

## Installation instructions

For WAOD side sliding shutters models Sienna, Boris, Kees and Nelson

1. Before starting the installation make sure that the preparatory works have been completed in accordance with the INSTRUCTIONS FOR THE PREPARATION OF THE SITE.
2. Generally speaking we recommend that the installation be carried out by two people.
3. The shutters are shipped in MDF crates strapped together on a pallet which can be moved by forklift or with a manual pallet truck.
4. The straps can be removed in order to transport individual crates manually. Each crate can be carried by two people.
5. Transport all crates to the installation site.
6. The crates are opened with a manual or battery powered screw driver. Do not open the crates with a crowbar or similar to avoid damage to the content.
7. First open the crate marked "INSTRUCTIONS" and remove the pouch containing the installation drawing and instructions, the fixing materials and accessories. Do not open the other crates yet.
8. Find the agreed shutter height on the installation drawing and check the height of the opening, measuring from the mounting surface of the track to the finished floor. This dimension may not vary more than + 15mm or – 5mm relative to the height indicated on the drawing.
9. Check that the mounting surface is clean and true.
10. Mark the center line of the track on the mounting surface to guide the mounting of the track. Small pencil marks can be placed at regular intervals to mark the outline of the track. In this way soiling the paint finish can be avoided.
11. Select and open the crates marked "TRACK" and "CURVES".
12. If the layout of the track contains a curve near the stacking area, begin the installation by installing this item first. Otherwise start installing the track inside the stacking area.
13. Place the curved track section against the mounting surface and check for alignment. It may be necessary to trim one or both ends of the curve to meet the neighbouring straight section(s). The cut should be made carefully at 90° to the track line.
14. Deburr the edges of the cut(s) and insert the joining plates and pins.
15. Place the curved track section against the mounting surface again, check for alignment and screw fix to the mounting surface using the screws and screw bit. Make sure the screws are no more than 200mm apart and at 50mm from the end of each section
16. Continue installing straight track sections in the direction of the stacking area. Measure carefully to obtain a good fit and cut the track sections to length as necessary. Deburr the cutting edges and insert the joining plates and pins.
17. Offer up the track section, check the alignment and make sure the joint with the neighbouring section is tight. Screw fix to the mounting surface.
18. Use a flat screw driver and a hammer to tap the joining plate and pins halfway into the neighbouring track section to strengthen and align the joint.
19. Secure the joining plate by positioning a screw at both ends into the mounting surface and secure the joining pin by creating a slight dent across its rebate at both ends of each pin by giving it a sharp tap with a hammer on a flat screw driver.

20. Install two screws diagonally through the end of the track in the stacking area to avoid accidentally derailing the shutter.
  21. Continue installing track sections in the opposite direction following the instructions set out above.
  22. Once the installation of approximately 50% of the track has been completed, clean out all debris from this section and prepare to install the shutter into the track.
  23. The shutter consists of a number of separate elements which are clearly marked on the installation drawing with the letters "A", "B", etc. These letters are also marked on the crates.
  24. Open all crates containing shutter elements and select the shutter element nearest to the already completed stacking area.
  25. Position the two squares of MDF on the floor just underneath the end of the track to protect the floor finish and to raise the shutter appr. 30mm from the floor. Take the shutter element out of the crate but leave the protective film in place. This will keep the shutter element together in an easy to handle package.
  26. Lift the shutter element to a vertical position with the top near the open end of the track while resting its lower end on the protected floor.
  27. Make sure that the shutter element is in the correct position with the floor bolt knobs facing the interior of the shop. Now remove the protective film.
  28. One person lifts the shutter element slightly while the other person (standing on a raised surface) guides the wheels one by one into the track. The use of protective gloves is recommended to avoid injury during this operation.
  29. Install the remaining shutter elements in accordance with the installation drawing and the above instructions. Slide the shutter elements along the track in the direction of the stacking area and well away from the open end of the track.
- Warning:** Make sure that the shutter elements remain in this position until the track is fully completed. Casual operation of the shutter elements by bystanders can cause the shutter element to derail and fall with a risk of damage to the shutter and serious injury.
30. Continue the installation of the tracks, positioning and aligning curved track sections first followed by the installation of straight sections as per the above instructions. Clean out all debris from the track before installing the last section.
  31. In the case of a shutter which opens to one side only (into one singular stacking area) the track should be fitted right up to the wall which will receive the wall jamb.
  32. In the case of a shutter which opens to two sides (into two stacking areas) place two screws diagonally into the end of the track to avoid accidental derailing of the shutter.
  33. Remove the screws from the intermediate posts and connect the first two elements by slotting the intermediate posts together. Make sure the screw holes line up and re-insert and tighten the screws to connect the elements.
  34. Repeat this operation with the remaining shutter elements.
  35. In the case of a shutter which opens to one side, install the wall jamb, aligning it carefully with the track and fix initially with only two screws onto the vertical mounting surface.

36. The wall jamb does not come prepared with screw holes. These should be marked and drilled in accordance with the condition of the mounting surface.
37. Check carefully that the wall jamb is positioned exactly plumb and right up to the track above.
38. Slide the shutter towards the wall jamb and engage the leader post firmly with the wall jamb and test whether the latches of the two point hook lock engage correctly and freely into the slots in the wall jamb.
39. If that is not the case, trim the height of the wall jamb as necessary; ONLY cut from the bottom end. After that install all screws.
40. In the case of a shutter which opens to one side; keep the lock engaged with the wall jamb and extend the shutter fully in the direction of the stacking area.
41. In the case of a shutter which opens to two sides; connect the two halves of the shutter and lock together. Extend the shutter fully in both directions and make sure that the lengths of shutter entering into the two stacking areas are balanced evenly.
42. When fully extended, the shutter should hang neatly and regularly but should not be stretched using force.
43. Untighten the securing bolt(s) on the end bolt(s), lower the bolt(s) until touching the floor and mark its position(s) on the floor. Unlock the shutter.
44. Position the V-stopper(s) on the floor and align the cross bar with the marking(s) on the floor. Fix the V-stopper(s) provisionally with two screws (using the rawl plugs and screws provided in the pouch).
45. Slide the end bolt(s) up to a position at 10mm above the floor and check whether the end bolt engages correctly and easily with the V-stopper.
46. Extend the shutter fully and lock it. Check that the shutter hangs neatly and regularly and can be locked easily. Adjust the position of the V-stopper(s) in case force is needed to extend the shutter to reach the locking position. Also adjust this position if the shutter presents too much slack. Once the V-stopper is positioned correctly install all screws.
47. Install the track stopper(s) (provided in the pouch) in the track in alignment with the cross bar of the V-stopper(s) on the floor below.
48. Open the shutter fully and slide it back into the stacking area(s) and extend it again to the locking position and lock it a few times while checking that the shutter extends, folds and locks correctly and easily.
49. With the shutter in the fully closed and locked position, lower all floor bolts until they touch the floor making sure that the shutter remains hanging plumb. Mark the bolt positions on the floor.
50. Drill out holes in the floor to accommodate the floor sockets. For drilling through ceramic or natural stone floor finishes we recommend the use of a diamond tipped core drill bit diam. 20mm. Once the floor finish has been perforated, drill out the hole to a depth of 70mm with common drill bit for masonry or concrete.
51. Remove all particles from the holes and insert the floor sockets in the holes after applying a small dose of silicone adhesive and allow to set.
52. Experiment again opening and closing the shutter and raising and lowering the floor bolts.
53. Affix the Operating Instructions on the inside of the stacking area.
54. Dispose of the protective polystyrene packaging using the waste disposal bags provided.
55. Dispose of the crates in a responsible manner.