



Installation manual

ANTI-BURGLARY DOORS

Installation manual

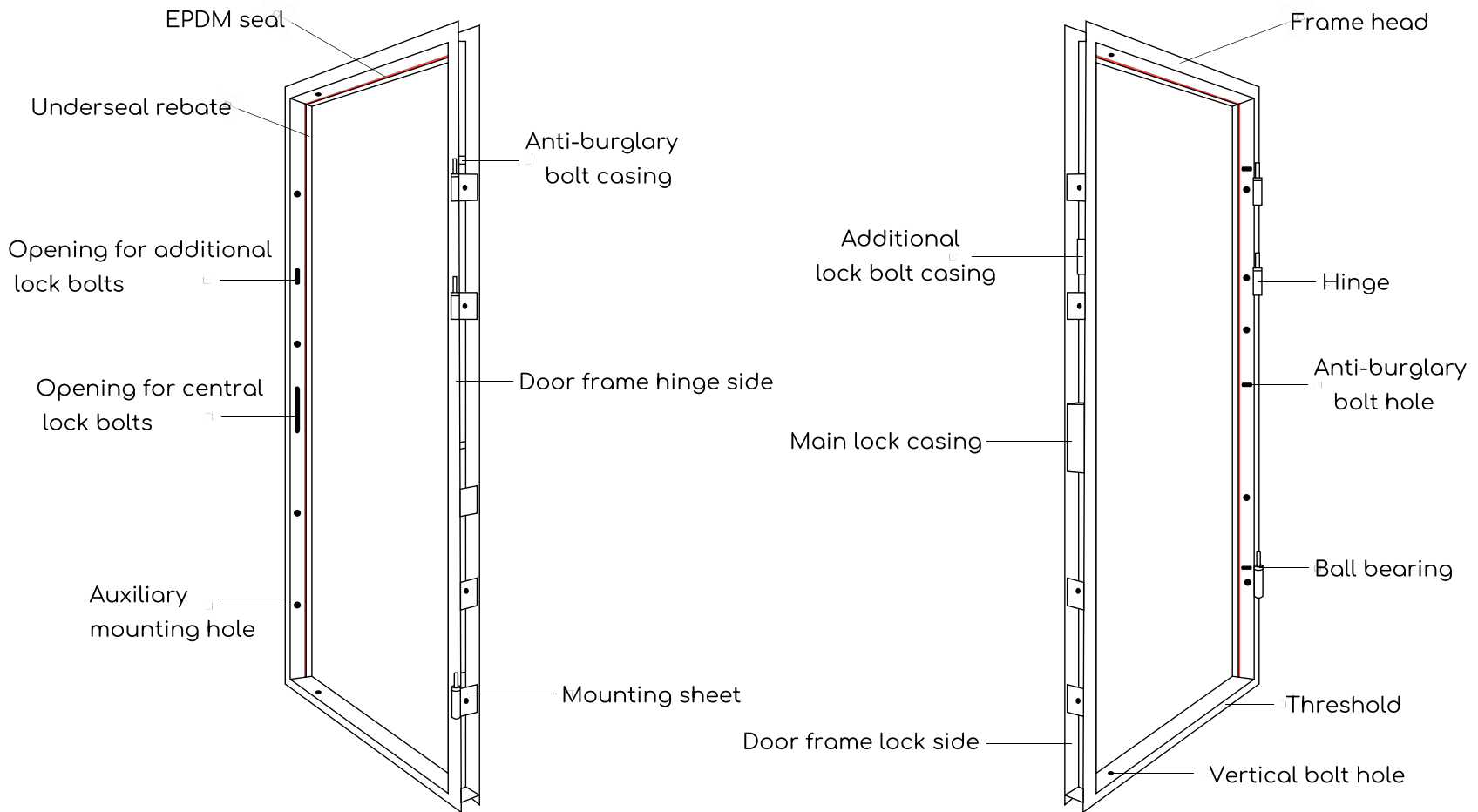
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Tools and materials

To install the anti-burglary DC3.1 door the following tools and materials should be provided:

1. Hammer drill with Ø12 carbide bit (Ø18 for DS3B doors)
2. Angle grinder
3. 220V Transformer welder
4. Mounting tools: hammer, woodcutting saw, spanner and screwdriver kits, nail puller, wood wedges, mallet, cutter, round and flat files, chisel, concrete funnel, seal strips, screw clamp, rubber mallet, expanding slats with turnbuckle, small trowel, long float
5. Measuring tools: level, slide caliper, tape measure
6. Building materials: lime cement mortar, polyurethane foam, plaster mortars, acrylic silicone, mortar paints
7. Protecting materials: protective films, non-flammable mats, self-adhesive protective tapes
8. Mounting rods 180mm long, Ø12 smooth rod (Ø18 for DS3B doors).

After delivering the door to the customer, hand over the keys in original packaging with the lead seal intact to the user or authorised person.



Installation procedure - Single door

Installation procedure - Solid channel iron door frame

1. Put the door and frame safely near the installation place. Place rubber, wooden or foamed polystyrene shims beneath the door leaf and frame to protect its lacquered bottom edges.
2. Measure the door opening and check the delivered door for compliance with the order.
3. Protect the place of installation with appropriate films and mats.
4. Prepare the cavity for installation:
 - remove the existing door with a crowbar and woodcutting saw for a wooden frame.
 - any masonry irregularities should be chiselled and made even.
 - the door opening should be approx. 20 mm wider and 20 mm taller than the door frame. Larger mounting gaps are also allowed but should be later filled appropriately.
5. Insert the door frame into the prepared wall opening.
6. Plumb the hinge side, level the threshold and the head. Then set the plumb of the lock side. Secure the frame with wooden wedges.
7. Check once again the setting of the hinge side and drill 180mm deep holes through provided openings in the door frame. Use 12mm drill bit. For DS3B door type use an 18mm drill bit.
8. There are two installation options, you can either use mounting rods (go to step 9) and weld it or use concrete anchors (step 15).

----- Mounting rods installation.

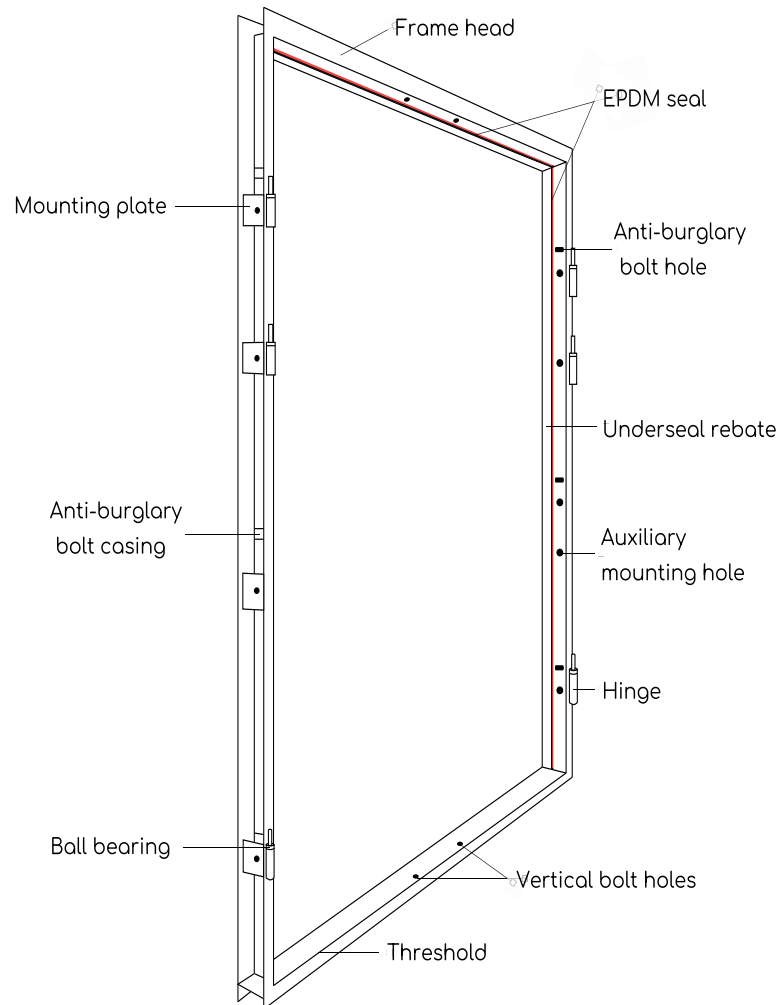
9. Install mounting rods using mallet and hammer. The rod should be entirely hidden in the door frame. The end of the rod should be flush with the mounting plate.
10. Tack weld it to the frame on the hinge side and top rod on the lock side (stronger welding is undesired as it could cause unnecessary frame heating, possible deformations and lacquer coating overheating).
11. Put the door leaf on the hinges, while checking if hinge pins are free of dirt and are coated with grease. If hinge pins are dirty, it is absolutely necessary to clean them by removing the dirt along with grease. Take care so that impurities, especially dust and chips produced when dismantling the old door frame and hole drilling do not penetrate into bearings. Then, hinge pins should be coated with thin a film of clean solid grease.
12. Align the frame on the lock side with the leaf by adjusting its position, striking relevant wedges. Make sure that the gap between the frame and door leaf is between 3 to 5 mm.
13. Open the door leaf, lock it with a wood wedge, tack weld it to the frame on the lock side (stronger welding is undesired as it could cause unnecessary frame heating, possible deformations and lacquer coating overheating).
14. Check the door frame for proper alignment and proper lock functionality.

----- Concrete anchors installation.

15. When mounting with Ø12 concrete anchors, placed between the outer edges of the frame and the masonry four wooden shims to avoid longitudinal deformations of the door frame during bolt tightening.
16. Tighten bolts on the hinge side and top rod on the lock side until a resistance is felt.

17. Put the door leaf on the hinges, while checking if hinge pins are free of dirt and are coated with grease. If hinge pins are dirty, it is absolutely necessary to clean them by removing the dirt along with grease. Take care so that impurities, especially dust and chips produced when dismantling the old door frame and hole drilling do not penetrate into bearings. Then, hinge pins should be coated with a thin film of clean solid grease.
18. Align the frame on the lock side with the leaf by adjusting its sitting, striking relevant wedges. Make sure that the gap between frame and door leaf is between 3 to 5 mm.
19. Open the door leaf, lock it with a wood wedge lock it with a wood wedge, tighten bolts on the lock side until a resistance is felt.
20. Check the door frame for proper alignment and proper lock functionality.

Installation procedure - Double door



1. Put the door and frame safely near the installation place. Place rubber, wooden or foamed polystyrene shims beneath the door leaf and frame to protect its lacquered bottom edges.
2. Measure the door opening and check the delivered door for compliance with the order.
3. Protect the place of installation with appropriate films and mats.
4. Prepare the cavity for installation:
 - remove existing door with a crowbar and woodcutting saw for wooden frame.
 - any masonry irregularities should be chiselled and made even.
 - the door opening should be approx. 20 mm wider and 20 mm taller than the door frame. Larger mounting gaps are also allowed but should be later filled appropriately.
5. Insert the door frame into the prepared wall opening.
6. Plumb the active leaf hinge side, level the threshold and the head. Then set the plumb of the passive leaf hinge side. Secure the frame with wooden wedges.

7. Check once again the setting of the hinge side and drill 180mm deep holes through provided openings in the door frame. Use 12mm drill bit. For DS3B door type use an 18mm drill bit.
8. There are two installation options, you can either use mounting rods (go to step 9) and weld it or use concrete anchors (step 15).

----- Mounting rods installation.

9. Install mounting rods using mallet and hammer. The rod should be entirely hidden in the door frame. The end of the rod should be flush with the mounting plate.
10. Tack weld rods to the frame on the active leaf hinge side and top rod on the passive leaf hinge side (stronger welding is undesired as it could cause unnecessary frame heating, possible deformations and lacquer coating overheating).
11. Put the door leaves on the hinges, while checking if hinge pins are free of dirt and are coated with grease. If hinge pins are dirty, it is absolutely necessary to clean them by removing dirt along with grease. Take care so that impurities, especially dust and chips produced when dismantling the old door frame and hole drilling do not penetrate into bearings. Then, hinge pins should be coated with thin film of clean solid grease.
12. Adjust the frame on the passive leaf side with by striking relevant wedges. Make sure that the gap between the meeting edge is between 3 to 5 mm.
13. Open door leaves, lock it with a wood wedge, tack weld rods to the frame on the passive leaf side (stronger welding is undesired as it could cause unnecessary frame heating, possible deformations and lacquer coating overheating).

14. Check the door frame for proper alignment and proper lock functionality.

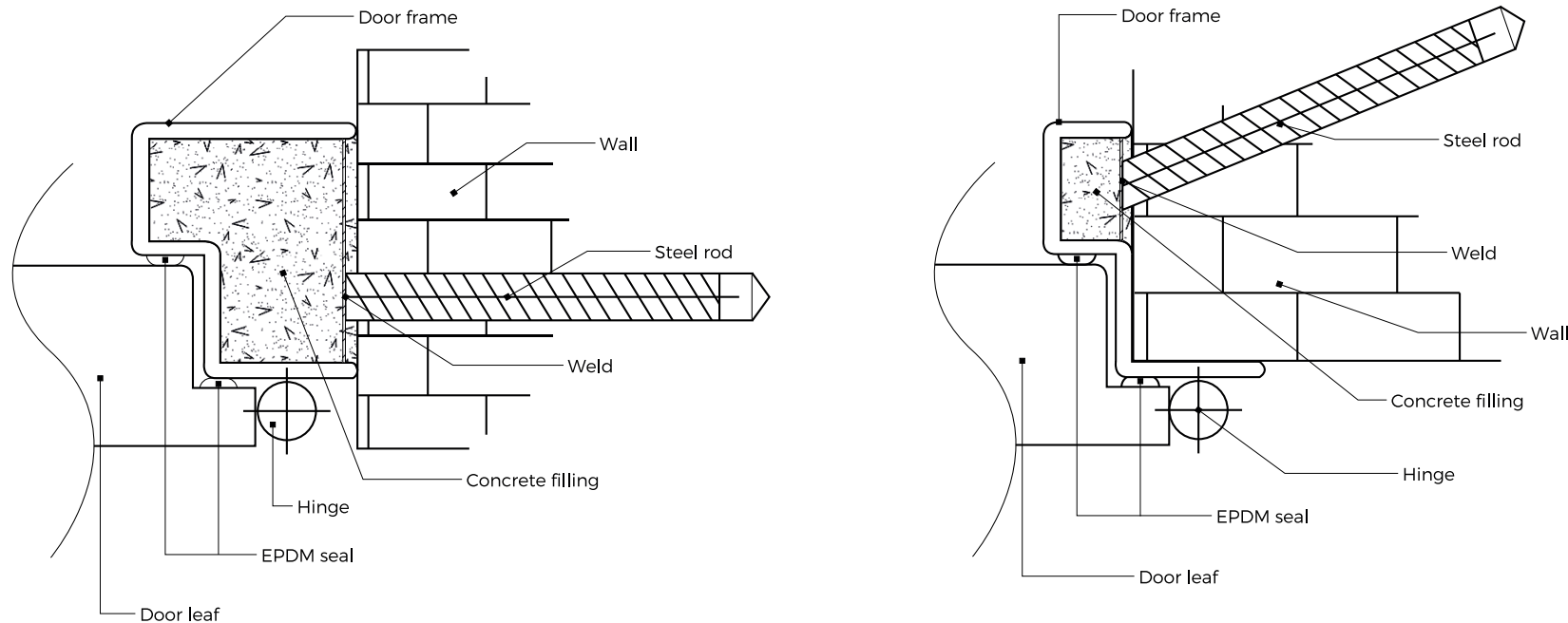
----- Concrete anchors installation.

15. When mounting with Ø12 concrete anchors, placed between the outer edges of the frame and the masonry four wooden shims to avoid longitudinal deformations of the door frame during bolt tightening.
16. Tighten bolts on the active leaf hinge side and top rod on the passive leaf hinge side until a resistance is felt.
17. Hang the door leaves on the hinges, while checking if hinge pins are free of dirt and are coated with grease. If hinge pins are dirty, it is absolutely necessary to clean them by removing dirt along with grease. Take care so that impurities, especially dust and chips produced when dismantling the old door frame and hole drilling do not penetrate into bearings. Then, hinge pins should be coated with thin film of clean solid grease.
18. Adjust the frame on the passive leaves side with by striking relevant wedges. Make sure that the gap between the meeting edge is between 3 to 5 mm.
19. Open door leaves, lock them with wood wedges, tighten bolts on the passive leaf side until a resistance is felt.
20. Check the door frame for proper alignment and proper lock functionality.

Door frame filling must be done for EI60, DS3B, BP6, BP7, DS3

To stiffen and reinforce the door frame it is necessary to fill it with a filling compound. Door frames mounted in facilities severely exposed to burglary or in rooms, where instructions specify the filling method especially the DS3 doors should be filled with concrete, while for outer entry doors (excluding DS3) door frame filling with polyurethane foam is recommended due to heat penetration that is very important for doors exposed directly to weather conditions.

Filling the door frame with concrete:



1. Prepare the door frame: Insert the plugs (provided along with door set) into mounting holes, tape the frame edges to the wall with a masking tape and protect the door leaf with a thick masking film.
2. The masonry where the door frame is mounted and the inner side of the frame must be cleaned and sprinkled lightly with water.
3. Place the formwork (wood strips with seals) on both side of the door frame by using screw clamps.
4. Prevent any “surface irregularities” resulting from dismantling of the existing door frame from concrete flowing out.
5. Mount expanding slats (by unscrewing turnbuckle), two pieces at least, dividing the frame height into three approximately equal sections. The struts should prevent the door frame from “bulging” under the weight of concrete filling the frame. Place a soft insulating material between the expanding slats and the frame. Instead of expanding slats with turnbuckle, plain wood slats cut to length can be used.
6. Prepare concrete mix that contains 40% of cement Class 350, and 10% of fast-setting cement with plasticizer and 50% of sand. The mix must be thoroughly mixed and aerated to avoid delamination after pouring, or a ready to use mortar shall be used.
7. Pour the mix by using the “funnel” through mounting holes. While pouring the mix the door frame and formwork should be “tapped” to ensure even distribution. The mix density should be chosen so that the mix can be easily poured through the funnel, while not trickling from under the formwork. Special care need to be taken when the installation is taking place in rooms that are still in use.
8. After about 90 to 120 minutes the formwork and expanding slats can be removed.
9. Once the concrete mortar is completely dried, finishing work should be carried out, with plaster, gypsum or other mortar depending on wall type, and according to the manufacturer’s instructions.

Final operations

1. Clean up the area of installation from any dirt resulting from installation work.
2. Up on request of the customer or an authorised person dispose the dismantled door.
3. At the presence of an authorised person perform a final check of proper frame and door installation and full lock functionality.
4. Instructions regarding general care and maintenance of doors and locks to be given to the customer.
5. Get the customer to sign the delivery docket. Fill up and hand over the service and warranty booklet to the customer.

Door care and maintenance

To ensure trouble-free and long-lasting operation of the door it is necessary to give you some guidance.

1. Door installation should be performed by a certified installer.
2. Doors should be protected against the bad weather conditions (snow, rain, etc.): install in a recess or a door canopy should be provided.
3. When you decide to paint the door yourself, the lock movable parts should be protected, but it is best to dismantle all the hardware.
4. Do not make unauthorised modifications as this leads to loss of warranty.
5. Do not bang the door (the risk of plaster finish breakage, damage to lock mechanisms and outer door liners).
6. Every six months grease hinges with machine oil or WD 40 lubricating and penetrating fluid or equivalent.
7. Open the door by pushing/pulling after fully pressing the handle.
8. When façade is painted or refurbished in the protected building or room the door should be unhinged for this period or thoroughly protected with a thick film. The door frame should be carefully secured with a masking tape.
9. Do not use the door handle while holding something in your hands, for example keys (the risk of damage to door or handle protective coating).
10. Protect the door against “breaking”, for example by mounting door stops or opening restrictors.
11. Most door locks and hardware is fixed by using screw joints. Vibrations occur during use, for instant when closing the door, that may cause screws to loosen - if so the loosened screws must be tightened

with common tools.

12. To clean the door do not use strong cleaning agents containing acids, solvents and other aggressive substances.
13. All the locks are designed and protected by their manufacturers, so that no lubrication is required, however after prolonged use it may occur that more force is required to turn the key and unpleasant noises are emitted from the lock movable parts. In such case WD 40 lubricating and penetrating fluid or equivalent should be used by applying it directly into the key hole or other movable parts, bolts, handle etc.
14. Keep the door and door frame clean and remove any dirt on a regular basis. Special attention should be given to cleanness of contact surface where the leaf and door frame meet and bolt holes. The bolt hole in the surface should be checked more often as it most exposed to dirt !!!

Warranty terms and conditions

1. The manufacturer grants a warranty for proper operation of the doors and locks (this does not apply to the customer's entrusted locks) for a period of 24 months from the date of:
 - a. door installation by an authorized installer
 - b. purchase subject to the correct installation of the door
2. In the event of defects arising during the warranty period caused by from the fault of the plant production, the manufacturer guarantees a free repair within 30 days working from the date of notification.(This does not apply to defects listed under 6 and 7).
 - Notification shall be made in writing: by email, fax or registered post.
 - The notification shall be accepted subject to presentation of the warranty book properly filled in and signed by the user.
3. The user shall be entitled to have the product replaced for a new one, free from defects, if:
 - four major repairs have been made during the warranty period and the product still has defects
 - an authorised serviceman considers that there has occurred a defect that is impossible to remove.
4. Subject to replacement shall only be the component of the product in which the defect occurred – if it is impossible to replace the relevant component or the entire product for an identical one, the component or product will be replaced for a product with parameters not lower than the parameters of the one subject to replacement.
5. The warranty shall not include deterioration of the quality of the product caused by the normal wear and tear process.
6. The warranty shall not include any defects resulting from:
 - inappropriate transport, storage, assembly and use
 - inappropriate use (ex. holding keys in the same hand during opening or closing - applies to the

- varnished doors and fittings)
- use of the product in inappropriate conditions or other reasons not attributable to the manufacturer
 - improper use, non-corresponding to the instructions for use of the product.
7. Any changes to the records in the warranty booklet, destruction of the lock seals, traces of alterations or attempts to make structural changes to the product and repair using unauthorized parts or materials, or repairing it outside authorized service, as well as using the product in a manner particularly negligent causing corrosion exposure revealed during performing service inspections voids this warranty.
 8. The Warranty Card filled out incorrectly is invalid. In particular, the production number must match the number on the ID plate on the door. The plate is located halfway up the door on the hinged side, or accordingly on the door frame.
 9. The warranty does not cover any reduction in product quality caused by normal door use process.
 10. The manufacturer does not accept any responsibility for door assembly carried out by a third-party installers and for any consequences associated with it.
 11. If it is necessary to make repairs at the production plant, the manufacturer is not obliged to secure the facility for the duration of the door repair and does not bear any responsibility for the safety of persons and for any property left in it..
 12. Differences in colour and patterns of oak veneer wood and natural wood due to the fact that finishes are made from various veneer and wood supplies, and varnish materials are not the basis for warranty claims.
 13. User lodging a claim and submitting the product for warranty repair shall accept all the above conditions of the granted warranty.



INSTALLATION MANUAL DC3.1 DOOR TYPE

Required tools / materials

- Measuring tape
- Magnetic spirit level
- Hammer Drill
- Concrete drill bit size 10mm or 13mm
- Steel rods size M12 , 7.5in long (supplied by Donimet)
- Welding machine
- Temporary wedges/ shims , hammer , crowbar
- Grease
- Masking Tape
- Strong sand and cement mix (frame filling - recommended option)
- Optional - HILTI chemical glue, polyurethane foam
- Antipick mastic - Soudal HS 270 or similar

Before installation we recommend carrying out a Rod test subject to existing wall type/conditions

1. Direct installation - No Hilti Chemical (Recommended for solid walls)
 - Bore a hole with drill-bit size 10mm
 - Install / hammer in M12 7.5in steel rods
 - Carry out pull out test - Check if the rods are adequately secured to the wall
2. With Hilti Chemical - (optional, Recommended for cavity walls)
 - Bore a Hole with drill bit size 13 or larger as per Hilti recommendation for 12 mm rods
 - Make sure drill holes are free of debris
 - Apply Hilti chemical glue
 - Install M12 7.5 inch rods
 - Carry out pull out test - Check if the rods are adequately secured to the wall



Door installation:

1. Check measurements
2. Check door opening measurements
3. Cover edges of the frame with the masking tape
4. Isolate electronic elements within the frame , Reed Switch etc. (sand and cement fill - recommended option)
5. Place door frame in the wall opening
6. Secure frame with temporary wedges
7. Check plumbs and levels
8. Bore a hole on the top of the hinge side (as per above option)
9. Install M12 7.5in steel rods ,
10. The rods should be left 1/4 inch proud of mounting plate
11. Check plumbs and levels
12. Bore hole on the lower hinge side (same chosen option as per above)
13. Install 7.5in steel rods
14. Check plumbs and levels
15. Bore a hole on the top lock side
16. Install 7.5in steel rods
17. Grease hinges,
18. Wait 45min before carrying out the rest of the installation (Optional as per Hilti recommendation / type of chemical used)
19. Place bearings on hinges
20. Put the door leaf on the hinges, while ensuring that hinge pins are free of dirt and are coated with grease. If hinge pins are dirty, it is absolutely necessary to clean them by removing the dirt along with the grease. Take care so that impurities, especially dust and chips produced when dismantling the old door frame and hole drilling do not penetrate into bearings. Then, hinge pins should be coated with a thin film of clean solid grease
21. Align the frame on the lock side with the leaf by adjusting its position, striking relevant wedges. Make sure that the gap between the frame and door leaf is between 3 to 5 mm.
22. Check the lock side for any gaps, adjust plumbs and levels if necessary
23. Drill the rest of the holes on the lock side
24. Install rods
25. Check the lock (it must fully open and close without any resistance)
26. Tack weld all rods to the frame on the hinge side. Stronger welding is undesired as it could cause unnecessary frame heating , possible deformation and coating overheating
27. Check if the door opens and closes correctly
28. Tack weld all remaining rods to the frame



Filling of the frame

To stiffen and reinforce the door frame it is necessary to fill it with foam or concrete (recommended option)

Filling the frame with strong sand and cement mix:

1. All Inlets (all receiver boxes, dog bolts, etc..) must be temporarily blocked, preventing mix from going in
2. Isolate electronic elements within the frame, Reed Switch etc.
3. Place the formwork (wood strips with seals) on both sides of the door frame by using screw clamps.
4. Prepare concrete mix. The mix must be thoroughly mixed and aerated to avoid delamination after pouring. Alternatively, a ready to use mortar can be used.
5. Insert the mix by using the "funnel" through mounting holes. While inserting the mix the door frame and formwork should be "tapped" to ensure even distribution. The mix density should be made up so that the mix can be easily poured through the funnel, while not trickling out from under the formwork. Special care needs to be taken when the installation is taking place in rooms that are still in use
6. Install masking caps
7. Once the sand and cement mix is completely dry, formwork should be removed and finishing work should be carried out.
8. Seal the gap between the frame and the wall with Anti-Pick Mastic (Soudal HS 270 or similar)