# Build a Gopher Tortoise Burrow Instructions





# **Burrow Supply List**

- 'A" PVC pipe (need 5, 10' long pipes @ 1.75 each = \$8.75, Lowe's will cut pipe for free)
  - o Four 3' pieces
  - o Seventeen 2' pieces
  - o Four 4' pieces
- Five 4' PEX pipe (bendable white pipe similar to PVC, comes in 5'sections @ \$1.78 each = \$9)
- Twelve 'A inch 90° PVC T joints (\$1.50 each = \$18)
- Eight 'A inch regular PVC T joints (\$0.45 each = \$3.68)
- Two 'A inch straight PVC joints (\$0.36 each = \$0.72)
- Eight  $^{1}/_{2}$  inch threaded PVC adapters (not needed if T-Brackets are not threaded inside, (\$0.45 each = \$3.68) Disregard information on adapters if not needed
- Zip ties (100 ct. = \$9)
- Burlap (Approximately 13 yards of fabric @ \$4 a yard = \$52)
- Outdoor carpet (13' long X 7' wide @ Lowe's = \$40)
- Aluminum wire (1 roll = \$3)
- Plant decorations (craft or hobby store such as Michael's or Joann's = \$35)

### Total ~183.00

- Commensals (ordered on <u>Amazon.com</u>)
  - o Aurora Plush Sachet Skunk \$10
  - o Aurora Plush Bandit Raccoon \$10
  - Safari LTD Eastern Diamondback Rattlesnake \$17
  - o Plastic frogs \$14
  - o Mini Pet Mouse \$8
  - o Vinyl Snakes \$8
  - o Big Bunch O' Bugs \$7
  - o 13" Tortoise Hand Puppet \$18
  - o 10 Piece set of wild insects \$10
  - o Giant Microbes Tick \$10

Total = \$112.00

**GRAND TOTAL: ~\$295.00** 

Additional supplies include: Sewing machine, thread, pins, tape measure, and scissors.
 Total cost ~ \$300 (cost may vary based on many factors such as location, stores, etc.)
 For reference, the images below represent the 3 different types of PVC joints used.





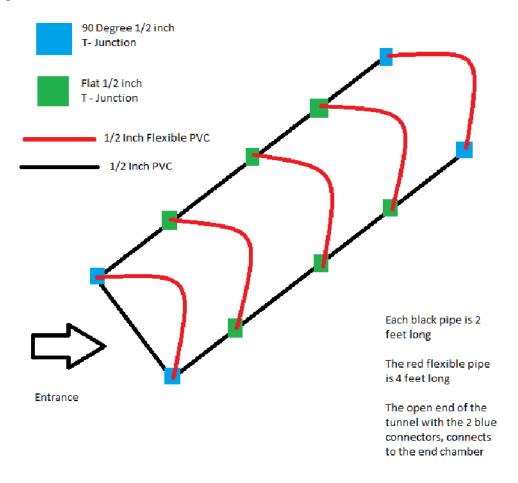


# **Assembly**

# STEP 1: Construct the front tunnel.

- Locate nine (9) 2' PVC pipes, four (4) 90° T- joints, and six (6) flat T-joints.
- Each side of the tunnel will consist of 4 2' pipes connected with either a 90 degree or a flat T-joint and a single pipe connecting each side at the entrance of the burrow (See Figure 1 below).
- Once all the 2' PVC pipes are connected, install the 5 PEX pipes.
  - o Bend the PEX pipe prior to joining with the frame of the tunnel to minimize the amount of bowing that will occur.

Figure 1. Burrow tunnel

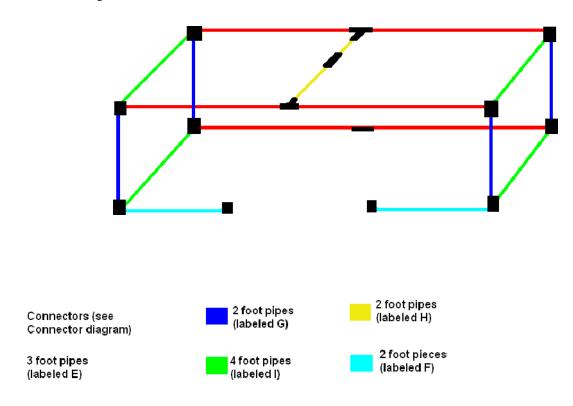


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# **STEP 2:** Construct the end chamber.

- It is best to build the end chamber separately, and then connect to the burrow tunnel to prevent pieces from coming apart.
- It is easiest to assemble the foundation of the end chamber first, and work your way up.
- The assembled end chamber will be 2' tall, 6' wide, and 4' deep.
- To make assembly easier, refer to the PVC labeling system identified in Figure 2.
  - o Label each PVC piece with a letter in permanent marker .

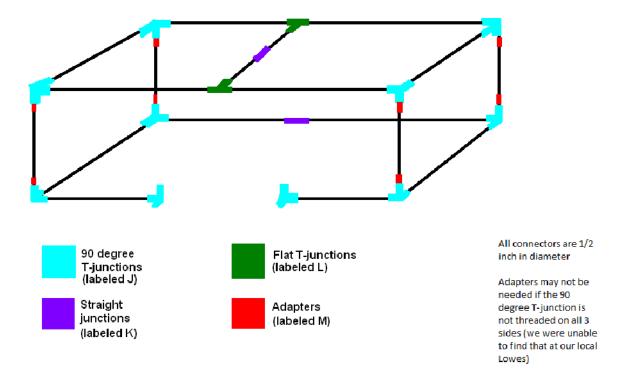
Figure 2. End chamber diagram



**STEP 3:** Figure 3 illustrates the location of each PVC joint placement.

- Please note, 90° T-joints located at the entrance to the end chamber, are the same joints that are attached to the tunnel.
  - o This is where the end chamber and tunnel will connect.
- Again, if all of your joints are not threaded (meaning, do not cork-screw inside) you will not need the adapters.
  - Adapters are needed to connect a threaded joint, to a smooth pipe, disregard if you do not need adapters.
- Connect the end chamber to the tunnel.
- Once the end chamber and tunnel are connected, you should have used all of the pipes and joints.

Figure 3. PVC joint placement



# **Covering the Burrow**

Now that all of the pipes have been assembled, the burrow shape should be apparent. Covering the burrow frame can be as simple or difficult as you chose to make it (\*this is where creativity comes in).

STEP 4: Tailor the burlap to the burrow frame.

- First cover the tunnel with the fabric.
- To fit the burlap on the burrow easily, 2 separate pieces are recommended.

**STEP 5:** Measure the tunnel; It should be just over 8' long and 4' in diameter.

- Depending on how wide your fabric is, you may need to sew two pieces of burlap together lengthwise to cover each side of the burrow.
- Burlap is easily frayed, so you will need to hem all of the rough edges once it is cut to the size you
  want
- To keep the fabric on the burrow, we recommend creating a pocket that the front entrance PEX pipe AND the last PEX pipe can slide through (like a curtain rod), as seen in the image below. This will securely attach at the front and end of the tunnel structure.



Figure 4. Creating a pocket for the tunnel opening

**STEP 6:** Now that the tunnel is covered, cover the end chamber.

• To start you will need 3 pieces of fabric that are 9' long (the burrow is 2' tall (front) + 4' across + 2' tall (back) + extra fabric for hemming edges).

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- Next, sew those 3 pieces together, length wise (along the 9' side) to create a very large sheet of burlap.
  - O Drape the burlap over the end chamber (with the edges that are sewn together facing outwards).
  - o Pin the burlap on each corner to fit it to the frame, and sew a line from the top corner to the bottom corner.
  - o Hem all edges.
  - o Turn burlap inside out, so the sewn edges are now on the inside of the burrow.

# **STEP 7:** Connect the tunnel to the end chamber.

- Cut out a portion of the burlap that covers the entrance to the end chamber (again be sure to hem this edge so the fabric does not fray).
- Use the zip-ties to connect the last PEX pipe to the entrance of the end chamber (See zip ties in Figure 5, be sure to cut the ties to remove when disassembling).



Figure 5. Connecting the tunnel and end chamber

# STEP 8: Create a burrow exit.

- To facilitate one-way burrow traffic, it is highly recommended that an exit be created.
- Simply cut a straight line through the burlap at the back portion of the burrow, and hem the edges (see Figure 6).

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Figure 6. Creating a burrow exit

- Secure the burlap to the frame in a few locations using the zip ties.
  - This will hold the burlap in place and alleviate the need for fixing the burrow each time a group of children crawl through.

# **STEP 9:** Decorate the burrow.

- We use aluminum wire to tie the commensal species to the burlap, twist ties would also work
- Attach the plants along the outside of the burrow for decoration.

# STEP 10: Test it out!

o For kids of all ages and for the kid at heart!

\*Orange "Gopher Tortoise" cones can be ordered from:

SC Supply Company LLC (SCSupply.com); Phone: 1-800-640-1843

The cone costs approximately \$15.00 each + shipping.

Specs: Item #RS70032CT3M6-c - 28" 7LB Orange, Black Base Traffic Cone with 6" reflective collars;

"Gopher Tortoise" Stencil on file.





