Timber Bi Fold

Frame Assembly

The frame comprises of 4 main sections

The head section, The sill section and 2 Upright jams(handed)

The Head Section

The head section is made up of a headboard, lintel, packer, aluminium track and fasia. See attached drawing Fig.1.1

The Sill Section

The sill section supplied is either a solid timber section or a hybrid aluminium / timber section. Either way the sill will have a drainage channel which drains out of the front edge and must clear the outside brick / wall edge when the frame is installed.

The Jam Sections

The Jams are handed left and right and the wall edge of each will have a line drawn on the back which is hidden when installed. Each jam also has a plastic foot attached to the bottom which prevents the bottom of the jam from rot. The plastic foot has an angled splay which follows the contour of the sill section. The upper edge of each jam has pre drilled holes and a mark which coincides with the matching head groove. Usually these will be marked as A & B or X & Y.

Step 1 - Frame Assembly

The aluminium track of the head section is closest to the outside of the frame.
The aluminium head track has a removable section on the side of the frame that all the doors slide towards. Remove this section by unscrewing the 2 screws if it has been prefitted. In the box supplied you will have a black brush seal. Note that there are 2 grooves in the aluminium head track. The seal must be on the inner groove closest to the packer and lintel(See Fig.1.2)
Slide this seal into the aluminium track groove and cut so that the seal finishes level with the main track section. A small section of seal can be added to the removable section of track later.

The head section should be positioned on a flat surface on timber bearers or trestles so the aluminium track will be closest to the outside when lifted into place.
The head section should have d4 pva glue or expanding polyurethane glue along the groove and on the edges of the head section timbers to form a waterproof bond.

(polyurethane glue can be messy as it expands and requires solvents to remove when wet or can be cut off later, we recommend d4 waterproof pva if you arent familiar with polyurethane glue and a damp sponge can be used to remove excess pva))

The head section jam grooves are numbered/labelled to correspond to the correct Jam as they are handed left and right. See Fig. 1.3

The jam and head sections are pre drilled and should easily align the jams correctly. Before tightening any screws ensure the jam is aligned correctly with the head section. If not use a block of wood and tap the jam into position.

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The timberfast wood bolts with the hexagonal head screw through the top of the head section into the jams. The 70mm screws are used to screw through the jams into the head sections. One screw will go into each timber section.
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Tighten the central 70mm screw and check that the jam is still aligned correctly. If the jam has moved, loosen the central screw, tap the jam back into position and tighten another screw. Check again and if the jam is correct tighten the other screws and then the timberfast bolts.

Wipe any excess pva glue with a damp sponge. If you have used the expanding polyurethane glue then it is best to leave any excess until it has cured or use solvent wipes. Any excess can be trimmed off with a chisel later.

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If your system is European Oak then it is important to use as little amount of water as possible to remove the glue. Excess moisture can result in a blackening effect due to tanin in the timber. Use a dry paper towel to remove any moisture as quickly as possible.
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Step 2 - Fitting The Sill Section

Once the jams are attached lift the sill section into place so that the plastic feet sit flush with the inside edge of the sill section. See Fig 2.1. The angle section should sit neatly against the aluminium or timber sill. Pilot drill through the sill into the jam and then remove and clean any dust from the sill and jam foot. Apply a bead of silicone to the jam foot perimeter and screw the sill section to the jam. Excess silicone can be cut and removed later. Ensure the jam is square and flush with the edge of the sill section as you tighten each screw.

The frame is now ready to sit in place and level / fix

Step 3 - Fixing the Frame

It is critical to ensure the head is perfectly level. Ensuring the head is level will make installing the doors easy in the following steps. We recommend using plastic packers placed either side of each fixing point. See Fig 3.1 These are available from diy stores and come in a variety pack containing 1-6mm packers. See Fig 3.2.

**** Important
When fixing the head section to the lintel it is very important to ensure the aluminium head section is either removed before drilling or cleaned out after drilling. Any debris in the head track will result in debris on the nylon runners making the system judder and void any warranties with Brio.

Step 3.1 - Setting The Datum Point

Check that the structural lintel is level. If the lintel is running out of level then start with the lowest end. Place a 5mm packer on top of the frame above the jam at the lowest end. Using a wedge, pack the frame under the jam so that the frame is tight against the 5mm packer. This gives us our starting datum point to work from. The 5mm top gap ensures a suitable seal can be applied later and also if the structural head is not straight or level gives a 5mm tolerance to play with.

Once the first side is wedged into position we recommend fixing the jam upright.

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The jams and sill can be fixed behind the door stops for a clean look. This is done by screwing the jams and sill along the line of the center of the head lintel . The lintel is the timber section of the head with the draftproofing groove in measuring approx 32mm and set back from the inside edge of the frame approx 3mm. See Fig 3.3.
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Step 3.2 - Fixing The First Jam

Pilot and countersink the jam along the line of the stops as described above approx every 400mm and use packers to pack the back of the jam against the wall to ensure that the jam is upright and level is both directions. Fix the jam tight so that it remains level and straight. Use a level to check the jam is upright in both directions and not bowed by the fixings. If the jam is bowed, loosen the screws and pack till the jam is straight again.

This step will be used again for the other jam.

Step 3.3 - Leveling The Head Section

Now that the first jam is fixed we can now level the head across its full length. We recommend wedging the 2nd jam to ensure the head is running parallel to the wall face and is roughly level. Use packers to ensure the head is level at each fixing point. As stated

earlier it is important to ensure the head track is clean after any drilling. This can be done by removing the head track before final fixing or using a compressed air blower.

Once the head is fixed securely and the head track does not contain any debris Step 3.2 can be repeated to fix the 2nd Jam.

Step 3.4 - Fixing The Sill Section

When fixing the sill down it is important that the center is the lowest point to aid drainage. I.e perfectly level is best but a slight drop to the center is fine(max 2mm drop to center). Please ensure the center is not the highest point.

The same fixing position line as the jams is to be used. Pilot and countersink at approx 400mm centers and pack the sill level. As stated above ensure the sill is as level as possible. Use plastic packers either side of each fixing point.
Once the frame is fixed and foamed you can proceed to install the doors