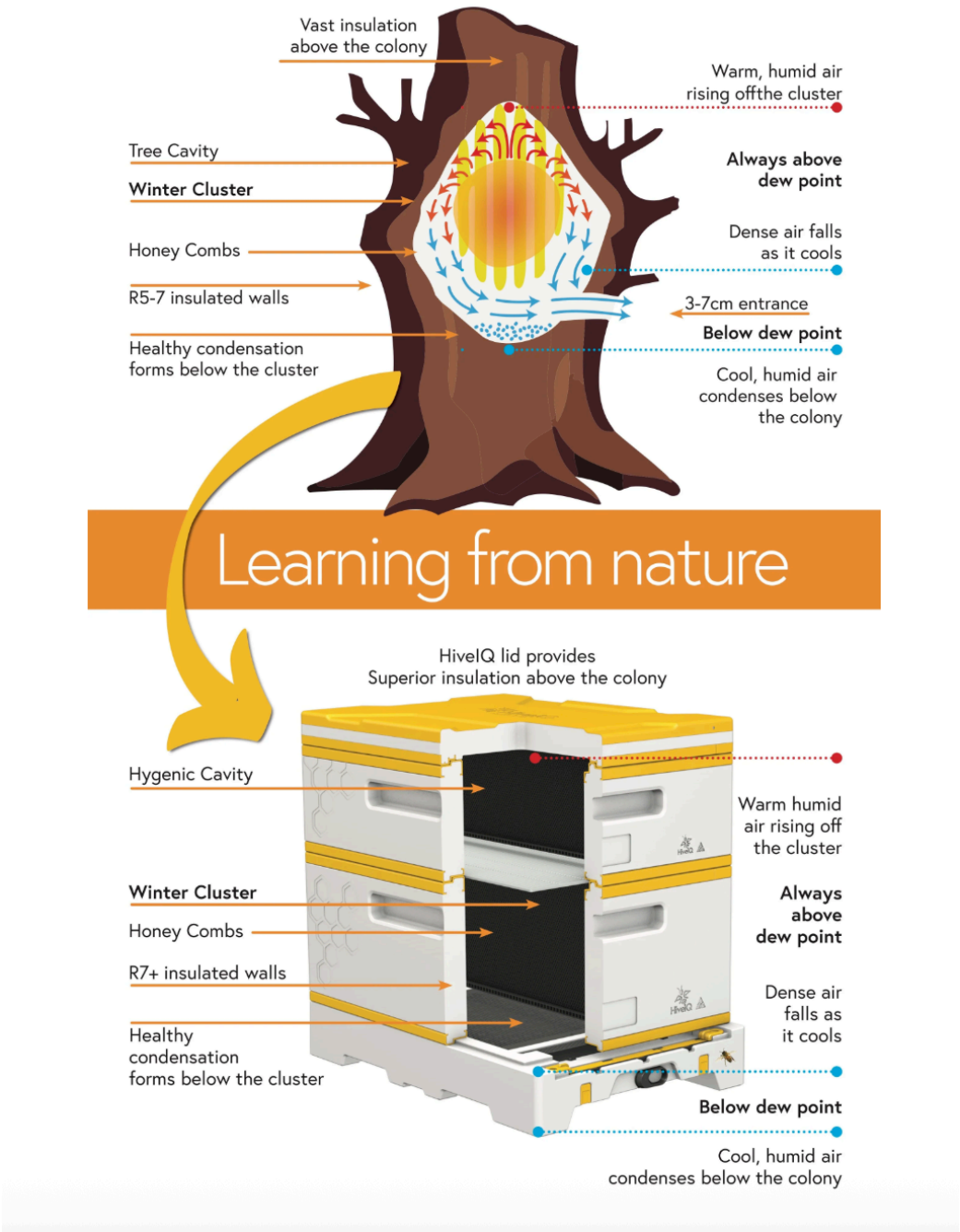
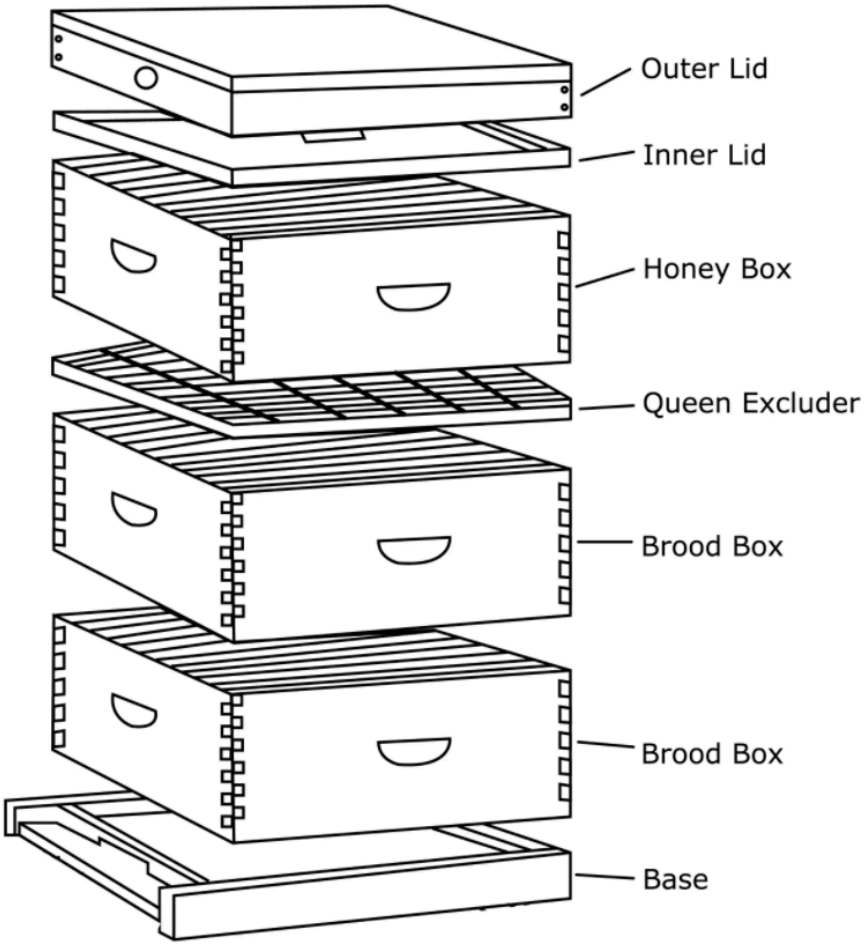
Hive IQ



HIVE IQ boxes are made of high-density polystyrene, making them significantly more durable and insulating than wood boxes, which are typically made of pine. The boxes hold 9 deep or medium frames and do not need follower boards.

Langstroth Hives



To house your bees for the first three weeks to a month after you install them, you will need one completely assembled Basic Hive Set up with Deep or Medium box (Depending on preference). Some folks prefer the commercial standard of two deep boxes and one medium. Others prefer all medium boxes because they are lighter. NOTE: you will need 4 to five mediums to offer the same amount of space to bees. Below is a suggestion for needs as a beginning beekeeper. Please note that two separate colony set-ups are recommended by many books as you may use resources from one hive to boost the other (if needed).

Note: Beekind does not sell top bar hives or flow hives.

DEEP & MEDIUM BOXES

Your hive body will be made up of boxes filled with frames. Beekind carries boxes in two depths: **Deep boxes** are commonly used for brood and medium boxes are commonly used for honey, but are otherwise interchangeable. **Medium boxes** are typically used for honey as a 10-frame deep box can weigh up to 100lbs when filled with honey. Using all the same size box will make your hive more modular, as you can move frames between any box. The outside of the box will need to be painted with exterior latex-based paint, unless you purchase **dipped** boxes (Paraffin and Rosin to protect from elements)

FRAMES, FOUNDATION, and FOLLOWER BOARDS

Eight frames should be placed snugly in the middle of each box, between two follower boards. Alternatively, you may choose to use 10 frames per box and forgo follower boards.

Plastic Rite-Cell foundation is quick, cheap, and easy to replace. This is what the commercial beekeepers use, as they are very sturdy in the hive and perfect for collecting honey in a centrifugal extractor. The plastic foundation keeps hives organized, consistent, and tidy. Plastic foundation doesn't allow for creating cut comb or customizing cell size, and a very small number of drones are produced.

Beeswax Foundation allows bees to customize passageways and remove foundation to make large, healthy drone cells. It also allows bees and beekeepers more freedom to customize cell size. Beeswax foundation is fragile than plastic foundation to work with; should be double-wired to prevent buckling and further disorder in the hive. Very thin beeswax foundation can be used for cut-comb production. Frames with beeswax foundation can be carefully spun in a centrifuge at lower speeds, although sometimes foundation will still blow apart. Frames should be kept vertical when inspecting to prevent heavy fragile wax comb from dropping out of the frame. Wax foundation still dictates a consistent cell-size in the hive, although smaller cell-size beeswax foundations are available.

A Note On Beeswax Foundation Cell Size:
***5.4mm** is the standard industry cell size, also used in plastic rite-cell foundation. Some studies have shown varroa mites have a difficult time reproducing on worker brood raised in small cell comb.*
***4.9mm** cell size (aka Small Cell Foundation) is an option for use by experienced beekeepers. Smaller cells are also the choice of wild honeybees, although many cell sizes can exist on natural comb.*
***5.1mm** cell size is strongly recommended to transition from the standard 5.4 to the 4.9 cell foundation, allowing the bees to adjust more readily and help avoid the erratic comb drawing that can occur with a direct downsizing from the 5.4 to the 4.9.*

Foundationless Frames are even more fragile during beekeeping than beeswax foundation, so not recommended for beginners. With foundationless frames, bees produce their own beeswax entirely and customize cell sizes, passageways, and overall comb shape to fulfill their natural

needs. Bees produce significantly larger numbers of drones, ensuring availability of healthy drone populations for well- mated queens. Preferred by those wishing to maintain bees closer to an ideal wild state, including bio-dynamic beekeepers.

A colony will sometimes construct "crazy comb" (meaning not in straight rows), which may be beautiful and effective, but makes beekeeping maneuvers very challenging. Single frames need to be removable from the hive to inspect for disease, and crazy comb will prevent that since inspection at this point will be most damaging and disturbing for the bees and keeper.

Honey frames may still be spun in an extractor but only if you've done the work of adding 1 or 2 horizontal wires to the frames for reinforcement. Also special care must be taken to spin very slowly at first, flip frame, spin slowly again, flip frame, then able to spin a little faster after the comb is lightened, etc... Or comb can be crushed and drained to collect honey, but bees will have to take time and resources to construct new comb for the hive. (Good for collecting beeswax for candle making and other products though, and it's advisable to cull wax every two years or so anyway) Bees will produce significantly larger numbers of drones, i.e. possibly more varroa mites and less worker bees.

Follower boards

Use follower boards to turn a ten frame hive into an eight frame hive. Eight frames is preferred by honeybees, and eliminates the need for beekeepers to move frames (to get bees to build on the outermost frames). Two follower boards preserve bee space, make it easier to remove frames, and provide insulation & ventilation.

Entrance Reducer

This very important piece of equipment needs to be with every hive. The reducer fits snuggly in the opening between the screen bottom board and your first brood chamber to control the size of the entrance to the hive in order to reduce stress on guard bees and protect from invaders. The entrance must be reduced when colonies are being fed sugar syrup, are weak, during nectar dearth, and during yellow-jacket season (mid to late summer).

Bottom Boards & Observation Trays

Beekind sells solid and screened bottom boards. A screen bottom board helps to mitigate mites by allowing some mites to drop out of the hive. Better if used as an integrated pest management system with an observation tray insert.

Inner Covers and Outer Covers

*The outer **Telescoping Cover** is the roof of your hive, designed to withstand harsh conditions, and is always placed over the **Inner Cover**. Bees will propolize (glue) the inner cover to the box, and the beekeeper must use a hive tool to pry it loose. A thick inner cover works best with inside top feeders to prevent robbing (due to the screen), and provides more ventilation for heat to escape and moisture to evaporate.*

Feeders

Feeding bees is common practice when establishing a colony in boxes for the first time. Feed your bees a mixture of sugar water of 1 part pure cane sugar to 1 part fresh water helps the new colony build wax combs which are essential for egg production and storage of pollen and nectar. You will need approximately 20 lbs of sugar (non-organic) to establish a package of bees. Make sugar water in small batches as you need to avoid spoilage. Figure approximately one gallon a week. When starting a package for the first couple of weeks, we advise using a simple entrance feeder with a jar. (copied from Beekeeping 101)

Entrance Feeder
Use with a standard mouth mason jar (sold separately) and standard entrance reducer. Not recommended for cold weather feeding or times of nectar dearth, as it can facilitate robbing.

Wood Top Feeder
Place your top feeder directly below your inner cover. Hand crafted locally with pine wood and inert epoxy waterproof lining. Provides easy, abundant, and safe access for bees to feed inside the hive. Acts as an insulating attic during heat and cold. Inner lid condensation will drip into feeder reservoir instead of onto bees, keeping the colony dry and healthier, especially during winter. Designed with "bee-space", which results in less build up of burr comb underneath than plastic Mann Lake top feeder. Corkboard floats or dried lavender densely placed MUST be used when feeding sugar syrup to prevent drowning.

Mann Lake Top Feeder
Holds up to 4 gallons of syrup. Has a galvanized steel safety screen designed to prevent drowning- bees travel up through the center of the feeder and are
confined under the screen, but still have access to syrup. Beneficial for overall hive structure even when not feeding: Acts as an insulating attic space during heat and cold. Also inner lid condensation will drip into feeder reservoir instead of onto bees, keeping the colony dry and healthier, especially during winter. Caveats: You may experience ants sharing syrup in this feeder, because the bees don't have full access to chase them out. Bees may also build burr and drone comb in the open areas underneath. While some beekeepers enjoy using this feeder successfully, we have received feedback of drowning bees if the protective screen placement malfunctions, or through other beekeeper error.

1.5G Deep Frame Feeder with Cap & Ladder
Use in place of one deep frame. Sealed feeding tubes prevent the bees from making comb in the feeder, keeps the queen from laying brood inside, and ensures the bees are confined to the

feeding area so you will experience minimal drowning. The entire cap and ladder system is easily removed for cleaning.

Protective Gear & More

THE “BEE SUIT”

With experience comes confidence in working with bees. As a beginning beekeeper, it is good practice to wear protective gear that completely covers your hair and skin. If the bees become protective of their hive, then you are covered and your experience is good. Protective gear is an investment in your confidence and success as a beekeeper.

- Full Suit /Half Suit
- Goat Skin Gloves
- Helmet & Veil

THE HIVE TOOL

There are several different tools of the beekeeping trade, but the most essential and commonly used tool is simply known as the hive tool and resembles a small pry bar. Hive tools are approximately 7 to 10 inches long and are used to pry open hive boxes and to move and lift frames out of boxes for inspection and hive maintenance. We recommend a hive tool with a “frame lifter” on one end. Easily misplaced? A bright colored hive tool is an option. If a hive tool is used on a diseased hive, cleaning with a flame is advised.

THE SMOKER

A smoker is a device used to calm bees before beekeepers manage the bees in the hives. The smoker makes the beekeeper's job easier and safer. The smoke generated from a smoker masks protective bee pheromones that may be released while the beekeeper works on the hives. The smoke also causes bees to feed and fill their abdomens on honey from their stores of honey, which can make it more difficult for a bee to sting. Fuel used in the smoker may consist of cotton, leaves, cardboard or woodchips. Two smokers.

Bee Brush

The bee brush is a handy tool for a beekeeper when it comes time to harvest honey. The bee brush is used to very gently brush bees off a frame of honeycomb. The beekeeper will brush bees off a frame of honey when he or she is stealing honey from a hive so that the bees stay with the hive and don't come home with the beekeeper. The beekeeper will then transport the frames to a place where he or she can place the "bee free" frames of honey and comb into an extractor to extract the honey from the comb.

Capping Scratcher

Used for opening comb to let the honey out. Designed to scratch or lift off the wax corners of a capped frame that your knife can't reach. Also helpful for checking drone brood for Varroa mites- push the forks parallel to the comb to lift out the white drone larvae to inspect for dark-colored mites.

Queen Excluders
Bees are rarely motivated to move through an excluder if there are only empty frames above it. Do not place an excluder without first bating the bees with drawn out comb in the box above the excluder

Propolis Trap

Replace the hive's inner cover with this plastic propolis trap. The bees will fill the grooves of the trap with propolis. To remove propolis, place the trap in the freezer overnight. Twist the trap after it is frozen to release the propolis. Autumn is the typical peak propolis production time of year.