



## Mobile Raised Garden Bed Instructions

Creating a raised garden bed on wheels from reclaimed wood shipping pallets is a sustainable and practical project. Here are the instructions and a list of required supplies:

### Materials and Tools:

1. 3-4 Shipping pallets that have been labeled HT (heat-treated). Get your pallets from a trusted source as pallets built before 2005 may have been treated with methylbromide (MB) which is highly toxic.
2. 4-6' length of 4x4 lumber for legs (the height of the legs is the preference of the user).
3. 4 - Swivel casters. Two of the casters must have locks to prevent the bed from rolling when in use.
4. Deck screws
5. Drill and Drill Bits
6. Circular saw or handsaw
7. Tape Measure
8. Pencil
9. Level
10. Sandpaper or sander
11. Landscape fabric
12. Staple gun and staples
13. Linseed oil or tung oil for food safe wood preservation.
14. Soil and plants

## **Instructions:**

### **1. Safety Precautions:**

- Wear safety goggles and gloves while working with wood.
- Ensure proper ventilation if working indoors.

### **2. Prepare Your Pallets:**

- Choose the best, most sturdy pallet to be the base of the raised bed. Remove or pound in any loose nails or staples that don't contribute to this pallet's stability.
- Disassemble 2 or 3 of the remaining pallets carefully, removing nails or staples. The number of pallets that you'll need to disassemble will depend on the condition of the wood. You will need at least 26 – 1x4 boards of the same length. Only use the best boards.
- The structural 2x4s of the disassembled pallets will be used for bracing and the corners of the raised garden bed.
- Sand the wood to remove rough edges and create a smooth enough surface you're comfortable handling.

### **3. Build the Base:**

- Decide on the desired height of your raised garden bed, taking into account the depth required for vegetable growth (~24") and the depth of your base pallet (~6").
- Cut the 4x4-inch wooden posts to create four legs at the chosen height, making sure they are equal in length.
- Flip the pallet so the "top" is on the ground and secure the wooded post legs to corners of the bottom of the pallet using screws.
- Turn the base upright and use a level to ensure the frame is level and stable.

#### **4. Construct the Frame:**

- Cut the structural 2x4s from the disassembled pallets to 23" lengths. You'll need at least 8 pieces.
- Choose two of the 1x4s from the disassembled pallets. These will be used to attach your garden bed to the base.
- Create 4 x 90deg angle brackets from the cut 2x4s.
- Attach the angle brackets to each end of the 1x4 pallet lengths (laid flat) being conscious of their orientation. When laid out, they must form a square with the brackets.

#### **5. Construction the Sides of the Garden Bed:**

- The dimensions of a standard pallet are 40"x44" with each of the 1x4s being 40" long. You are building a 40" square garden pallet that will be centred on a 40"x44" base pallet.
- Attach the 1x4s to the angle brackets with the bottom board overlapping the 1x4 used for the frame. The bottom side boards should be flush with the ground.
- Attach 6 – 1x4s per side to have a garden bed that is ~24" deep (it won't be that deep as 1x4s aren't 4" wide).
- Use the any remaining structural 2x4s from the disassembled pallet to add support to the structure. At a minimum, I would place structural brackets at the centre of each side so when the soil is added, the 1x4s won't bow out.

#### **6. Putting it all Together:**

- Centre the garden bed on the top of the base, there will be 2" extra on parallel sides of the base. At the corners, try to put several screws all the way through the flat 1x4s of the garden bed, through the top of the base pallet and bite several inches into 4x4 legs. This will ensure the garden bed is well secured to the base.
- Attach the swivel casters to the bottom of each 4x4 leg. Ensure that the 2 castors with locks are on the same side (not diagonal) to one another.
- Sand any rough edges and surfaces to make them smooth.
- You may wish to preserve the wood using linseed or tung oil which are food safe.

- Line the interior of the raised bed with landscape fabric, extending it up the sides. Staple it securely to the wood to prevent soil from escaping and weed seeds coming up from the lawn.

## **7. Fill with Soil and Plants:**

- Fill the raised bed with a quality garden soil mix. Tailor your soil selection to the type of plants you'll be growing.
- Plant your desired flowers, vegetables, or herbs.

## **8. Maintenance and Mobility:**

- Regularly check the casters to ensure they are functioning well.
- Move the raised bed as needed by unlocking the wheels and gently pushing it to the desired location.
- Inspect and reinforce your frame as needed to ensure it can support the weight of the soil and plants.
- Enjoy your mobile and sustainable raised garden bed!