

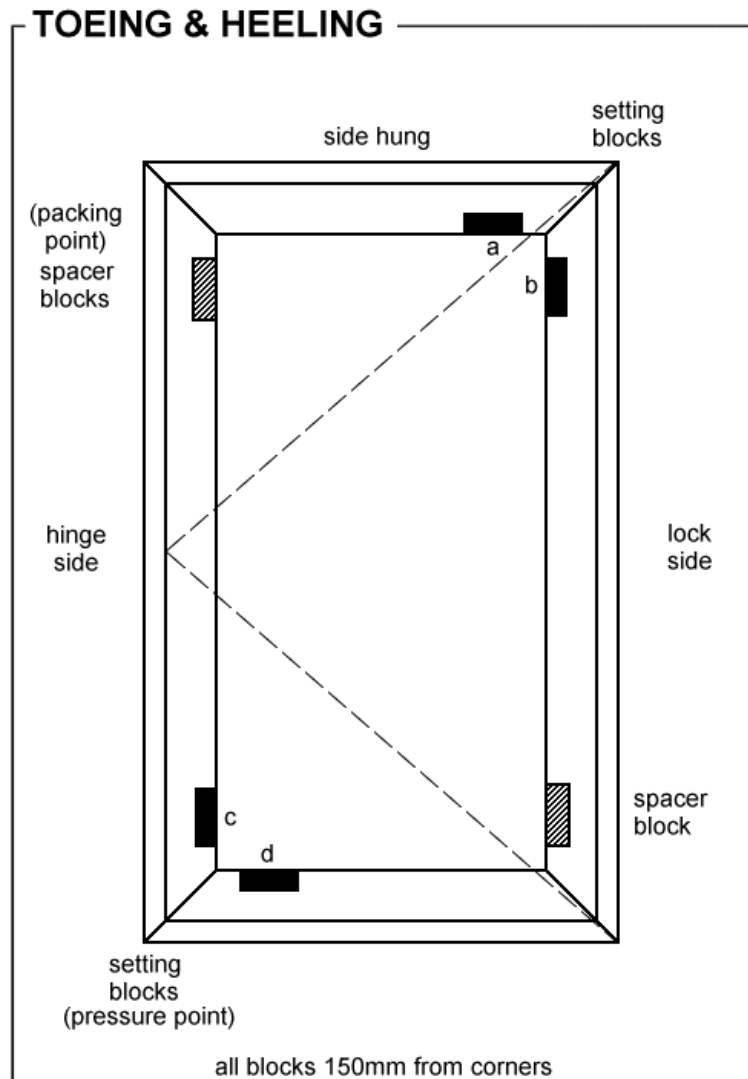
TOEING & HEELING

What is Toeing and Heeling?

Aluminum doors are heavy, and although the dead weight is supported on the hinge side when it is opened, there is nothing on the other side of the frame to support the weight, and without the procedure of toeing and heeling the door will "drop" on the handle side, sooner or later. To stop a door dropping the glass has to be braced diagonally corner to corner by the insertion of plastic packers slipped in the gap between the glass and frame, under the beading. On the hinge side the packers should be located at the bottom corner, whilst on the lock side, the packers are located at the top (opposite) corner.

To explain further:

To picture this in your mind more easily, look at or visualize the back of a normal wooden side gate and you will see three "ledges", that is horizontal planks - one top, one middle, and one bottom. These ledges are used for the diagonal planks of wood to sit on so as to brace, and therefore to stop the gate dropping on the lock/handle side.



Weight of doors transferred at hinge side

No weight is transferred to frame here on lock side

So does *my* door need toeing and heeling?

When an Aluminum door has "dropped" the first thing people usually notice is that the lock is not working as easily as it did, or will not lock all. The door may also rub on the bottom as it is closed. Closer inspection may reveal that the mitered welds do not line through at the top and the bottom of the lock side of the door, to its framework. If this is the case on any door, then the door will need bringing back to square (called "jacking" in the trade) and it will then need "toeing and heeling" to prevent it from dropping again in the future. If you suspect that your door may have dropped, then the easiest way to check is to measure corner to corner across the diagonals of the door, and verify that the measurements are near enough the same, or to within a couple of mm or so. A quarter of an inch difference in measurements is too much!

How to Toe and Heel a door, *properly*:

1. The glazing beading must be removed, and the double glazed sealed unit must be in place, and resting on its plastic setting blocks (for correct drainage) before beginning the procedure.
2. The opening door leaf must be raised on the lock side to the desired height, to square it up again. For one person to do this on their own; open the door slightly, place a small piece of wood on the floor to use as a fulcrum and in line with the door. Next, place a plank under the lock side of the door to push down on with your foot to raise up the side of the door that has dropped. A word of warning: Some doors will rise up and come off of their hinges, and these are harder to "jack".
3. You should notice a gap between the sealed unit and the door, and this is where the packers are inserted to achieve your toeing and heeling correctly to brace across the glass to stop the lock side of the door dropping out of square.

