Front view showing extended back as dark grey and roof as thick black line 
Front of box is shown as pale grey

65mm x 28mm entrance (Starling resistant)

Side section view 
Side pieces are inserted into the box ends and secured

Rear view showing the battens (chequered) that offset the back of the box by 12mm from the wall, and the 2mm x 2mm grooves (the thin grey lines) in the back of the box that give the bats places to grip on to when roosting / hibernating. Instead of grooves you may glue on wooden kebab skewers or ice-lolly sticks.

Dimensions:

Top 400mm x 230mm x 12mm  
Front 320mm x 170mm x 12mm 
Base 296mm x 170mm x 12mm 
Back 400mm x 170mm x 12mm 
Sides 170mm x 170mm x 12mm 
Battens 170mm x 50mm x 12mm

Internal floor area = 0.050 sq m  
Internal volume = 0.0085 cu m

The overhanging roof and the sides of rear panel (hatched dark grey) are used to provide space for fixings to the wall and the eaves soffit.

NB The roof overhangs both the front and also the back (here by 12mm), being aligned with the battens to fit against the wall and provide a sheltered space at the rear for the Bats.

Timber: 12mm Marine or Exterior Quality Plywood.

Coatings & treatment: The exterior may be varnished, or painted, but the interior and back must be left as they are. Insecticides/ biocides must not be used.

Entrance: A 45mm diameter hole drilled 10 to 20mm above floor level.

Construction: Glued, pinned and screwed with rust proof fixings.

Construction notes: Rear panel and roof overlap the sides to provide some rain protection and provide areas to drill through and fix to wall and/or soffit beneath eaves or overhanging flat roof.

Fitting Notes: Fit the box at least 5 metres up on a wall in clear airspace away from hazards and rodent access routes (like creepers) and preferably immediately underneath overhanging eaves and roofs, with the top of the box flush with the roof's lower surface. It should be fitted in shade or on the North/North West facing sides of the building.

NB: Make sure the back of the box's roof is sealed against the wall with mastic to prevent rainwater entering the bats' roosting area.