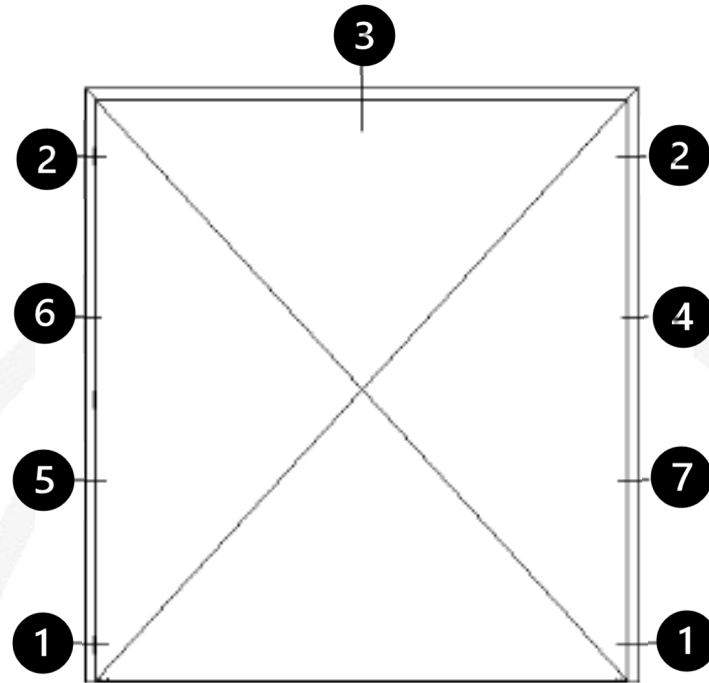


- Check the hardware to make sure it works properly and make any necessary adjustments to the closer spring (see the hardware instruction manual).
- In some cases, you may need to file down the bores for the lock or inner or outer latches for an optimal fit.

- Apply the intumescent seal so that it covers the screws in the jamb.

DOUBLE-LEAF DOORS

fig. 5/ Order of screws

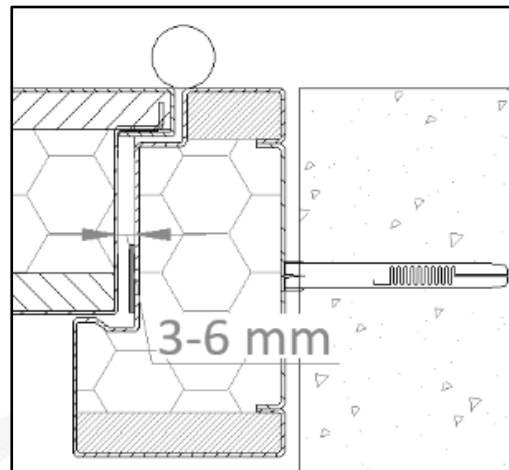


- Check that the holes are properly aligned to fit the door in place.
- Make sure that the door opens in the right direction and that there are no obstacles in the leaves' path.
- On a double-leaf door, remove the jamb from its packaging and prop it up in a vertical position, protecting the edges from possible dents or scratches.
- Fit the jamb inside the doorframe, making sure that it is perfectly plumb and level.
- Once the jamb is levelled, adjust the height of the hinge pins with screws 1 and 2 (see fig. 5). To keep the jamb from flexing, use shims to correct any gaps between jamb and doorframe.
- Lubricate the hinge pin and check that the bearings are on the leaf welded to the jamb.

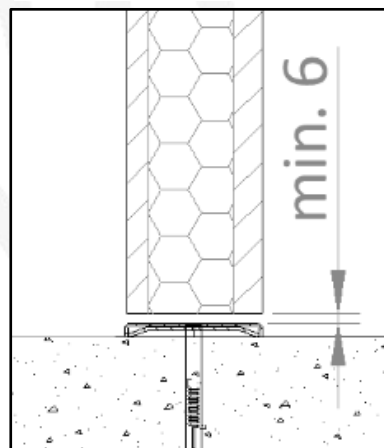
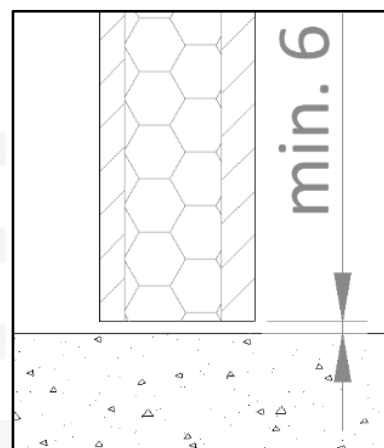


MAKE SURE TO LUBRICATE THE HINGE
DO NOT USE THE HANDLE, PANIC BAR OR OTHER HARDWARE TO HELP YOU LIFT THE LEAF
GENTLY REST THE LEAF ON THE HINGE BEARING

- Gently hang the inactive leaf on the hinges.
- Once the door is hung, close it gently, letting the leaf's weight adjust the closing mechanism.
- Gently hang the active door on the hinges.
- Check that the leaves open and close properly and that the active leaf closes correctly against the inactive leaf.
- Verify that the gap between leaf and jamb is between 3 and 6 mm (see fig. 6).

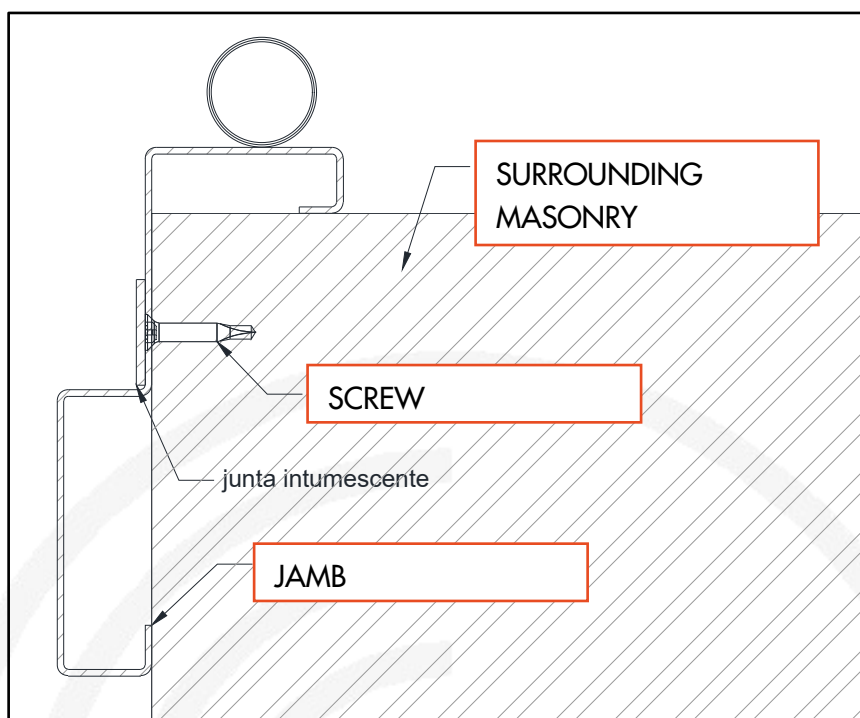
fig. 6/ Leaf-jamb gap

- Continue to screw in the jamb, following the order indicated in fig. 5. Place additional shims between the jamb and the doorframe to prevent flexing of the former.
- If the door has a threshold plate, screw it to the floor once the jamb is completely screwed in and levelled.
- Check the clear opening width at the height of the upper hinge, latch(es) and lower hinge. These should all measure the same. If not, adjust the screws in the jamb to make the opening width as even as possible.
- Open and close the door to verify that the gap between the leaf and the floor or the threshold is at least 6 mm (figs. 7 and 8).

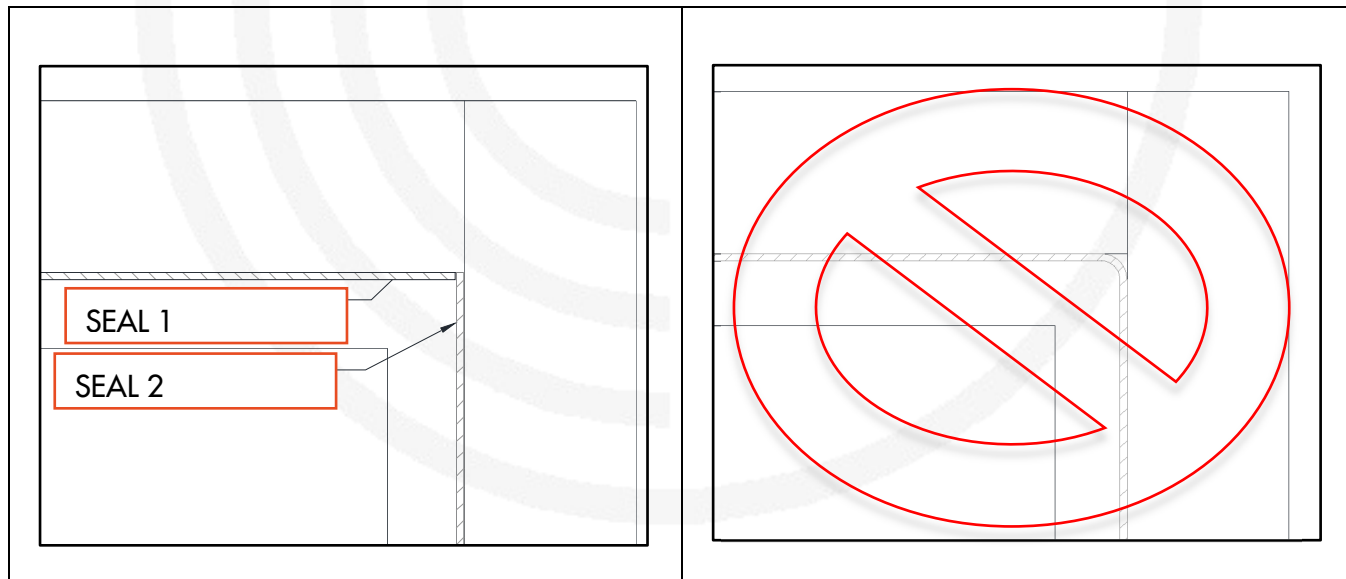
fig. 7/ Leaf-threshold gap*fig. 8/ Leaf-floor gap*

- Check the hardware to make sure it works properly and make any necessary adjustments to the closer spring (see the hardware instruction manual).
- In some cases, you may need to file down the bores for the lock or inner or outer latches for an optimal fit.

- For RF doors, apply the intumescent seal so that it covers the screws in the jamb, as shown below. Clean the installation area to remove any dust particles.



WARNING! DO NOT APPLY THE PERIMETER SEAL IN ONE CONTINUOUS STRIP! CUT THE INTUMESCENT SEAL TO FIT EACH OF THE 3 SIDES OF THE FRAME



EMBEDDED INSTALLATION

- Unpack the jamb anchors and check the identifying labels.
- If the jamb is in two pieces, connect the two right angles that form the jamb to the centre of the header by means of the tongue-and-groove tabs. Weld the header joint and check the measurements.
- Insert the structure in the opening. Do not remove the bottom spacer until installation is complete.
- Once the structure is in place, bend the jamb anchors outwards to facilitate attachment to the masonry.
- Make sure the jamb is plumb and level, and fill the gap with mortar/cement. Do not open the door until the mortar/cement is fully cured.
- If the hinge side is not securely fastened, use the 6-8 mm rods on the lower part of the jamb to keep the hinge pins from twisting round.

VERIFICATIONS

- Check the clear opening width, using the measurements at the height of the hinges and latch as your reference. These three measurements should be similar.
- Check that the door is firmly anchored to the surrounding structure.
- Remove gap wedges and stops.
- There should be a gap of at least 3–6 mm between jamb and leaf (figs. 2 and 6).
- Make sure there is no friction with the floor or the rest of the surrounding structure.
- Check for points of resistance between leaf and jamb; avoiding inserting wedges near the hinges as this may damage or break them.
- Check that the Intumex seal is properly placed and not deteriorated.
- Make sure the hinges are well lubricated and swivel properly.
- Adjust the closer spring so that the door closes slowly and softly.
- Check that the hardware, closer spring, etc., work properly.

MODIFICATIONS TO THE DOORS



Any modification made to the doors will affect the validity of our product's certificate and guarantee. If you have to make any changes to a door, you must inform CIMESA first and have them done by qualified experts.

TROUBLESHOOTING

Always use a metre stick and level to check that the jamb is level with the opening and the diagonals. If the jamb is not level, unscrew it and begin levelling at the misaligned part or parts of the jamb.



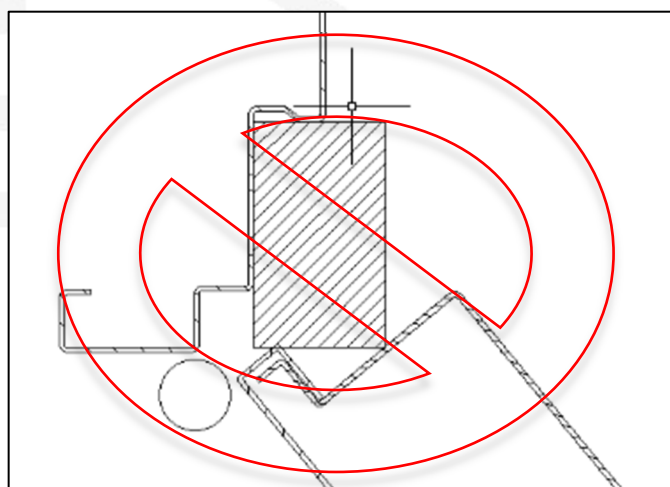
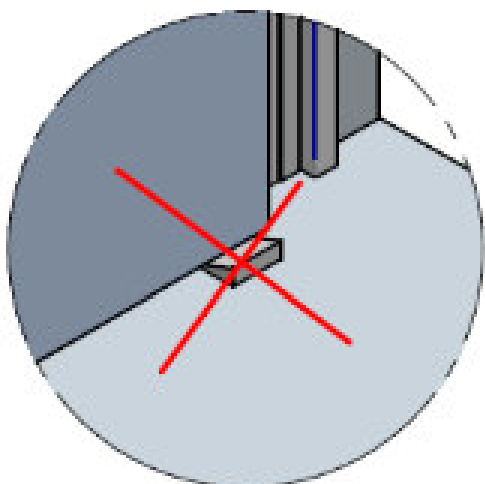
The doors are tested at CIMESA before shipment. This test guarantees that the hinges are properly aligned, and that the door will work correctly when levelled and plumbed.

INAPPROPRIATE USE



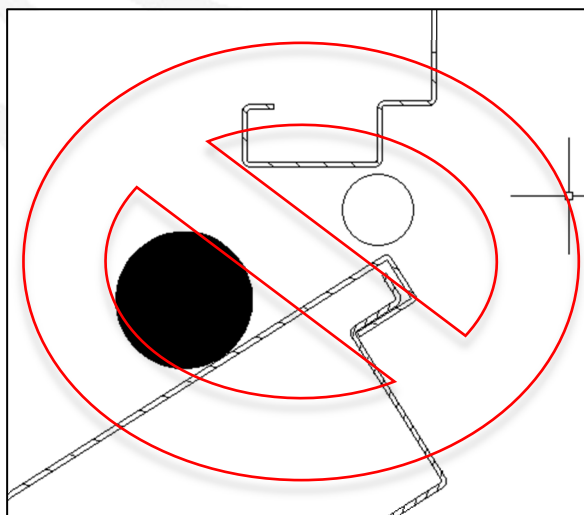
**CIMESA WILL NOT BE HELD RESPONSIBLE FOR MALFUNCTIONS
CAUSED BY INAPPROPRIATE USE.
INAPPROPRIATE USE OF THE DOORS WILL COMPROMISE THE SAFETY
OF THE INSTALLATION**

- **DO NOT USE ANYTHING TO PROP THE DOOR OPEN:** CIMESA will not be held responsible for any damage to our doors caused by this bad practice, which in addition to violating fire safety regulations will result in defects to the leaf support elements.



E

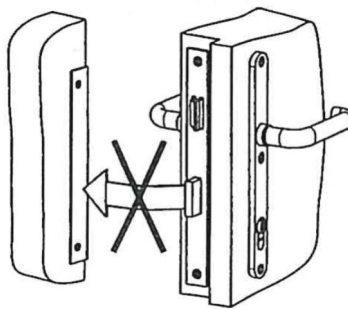
- **DO NOT PLACE DOOR BUMPERS NEAR THE HINGES:** bumpers must be placed as far as possible from the hinges.



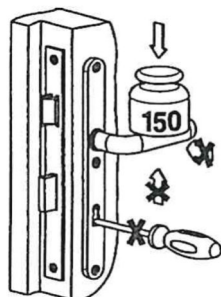
- AVOID ROUGH USE AND SLAMMING



- WHEN CLOSING THE LEAF, THE LOCK BOLT MUST BE SHOT BACK

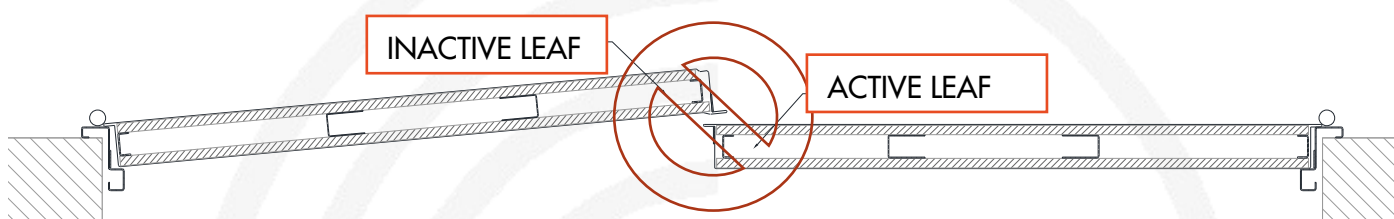


- DO NOT PULL UP ON THE HANDLE OR PANIC BAR
- DO NOT ATTEMPT TO MANIPULATE THE LOCK CYLINDER WITH TOOLS OR ANYTHING OTHER THAN THE KEY



- DO NOT USE THE FLUSH BOLTS ON THE INSIDE OF THE LEAF TO PROP THE DOOR OPEN
- DO NOT PULL ON PARTS OF THE DOOR NOT DESIGNED FOR THIS PURPOSE (DO NOT PULL ON THE BOLT LEVERS TO OPEN THE INACTIVE LEAF)

- DO NOT PUSH PARTS OF THE DOOR NOT DESIGNED FOR THIS PURPOSE (DO NOT PUSH THE BOLT LEVERS TO OPEN THE INACTIVE LEAF)
- IF A DOOR HAS A CLOSER SPRING, DO NOT PUSH THE DOOR CLOSED; THE CLOSER SPRING SHOULD CLOSE THE LEAF IN THE PROPER TIME AND MANNER
- DO NOT SHOVE THE DOOR TO MAKE IT CLOSE FASTER
- DO NOT SHOVE THE DOOR OPEN
- DO NOT USE GOODS TO PUSH THE DOOR OPEN
- DO NOT LET THE DOOR HIT THE WALL AFTER OPENING
- IF THE CLOSER SPRING DOES NOT CLOSE THE LEAF PROPERLY, DO NOT PUSH THE LEAF CLOSED; ADJUST THE CLOSER SPRING SO THAT THE DOOR WORKS PROPERLY
- ON DOUBLE-LEAF DOORS, DO NOT PROP THE DOORS OPEN BY CLOSING THE ACTIVE LEAF FIRST AND THE INACTIVE LEAF SECOND



EVACUATION AND FIRE SAFETY



Do not block any doors located on evacuation routes. Blocking doors on evacuation routes endangers the building's occupants.



The use of hold-open devices that do not comply with standard EN-1155 will compromise the premises' fire compartmentation system, endanger occupants and hinder the efforts of emergency responders in the event of a fire.

GENERAL TERMS AND CONDITIONS OF THE GUARANTEE PERIOD

- The doors must periodically undergo preventive maintenance work and lubrication of their hinges* and moving parts (in case of doubt, consult the Maintenance Manual or the manufacturer).

- Do not use elements not provided by the manufacturer (shims, wedges, stops, etc.) to hold the door open.
- It is essential to make sure that automatic double-leaf doors are perfectly anchored at the bottom.
- The doors should not be slammed or roughly closed.

*If your door has concealed hinges, ask CIMEA about specific installation and maintenance recommendations.

GUARANTEE EXCLUSIONS

This guarantee will not cover the following:

- Doors that have not received the necessary maintenance work.
- Doors that have been manipulated by unqualified individuals.
- Damage due to inappropriate use.
- Damage caused by forcing closer springs (for instance, pushing the door closed).
- Damage caused by inappropriate use of hardware.
- Breakage caused by slamming or blows.
- Doors with pieces, hardware or any accessories not installed by the manufacturer or installed without the manufacturer's express consent.
- Any defective door installed without first consulting CIMEA.
- Problems derived from defective installation not performed by CIMEA technicians.
- Problems derived from inappropriate storage.
- Problems derived from a weak or poorly made surrounding structure.
- Problems derived from a floor that is poorly made, uneven or presents protuberances.
- Defects in the finish of the doors not indicated on the delivery note and/or not notified before installation.
- Missing material not indicated on the delivery note and/or not notified before installation.

MAINTENANCE

Maintenance work on our doors can only be performed by qualified technicians with professional locksmith training.

AVERAGE USE: 15,000 open/close cycles per year.

HEAVY USE: 30,000 open/close cycles per year.

ACTION	Average Use	Heavy Use
1) Doors		
Inspect the general condition of the leaf and jamb	Biannually	Quarterly
Check the leaf and jamb for mechanical damage and/or corrosion	Biannually	Quarterly
Make sure there is no sagging or warping which might prevent correct closure	Biannually	Quarterly
2) Gaps		
Check outer and central gaps and adjust if necessary	Biannually	Quarterly
3) Hinges	Biannually	Quarterly
3.1) Single-axis hinges	Biannually	Quarterly
Check anchoring	Biannually	Quarterly
Lubricate pins	Biannually	Quarterly
3.2) TECTUS concealed hinges	Biannually	Quarterly
Check anchoring	Quarterly	Quarterly
Check hinge adjustment on leaf and jamb	Quarterly	Quarterly
4) Seals	Biannually	Quarterly
Inspect the condition of the intumescent seals	Biannually	Quarterly
Inspect the condition of the cold smoke seals	Biannually	Quarterly
5) Latches		
Inspect the anchoring and operation of the latch mechanism	Quarterly	Quarterly
Lubricate the latch handle and bolt	Quarterly	Quarterly
Check that the cylinder is working	Quarterly	Quarterly
Check that the flush bolts (double-leaf doors) are working	Quarterly	Quarterly
6) Closing mechanisms		
Check closing force and adjust if necessary	Biannually	Quarterly

ACTION	Average Use	Heavy Use
Check closing speed and adjust if necessary	Biannually	Quarterly
Check impact on closing and adjust if necessary	Biannually	Quarterly
Check the sequence selector (double-leaf doors) and adjust if necessary	Biannually	Quarterly
7) Handles		
Check anchoring and wear	Biannually	Quarterly
Verify that they work properly	Biannually	Quarterly
8) Panic bars		
Check anchoring and wear	Biannually	Quarterly
Check panic function	Biannually	Quarterly
9) Fire safety anchoring and closing systems		
Check the anchoring system	Quarterly	Quarterly
Verify that the electro-magnet / anchoring plate work properly	Quarterly	Quarterly
Check that the pushbutton is working	Quarterly	Quarterly
Check that the smoke detector and its alarm are working	Quarterly	Quarterly
Inspect the transformer	Quarterly	Quarterly
10) Glazing		
Check glass for breakage, cracks and/or general defects	Biannually	Quarterly
Check glass anchoring	Biannually	Quarterly
Check glass seals	Biannually	Quarterly
11) Electrical elements		
Inspect entry phone and adjust if necessary	Biannually	Quarterly
Inspect cable grommets (concealed and/or exposed)	Biannually	Quarterly
Check the security and surveillance system	Biannually	Quarterly
Check sensors and pushbuttons	Biannually	Quarterly

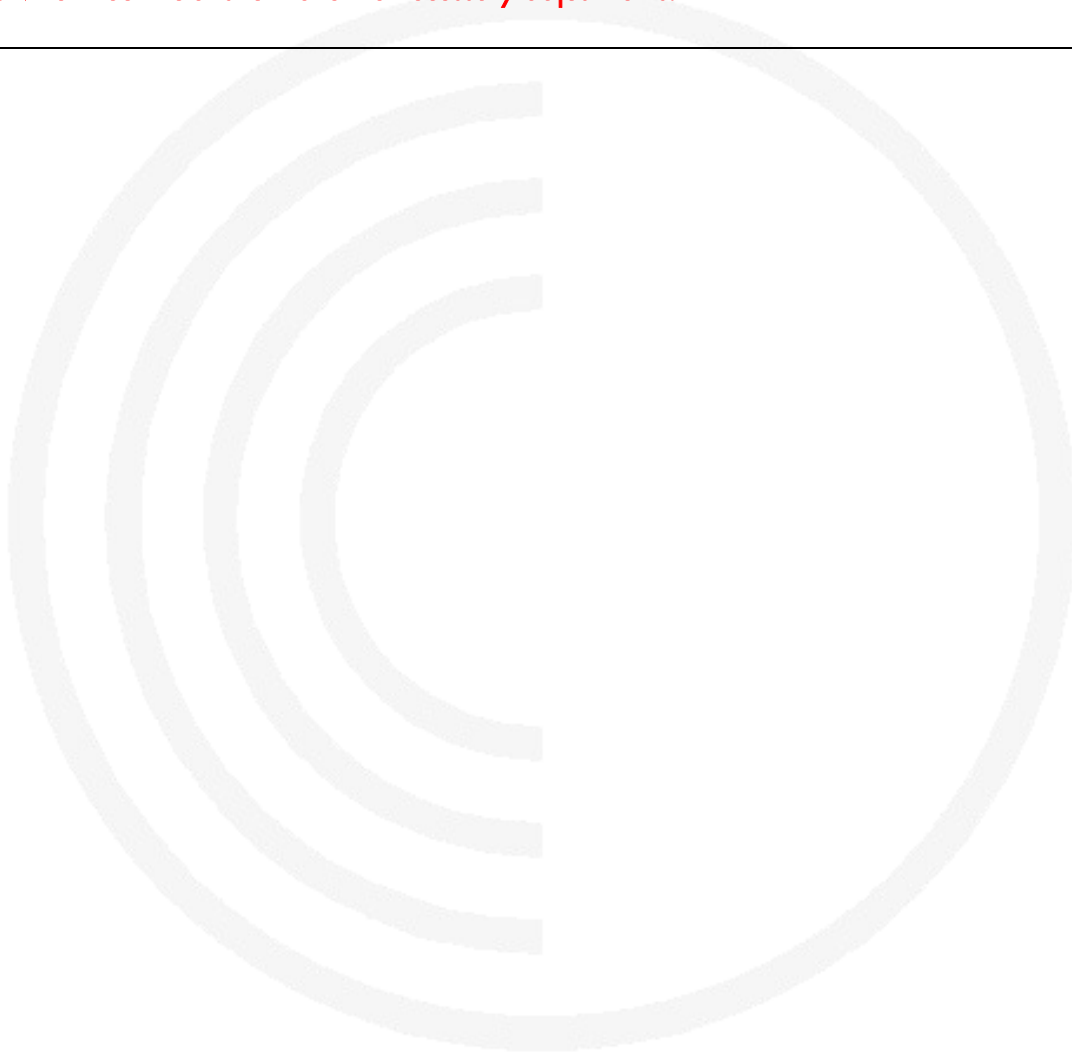
RECOMMENDATIONS

CIMESA recommends that our product be installed by CIMESA technicians.

CIMESA recommends that the product be inspected by CIMESA technicians immediately after installation, if installed by third parties.

CIMESA takes no responsibility for adjustments made after the doors are installed if their installation was not performed or supervised by our technicians.

If the client is not satisfied with how the doors have been installed by a third party, s/he may request the services of CIMESA technicians to make the necessary adjustments.



MAINTENANCE LOG

MAINTENANCE WORK FOR BOTH METAL AND FIRE DOORS

INSTRUCTIONS: MARK THE MAINTENANCE JOB COMPLETED WITH AN "X"

	Year:			
ACTION	Date:	Date:	Date:	Date:
1) Doors				
Inspect the general condition of the leaf and jamb				
Check the leaf and jamb for mechanical damage and/or corrosion				
Make sure there is no sagging or warping which might prevent correct closure				
2) Gaps				
Check outer and central gaps and adjust if necessary				
3) Hinges				
3.1) Single-axis hinges				
Check anchoring				
Lubricate pins				
3.2) TECTUS concealed hinges				
Check anchoring				
Check hinge adjustment on leaf and jamb				
4) Seals				
Inspect the condition of the intumescent seals				
Inspect the condition of the cold smoke seals				
5) Latches				
Inspect the anchoring and operation of the latch mechanism				
Lubricate the latch handle and bolt with a drop of lithium grease				
Check that the cylinder is working				
Check that the flush bolts (double-leaf doors) are working				
6) Closing mechanisms				
Check closing force and adjust if necessary				
Check closing speed and adjust if necessary				
Check impact on closing and adjust if necessary				
Check the sequence selector (double-leaf doors) and adjust if necessary				
7) Handles				
Check anchoring and wear				
Verify that they work properly				

8) Panic bars				
Check anchoring and wear				
Check panic function				
9) Fire safety anchoring and closing systems (SPECIFIC TO FIRE DOORS)				
Check the anchoring system				
Verify that the electro-magnet / anchoring plate work properly				
Check that the pushbutton is working				
Check that the smoke detector and its alarm are working				
Inspect the transformer				
10) Glazing				
Check glass for breakage, cracks and/or general defects				
Check glass anchoring				
Check glass seals				
11) Electrical elements				
Inspect entry phone and adjust if necessary, apply a drop of lithium grease				
Inspect cable grommets (concealed and/or exposed)				
Check the security and surveillance system				
Check sensors and pushbuttons				
MAINTENANCE PERFORMED BY: (Indicate maintenance company)				
SIGNATURE AND STAMP				
Remarks:				
Remember to record all preventive maintenance work by placing a sticker on the inside edge of the door indicating the date on which maintenance was performed.				

Keep a separate maintenance record for each door unit.