

Fire Behavior and Thermal Imaging Burn Box Creation

Makes 2+ Boxes. (18"x24" or 15"x24")

Required Materials:

- 1 - sheet 4'x8'x5/8" OSB
- 1 – Tube of Fire-resistant caulk
- 1 – Narrow Crown Staples (or another suitable fastener)
- 2 – scrap pieces of 2"x2" or similar for handles

Optional Materials:

- 1 – Small sheet of Polycarbonate for window & roof vent covers (2- 3"x3" pieces needed)
- 1 – Pan head screw to hinge the "window."

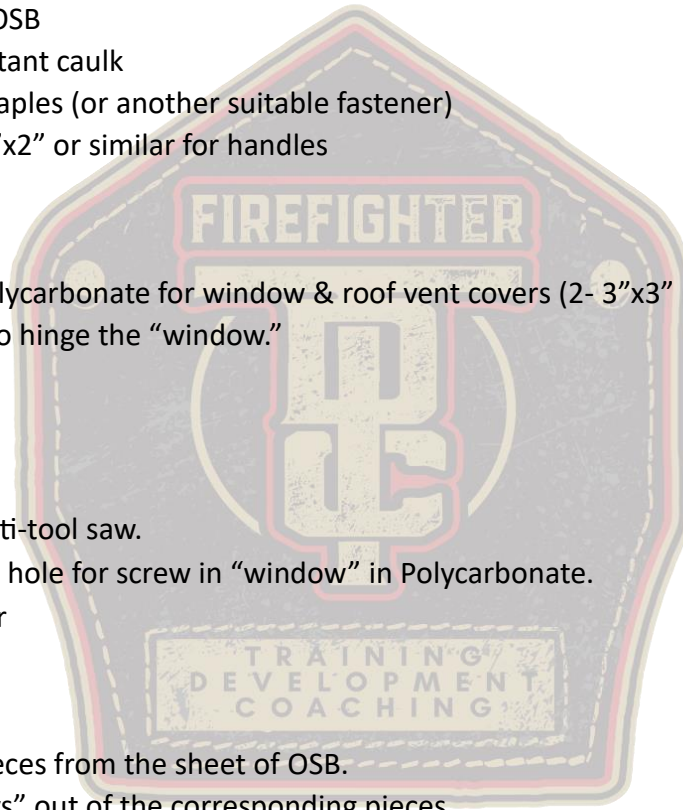
Tools:

- Circular Saw
- Jigsaw or multi-tool saw.
- Drill to create hole for screw in "window" in Polycarbonate.
- Crown Stapler

Directions:

1. Cut out all pieces from the sheet of OSB.
2. Cut "doorways" out of the corresponding pieces.
3. Assemble the bottom (1st), sides & back (2nd), interior walls (3rd) and front wall (4th) with narrow crown staples or similar fasteners.
4. Fire-caulk the tops of all assembled walls.
5. Place the top ("roof") on the caulked walls/box and fasten with narrow crown staples.
6. Using a drill and a jigsaw or a multi-tool type saw, cut out a 2"x2" or 2.5"x2.5" hole for a simulated roof vent over the left bedroom (when looking from the front). (This is knowingly in the wrong place for a fire in the front "room" to show how understanding air entrainment is essential.) (Keep covered until you "vent.")
7. Using a drill and a jigsaw or a multi-tool type saw, cut out a 2"x2" or 2.5"x2.5" hole for a simulated window on the right bedroom exterior wall (when looking from the front).
8. Cut small pieces of acrylic (3"x3" to cover the roof vent and the window if desired.)
9. Attach 2"x2" scraps or similar to create "handles" for the vertical vent cover and the front doorway cover.

Feel free to change any measurements as you deem for your presentation. Many changes WILL affect fire growth, behavior, and air entrainment.



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18"x24"

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15"x24"

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