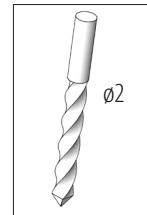


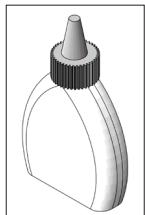
123.229

# Insect Hotel Easy 4 houses

## Required tools:



Drill



Wood glue



Hammer



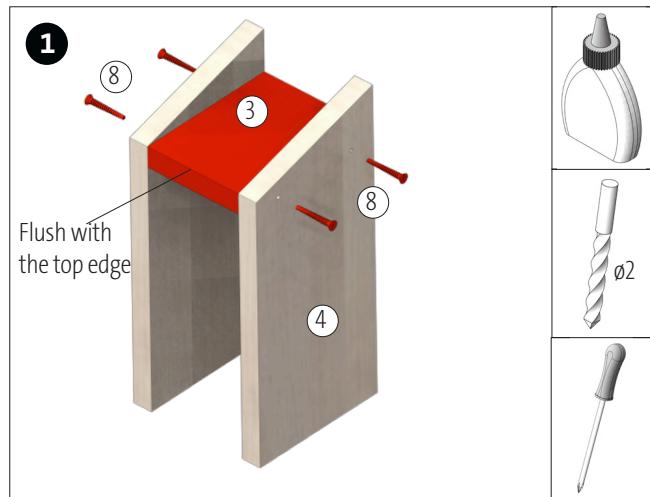
Philips screwdriver

### Note

The Opitec Range of projects is not intended as play toys for young children. They are teaching aids for young people learning the skills of craft, design and technology. These projects should only be undertaken and operated with the guidance of a fully qualified adult. The finished projects are not suitable to give to children under 3 years old. Some parts can be swallowed. Danger of suffocation!

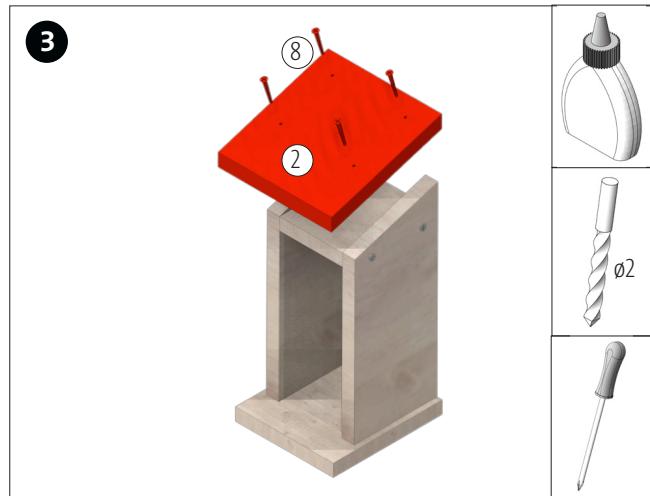
Components List	Quantity	Size (mm)	Description	Part-No.
Wooden board	4	1045x95x12	Base plate	1
Wooden board	4	120x110x12	Roof	2
Wooden board	4	80x60x12	Intermediate floor	3
Wooden board	8	180x80x12	Side panels	4
Wooden board with slotted holes	1	140x60x12	Butterfly door	5
Plywood with a hole	4	190x85x4	Back panel	6
Welding grid	1	140x75	Grid	7
Screws	52	Ø3x25	Fixing	8
Screws	24	Ø3x12	Rear wall mounting	9
Staples	6	12x6	Fastening welding grid	10

Building instruction 123229  
Insect Hotel Easy, 4 houses



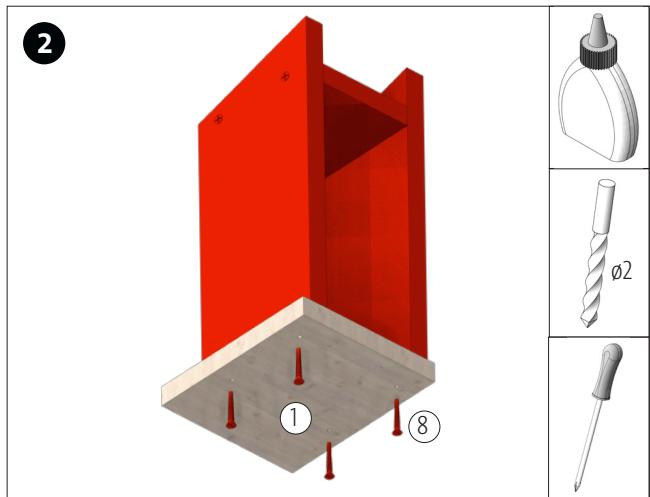
Glue the intermediate shelf (3) flush with the front and top edge between the side panels (4) as shown. Let the glue dry well. Then fix it with the screws (8).

**Notice:** Screw holes must be pre-drilled  $\varnothing 2$  mm!



Glue on the roof (2) and fix it with 4 screws (8).

**Notice:** Pre-drill screw holes!



Glue on the bottom plate (1) from below, flush with the rear edge, and fix it with 4 screws (8).

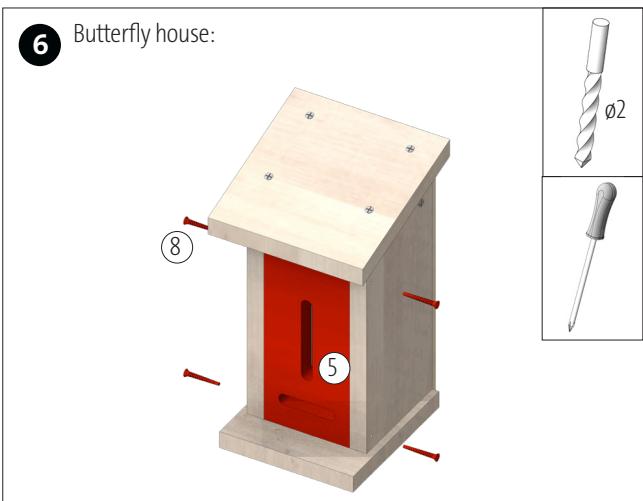
**Notice:** Pre-drill  $\varnothing 2$  mm screw holes!



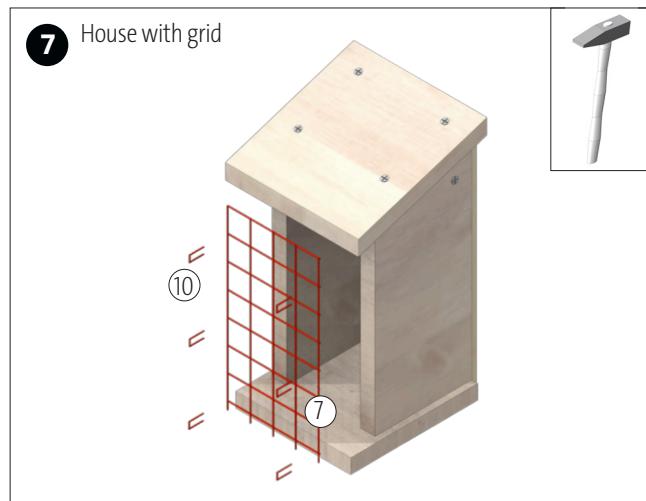
Center the rear wall (6) as shown, glue it on and fix it with 6 screws (9).

**Notice:** Pre-drill  $\varnothing 2$  mm screw holes!





Take a house, fill it with thin twigs or stalks and fasten the wooden board with the slotted holes with 4 screws (8) as shown. **Note:** Do not glue! Pre-drill screw holes!



Fasten the welding grid (7) with the 6 staples (10), after filling with pegs or similar.

#### Residents of insect hotel:



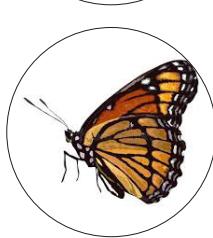
##### BEETLES & FLIES (e.g. ladybugs, ground beetles, lacewings)

Lacewings eat various types of aphids and use the room as a shelter all year round. Insect hotel guests such as ladybirds, in turn, feed on spider mites and aphids and use their room mainly at night and in winter. This way you benefit from natural pest control.



##### SOLITARY BEES (e.g. wood bees, mason bees, silk bees)

The hollow reed branches offer optimal breeding places for various bee and wasp species. The insects' eggs are laid in the tubes and then "bricked up" by the mother with a secretion. In spring, the larvae hatch and eat their way into their new life.



##### BUTTERFLIES (e.g. peacock butterflies, purple butterflies, pigeontails)

Butterflies like to occupy this room in bad weather and in winter. Various types of butterflies such as the brimstone butterfly, the peacock butterfly, the painted lady or the pigeon tail like to hide in hollow spaces like these and seek rest and shelter here.



##### WASPS (e.g. peaceful gold wasps, digger wasps, clay wasps)

These "suites" are preferred by harmless wasps and bees. They lay their eggs in the 4 and 8 mm drilled holes. The rearing of the young is preferably done with aphids in the spring. When they eat, they pollinate flowers in the garden and are therefore welcome beneficials.



##### LADYBUG (e.g. light ladybug, alfalfa ladybug, seven-spot ladybug)

These beneficial insects prefer dense natural materials such as pine bark as nesting sites. During the day, they effectively reduce the aphid, scale insect and spider mite populations in your garden. They like to settle down in this room at night and generally in winter.

**Insect hotel - cleaning and care**

**Should You Clean and Maintain an Insect House - Yes or No?**

**Because the question of how to clean an insect hotel comes up again and again, here is a brief explanation:**

Insect hotels should always be made of untreated wood. In the wild, insects only have access to materials that are neither coated with chemical glazes nor oiled or waxed. The foreign odors that occur as a result of wood treatment keep insects away. Cleaning insect hotels has a similar effect, since cleaning agents also have fragrances. If you want to clean an insect hotel, you should therefore only use clear water. But actually an insect hotel cleaning is not necessary at all. After a certain time, wood develops a natural patina with a grey-silver colour. Treating it with artificial wood preservatives, oil or wax prevents the wood from turning grey. In an insect hotel, however, such care treatments would be associated with foreign odors and should therefore be avoided. If anything, you can impregnate and maintain an insect hotel with some natural beeswax or some olive or sunflower oil. The associated odors are natural to the insects and are not deterrent. The corridors used in an insect hotel should also not be cleaned. The bees and wasps prefer to do it themselves. In some species, it takes almost a year for the offspring to hatch. There is therefore no need to worry that the larvae will no longer live behind a closed chamber.

**Clean insect hotel and remove cobwebs**

Spiders feed on insects. Because they suspect rich prey in the vicinity of an insect hotel, garden spiders in particular like to build their orb webs directly in the flight path of an insect hotel. So it can happen that newly hatched bees and wasps become the victim of a hungry spider on their first flight. Cleaning an insect hotel therefore primarily means regularly removing any cobwebs that may be present in the house. Nothing more is necessary.

**Replace materials in the insect hotel?**

As a rule, you do not need to replace the filling materials of an insect hotel. However, from time to time, wind and weather or birds or other animals steal pine cones, straw or reed stalks. The resulting gaps can of course be filled in again in spring. Make sure that the fillings are always firmly in place so that they cannot be easily removed by the weather or animals. If you wish, you can additionally fill the hotel with some pithy stems, as some bee and digger wasp species prefer these "unused" breeding tubes. In this way, you can ensure an even greater potential diversity in the insect hotel. Dry twigs or stems of e.g. blackberries, raspberries, mugwort, thistles, hedge roses, elderberries or burdocks are suitable for this. The wild bees then gnaw a passage for the nest into the soft plant pulp.