Expedient Airborne Isolation Tent

Assembly Instructions

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The following materials list and assembly instructions are for a PVC-framed, plastic sheeting-covered tent, intended as an optional 2nd level of containment, in conjunction with the expedient airborne isolation ventilated headboard. The tent accommodates a single-patient bed (or cot). The design has been optimized to reduce the quantity and cost for construction supplies. All of the construction supplies are items normally found at hardware/building supply stores.

Supply List

<table>
<thead>
<tr>
<th>Supply</th>
<th>Quantity</th>
<th>Part ID</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVC Elbow</td>
<td>10</td>
<td>B</td>
<td><img src="image" alt="PVC Elbow" /></td>
</tr>
<tr>
<td>PVC Tee</td>
<td>8</td>
<td>D</td>
<td><img src="image" alt="PVC Tee" /></td>
</tr>
<tr>
<td>PVC Cross Tee</td>
<td>2</td>
<td>K</td>
<td><img src="image" alt="PVC Cross Tee" /></td>
</tr>
<tr>
<td>PVC Coupling</td>
<td>2</td>
<td>H</td>
<td><img src="image" alt="PVC Coupling" /></td>
</tr>
<tr>
<td>PVC Pipe 10' section</td>
<td>12</td>
<td>See “Prepare Parts” section</td>
<td><img src="image" alt="PVC Pipe" /></td>
</tr>
<tr>
<td>#10 Utility Chain (30” long)</td>
<td>3</td>
<td>P</td>
<td><img src="image" alt="Utility Chain" /></td>
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<tr>
<td>3.5 Mil, 10’x25’ Plastic Sheeting</td>
<td>3</td>
<td>M,N,O</td>
<td><img src="image" alt="Plastic Sheeting" /></td>
</tr>
<tr>
<td>Clear Duct Tape Roll</td>
<td>2</td>
<td>n/a</td>
<td><img src="image" alt="Clear Duct Tape" /></td>
</tr>
</tbody>
</table>

All pipes and fittings are 1-1/4” PVC (1-1/2” PVC is also acceptable)

- Recommended assembly tools include a tape measure, scissors, PVC pipe cutter (or saw), bolt cutters, and a small mallet.
- Dry-fitting of pipe joints is generally sufficient.
- PVC joint primer and adhesive can be applied if a more permanent fixture is desired.
Prepare Parts

- Cut 3 rolls of 3.5 Mil, 10'x25' Plastic Sheeting into the following dimensions:
  - Part M: 10’ x 19’ (covers both front and top)
  - Part N: 8’ x 20’ (covers both back and one side)
  - Part O: 8’ x 11’ (covers one side)
- Cut twelve 10’ PVC Pipes with a PVC pipe cutter (or saw) to the lengths indicated below (Part ID in parenthesis)(discard pipe labeled as scrap).
Assembly Step 2: Plastic Sheeting – Side and Back

- Back Left Support
- Horizontal Wall Support (A)
- Upper Elbow (B)
- Back Right Support
- Front Right Support
- 8’x20’ Plastic Sheeting – Side and Back (N)

Assembly Step 3: Plastic Sheeting – Side

- Upper Elbow (B)
- Back Left Support
- 8’x11’ Plastic Sheeting – Side (O)
- Front Left Support
- Notch

Assembly Step 4: Plastic Sheeting – Top and Front

- Horizontal Wall Support (A)
- 10’x19’ Plastic Sheeting – Top and Front (M)
Assembly Step 5: Create Entrance

- 30" #10 Utility Chain (P)
- Ballast Pocket
- 7’ Slit for Door
- 2” Duct Tape Reinforcement
- Door Ballast Pocket
- 30” #10 Utility Chain (P)
Plastic Sheeting Assembly: Steps 2-5

The following text accompanies the Figures for Assembly Steps 2-5:

Assembly Step 2:
(Note: Firmly secure all frame connections before proceeding to Assembly Step 2; a small mallet may be helpful.)
1) Position plastic sheeting (N) so 8’ side is vertical and 20’ side is horizontal
2) Starting at the vertical back left support (See Figure: Assembly Step 2), align end of plastic sheet along vertical support and tack (temporarily attach) into place using small strips of clear duct tape.
3) Tack top horizontal edge of plastic sheet along top edge of upper horizontal wall support, progressing along back wall.
4) Continue to work plastic around vertical back right support and along right side wall while tacking top horizontal edge of plastic to Upper Elbows (B). Upon reaching vertical front right support. Wrap vertical end of plastic sheet around front right support and tack into place against the back side of the plastic sheeting side wall. (NOTE: Plastic sheeting is slightly taller than height of frame. Notch lower corners of plastic sheeting as needed (see Figure: Assembly Step 3) and allow excess sheeting to lay flat on floor.)

Assembly Step 3:
5) Position 8’ x 11’ plastic sheeting (O) so the 8’ dimension is vertical and the 11’ dimension is horizontal
6) Tack one 8’ edge into place along vertical front left support. Tack top horizontal edge of plastic sheet to Upper Elbows (B), progressing front-to-rear along side wall. Wrap excess plastic around rear vertical back left support and attach vertical edge to back of previously assembled back plastic wall.

Assembly Step 4:
7) Align 10’ edge of 10’ x 19’ plastic sheeting (M) with rear upper horizontal support (A) so it is centered with about 9” extending beyond each end of A and attach to upper horizontal support (A) using a long piece of clear duct tape.
8) With the 10’ rear edge attached, drape M over top and front of structure.
9) Attach the approximate 9” side overhang of M to Plastic Sheet on the Left and Right sides of structure, covering the entire length of all seams with clear duct tape. Similarly, tape the length of all interior seams for additional durability if desired.

Assembly Step 5:
10) Create entrance flap for the Isolation Tent by cutting two 7’ long vertical slits 2’8” apart in the center of the Front Plastic Sheet (see Figure: Assembly Step 3)
11) Reinforce upper ends of each door slit to prevent further ripping by placing 2” pieces of clear duct tape onto the inside and outside surface of each upper door corner.
12) Create Ballast Pockets along floor edge of front wall and door:
   a. Fold up excess length of plastic sheeting along lower edge of front wall and door segments until lower edge barely touches the floor. Resulting fold should be about 7”.
   b. Tape the horizontal edge of each fold into place forming 3 ballast pockets; one to the left of the door; one to the right of the door; and one at the door’s lower edge, keeping the pocket ends open.
13) Insert one length of ballast chain P into each of the three ballast pockets and secure chain in place within the pocket using clear duct tape.