

# Installing Your Bat House

## - On a Building -

Both single and multi-chambered bat houses work well when installed on buildings. Wood, brick or stone buildings with proper solar exposure are excellent choices, and houses mounted under eaves are often successful. Bat houses mounted on buildings with metal siding are seldom used.

All bat houses should be mounted at least 10 feet above ground, and 12 to 20 feet is better.

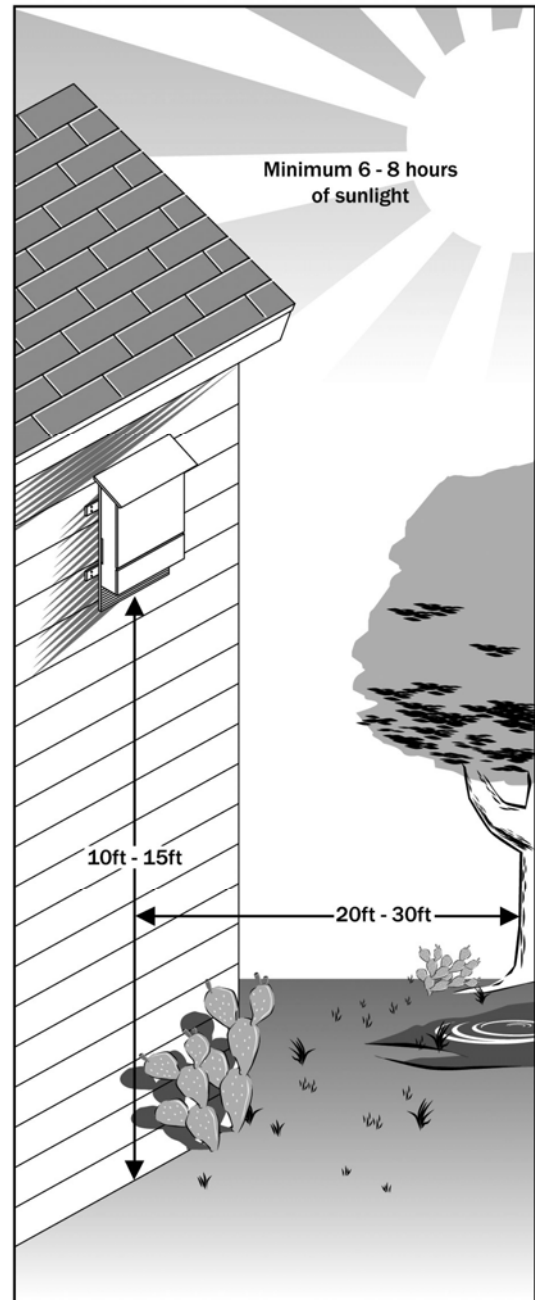
Choose a sunny location on the East or South facing side of your house. Bat houses work best with at least 6-8 hours of direct sunlight (if only partial day sun is available- morning sun is preferable). Bat houses should not be lit by bright lights, so installing near porch or security lights is generally a bad idea. Do not install your bat house above doors or windows where guano will fall or accumulate in an inconvenient location.

Bats may find bat houses more quickly if they are located along forest or water edges where bats tend to fly. However, they should be placed at least 20 to 30 feet from the nearest tree branches, wires or other potential perches for aerial predators.

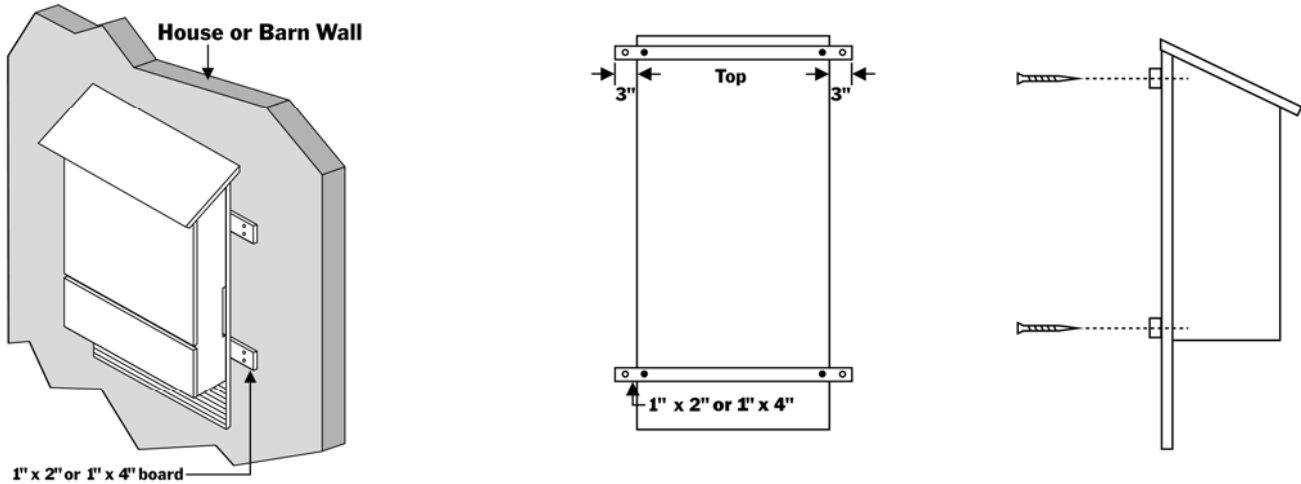
Most nursery colonies of bats choose roosts within 1/4 mile of water, preferably a stream, river or lake. Greatest bat-house success has been achieved in areas of diverse habitat, especially where there is a mixture of varied agricultural use and natural vegetation.

Bat houses can be installed at any time of the year, but they are more likely to be used during their first summer if installed before the bats return in spring. When using bat houses in conjunction with excluding bats from a building, install the bat houses at least two to six weeks before the actual eviction, if possible.

It is best to test for local needs before putting up more than three to six houses. Compare houses of different colors and/or different levels of shade and sun exposure.



## SINGLE BAT HOUSE ON A BUILDING (Horizontal Rails)



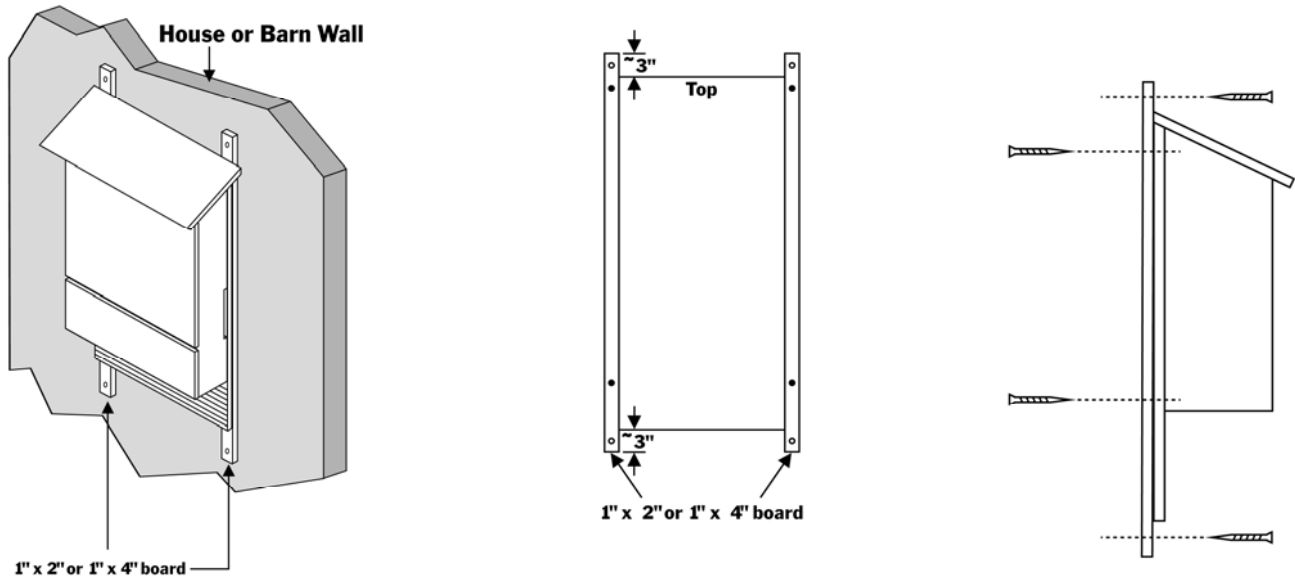
### You Will Need:

- [2] 1x2" or 1x4" wooden boards  
(at least 6" longer than the width of your bat house)
- [4-8] 1 1/2" exterior grade screws
- [8] 2" exterior grade screws
- [1] 3/32" bit (to pre-drill screw holes)
- [1] Exterior grade adhesive caulk (optional)
- [2-4] Wood clamps or spring clamps
- [1] Tape measure, Pencil, Electric Drill

### Basic Instructions:

- 1) Determine on your building where you will hang the bat house. Make measurement to determine how far apart your screws must be to ensure the bat house is attached to solid material (solid wood or masonry) not siding (e.g. aluminum siding or hardi-plank). This might alter ALL the measurements below.
- 2) Cut each rail (1x2" or 1x4" board) to a length at least 6" longer than the width of your bat house.
- 3) Measure and drill pilot holes to ensure screws will attach securely to the bat house frame and do not protrude inside the bat house roosting crevices. The bat house frame typically extends down the sides and along the top 1 1/2".
- 4) Apply adhesive caulk (optional) between the rail and the bat house and attach the rails to the bat house using 1 1/2" screws. You may want to clamp the rails prior to drilling to ensure they stay in place. Pre-drill the rails where they extend beyond the bat house according to your measurements in step #1.
- 5) Hold your bat house in place on the building and attach using 2" screws.

## SINGLE BAT HOUSE ON A BUILDING (Vertical Rails)



### You Will Need:

- [2] 1x2" or 1x4" wooden boards  
(at least 6" longer than the width of your bat house)
- [4-8] 1 1/2" exterior grade screws
- [8] 2" exterior grade screws
- [1] 3/32" bit (to pre-drill screw holes)
- [1] Exterior grade adhesive caulk (optional)
- [2-4] Wood clamps or spring clamps
- [1] Tape measure, Pencil, Electric Drill

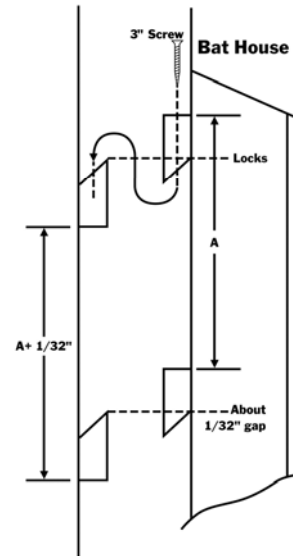
### Basic Instructions:

- 1) Determine on your building where you will hang the bat house. Make measurement to determine how far apart your screws must be to ensure the bat house is attached to solid material (solid wood or masonry) not siding (e.g. aluminum siding or hardi-plank). This might alter ALL the measurements below.
- 2) Cut each rail (1x2" or 1x4" board) to a length at least 6" longer than the length of your bat house.
- 3) Measure and drill pilot holes to ensure screws will attach securely to the bat house frame and do not protrude inside the bat house roosting crevices. The bat house frame typically extends down the sides and along the top 1 1/2".
- 4) Apply adhesive caulk (optional) between the rail and the bat house and attach the rails to the bat house using 1 1/2" screws. You may want to clamp the rails prior to drilling to ensure they stay in place. Pre-drill the rails where they extend beyond the bat house according to your measurements in step #1.
- 5) Hold your bat house in place on the building and attach using 2" screws.

## SINGLE BAT HOUSE ON A BUILDING (French Cleats)

### You Will Need:

- [2] 2x4 boards cut to the width of your bat house (used to make cleats)
- [8] 1 5/8" exterior grade screws
- [1] 3" exterior grade screw
- [6-8] 2" exterior grade screws
- [1] 3/32" drill bit & countersink to pre-drill holes
- [1] Exterior grade adhesive caulk
- [2-4] Wood clamps or spring clamps
- [1] Tape measure, pencil, electric drill
- [1] Table saw with tilting blade



### Basic Instructions:

- 1) Cut the 2x4 at a 45-degree angle on table saw to make the cleats.
- 2) Position top cleat centered on the bat house with top flush with the body of the bat house (as shown), not flush with the roof.
- 3) Clamp cleats to the bat house, then mark and drill pilot holes to attach the cleats to the bat house. Make sure screws will embed into the frame of the bat house and do not protrude into the roosting cavity. The bat house frame typically extends down the sides and along the top 1 1/2".
- 4) Apply adhesive caulk between the cleats and the bat house before installing screws. Install 1 5/8" screws to secure cleats to bat house.
- 5) Drill vertical center pilot hole all the way through the top cleat for the 3" screw. Drill and countersink pilot holes on the remaining cleats where they will attach to the building, it is important to countersink the pilot holes so the cleat will be flush against the bat house. Be sure you space pilot holes so they will drill into wall studs or other solid material on the building, NOT siding (e.g. hardi-plank or aluminum siding).
- 6) Install the top cleat on the building first using 2" screws. Measure the distance carefully from the top of the upper cleat to the top of the lower cleat (A). Bottom cleat placement is important, add 1/32 to 1/16 inch to your original measurement (A) and use this measurement (A + 1/32") to install the lower cleat. This ensures that the bat house weight is hanging on the top cleat while the bottom cleat catches and retains the lower portion of the bat house.
- 7) Hang the bat house to check fit and cleat placement before securing the 3" screw. Reposition the bottom cleat if it is holding the bat house weight.

\* mounting design and instructions adapted from *Habitat for Bats bat house manual* courtesy of Robert Ball ([www.habitatforbats.org](http://www.habitatforbats.org))