

Powersheds®

—

Powerfully

Simple

uPVC Door Adjustment Guide for Log Cabins



Powersheds®

Introduction

Timber is a natural material and will move over time as it responds to changes in temperature and moisture. As a log cabin settles, expands, or contracts, this movement can affect openings such as doors and windows.

uPVC frames are far more dimensionally stable than timber, but they can still experience minor thermal expansion and contraction. Because uPVC doors and windows are fixed into a timber structure, any movement in the cabin itself is usually more noticeable at these rigid openings, which can cause doors or windows to appear out of square.

This guide provides a clear, step-by-step process to diagnose the cause and correctly realign the doors if required.



Important First Point - How the Doors Are Supplied

All uPVC doors are pre-fitted into the frame at the factory, though the sashes are then removed for transport. Before dispatch, each door set is:

- Squared within the frame;
- Heeled and toed;
- Checked for correct operation.

What does *heeled and toed* mean?

Heeling and toeing is a glazing technique used to keep doors square and prevent them from dropping over time.

- Small glazing packers are placed diagonally inside the door sash;
- These transfer the weight of the glass to the hinge side of the frame;
- This ensures the door remains square, level, and properly supported.

Because of this process, the doors leave us square and correctly aligned. If the doors appear out of square once installed, it almost always indicates an issue with the base or cabin construction, rather than the doors themselves.

Why Base and Build Accuracy Matters

Even a small discrepancy in the base can have a noticeable impact on door alignment.

For example:

- A difference of just 2-5mm across the base can twist the cabin structure;
- This twist transfers directly into the door opening;
- The result is doors that appear to drop, bind, or show uneven gaps.

While uPVC doors are rigid and manufactured square, if the base or walls are not built correctly, issues will arise.

01

Check the Cabin Walls and Door Frame

Before adjusting hinges, always confirm the structure is sound by:

Check walls are vertical (plumb)

- Use a spirit level on both sides of the door opening;
- Check internally and externally;
- Ensure walls have not leaned in or out.

Check the door frame is square

- Measure diagonally from top left to bottom right of the uPVC frame;
- Measure from top right to bottom left;
- If both measurements are the same, the frame is square.

If these measurements differ, the door frame needs adjusting.

Check for log gapping

As timber expands and contracts, fascia boards, storm bracing or any internal items (e.g. shelving) screwed into logs, will move with the movement of the logs. Therefore, if all logs shrink by 1mm each, the logs screwed into other items will move with them, this can occasionally lead to gaps being visual between the logs.



This is simple to rectify, all you need to do is unscrew all the windows and door fascias, storm bracing and any items that may have been attached to the walls. The logs will fall back into place, this may not be instantaneous. Once the logs have fallen back into place, you can reattach the fascias/bracing/items.

02 Squaring the Door Frame (Most Common Fix)

If the frame is not square, this is the primary method for resolving door alignment issues.

How to adjust the door frame

1. Locate the fascia boards around the door internally and externally
2. Carefully remove or loosen only the OUTER fascia screws
 - ⚠ Do not remove the inner screws;
 - Removing inner screws may cause the door frame to fall out;
3. Once the outer screws are loosened, the frame can be gently adjusted.

Why this works

Behind the fascias, there is a **small tolerance gap** around the door frame. This gap is intentionally designed to:

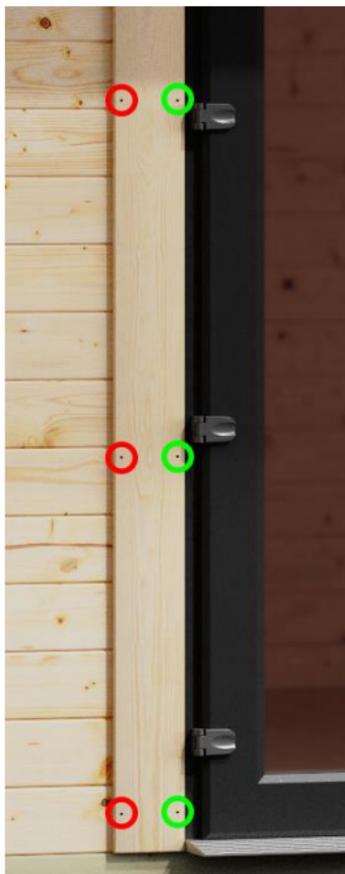
- Allow for natural timber expansion and contraction;
- Enable minor adjustment during installation;
- Allow the frame to be squared if the cabin settles.

Best practice

- Temporarily remove the doors from the frame before adjusting;
- Square the frame using diagonal measurements;
- Once square, re-secure the outer fascia screws;
- Refit the doors.

This step resolves the majority of door alignment issues. Once the building is square, re-screw the fascias.

Powersheds®



03

Additional Checks

Base level

- Run a spirit level across the **full width of the base**
- Check across the **door threshold** (at the bottom of the door) specifically
- Even a few millimetres of variation can affect door operation

Walls plumb (final confirmation)

- Re-check vertical walls after frame adjustment
- Ensure nothing has shifted during installation

04

Final Fine Tuning: Hinge Adjustment

Once the base, walls, and frame are confirmed correct, any remaining minor alignment issues can usually be resolved with hinge adjustment.

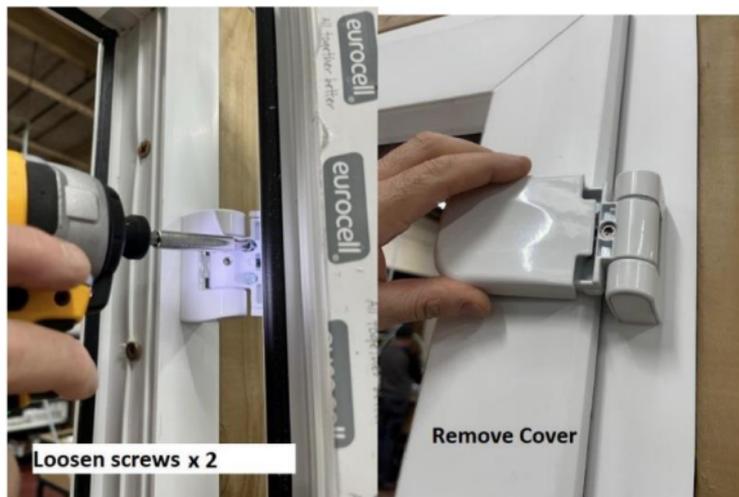
Quantum Hinge – On Site Adjustment

The Quantum hinge system is **fully 3D adjustable**, allowing adjustment:

- Side to side (lateral)
- In and out (compression)
- Up and down

Adjustments can be carried out **during or after installation**.

Powersheds®





Powersheds®



Removing the Door Sash (If Required)

If the sash needs to be removed from the frame:

1. Remove the top and bottom cover caps from the hinges;
2. Unlock the grub screw using a 2.5mm Allen key;
3. Remove the hinge pins;
4. The sash (door leaf) can then be lifted away from the frame body.

This makes frame adjustment easier and safer.

Summary

- Doors are factory-fitted, squared, and heeled and toed;
- Doors being out of square almost always indicates a base or build issue;
- Squaring the door frame behind the fascias is the most effective fix;
- Hinge adjustment is the final fine-tuning step.

Following this sequence will resolve the vast majority of uPVC door alignment issues in log cabins.