# **Urban Worm Bag DIY Frame Instructions**

Your Step by Step Guide



Updated 7/05/2018





## **Greetings!**

Thanks for your interest in the Urban Worm Bag! While "the Bag" normally comes with the frame included, buying it without the frame is sometimes more feasible for international buyers (shipping the frame is expensive!) or for people who just want to do some DIY.

It is also great for anyone who plans to keep the Urban Worm Bag on an uneven surface.

As built this stand will measure 30-inches by 30-inches x 42-inches tall, slightly wider, but also taller than the standard iron frame that comes with the Urban Worm Bag, allowing you more room for harvesting. Please note the PVC portion of this frame will not be attached to the 2x4 lumber frame, but rather will rest on it.

These instructions are just one way to build a sturdy frame using common materials. You may indeed find a different way to accomplish the same task, so please don't take these instructions as Gospel. The Urban Worm Company accepts no liability for the construction and safety of this frame or any modifications you would make to it.

## **Required Tools and Materials**

#### **Tools**

Drill Speed square (optional)

1/8-in drill bit

#### **Materials**

2-1/2 inch wood screws

1 ¼-in wood screws (optional) 1-inch PVC

Casters (optional) • 4 x 23-in lengths

4 90-degree elbows

2x4 lumber

• 3 x 30-in lengths

- 4 x 42-in lengths
- 4 x 26 7/8-inch lengths

#### **Area Preparation**

I recommend an area at least 10 ft x 10 ft for construction, larger if possible. You will want to be near an electrical source if you plan to use a saw to cut your lumber or a corded drill. If you are using a power saw to cut the lumber and PVC, expect a good amount of sawdust and debris to be created.

### **Assemble the PVC Frame**

This is the easy part. Simply slide the PVC lengths through the tunneling on your Urban Worm Bag, attaching each with a PVC elbow. The PVC frame will be square, measuring 27-inches x 27-inches.

Set this part aside for later.





#### **Predrill the Lumber**

In order to prevent splitting, it is highly recommended to predrill holes in your lumber. The crucial parts to predrill are the

- 3 x 30-inch pieces (B)
  - o 2 of these will be predrilled the same while the 3rd will be different
- 4 X 26 % -inch pieces (C)

#### Predrilling 2 30-inch Pieces

Now, you could probably get away with predrilling by just eyeing up how the parts line up upon assembly, but to be precise, it's best to follow these instructions.

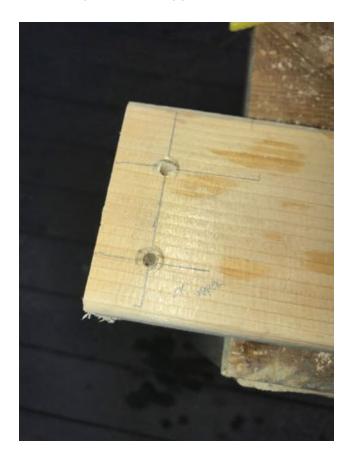
- Measuring in from the end of the 30-in piece, measure .75 inches and mark the
  wood with a pencil. You might want to do this twice, in two spots. Draw a straight
  line across the wood, perfectly perpendicular to the long side. A speed square
  would help with precision.
- Again, measuring in from the end of the 30-in piece, mark 2.25 inches. A draw another straight line.
- Now, from the long edge of the 30-inch piece, but towards the same end, mark .75 and 2.25 inches in from the end.
- You should now have 4 intersections. These mark where your predrilling holes will be. Using your drill and drill bit, and resting your 30-in piece with two scrap pieces of lumber, predrill your holes, making sure your drill goes all the way through the 2x4.



- Repeat at the opposite end, making sure that you begin from the same edge you
  measured from at the other end of the board.
- Repeat for another 30-in piece.
- These will be your two (2) bottom 30-in pieces.

## Predrilling the Remaining 30-in Piece

- Measuring in from the end of the 30-in piece, measure .75 inches and mark the wood with a pencil, drawing a line perpendicular to the long edge of the lumber, exactly as you did with the pieces above.
- Along that line, mark at .75 and 2.25 inches from the long enge of the lumber.
- You should now have 2 intersections of the lines.
- Predrill your holes at those intersections.
- Repeat at the opposite end.



#### Predrilling the 26 %-in Pieces

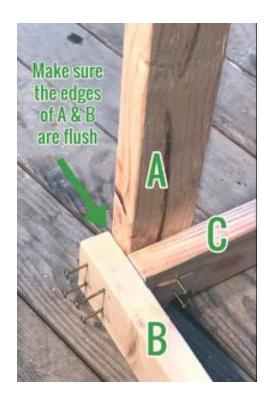
- Measuring in from the end of the 27-in piece, measure 1.75 inches and mark the wood with a pencil, drawing a perpendicular line exactly as you did with the pieces above.
- From the short end, along that line you just drew, mark at 1.25 and 2.5 inches from the edge.
- Predrill those marks.
- Repeat at the opposite end, making sure to measure from the same edge.

## **Assembly Time!**

OK, here's the fun part! It may also be slight awkward. If you're handy, have some bigger hands, and can hold a couple pieces together while using a drill, then you're probably fine. But it would be best to have a second person to help you hold things still while you assemble the pieces.

#### Assembling the Lower Part of the Base

- 1. Take a bottom 30-in piece (B) and rest it on its narrow side.
- 2. Place a 42-in vertical piece (A) at the end, with the narrow side of the vertical piece intersecting with the wide wide of the bottom piece.
  - a. It would be helpful to ask your partner to hold the vertical piece upright for you.
- 3. Place a 26 %-in piece (C) on the ground, perpendicular to piece B as pictured. Make sure the end of B and the edge of C are flush.



- 4. Screw all six 6 screws through the predrilled holes.
- 5. You have now assembled the left side of the front of your frame. Repeat on the other end of B with another piece A and piece C. See image on next page.
- 6. Repeat the same steps before, but for the back of the base.



You should now have a finished base.



#### Assembling the Upper Part of the Base

Again, this part is easier if you have a second set of hands, but it's not absolutely necessary. And I should note, while I have been using the terms "front" and "back," the two sides until now are identical, so it doesn't really which end you choose to be your front or back.

The next step attaches the remaining 30-in piece to form the back of your Urban Worm Bag frame.

- 1. Take the remaining 30-in piece (B) which will only have two holes drilled at each end and place it flush with the top and sides of 42-in piece (A) at the upper part of the frame, as pictured.
- 2. Screw piece B into piece A.
- 3. Repeat on other end of piece B. (See images below)





#### **Attaching Side Rails**

The previous piece formed the back of your frame and is what will prevent your Urban Worm Bag from being pushed out the back of the frame. The side rails, which are formed by attaching piece C to piece A are what the Urban Worm Bag is going to rest on.

1. Measure a line 1.75 inches below the top of each piece A. See image below. (It would be best to mark the line all the way across piece A)



2. Now attach piece C to piece A, making sure the top edge of piece C is level with the mark you just drew.



- 3. Repeat on the other end of piece C.
- 4. Repeat on the other side of the frame.

# **Congratulations!**

You now have a fully assembled frame for your Urban Worm Bag. If you want to add a little extra mobility, you could add casters by laying the frame on its side or upside down and attaching casters (fully-rotating 360-degree casters are recommended) to the bottom of the frame using 1 1/4-in wood screws.

To protect your floor or to aid in catching castings during harvest, a mortar mixing tray fits nicely at the base of the frame.

