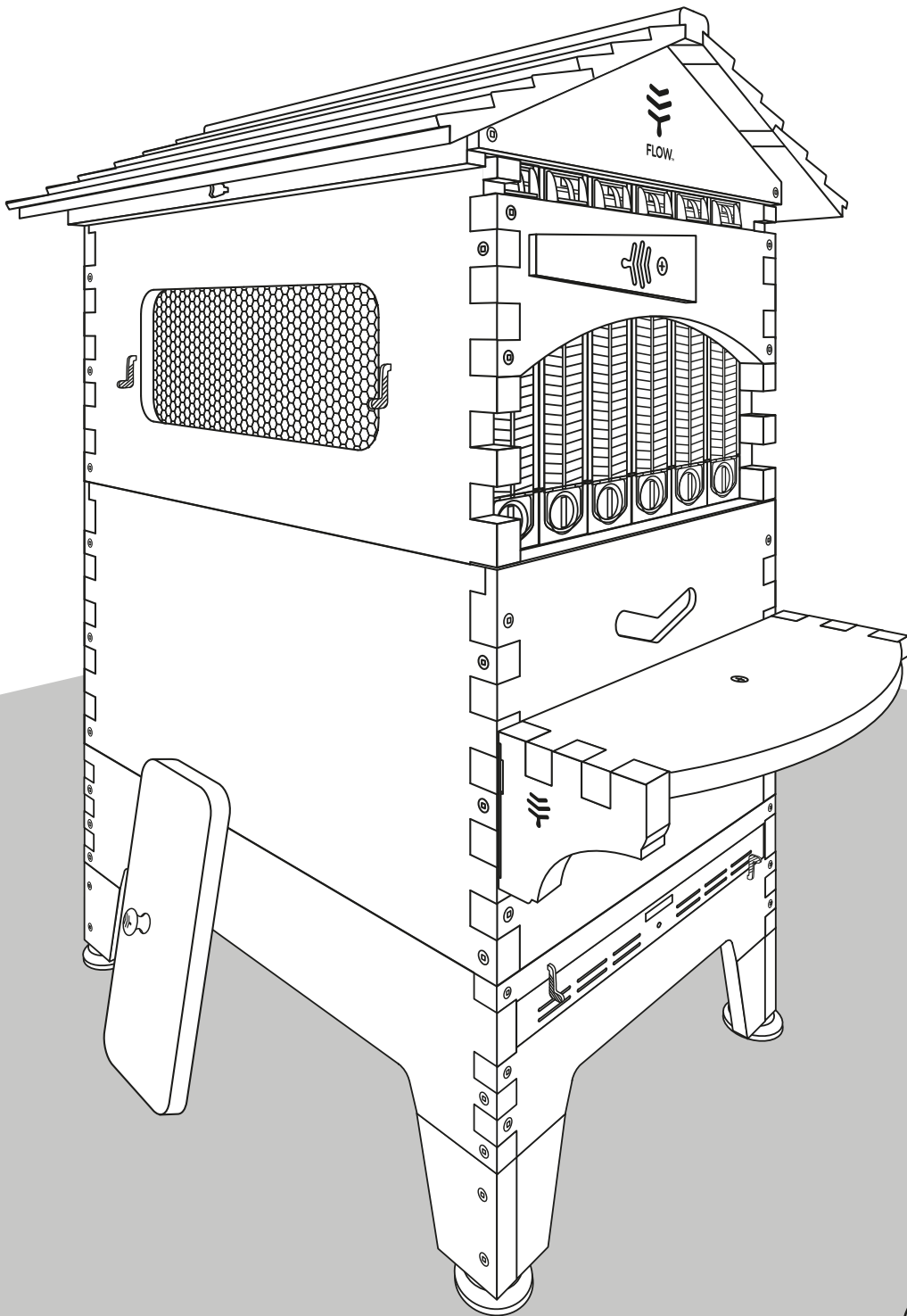




FLOW[®] HIVE 2

ASSEMBLY GUIDE



*If we look after the bees they will look after us,
and the honey really is an amazing bonus.*



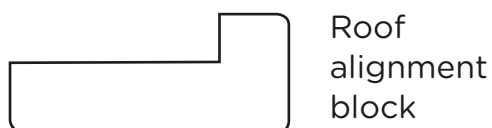
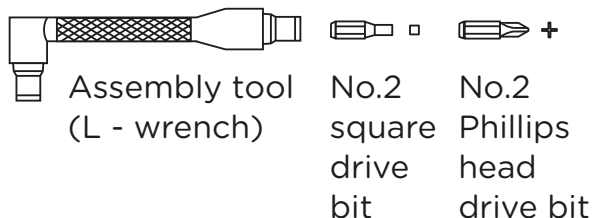
Building a Flow Hive usually takes a couple of hours, so it's a good idea to leave time and space to spread out your components to ensure that your assembly goes smoothly.

To assist you in identifying the parts for each of the major components we have included a pictorial guide at the beginning of each set of instructions. To further help identify and group them we have inscribed group names on the inside of most of the panels (eg base, super, roof etc).

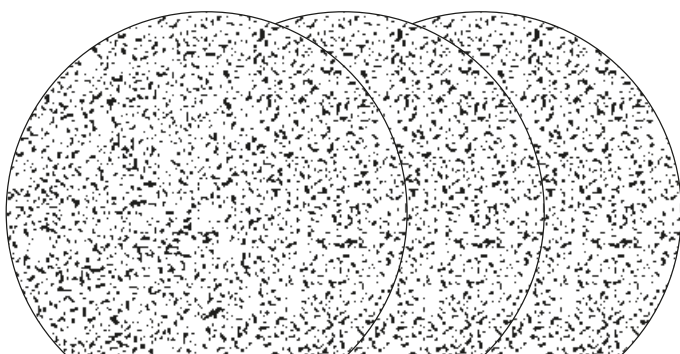
- It is important to read all instructions before assembling, however, if you're like most of our Flow team, you may find our assembly videos extremely helpful. These can be viewed at www.honeyflow.com/assembly
- If you are unfamiliar with constructing beehives, you may like to ask a friend or someone from your nearest beekeeping club to help.
- If short on time, the Flow Super can be constructed at a later date, as this will not be added to your hive until your colony is well established in the brood box.
- Timber is a natural product and will expand and contract in different climate conditions.
- Don't be alarmed if you have extra screws and hardware as we have included spares.
- When fastening the square drive screws, stop when the screw head is still slightly proud of the box to avoid splitting the timber.

TOOLS INCLUDED FOR ASSEMBLY

***PLEASE NOTE:** The assembly tool is located in the super hardware pack along with drive bits. Additional drive bits are located with the brood hardware kit.



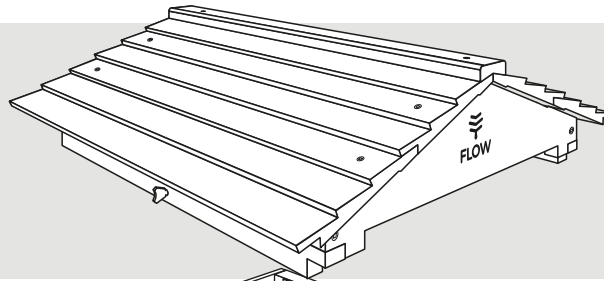
Sandpaper



TOOLS YOU WILL NEED (NOT SUPPLIED)

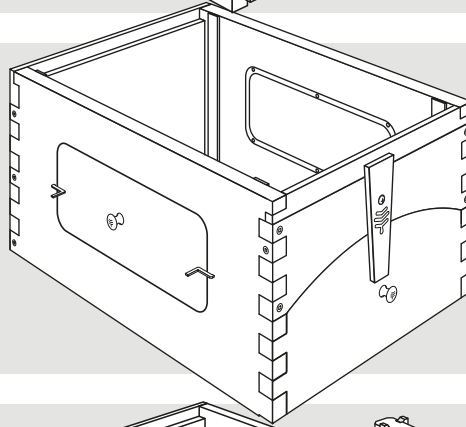
- Hammer (for brood frames)
- Non-toxic wood glue
- Suitable wood finish (see page 15). Many customers find it useful to apply this finish before adding windows, latches and knobs.
- Carpenter's square (optional)
- Clamps 41cm and 51cm (optional)
- Power drill (optional) use only with low torque setting. Must be used with care to avoid splitting the timber.

ROOF



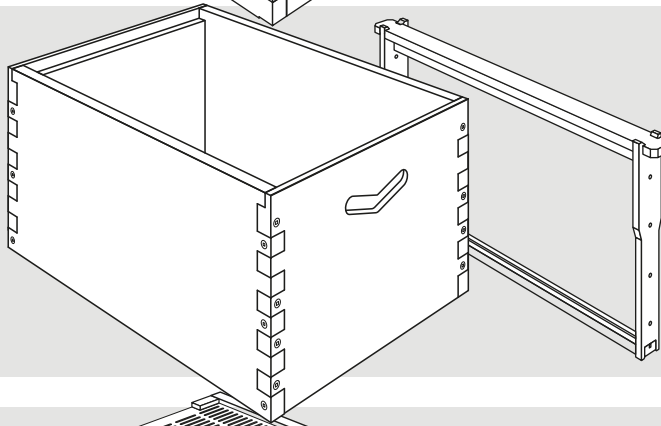
**PAGE
5**

**FLOW
SUPER**



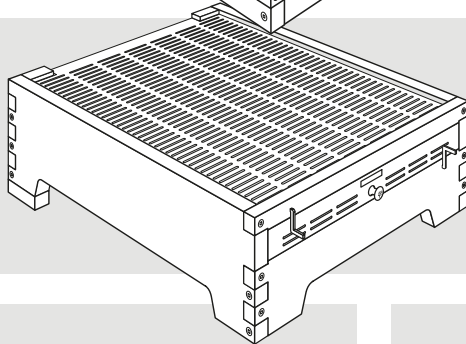
**PAGES
6-7**

**BROOD
BOX &
BROOD
FRAMES**



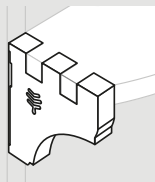
**PAGES
8-9**

BASE



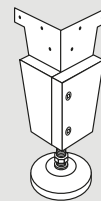
**PAGES
10-11**

**HARVESTING
SHELF**
(OPTIONAL)



**PAGE
12**

**LEG
KIT**
(OPTIONAL)



**PAGE
13**

HIVE CONFIGURATIONS

**TIMBER FINISHES, HOW TO USE THE BASE TRAY,
HOW TO USE THE INBUILT SPIRIT LEVELS**

**PAGES
14-15**

HARVESTING CHECKLIST

**PAGE
16**

NOTE: IDENTIFYING FLOW SUPER AND BROOD BOX PARTS

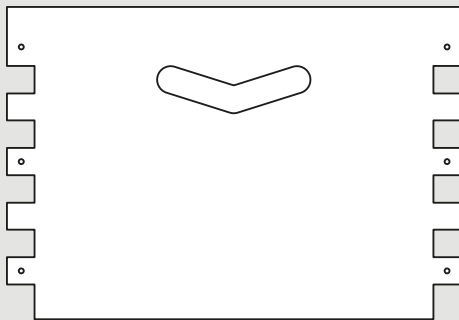
It's important to note that your Flow Super and Brood box panels may appear to be the same, however, these have a few minor differences which need be identified, to avoid confusion.

The brood box end panels can be distinguished from the Flow Super front panel, by the inclusion of an extra set of pilot holes on the finger joints (see images below).

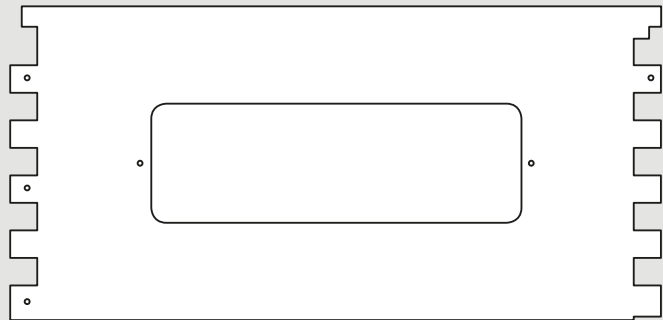
The Flow Super side panels can be easily identified as the panels which contain a window cutout, stepped box joint and metal bracing strip notch, all of which are absent from the Brood Box side panels.

FLOW SUPER PARTS

Flow Super front panel

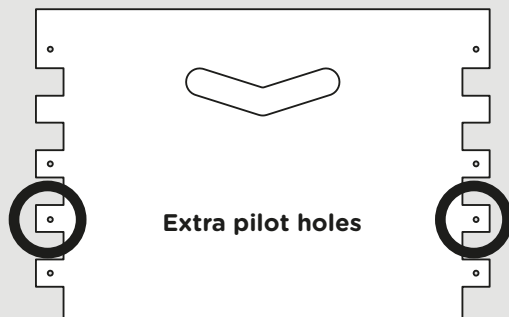


Flow Super side panel

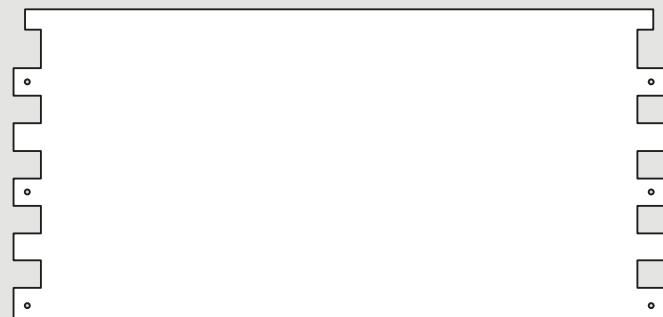


BROOD BOX PARTS

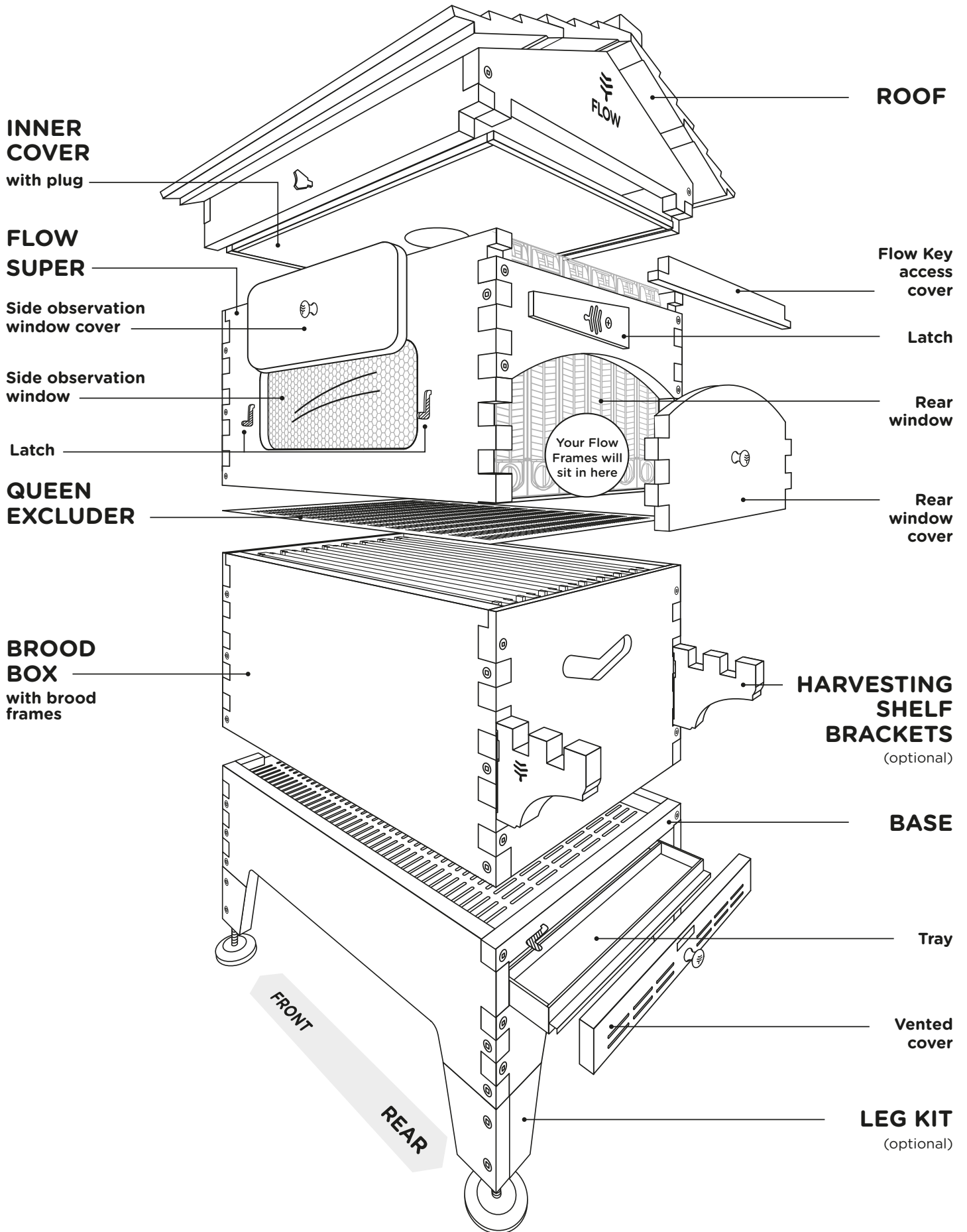
Brood box end panels



Brood box side panel

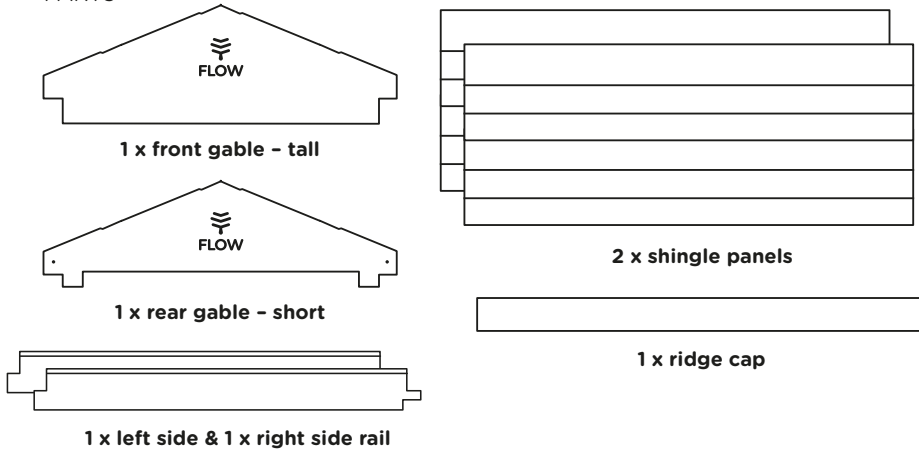


COMPONENTS OF A FLOW HIVE 2



ROOF ASSEMBLY

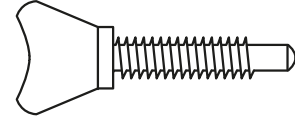
PARTS



ROOF SCREW PACK - ACTUAL SIZE

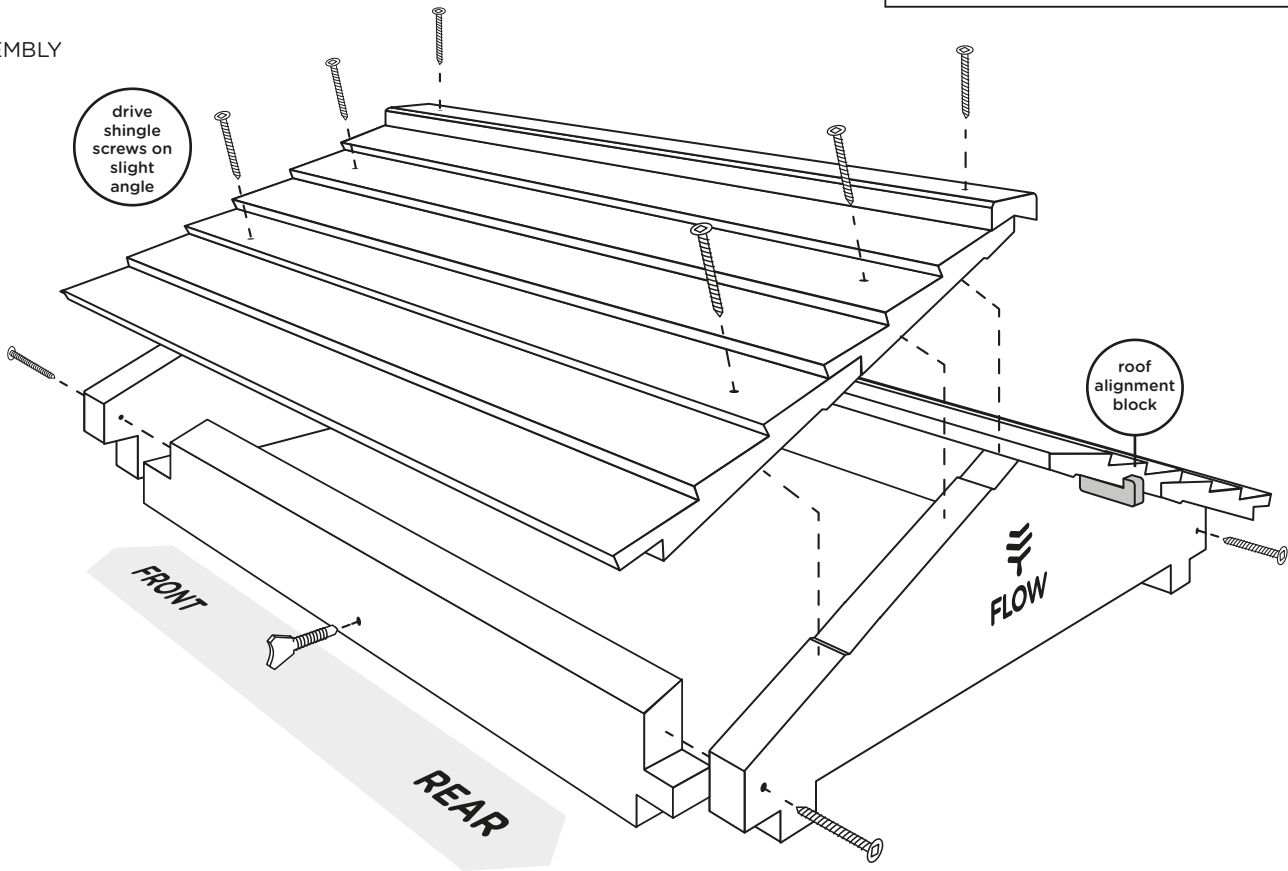


17 x square drive screws



2 x brass wing screws

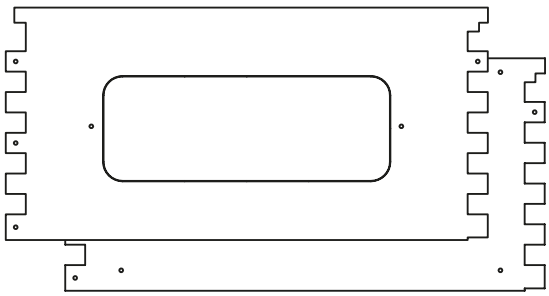
ASSEMBLY



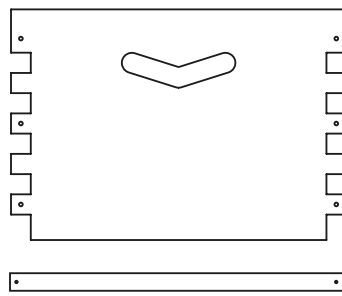
- Screw the roof rails and gables together (using the square drive bit and square drive screws) as shown.
 - The Flow logos face toward the outside.
 - Match the slope of the rails with the slope of the gable. The angle should align at both ends.
 - The roof rail end that aligns with the rear gable (shorter gable) has a second cut out to allow space for the key access cover once assembled.
- Check the roof is square prior to affixing the shingle panels.
 - Hint: You can use the inner cover and some packing material to hold it square while you affix the shingles.
- To affix the roof shingles, place them so that the underside of the panels match with the roof alignments on the gables.
- Line up the holes in the shingle panels with the roof gables. The roof overhangs the front and rear gables by 27mm (1.06 inches). Use the roof alignment block to measure this overhang
- Check once again that the roof assembly is square and that the holes in the shingles are correctly aligned with the gable ends. Screw the shingles into position (square drive bit and square drive screws).
 - Take care with this stage to make sure the screws are positioned square to the shingle and run into the gable (so they don't break through).
- Line up the ridge cap with the roof shingles. Screw the ridge cap down as shown.
- To secure the roof, locate the two brass wing screws. Screw into the pilot holes in the side rails. These can be used to secure your roof in high wind areas.

FLOW SUPER ASSEMBLY

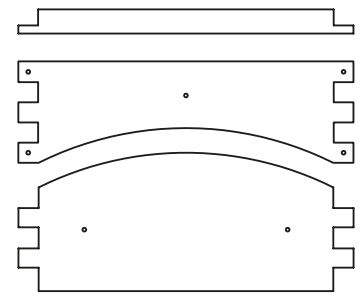
PARTS



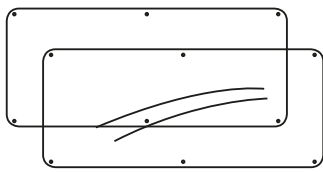
2 x Flow Super side panels with observation windows



1 x Flow Super front panel
1 x metal bracing strip



1 x Flow Key access cover
1 x rear fixed panel
1 x rear window cover



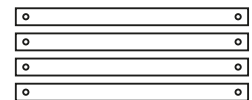
2 x observation windows



2 x window covers



1 x rear window latch



4 x acrylic frame spacers

SUPER HARDWARE PACK - ACTUAL SIZE



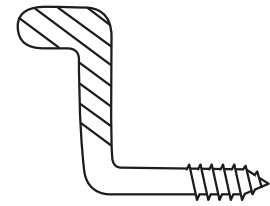
21 x square drive screws



21 x window/
frame spacer screws



2 x metal strip screws



4 x brass L screws



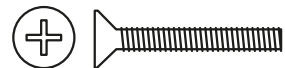
1 x rear window latch screw



2 x springs



3 x brass knobs



3 x brass knob screws

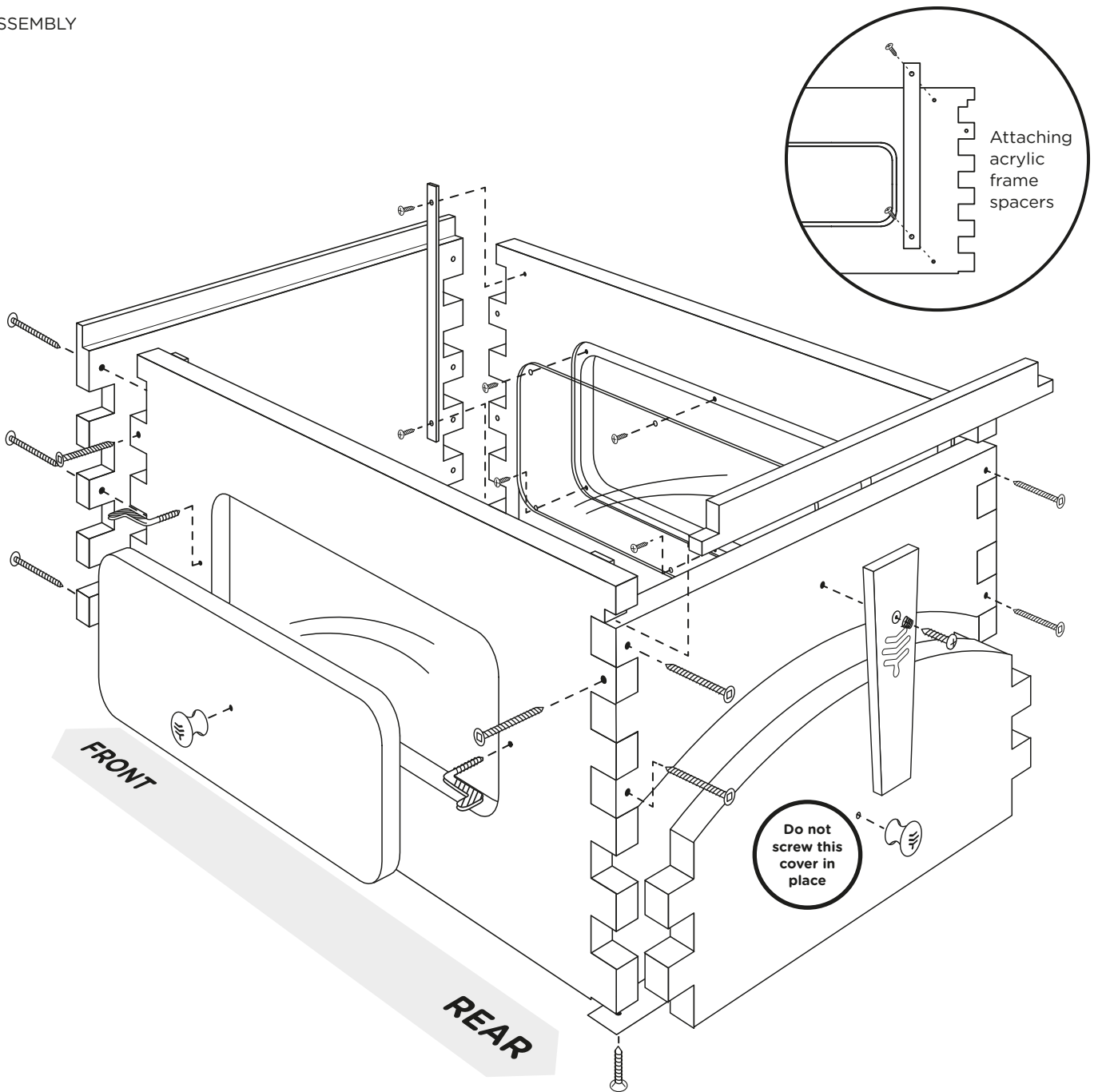
- To attach the acrylic frame spacers to the left and right side panels, remove the plastic film and line up with the pilot holes on the inside ends of the super side panels.
- Affix spacers (Phillips head driver bit and the frame spacer screws).
 - Face countersink bevel outwards to house screw shape.
- Dry fit the 2 super side panels, super front panel and rear fixed panel together as shown.
 - If finger joints are tight due to expansion or contraction, use the sandpaper (supplied) to adjust.
 - Make sure the 6 pilot holes surrounding the window face the inside of the box.
 - Do not screw the rear window cover in place as
- this piece will be used to gain access to the Flow Frames.

Hold the finger joints tightly together (clamp optional) and use the assembly tool (square drive bit and square drive screws) to secure through the pilot holes. Take care to stop when the head is flush with the wood surface. **If using a drill, be careful not to overtighten or the wood may split.**

To affix the metal bracing strip, turn the super upside down. Align the metal strip with the notch on the bottom of the side panels. Screw in to place using the assembly tool (Phillips head driver bit and two metal bracing strip screws) Optional: Pre-drilling may avoid splitting the wood.

Note: You may wish to apply a suitable timber finish before installing windows and latches

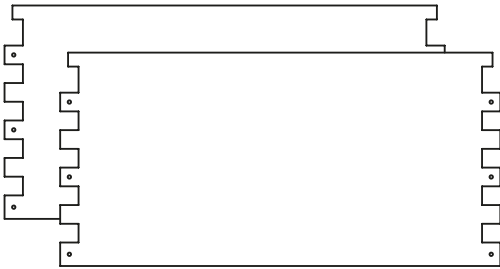
ASSEMBLY



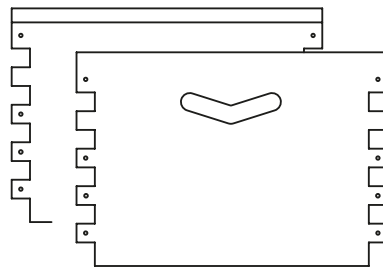
6. Remove protective plastic film from both sides of the observation windows and line up with the 6 pilot holes. Attach the acrylic windows (using the Phillips head driver bit and window screws) to the inside of the box. **Do not use a drill for this step as it is easy to overtighten and crack the acrylic window).**
7. Affix the 2 brass L screws into the pilot holes (by hand) on either side of the observation window on the outside of the box. Wind in until they almost scrape on the external box side.
8. Locate the 2 observation window covers and 2 brass knobs. Affix the knob using the brass knob screw and tighten by hand until the head of screw is flush with the wood. You can now put the window covers in place using the brass L screws to secure them.
9. Place a spring onto the rear window latch screw and use the screw to affix (Phillips head drive bit) the rear window latch onto the rear fixed panel of the super at the pilot hole. The spring will prevent over-tightening of the screw and allow this latch to move easily.
10. Place the Flow Key access cover above the rear fixed panel, and turn the rear window latch to secure it in to place.
11. When you install your Flow Super make sure to place the queen excluder between the brood box and super (see establishing colony configuration pg.14). We have plenty of resources online to help give guidance on when to add your Flow Super.

BROOD BOX ASSEMBLY

PARTS



2 x brood box side panels with observation windows



2 x brood box end panels

BROOD BOX SCREW KIT - ACTUAL SIZE

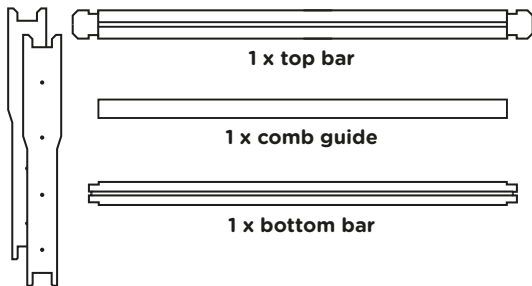


29 x square drive screws

1. Dry fit the 2 brood box side panels and 2 brood box end panels together as shown.
 - If finger joints are tight due to natural timber expansion or contraction use the sandpaper (supplied) to adjust.
2. Hold the finger joints tightly together (clamp optional) and use the assembly tool (square drive bit and square drive screws) to secure through the pilot holes. Take care to stop when the head is flush with the wood surface. **If using a drill, be careful not to overtighten or the wood may split.**

BROOD FRAME ASSEMBLY

PARTS (SHOWN FOR SINGLE FRAME ONLY)



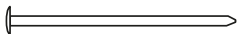
2 x end panels

1 x top bar

1 x comb guide

1 x bottom bar

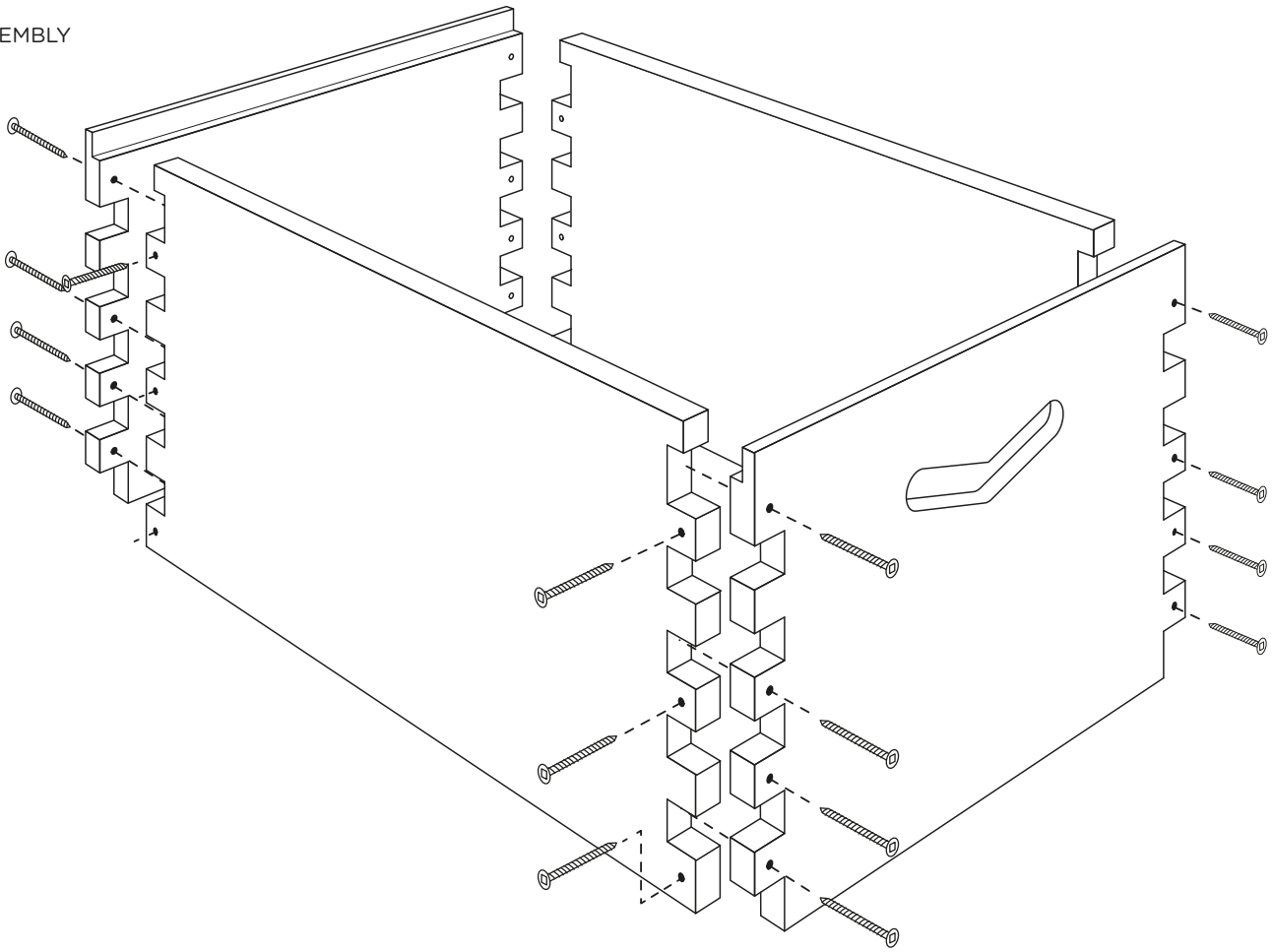
BROOD FRAME HARDWARE - ACTUAL SIZE



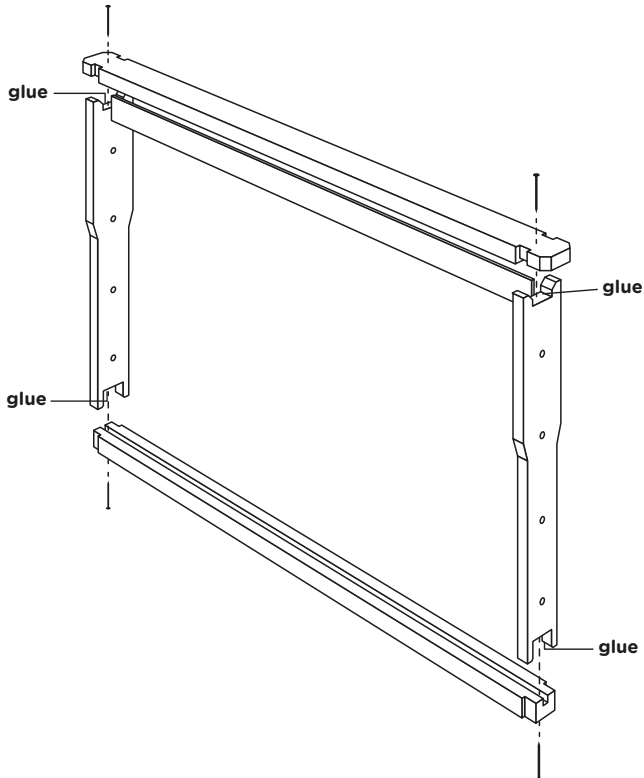
65 x nails

1. Lay out all the pieces for a single frame on a flat surface.
2. Apply a small amount of glue to the u-shape slots on the end panels, then fit the top and bottom bars into the slots. Glue is not completely necessary but will make the frame more robust.
3. Check that the frame is square, then nail all pieces together.
4. Glue comb guides in only when using natural foundation in your brood box. If you plan to use a plastic or wax foundation (not supplied) do not use the comb guide strips. Turn frame upside down, add a few drops of glue to the slot on the underside of top bar and insert the comb guide.
5. Repeat for remaining frames.

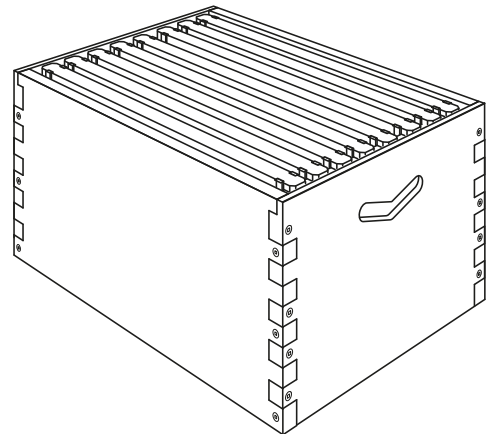
ASSEMBLY



ASSEMBLY

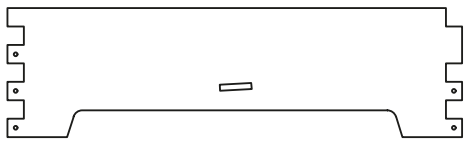


IMPORTANT: When installing your bees, make sure the brood frames are pressed together in the centre of the box with any extra space spread evenly across both outside edges.

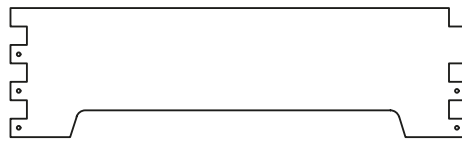


BASE ASSEMBLY

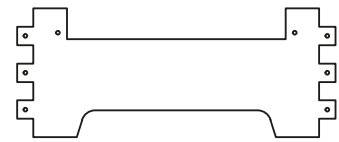
PARTS



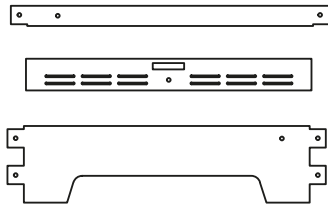
1 x side panel left (with spirit level)



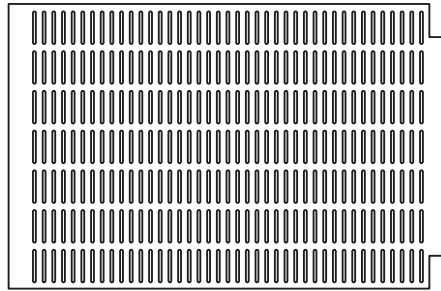
1 x side panel right



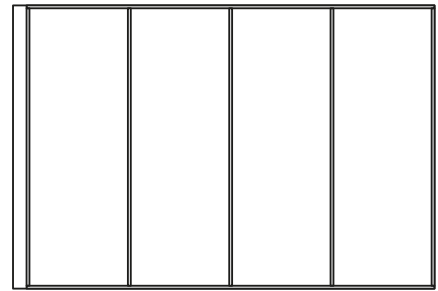
1 x front panel



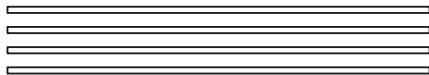
1 x rear support beam
1 x rear vented cover
(with spirit level)
1 x rear panel



1 x metal screen



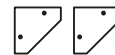
1 x tray



4 x metal rails



1 x landing board

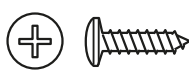


2 x footblocks – for use if **not**
installing the optional leg kit

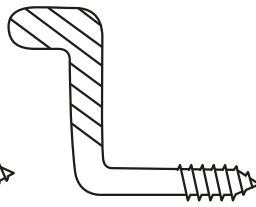
BASE SCREW PACK - ACTUAL SIZE



30 x square drive screws



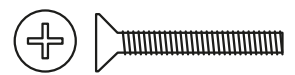
8 x rail screws



2 x brass L screws



1 x brass knob

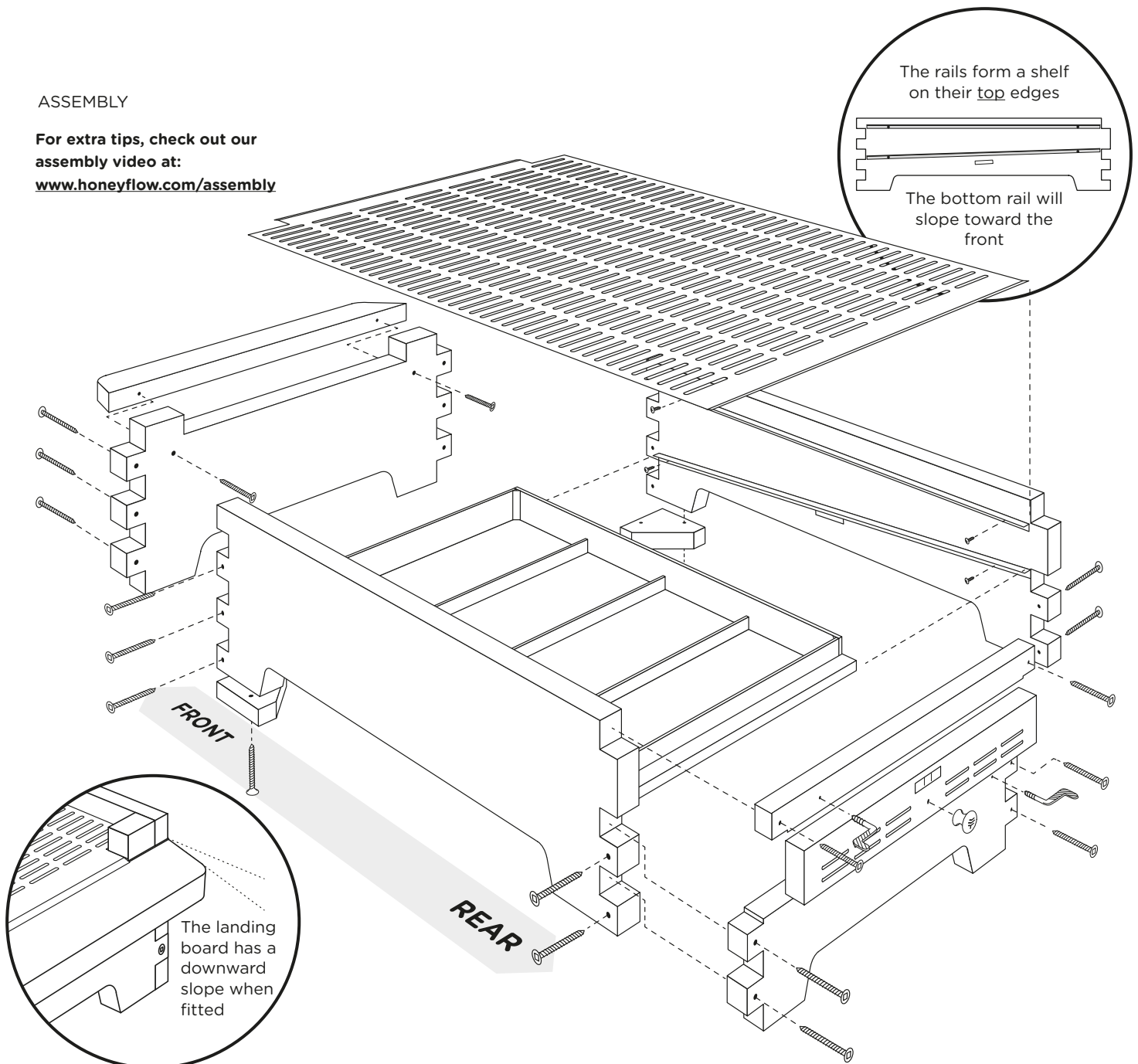


1 x brass knob screw

- Dry fit the base sides, rear and front panels together.
 - The 4 small pilot holes on each side panel (for supporting the metal rails, acrylic tray and metal base screen) face the inside.
- Hold the finger joints tightly together (clamp optional) and use the assembly tool and square drive bit to secure your base (square drive screws). Take care to stop when the head is almost flush with the wood surface. **If using a drill, be careful not to overtighten or the wood may split.**
- Attach the rear support beam (square drive screws) to the top rear of the side panels with a gap between the support beam and the base rear panel (this is where the rear vented cover will sit, but do not attach this).
- Centre the landing board at the front of the base and attach to the front panel using the pilot hole locators (square drive screws), as shown, with a downward angle to deter rain from entering the hive.
- Now affix the 4 metal rails to the inside face of the side panels (Phillips head driver bit). These rails will house the acrylic tray and metal base screen. Line up the screw holes in each metal rail with the internal side panel pilot holes.
 - The right angle rails mount with the holes on the underside (and forms a shelf on the top edge).
 - Repeat on each side panel to create two small horizontal bracket shelves on each side as shown.
 - The rails are not parallel. The bottom rail slopes toward the front.
- Slide the acrylic tray into place through the gap between the rear panel and the rear support beam.
 - When the tray is in place, a gap remains for ventilation.
- Locate the 2 brass L screws and screw them into the pilot holes by hand on the rear panel and the rear support beam.

ASSEMBLY

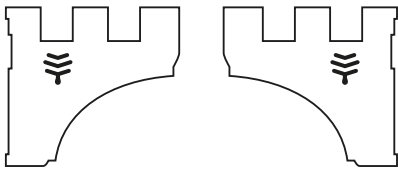
For extra tips, check out our assembly video at: www.honeyflow.com/assembly



- These L screws sit asymmetrically (see diagram). Screw in until they almost scrape on the external box side.
8. To attach the brass knob onto the rear vented cover (with spirit level), insert the knob screw through the pilot hole and tighten by hand until the head of the screw is flush with the wood. You can now put the base rear vented cover in place using the brass L screws to secure it.
 - The base rear vented cover can be used in two positions. Place vents on the top side to assist with ventilation, or turn upside down with vents at the bottom to block ventilation.
 - The vented cover should touch the acrylic tray to create a sealed surface on the inner edge.
 9. Remove plastic protective layer from the metal screen and place onto the top side of metal rails so that the entrance lip slopes down to touch the landing board.
 10. To create an optimal harvesting slope on the base for customers who do not have the optional leg kit, you will need to attach the 2 footblocks to the front of the base (the front is the side with the landing board attached). Line up each footblock so that the corners match and using the square drive bit, screw 2 square drive screws into the pilot holes.
 - Your base includes a side panel spirit level, which indicates when the base is sloped to the optimal harvesting angle (3°). Once you have attached your 2 footblocks, check the spirit level to ensure that your base is sloped for optimal harvesting.
 - Please also note; there are 6 pilot holes in the bottom corners of the base for the optional leg kit. Disregard these pilot holes if you have not purchased this.

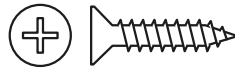
HARVESTING SHELF ASSEMBLY (OPTIONAL EXTRA)

PARTS



2 x harvesting shelf brackets

HARVESTING SHELF HARDWARE PACK - ACTUAL SIZE

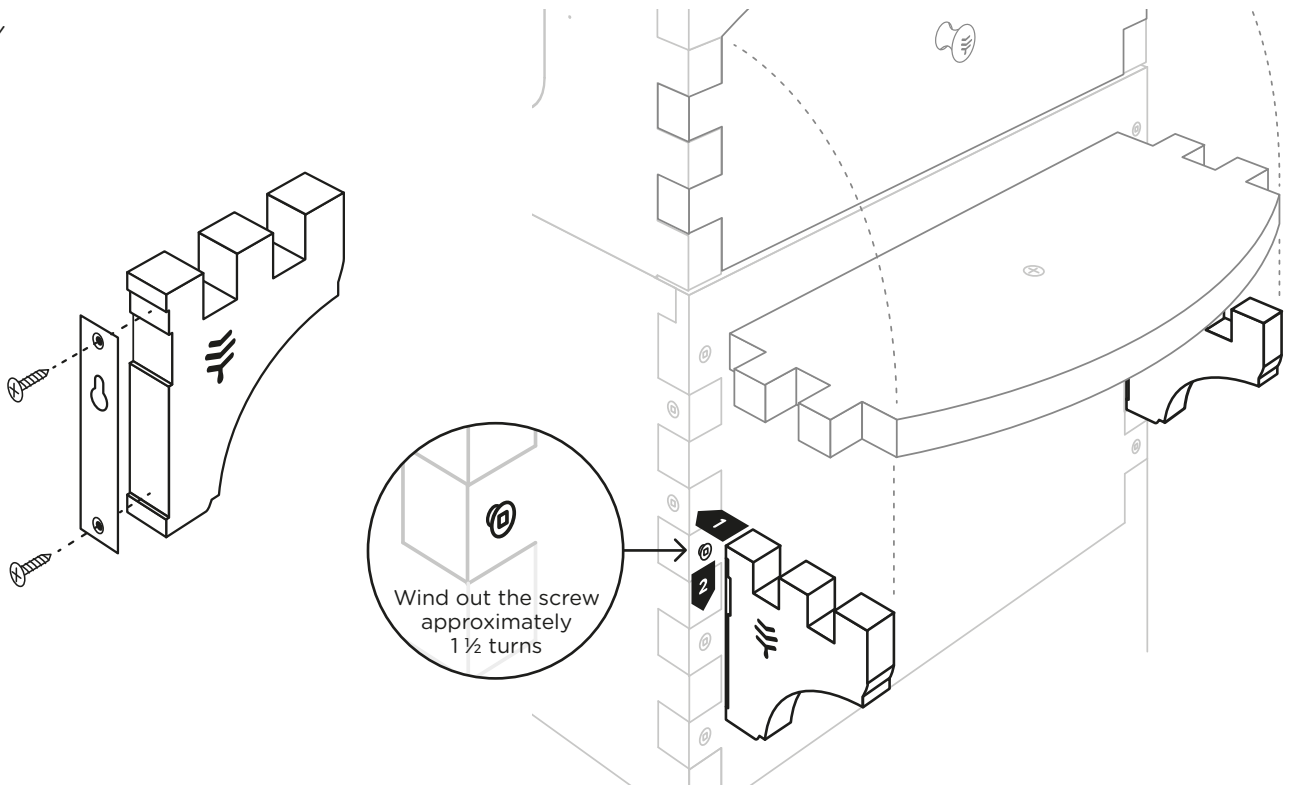


4 x Phillips head screws



2 x harvesting shelf bracket keyhole mounts

ASSEMBLY



1. To fix keyhole mount to bracket: place the keyhole mount with countersink facing outward, against the shelf bracket and attach to the vertical edge as shown (Phillips head screws and Phillips head driver bit).
2. Make sure the large hole on the bracket mount goes at the bottom.

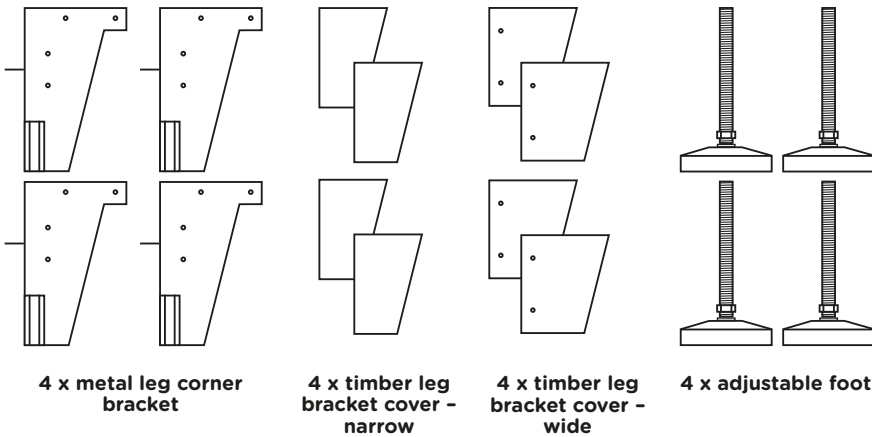
Using your harvesting shelf

1. You can attach your shelf in multiple locations at your preferred height. Choose any two corresponding square head screws on the brood box front (using the assembly tool and square drive bit) and wind out the screw approximately 1 1/2 turns (you may need to adjust slightly to get the perfect fit) see diagram.

- For large jars you can even use the screws on the rear of the base for a lower shelf, but be careful not to overload.
 - Adjust the screws so that they make a nice tight fit. If the screws are wound out too far, the brackets will not be as structurally secure.
2. Fit the harvesting shelf bracket over the exposed screwhead and push down until it clicks into place.
 3. When you are ready to harvest you can fit the Flow Super rear window cover to these two brackets to create a handy shelf which will make harvesting honey even easier.
- These brackets are designed for easy removal. Store inside for longevity.

LEG KIT ASSEMBLY (OPTIONAL EXTRA)

PARTS



LEG KIT SCREW PACK - ACTUAL SIZE

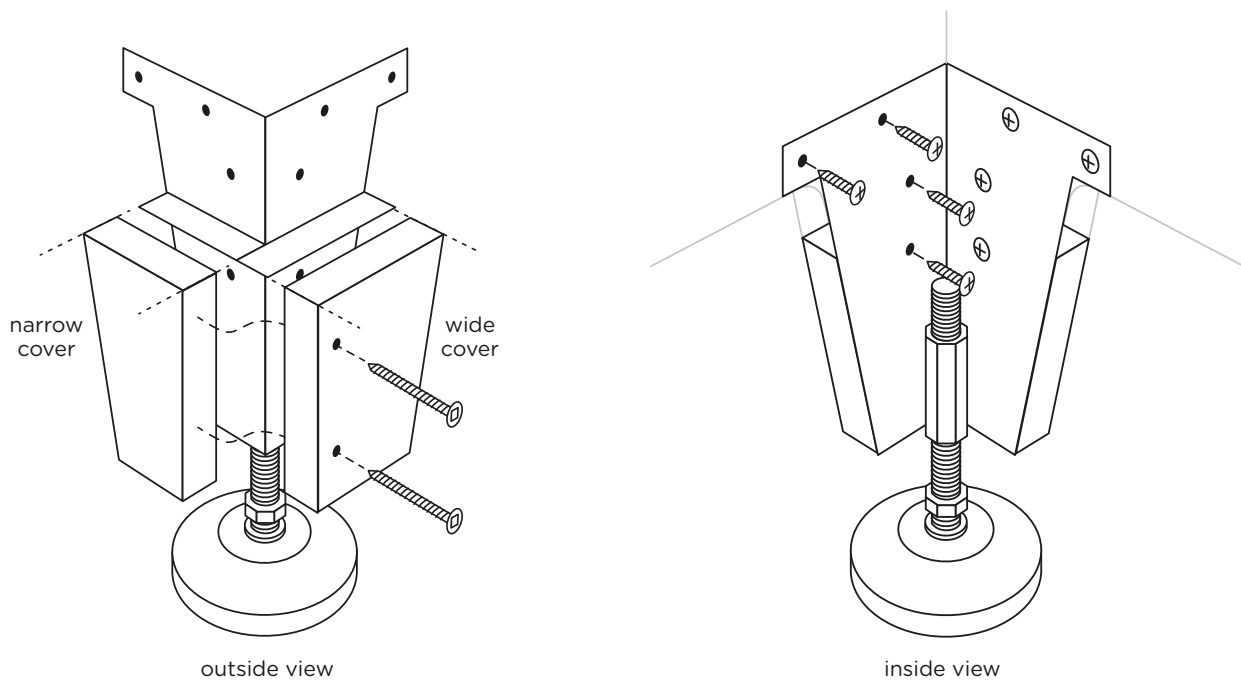


8 x square drive screws



33 x phillips head screws

ASSEMBLY

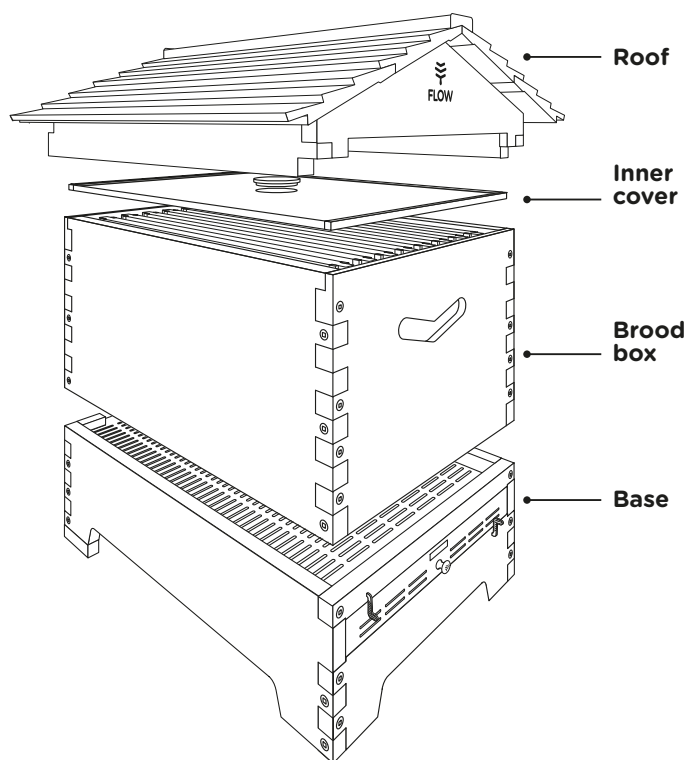


1. Dry fit one narrow and one wide timber leg bracket cover to the metal leg corner bracket as shown.
2. Line up the two pilot holes in the bracket covers with the corresponding two holes in the metal bracket and attach (Phillips head drive bit and Phillips head screws).
3. Attach the bracket covers together using the two pilots holes on the wide cover (square drive bit and square drive screws).
4. Turn the base on its side to access the bottom four corners.
5. Align the metal brackets with the 6 pilot holes on the inside of the base corner and attach (Phillips head drive bit and Phillips head screws) like shown.
6. Turn the base upside down and screw the feet into each leg bracket.
 - You can adjust the height to create the optimal slope for harvesting, using the inbuilt spirit levels on both the side and rear of the base. If you are on flat ground the front two legs should be longer than the rear to create the 3° slope required for harvesting.

FLOW HIVE 2 CONFIGURATIONS

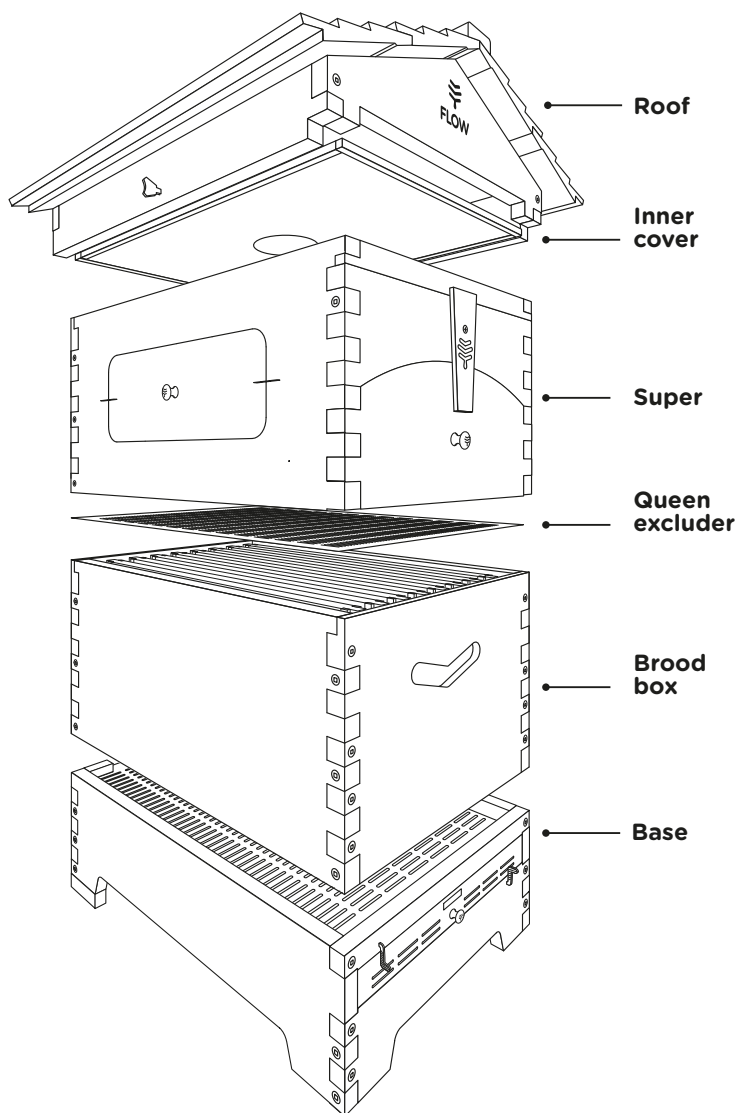
STARTING YOUR COLONY CONFIGURATION

It's important to get your brood box humming before you add your Flow Super. First set up your base, brood box with frames, inner cover and roof (as shown below) while your bees are growing in number and building comb. You can use the inner cover plug to control bee access to your roof while the colony is establishing.



ESTABLISHED COLONY CONFIGURATION

Add your Flow Super with Flow Frames once your colony is strong and established. Place the queen excluder between the brood box and Flow Super. The inner cover is placed on top of the super. It is possible to add extra brood boxes or supers once your colony is established and expanding. Speak to your local beekeeping club for region specific advice.



TIMBER FINISHES

Applying a suitable wood finish will improve weather protection and increase the life of your timber hive.

Araucaria or Paulownia: We recommend painting the outside of the hive with a paint primer followed by a good quality exterior grade paint.

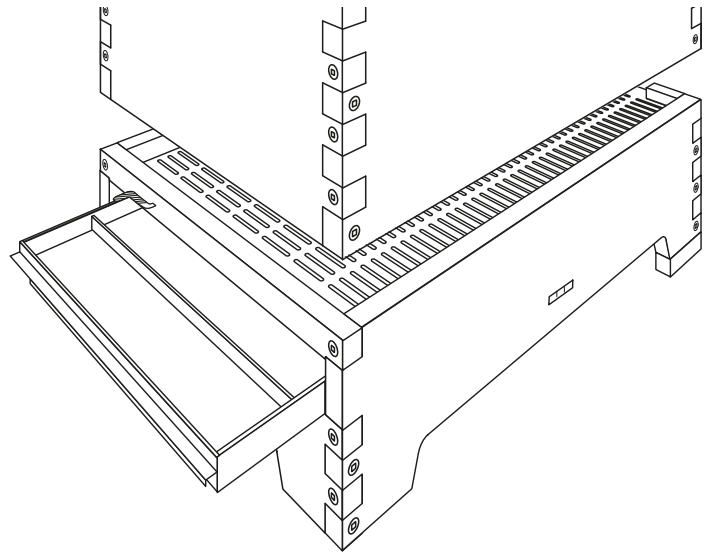
Western Red Cedar: If you would like to preserve the natural timber finish of your hive we recommend applying a non-toxic, no- or low-VOC timber finish to

the outside of the hive only, along with the inside of the door covers, swing latch and bracket covers, to minimise expansion in wet weather.

Roof: To create a good weather seal on the roof we recommend painting with exterior grade paint. Apply a primer first then use two coats of paint. Apply liberally to the joins.

HOW TO USE YOUR BASE TRAY

The base tray provides a safe space free from bee activity, which can be used to apply pest treatments, such as small hive beetle traps, to the hive. You can also use the tray to inspect debris from the hive, giving an insight into hive health. We recommend cleaning the base tray prior to harvesting.

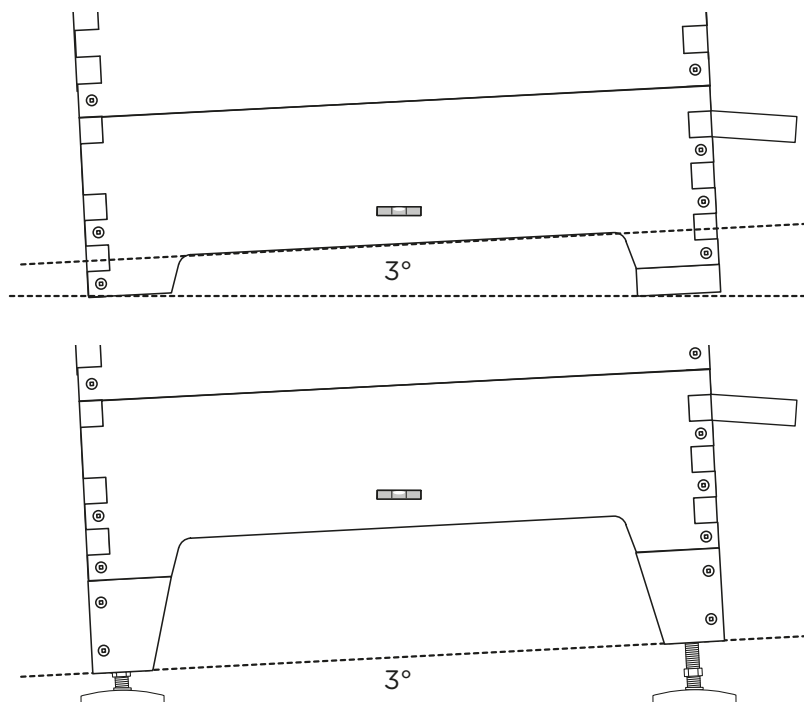


HOW TO USE YOUR SPIRIT LEVELS

The Flow Hive 2 comes with two inbuilt spirit levels to ensure your hive is set up for optimal honey harvesting.

You can adjust the front height of your hive to create the optimal slope for harvesting by either attaching the supplied footblocks or optional leg kit to the rear of the base. The inbuilt spirit levels on both the side and rear of the base will be centred when your hive has the optimal 3° slope required for harvesting.

For those that don't know how to use a spirit level, angle the base until the spirit level bubble is between the two marks. This sets your hive on the 3 degree slope required for harvesting.



HARVESTING CHECKLIST

The Flow Hive 2 has additional new features which make the experience of harvesting honey even easier.

Please note: some of the steps are different to the original Flow Hive Classic and those in the Flow Frame Manual.

Wear a suitable protective bee suit to minimise stings.

Check out this Flow sponsored safety pamphlet: www.accreditedfirstaid.com.au/beekeeping-safety for an introduction to beekeeping safety and first aid.

Ensure that the hive has a 3° slope towards your honey outlets.

Your base side spirit level and rear spirit level will both be aligned when the hive has the appropriate 3° angle. (Check out page 15 for tips on how to use your spirit levels).

Clean out your base tray prior to harvesting.

Remove pest treatments and hive debris.

Ensure that each frame you are harvesting is ready and that the bees have capped the cells.

Look in the end frame view, if the cells are mostly full and capped with wax then it's a good indication the honey is ready for harvest. For more hints on capping and harvesting visit our Beginner Beekeeping Series at: www.honeyflow.com/beginner-videos.

Attach your harvesting shelf brackets (optional) or find a suitable stand for your honey jars.

Check each bracket is secure and fit the Flow Super rear window cover to create a shelf.

Are the collection tubes pointing the right way?

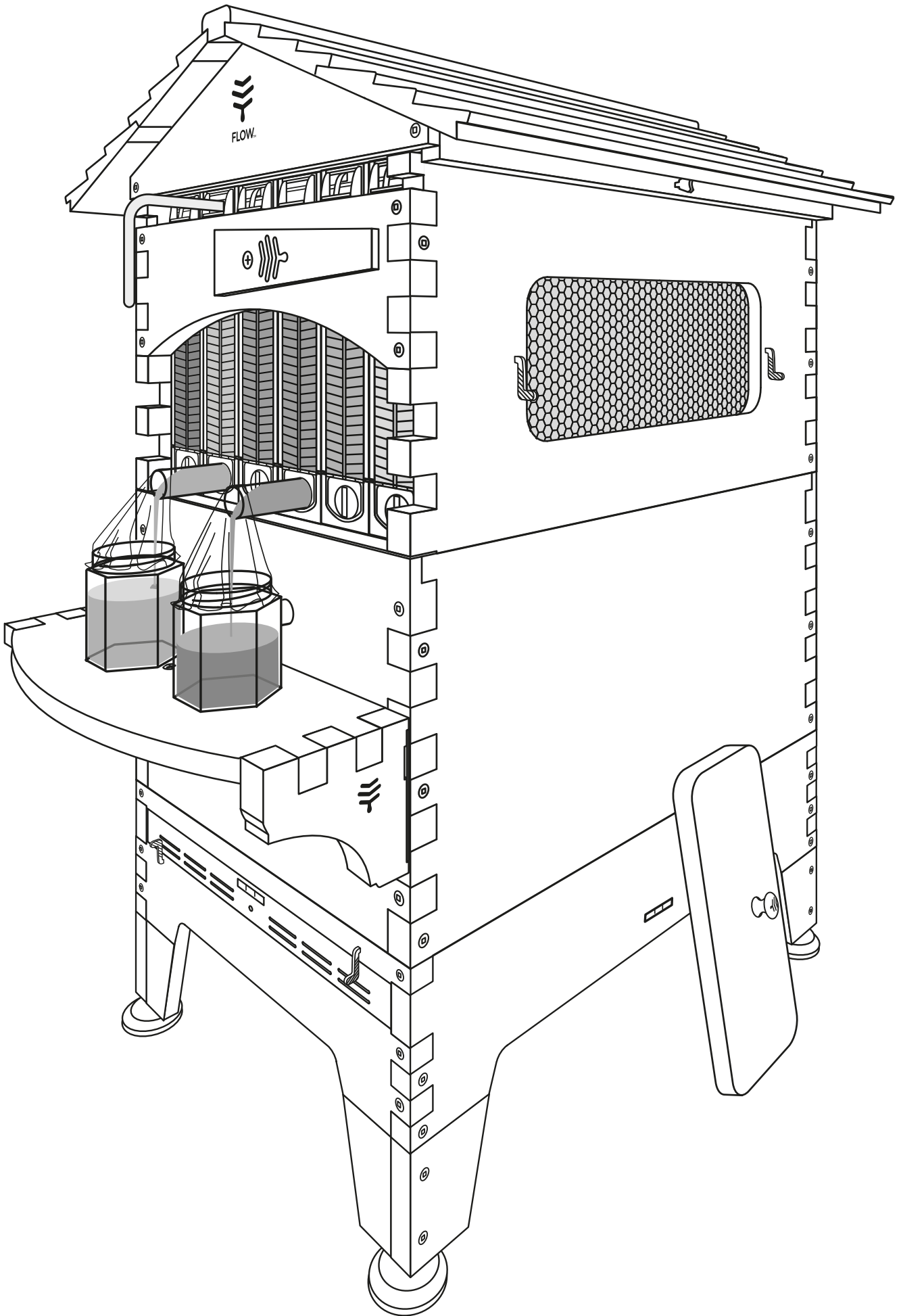
The little tongue on the end of the tube goes into the frame and blocks the honey leak back point. If the tube is the wrong way around honey may flow back into the hive. Make sure the tube is inserted all the way in to create a seal, you may need to wiggle the tube to make sure it fits in correctly.

Do you have enough jars?

Each Flow Frame can hold up to 2.3L /3.2kg, (2.4qt) of honey. If you are harvesting for the first time, it may be a good idea to start with one or two frames first to make sure everything is setup correctly.

Have covers for your jars ready

Place a cover over your jar to keep out bees or other contaminants. Some netting, kitchen cling wrap, cloth etc. can be used to cover the open honey jars while harvesting.



ASSEMBLY VIDEOS



honeyflow.com/assembly

BEGINNER VIDEOS



honeyflow.com/beginner-videos

MEET THE BEEKEEPER



honeyflow.com/mtb

BEE PART OF OUR COMMUNITY

For beekeeping info and assembly instructions go to: www.honeyflow.com/assembly
To keep connected join us on forum.honeyflow.com or contact info@honeyflow.com



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Australian Made
Flow Hive 2 Assembly Guide

Revision: 02.18



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