# Murphy Bed Construction

This playbook outlines the steps required to build a Murphy bed using a wooden frame. It is designed to help maximize space in small living areas.

### Step 1: Design Plan

Create a detailed design plan for the Murphy bed, considering the dimensions of the mattress, wall space, and room functionality. Ensure the plan includes specifics for the pivot mechanism and support structure.

### Step 2: Material Collection

Gather all necessary materials and tools as listed in the design plan. This includes wood, screws, hardware for the pivot mechanism, wood glue, and finishing supplies.

### Step 3: Cut Wood

Measure and cut the wooden pieces according to the design plan. Be precise with measurements to ensure the bed can fold up smoothly and align perfectly when closed.

### Step 4: Assemble Frame

Assemble the wooden frame using screws and wood glue. Ensure the frame is square and sturdy, as it will need to withstand the weight of the mattress and frequent movement.

### Step 5: Install Mechanism

Install the pivot mechanism according to the manufacturer's instructions, making sure that it operates smoothly and can securely hold the bed when not in use.

### Step 6: Attach Bed Base

Secure the bed base to the frame, and then attach the pivot hardware to allow the bed to fold up into the wall unit.

### Step 7: Mount to Wall

Carefully mount the assembled Murphy bed frame to the wall. Ensure that it is anchored into the wall studs for adequate support and stability.

### Step 8: Finalize

Place the mattress on the bed base and test the Murphy bed's functionality. Make any needed adjustments so that it opens and closes with ease. Add any decorative finishes as desired.

## General Notes

### Safety Precautions

Always wear protective gear when working with power tools. Follow all safety instructions provided with the pivot mechanism and wall mounting hardware to prevent accidents.

### Customization

Consider customizing the external appearance of the Murphy bed to match the room's decor. This can include painting, staining, or adding trim or molding.

### Maintenance

Periodically check and tighten any loose screws and hardware to ensure the Murphy bed remains secure and operational over time.