

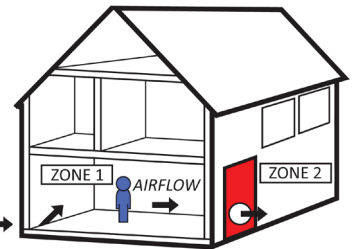
QuickGuide

House and Duct Simulator



The Simulators

The **House Simulator** represents any building and lets you adjust leakage from house-to-outdoors so you can practice with a Blower Door. The inside of the tent represents the "outdoors", while the room in which you are standing represents the inside of the building.



The **Duct Simulator** represents a duct with adjustable leakage that can be measured on its own, or connected to a House Simulator to demonstrate the Duct Leakage to Outdoors Test.



Unpack the House Simulator case

The case contains:

- Aluminum simulator frame (4 pieces)
- Bolts and plastic washers
- Tent cloth
- Velcro leakage sliders (3)
- Fixing kit for aluminum simulator frame



You may also need:

- Cloth Door Panel with aluminum frame
- Fan (from Q46 or Q4E system)
- Digital Dual Channel Pressure Gauge
- Duct Simulator with 2 velcro leakage sliders
- DucTester



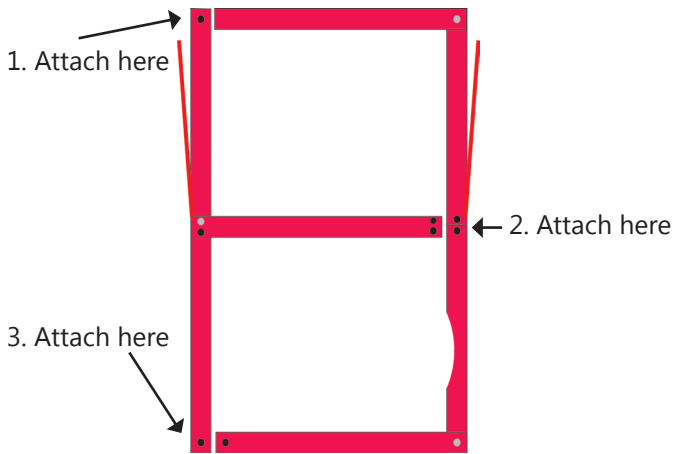
Assemble Frame: Step 1

Remove the base frame from case and lay on the ground in a rectangle as shown.



Assemble frame: Step 2

Secure the frame together using the bolts and washers provided. Ensure brass knobs are on the outside of the frame.

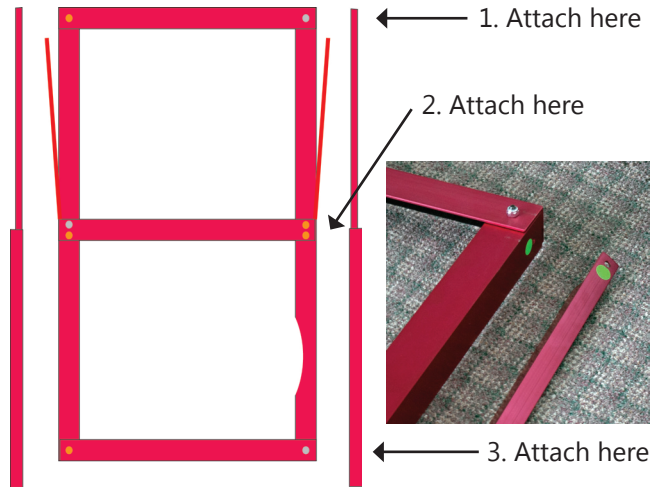


- Ensure nylon washer is between frame pieces that can move to prevent chaffing.
- Make sure knobs are tight, not just snug.

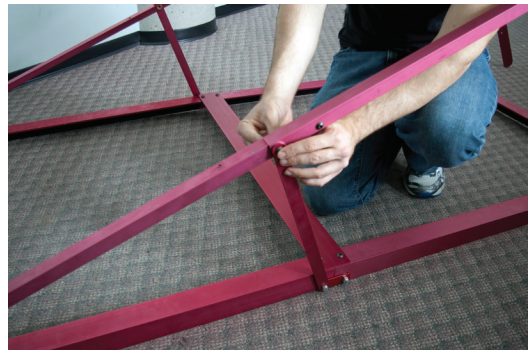


Assemble frame: Step 3

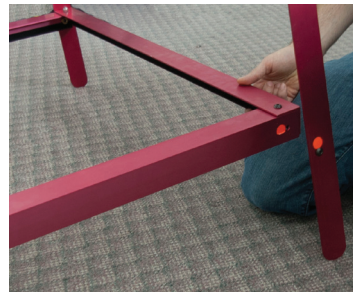
To install the legs, pair the colored dots on frame and legs to ensure proper installation. Start by attaching the tops of the legs to the tent frame.



Attach the center braces to the outside edge of the leg as shown.



Now move to the bottom and attach as shown.



Note: the nylon washers are not required here as it is a non-moving part.

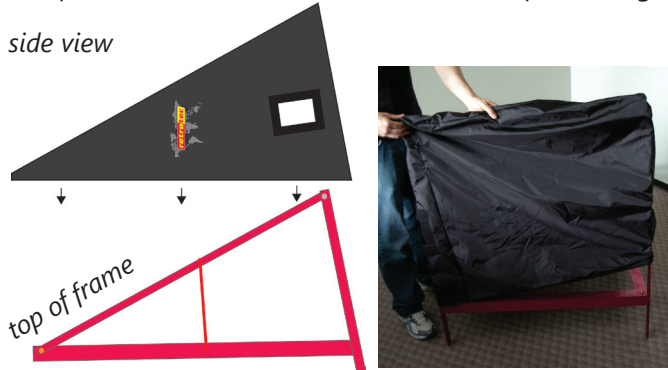


You can now install the tent shell.

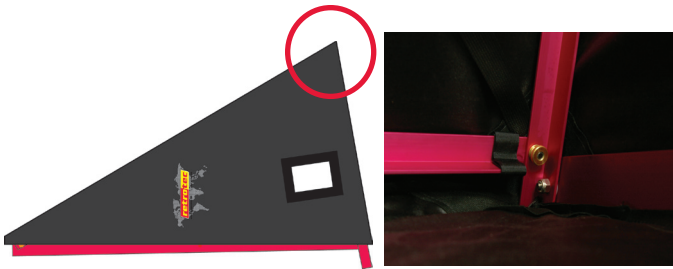
Attach Cloth Tent: Step 1

When installing the cloth tent, make sure that the logos on the silk screening and vent on the back side of the tent are on the upper portion of the frame.

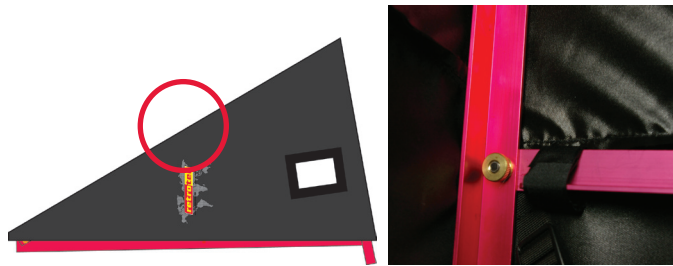
Drape the cloth tent over the frame. Do not pull it snug.



The bottom crossbar will be found attached to the frame inside of the cloth tent. Fold out and attach the bottom cross-brace to the base of the frame.



Move down the frame and fold out and attach the second cloth tent crossbar to the back side of the frame.

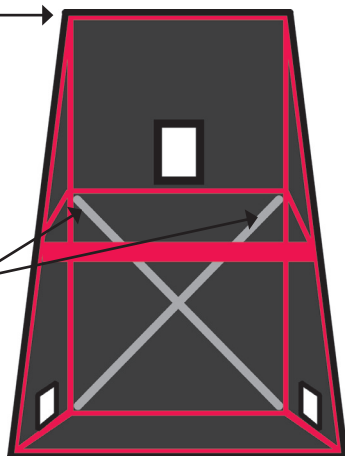


Once the two crossbars are installed, stand tent up. Secure the Velcro strip along the front of the frame until cloth is tight and a tent is formed.

1. Secure Velcro

2. Pull cross-strings here

Next, reach inside the tent to pull the cross-strings tight, ensuring support of test tent.



Attach Cloth Tent: Step 2

Affix the velcro slides to the test tent. Press firmly to ensure a tight fit without leaks. Use the slides to increase or decrease the amount of air leakage to be simulated.



The installation process is now complete. The simulator is ready to have the door panel and fan installed per the relevant QuickGuide.

Install Door Panel and Fan

Install the Door Panel and fan as you would for a doorway to prepare the simulator for testing.

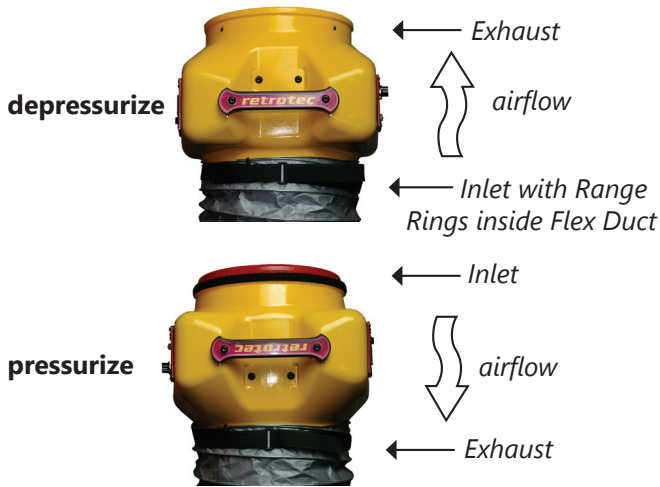


Duct Simulator

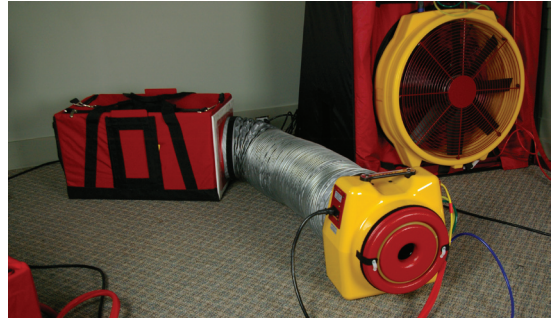
Setup Duct Simulator

To practice duct testing, you will need the Duct Simulator with adjustable sliders to simulate the holes in the ducts and your DucTester.

- Attach the Flex Duct to the Flange on the simulator using the velcro strap.
- Connect the other end of the Flex Duct to the DucTester. For pressurization, connect to the exhaust (outlet) side of the DucTester so air blows into the duct. For depressurization, connect to the inlet side of the DucTester over top of the Range Rings so air blows toward you.



Simulator Duct Leakage to Outdoor



- To simulate a Duct Leakage to the Outdoors test, attach the Duct Leakage Simulator to one side of the tent. Open the slider between the house and duct simulator to create the leakage to the outdoors.

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Optional Parts

<p>Flange to connect Flex Duct to register</p>  <p>Part #: DU157</p>	<p>Verification Plate</p>  <p>Part #: DU159</p>	<p>Flow Hood 24 x 24 inches (61 x 61 cm)</p>  <p>Part #: PP105</p>
<p>12.5ft (3.8m) Flex Duct for DucTester</p>  <p>Part #: DU161</p>	<p>Mid-Range Ring & Low-Range Ring</p>  <p>(Mid) Part #: DU154 (Low) Part #: DU155</p>	<p>Tubing Accessory Kit</p> <p>35 ft (10 m) of blue, red, yellow and green 1/4 inch (12mm) outside diameter tubing. Static Pressure Probe, 4 inch (100 mm) x 1/8 inch (6 mm) outside diameter metal probe, 2 T and 2 male-to-male connectors. Red L for duct leakage to outdoors test.</p>  <p>Part #: TU119</p>
<p>Umbilical for DucTester fans, 7ft (2 m)</p>  <p>Part #: DM240</p>	<p>Grill Mask 12in x 216ft, 12in perfs, Hi-stick Blue, Single Roll</p>  <p>Part #: GR116 Part #: GR117 (for case of 3)</p>	<p>DucTester</p>  <p>Part #: DFDU159</p>