

Background (from Building Homes for Bats, Alberta Bat House Guidelines [www.albertabats.ca](http://www.albertabats.ca) )

1. Bat boxes provide a safe, artificial alternative for roosting habitat safe from disturbance.
2. Ensure bats are present (observe them at dusk/dawn), and local neighbors are onboard.
3. Alberta species likely to use bat houses are the Little Brown Myotis and Big Brown bats.
4. Larger multi-chambered structures provide more stable internal temperatures for bats.
5. Design options: single or multi-chamber houses, rocket boxes, bat condos, & slat roosts.

Building a Bat Box (from Bat Conservation International [www.batcom.org](http://www.batcom.org) )

1. Use untreated, unfinished outdoor grade wood (plywood, pine, or cedar).
2. Apply exterior grade water-based stain (not paint) to outside, black, or dark brown.
3. Use paintable latex caulking to seal all openings for waterproofing and to reduce drafts.
4. Cover roof with asphalt shingles or galvanized metal to weatherproof.
5. Use coated deck or exterior grade screws that won't rust over time.
6. Cut out a horizontal slot in the back of the box for ventilation and cooling.
7. Roughen exterior landing surfaces; cut horizontal groves ( $\frac{1}{3}$ - $\frac{1}{2}$ " apart,  $\frac{1}{32}$ - $\frac{1}{16}$ ' deep)
8. Provide a good landing strip at the bottom entrance and a roof overhang on the top.
9. A hinged bottom is useful for cleaning up of guano and unwelcome visitors like wasps.
10. Ensure screws do not protrude into roosting chambers and harm bats.
11. Minimum size 61 cm (24") tall, 43 cm (17") wide, chamber spacing 1.9 cm ( $\frac{3}{4}$ " ) apart.

Installing a Bat Box (from Building Homes for Bats, [www.albertabats.ca](http://www.albertabats.ca) , by Cory Olson)

1. Ensure the habitat is suited to foraging and drinking water is nearby (within 400 m.).
2. Avoid areas where bat guano falling to the ground won't be a nuisance or health hazard.
3. Find a good location with plenty of sun (E, W, S), with temperatures 30-40 C daily.
4. Install away from any artificial lighting, or other disturbances (vehicle exhaust, noise)
5. Ensure boxes are unobstructed by trees or other objects (doors, decks) for easy access.
6. Mount the bat house 3-5 m (10-15' or more) above the ground clutter (shrubs, grasses)
7. Avoid aerial predators, by installing 6m away from suitable perches (trees, wires)
8. Avoid climbing predators, with a 45-60 cm wide band (metal, plastic) wrapped on pole.
9. Provide annual maintenance, fix leaks or structural defects, and remove any wasp nests.
10. Options for mounting; an oversized back board, brackets, or back-to-back box chambers
11. Mount on a wood or metal pole, secure in the ground, and ensure it is solid for years.