

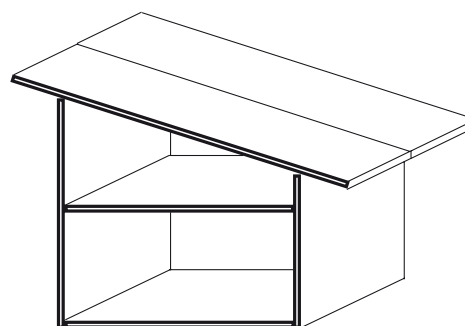
# TECHNICAL NOTES - BEE HOUSE

Small Model for Balconies and Gardens



To see a demonstration of how to build the structure,  
visit our website (animated video)

Place a small bee house on a balcony or on the edge of a window box or small garden to get a close view of wild bees species building their nests.



**Small Model**  
Approximate dimensions

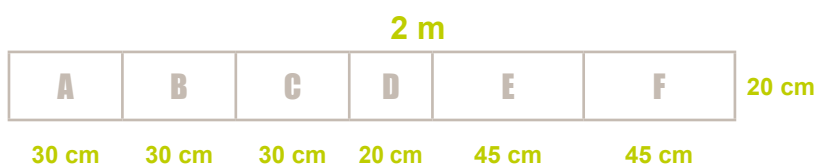
35 cm  
40 cm  
44 cm



- 1 plank of untreated wood, 2m long and 20 cm wide (choose a plank no less than 1 cm thick)
- 16 woodscrews



- Cut up the plank as indicated in the diagram:



Builder bees



© H. Mouret

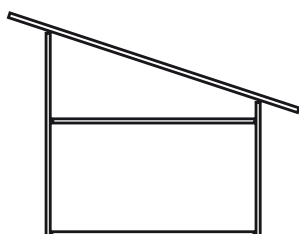
An occupied nesting cell



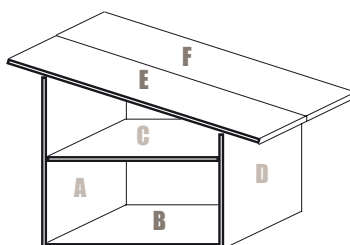
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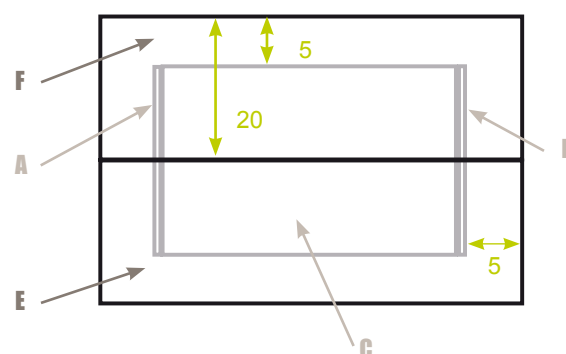
Front view



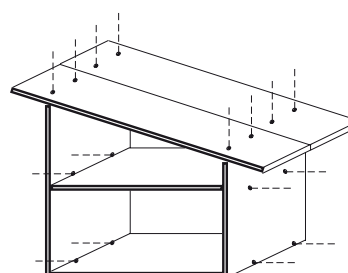
Side view



Top view



- Screw



Leafcutter bee



© H. Mouret

➤ Beware of materials containing substances that poison the environment.

➤ Recycle old objects by giving them a new use.

Tips

# FILLING MATERIALS

Honeybees live in colonies and build a honeycomb of hexagonal cells to store their eggs and food supply. Wild bees are highly diverse species, mainly solitary, and mostly nest in the ground. Yet many wild bee species build their nests in a wide of different materials.

## Hollow and pithy stems

Plant stems can provide a home for many beneficial garden species.

To fill your bee house, simply find hollow plant stems with an internal diameter of less than 12mm.

Cut the stems to the required length (the depth of your house) at the node, or seal one of the ends (**at least one of the two ends must be left open**).

You can find a wealth of hollow and pithy stems everywhere around you:

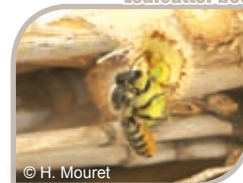
➤ **HOLLOW STEMS:** hogweed, giant weed, wild carrot, fennel, phragmites (reeds), bamboo, catalpa, paulownia and Japanese knotweed...

➤ **PITHY STEMS:** raspberry bushes, brambles, rose-trees, sunroot, elder, , ailanthus, buddleia, deutzia and hydrangea...



Certain species can be exotic, and even invasive.

Leafcutter bee



© H. Mouret

An occupied nesting cell



© H. Mouret

## Wood

Certain bees and other insects often lay their eggs in cavities dug out of wood by beetles.

You can help speed up the process by boring holes in logs from your woodpile.

The holes should be 3 to 10 mm in diameter, and 10 to 20 cm deep, and drilled at a slight upward angle to stop rainwater from getting in.



Be careful not to pierce any holes in the bark so as to ensure the light is blocked out along the whole length of the log. You can make holes on all the faces, but make sure you don't join up two cavities by mistake.

**We will be testing out different wood varieties as part of the URBANBEES programme, and we will update this technical sheet as our results come in. Meanwhile, we discourage you from using resinous wood.** As part of our research, we will also be testing out the technique of carving out dents in the wood to form the beginnings of holes, as certain bees dig their own cavities. However we don't have enough information at this stage on which to base any recommendations.

Builder bee



© H. Mouret

## Installation

It is important to choose a **sunny spot** (facing south or south-east) **sheltered from the wind and rain**, or to place the house with its back to the wind and driving rain, or with its back to a wall.

The bee house can be placed between 30 cm and 2 m high (or more) to prevent certain predators from disturbing our friendly foragers.

An occupied nesting cell



© H. Mouret

## How can you study bees nesting?

Each female builds her own nest to lay several eggs. Each egg is enclosed inside a larval cell (chamber) that contains enough food reserves for it to reach full adult growth. These reserves are called bee bread, which is made up of a mixture of nectar and pollen. Once the eggs have hatched, the female closes up the hole with different materials: earth, a mixture of earth and stones, fur, leaves and resin....