# Instructions for installing a Stira Folding Attic stairs

## Installation is a 3 stage process

| Stage 1<br>Preparing the hatch | Stage 2<br>Installation | Stage 3<br>Finishing |
|---|---|---|
| Removing old framing and replacing it with correct framing | Lifting into position, fixing in place | Cutting to length, final fixings. |

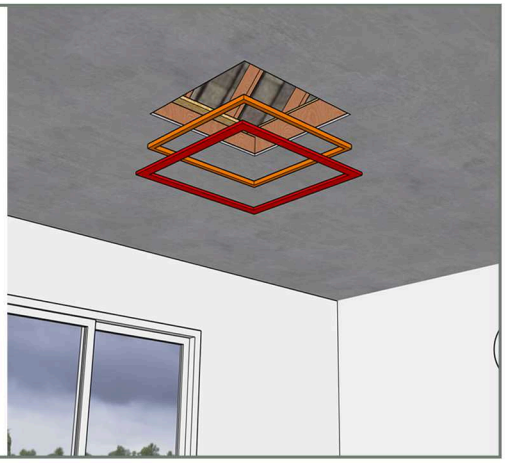
For information and tips on inspecting the attic hatch and how to decide on location and orientation of the Stira download our attic hatch inspection guide from our website

Stira folding attic ladders come in a range of sizes and shapes, but the fitting process is the same for all Stira, with only some additional steps required for remote control options (starting page 6). The outer frame size will be used as the reference to create the dimensions for the new hatch. Please read instructions fully before starting.

## STAGE 1: Preparing the attic hatch

### Quick notes

1. Remove existing architrave
2. Remove any existing framing that makes up the existing opening.
3. Add 12mm to the length and width of the external frame measurements of the Stira, then mark this dimension onto the plasterboard in the direction you want to extend.
4. Cut plasterboard to new frame size.
5. Cut back the centre joist to the length calculated in No.3
6. Create new bracing for the end of the cut joist

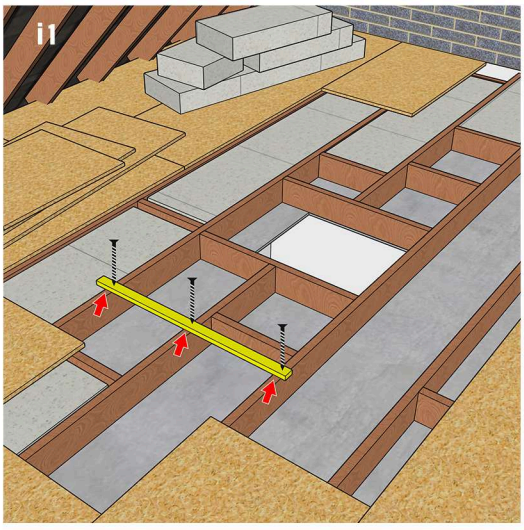


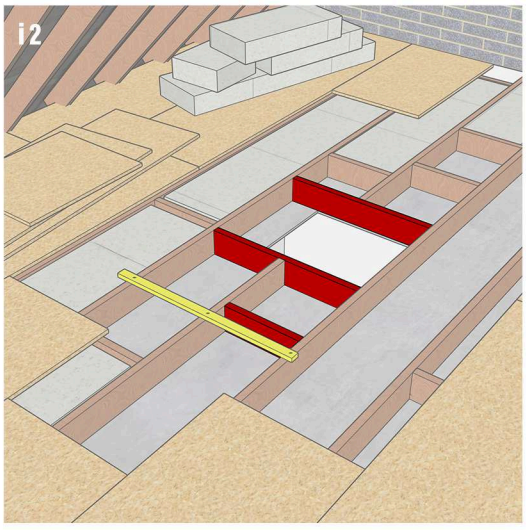
First the attic hatch must be prepared by removing any existing architrave and framing. We want to go back to the bare joists, remove any existing architrave.

1. If the attic is already floored, take up any flooring and insulation around the hatch and set aside for now.

2. Identify the centre joist that will be cut back, we need to support this joist while it is being cut during the opening enlargement. Do this by putting a timber lath across the 3 joists to fix them to each other. Make sure the brace is far enough back to allow for the opening to be cut as shown in image i1. This will prevent the centre joist from sagging after it is cut.

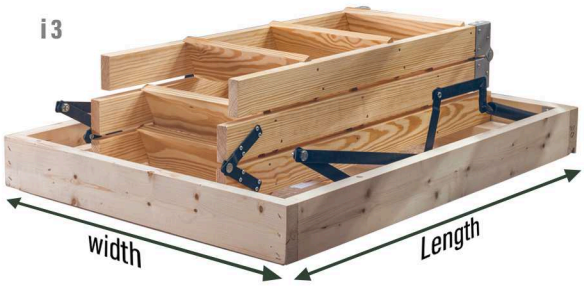
3. Remove any timberwork that made up the previous framing of the old opening. Shown in red in image i2.



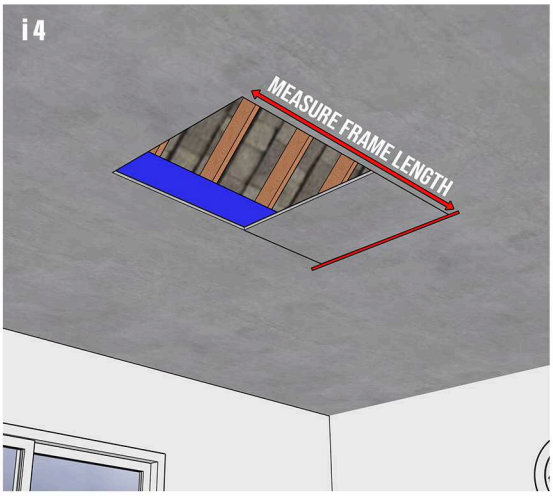
Measure the width and length of the outer frame, then add 12mm to each dimension For opening size to cut in ceiling

i 3

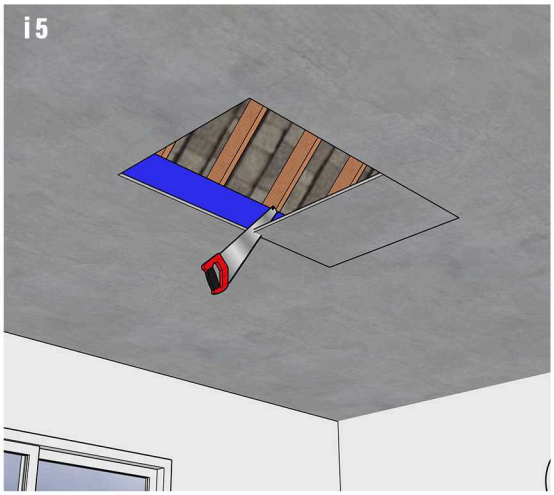



Measure from the end of the opening in the direction you want to extend. Mark the cut point. Cut the plasterboard to the mark.

i 4



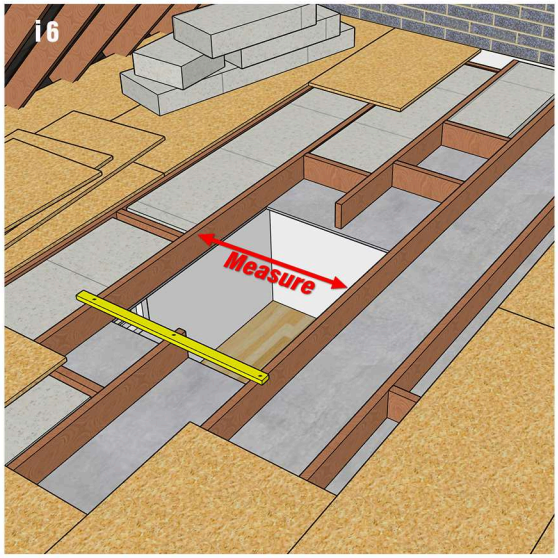

i 5



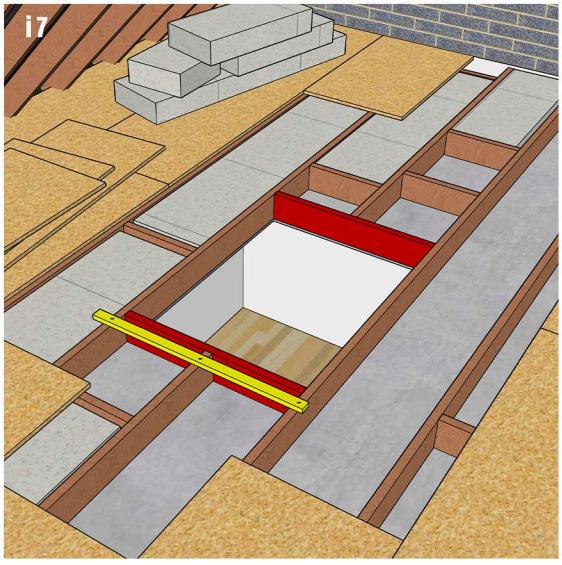
**At this point be careful with unsupported plasterboard. The plasterboard can be easily broken so you shouldn't lean, or pull on it, or leave any tools on it while working in the attic.**

In most cases one joist will have to be cut back further to make room for the attic ladder. This dimension is the external frame length of the Stira, plus 12mm to allow for squaring, plus the thickness of framing that will be added for the Stira to attach too.

i 6

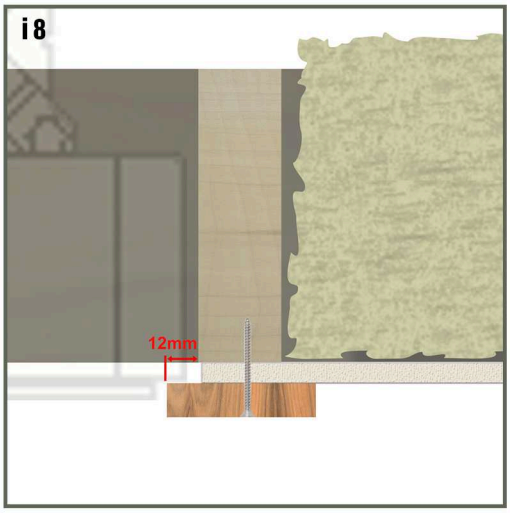



i 7

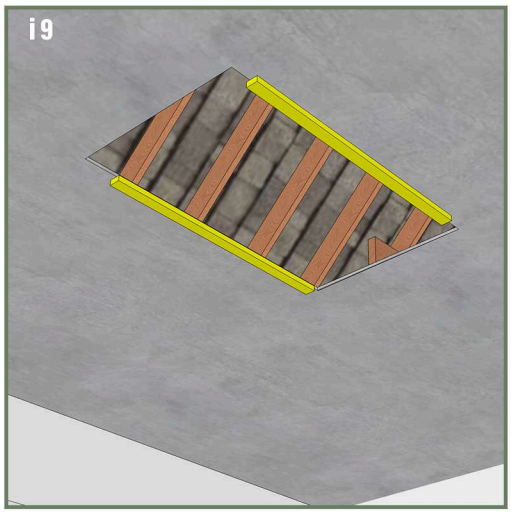


We will attach two temporary laths to each end of the opening for the Stira to rest on while it is being fixed in place. The laths should protrude into the opening no more than 12mm (half an inch). Use screws at least 50mm, not nails, to attach the laths directly to joists in the attic. Ensure the screws go into the joists and not just the plasterboard, these screws will be holding the weight of the Stira

i 8




i 9

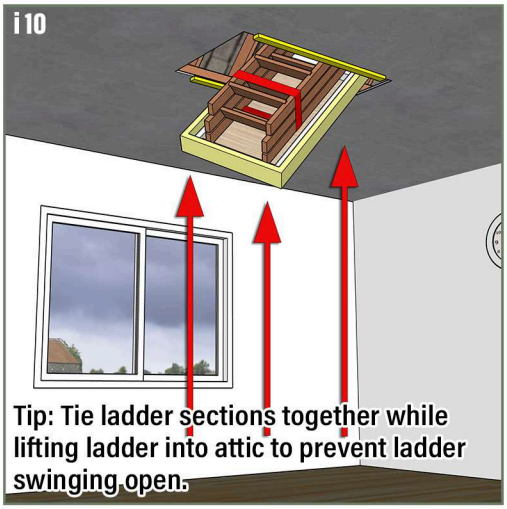


# Stage 2: Installing the ladder details

Attach handle before lifting Stira into attic. The handle will be required to open the Stira during installation.

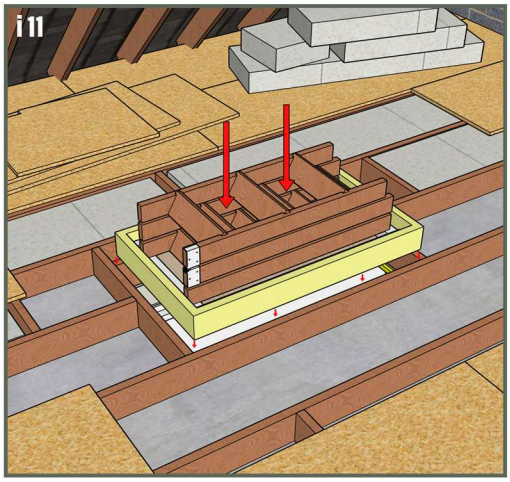
Lift Stira into attic and lower onto laths

i 10

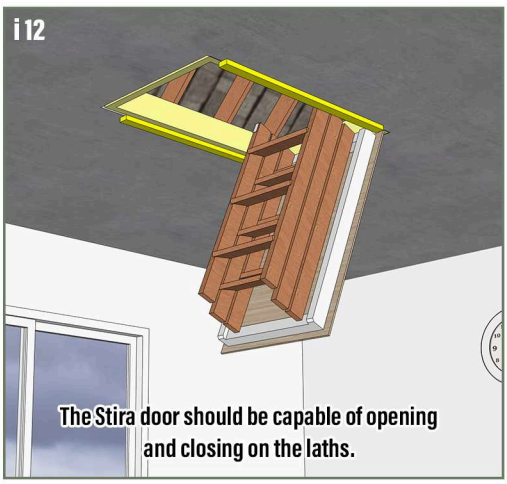


Tip: Tie ladder sections together while lifting ladder into attic to prevent ladder swinging open.

i 11



i 12

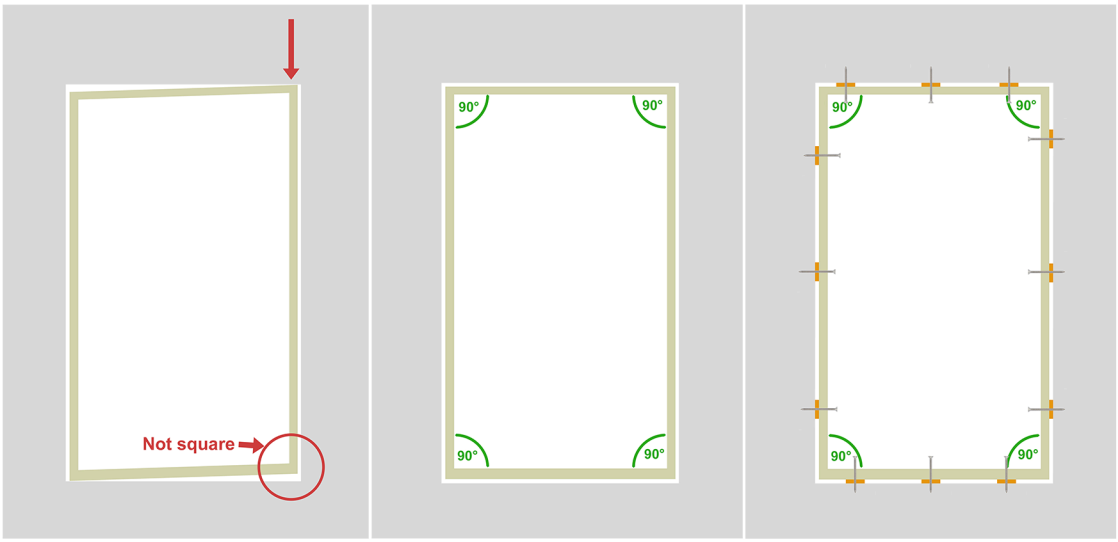


The Stira door should be capable of opening and closing on the laths.

**Caution!** be careful opening and closing the Stira before it is fixed in place, the springs are very strong. If you let the Stira slam open or shut it could cause the unit to come off the laths and fall out of the opening.

# Square the frame

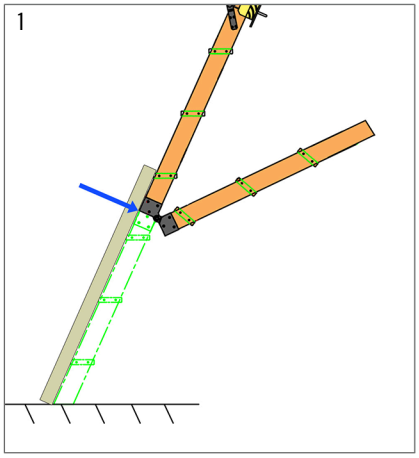
Ensure the frame is square, if the frame is not square tap the opposite end to make it square. Use packers to hold the frame in place. Use 70mm screws to fix the Stira to the joists. Always check that the Stira opens and closes and always remains square.

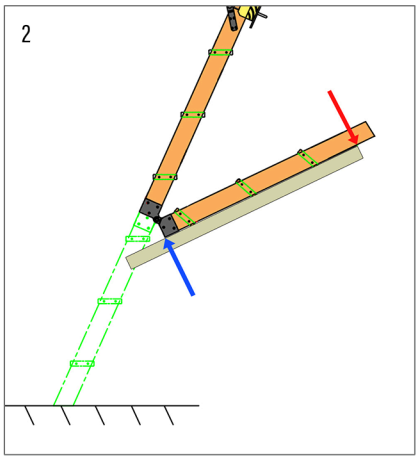



# Stage 3: Cutting the ladder to length

### Cutting to length for no boots

1. Open out the ladder but bend the bottom section back behind the ladder and rest it on the ground.
2. Take a length of timber and place it against the ladders side stringer. Ensure the timber is following the angle of the side stringer.
3. With the length of timber touching the floor, mark the timber where it meets the middle section. This will mark the length the bottom section needs to be.
4. It is important to do this on each side. Do not use the same mark for both sides as there could be slight differences in the floor height.
5. To get the angle for the cut, use an adjustable bevel. The angle is the same as the step, so set the angle using the step and transfer that angle to the end of the ladder.
6. Use the piece of timber you used to measure the distance to the ground to mark the length. That timber can be used to mark the cut point on the side stringers. As shown in the second picture.




### Cutting to length for boots

When cutting the ladder to length so that the protective boots can be fitted, the ladder is cut straight and there is no need to mark out an angle.

# Attaching architrave

At this point the Stira is installed and ready for use. All that is left to do is add architrave to finish around the hatch. Each Stira comes supplied with pre cut architrave.
(if you want to use a different architrave the Stira architrave can be used as a template).


1. We will start at the hinge end of the trapdoor. We need to ensure we do not cover the rebate that the trapdoor opens into. As shown in image F1.
2. The picture on the right shows a side profile of the outerframe and it's rebate. The red line shows where the architrave should start. It is roughly half way.
3. Use the rebate as a guide to keep the architrave in line.
4. Use two nails at each end, if you would like to keep some adjustability don't drive them all the way.
5. Using the piece we just fixed in place as a reference put on the two side pieces of architrave.
6. Finally put the last piece of architrave in place and make sure the pieces fit together correctly.
7. Nail the final piece in place and drive home all nails.

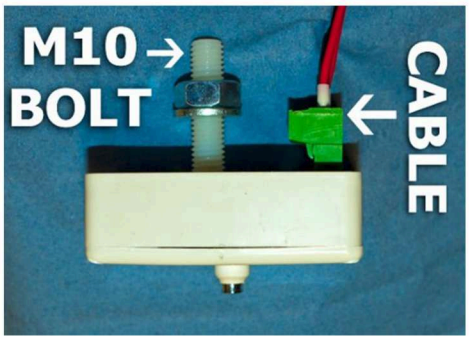
Screws or other large head fixings should be avoided. Use brad nails that have smaller heads for a neater finish.

## Stira Semi additional instructions

**Fitting of the semi Stira is identical to the fitting of a manual Stira up until the electronics need to be connected.**

When the Stira is in the attic it needs to be plugged in and the quick release box needs to be attached for the unit to work. Sit the Stira down into the opening and check that you are happy to go ahead with fixing the Stira in place. We can then fit the quick release.

1. A 10mm hole needs to be drilled or cut in the plasterboard to allow the bolt on the back of the quick release to pass through the plasterboard.
2. A hole also needs to be cut for the cable to pass through. It is important to drill two separate holes, if the hole for the bolt is too large the bolt may not hold it in place.
3. With the two holes cut, pull the cable through the hole, and plug it into the quick release.
4. Push the quick release bolt through the 10mm hole so that the quick release is flush with the ceiling.
5. Put the 10mm washer onto the bolt and then tighten the 10mm nut onto the bolt.
6. The quick release can be sealed by either using caulk around the box, or by using expanding foam in the attic. If you want to make the quick release easily removable in the future a small box could be made out of insulation and fixed in place with airtight tape.



## How to link a new Stira Semi remote to the main control unit

**Notice:** Each Stira-Semi remote is pre programmed before leaving the factory, **there is no need to go through this process on a new Stira**. Please read through these steps fully before beginning so that you know the process, some steps need to be taken immediately after the previous step

To link a new Stira-Semi remote to the Stira-Semi control box the stairs must be fully fitted and plugged in to a power source. Ensure the quick release box has a working battery. If the Stira is in the closed position use the quick release button to open down the trapdoor so you can access the main control box.

**Important:** It will be necessary for someone to be in the attic to manage both linking the new remote and for finding the open position of the stairs. For this reason this process requires two people, in the event a problem occurs when the Stira is closed someone needs to be able to use the quick release to open down the Stira.

**Step 1:** locate the main control box attached to the metal uprights, press the "program button" shown in the picture above, the button is recessed so you will need to use something with a narrow tip IE: a paperclip. Press the button once, briefly.

Programming button

**Step 2:** Immediately after pressing the "program button" press and hold both buttons on the remote control. It can take up to ten seconds for the control box to accept the signal from the remote. You will know the remote is working the Stira will start to open.

**Step 3:** Programming the open position of the Stira Semi stairs takes place immediately after step two. As the Stira is opening down the person in the attic needs to watch the cable unspooling. When it gets into the green area shown in figure 3, press any button to stop the Stira. This will be the new open position of the Stira.

## Common problems

The Stira either doesn't close fully or doesn't open fully meaning the ladder has trouble reaching the ground when fully extended. During reprogramming the open position of the stairs, the cable either did not fully unwind off the spool, or went past the ideal open position and started to wind back onto the spool. In the correct position the cable should be slack and not wound around the spool at all.

To reprogram the open position, close the Stira and press the two buttons for up to 10 seconds until the Stira starts to open. Repeat step 3.

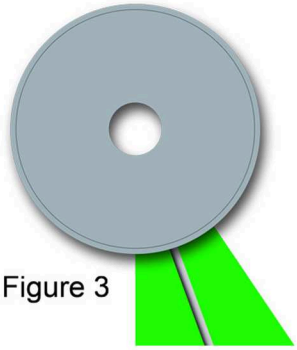
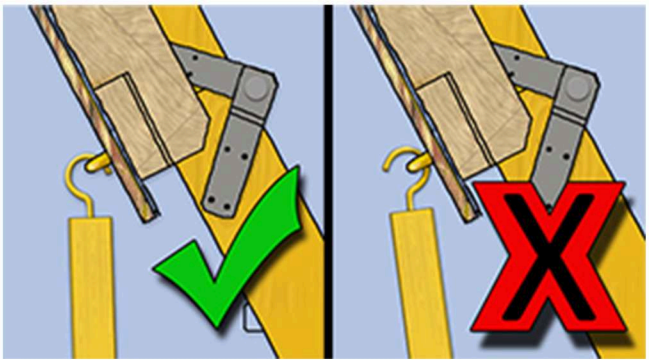


Figure 3

When opening the Stira ensure hooks open side is facing you to avoid damaging the hook and lid.

Guide Stira door with your free hand while opening the hatch. Do not let fall open.

Do not let slam shut



## Air tightness

This is the point you can also add airtight tape around the opening to close any potential air leaks. Airtight tape can be added along the underside of the opening or between the frame of the Stira and joists in the attic. Ensure the tape is not wider than the architrave so it will be covered.

## Painting

The Stira trapdoor and architrave can be painted just like any other untreated timber product. This allows the Stira trapdoor to match existing interior colours. Follow typical instructions for painting wood including using a primer before applying final paint. Leave painting until after fitting to avoid damaging the paint during installation. Before adding the paint primer, wood filler can be used to cover nail holes in the architrave. It is recommended that the Trapdoor be left open for 24 hours to ensure it is fully dry to avoid sealing the trapdor to the frame.

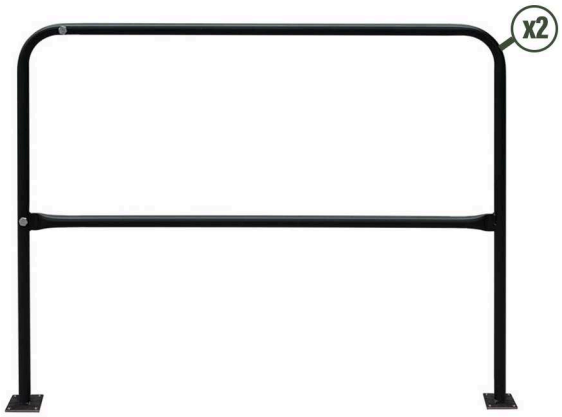
## Maintenance and servicing

The Stira does not require any maintenance, however a visual inspection is recommended every year to ensure all moving parts are functioning as expected. The hinges use long lasting grease and adding oil-based lubricants will not help, as they evaporate quickly. The Stira is a real timber product and can be lightly sanded to remove marks. Be aware that the ladder is lacquered, and any sanding will remove the lacquer.

**Stira parts are guaranteed for 10 years. Electronic parts 4 years.**
**If you have any issues with your Stira please contact our office on 093 38055 with the unit number and we will be happy to help.**
(Unit number found on the label inside the Stira trapdoor)

# Railaround balustrade

## Contents of package



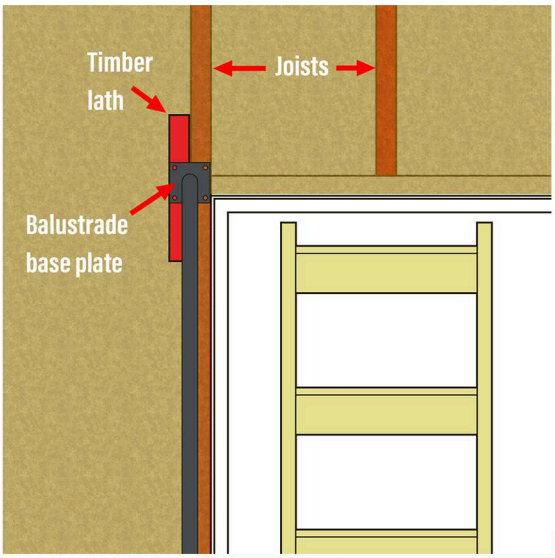

5x50mm screws

Remove the balustrade from the packaging and bring all the parts into the attic.

If you have bought the deluxe balustrade with integrated handrail, place it so that the handrail is facing inwards, towards the opening. For the railing without handrail the sides are identical and can go on either side of the opening.

Before fixing the plates to the ground put the side rails in the position you want them to be in to make sure they fit and ensure at least two of the screw holes will be over a ceiling joist.

Attic flooring on its own won't be strong enough to hold the screws when the balustrade is in use. That's why we provide you with long screws that can go into the joist.




**STEP 1.** Fix a timber piece to the side of the joist that you will be mounting the balustrade too with screws as shown in the image. You should have offcuts from your attic joists that would be ideal to use. Drive the long screws so that they will go through the flooring into the joist.

**STEP 2.** When the sides are fixed to the ground, the adjustable bar is fitted.

**STEP 3.** Remove the two end bolts from the adjustable bar.

**STEP 4.** The two side balustrades of the railing have predrilled holes for attaching the bar.

**STEP 5.** Loosen the bolt in the middle of the bar to extend or contract it.

**STEP 6.** Put the bolts through the holes in the side uprights and screw them into the adjustable bar ends.

# Grabrail installation

## Contents of package

Deluxe Grabrail

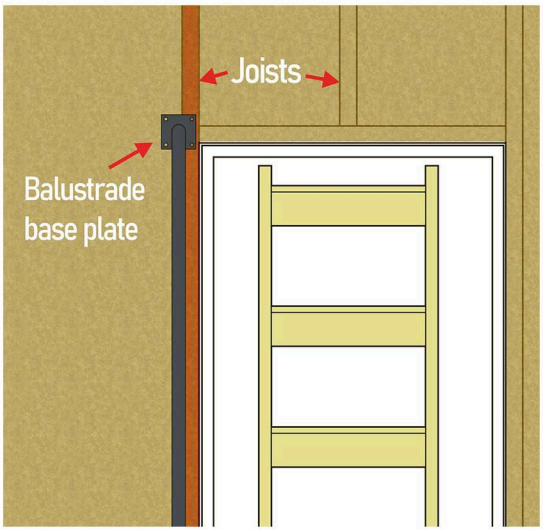
5x50mm screws

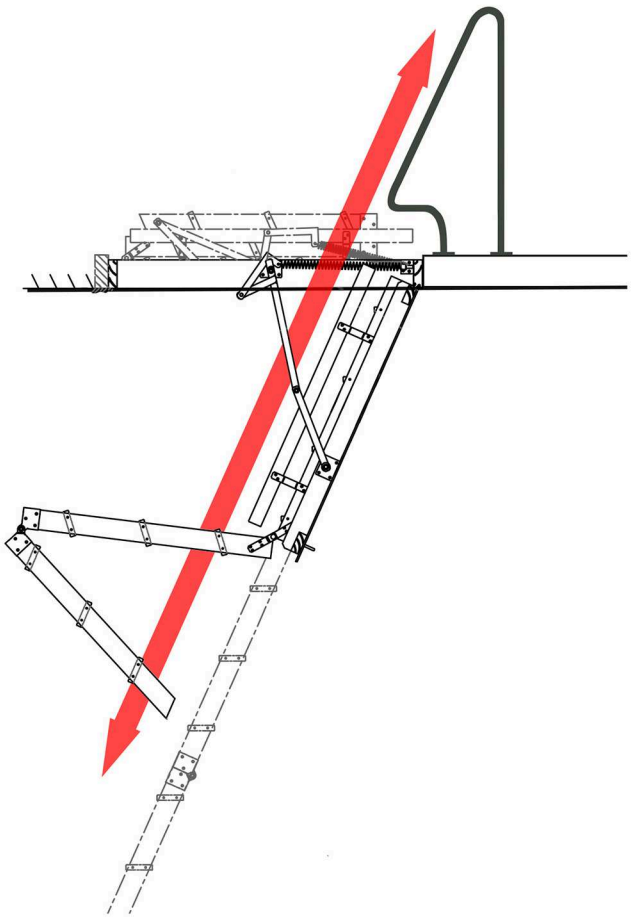
Standard Grabrail

Remove the grabrail from the packaging. The installation procedure is the same for both types of Grabrail.

Before fixing the plates to the ground put the Grabrail in the position you want it to be, ensure the screw holes are over a joist.

Attic flooring on its own won't be strong enough to hold the screws when the Grabrail is in use. That's why we provide you with long screws that can go into the joist.



Fix the Grabrail in place using the supplied screws. Drive the long screws first so that they will go through the flooring into the joist as they are the most important screws.