Birdhouse with a lift-off roof

Cut list for 18 mm boards, 32 mm hole (great tit, tree sparrow, pied flycatcher; blue tits use it too)

Part	Name	Qty	Size (mm)	Note
1	Roof	1	188 × 216	Lies on the slope against the back
2, 3	Sides	2	140 wide, 232 high at the front, 262 at the back	Cut the top at a slant
4	Bottom	1	140 × 176	4 holes of 8 mm to drain
5	Front	1	176 wide × 250 high	Hole 32 mm, centre 200 mm up; bevel the top
6	Back	1	176 wide × 350 high	8 mm hole near the top to hang it

You need

- Untreated, outdoor-grade softwood board, 18 mm thick, about 150 mm wide and 1.5 m long
- About 20 wood screws 4 × 40 mm (sides, front, back) and 6 screws 3 × 15 mm (hinge, clasps)
- 1 small hinge, 2 clasps (hook and eye), 1 to 2 m of wire to hang it
- Tools: tape measure, square, jigsaw or handsaw, drill, 32 mm hole saw, 8 mm and 3 mm drill bits

Good to know

- No perch: birds don't need one and it helps predators.
- Leave the wood untreated inside. Hang it 2 to 4 m up, the hole facing east or south-east, out of full sun and rain.
- Clean it out once a year in autumn, after the young have flown.
- Drill a pilot hole for every screw near the end of a board so it doesn't split.

Based on Wild Habitat's "Birdhouse (closed)" by Ben Larcher (La graine), CC0 1.0, habitat.graineahumus.org.
Model and plan by CadFlow, www.cadflow.app/library/birdhouse/ — free to use, share and change.

Sizes for each bird (mm), e = board thickness

Type	Birds	Roof	Sides: width; height front / back	Bottom	Front	Back	Hole
1	Blue tit, marsh tit, coal tit, crested tit	170 + e × 180 + 2e	140; 250 − e / 280 − e	140 × 140 + 2e	250 × 140 + 2e	350 × 140 + 2e	28 mm round
2	Great tit, tree sparrow, pied flycatcher	170 + e × 180 + 2e	140; 250 − e / 280 − e	140 × 140 + 2e	250 × 140 + 2e	350 × 140 + 2e	32 mm round
3	Nuthatch, common redstart	170 + e × 180 + 2e	140; 250 − e / 280 − e	140 × 140 + 2e	250 × 140 + 2e	350 × 140 + 2e	32 × 48 mm oval
4	Starling	195 + e × 200 + 2e	160; 300 − e / 340 − e	160 × 160 + 2e	300 × 160 + 2e	410 × 160 + 2e	45 × 50 mm oval
5	Hoopoe	235 + e × 240 + 2e	200; 330 − e / 360 − e	200 × 200 + 2e	330 × 200 + 2e	430 × 200 + 2e	65 × 70 mm oval
6	Hoopoe, scops owl, stock dove, starling	195 + e × 220 + 2e	160; 330 − e / 350 − e	160 × 160 + 2e	330 × 160 + 2e	420 × 160 + 2e	90 mm round
7	Tawny owl	350 + e × 260 + 2e	220; 550 − e / 570 − e	220 × 220 + 2e	550 × 220 + 2e	640 × 220 + 2e	120 mm round

Type 4's front and back may need checking: the source plan gives a back 14 + 2e wide with 16 cm sides. Use 16 + 2e.

Sizes from Wild Habitat's plan (CC0 1.0), which bases types 1 to 5 on the Swiss Association for the Protection of Birds and 6 and 7 on LPO Drôme-Ardèche.