

Guru Engineering Tech

Division B, Middle School

Check-in box Instructions

Instructions revision log:

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Check-in box Instructions

Questions? Email: Support@guruengineeringtech.com

These instructions explain how to create a check in box from common project board



Materials Needed Before Beginning Construction:

Project Board (Science Fair Board)	Tape measure/Ruler
Exact-o knife	Tape
Black Marker	Safe cutting surface

Information about Check-In Boxes:

For the 2022-2023 Science Olympiad Season, teams are required to bring a check-in box in addition to their planes. You must have a **SEPARATE** check-in box for **EACH** plane.

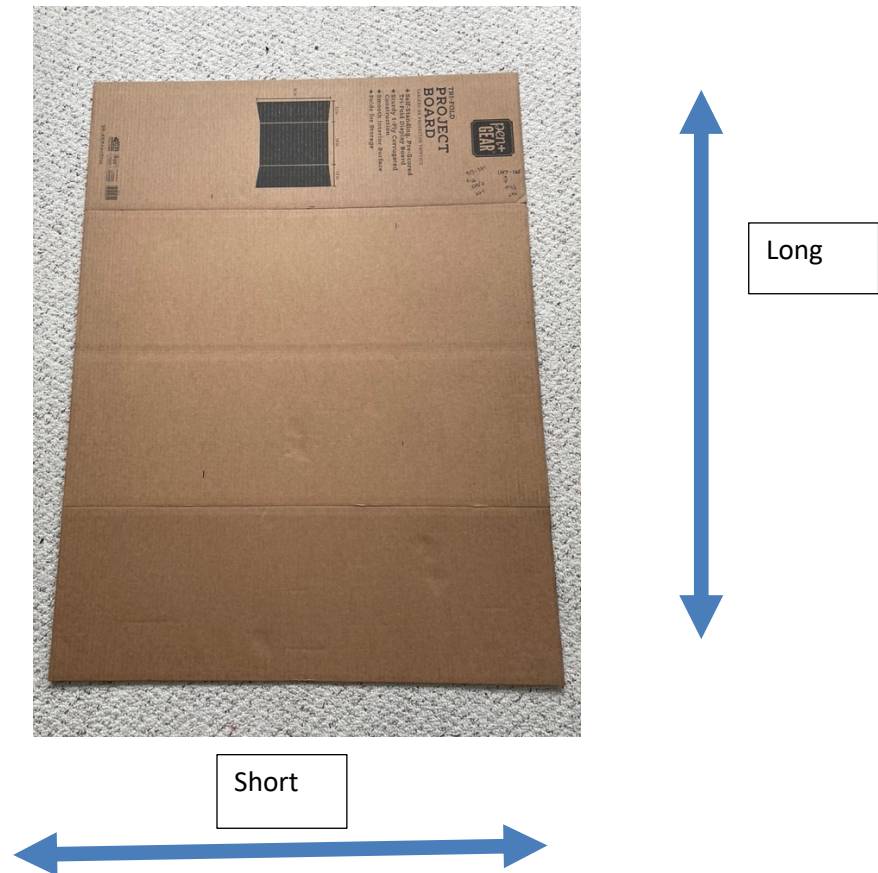
Many schools may have these boxes already. For Middle School Division B, a standard “Bankers Box” #702 will meet the rules. Similar boxes from other brands may also work. **ALWAYS DOUBLE CHECK THE BOX IS THE RIGHT SIZE**

Additionally, one of the better places to purchase boxes seems to be Amazon. Boxes which meet the requirements of Division B, Middle School are available at: <https://a.co/d/25Wtph2>

Part A: Calculating Dimensions

Step 1: Lay your box flat and measure the actual dimension in mm on the long side and the short side

- A) Measure Both Long and Side dimensions. In this example the Long side was 1217mm and the short side was 913mm. Do Not trust the “standard dimensions.” They may not be correct!



Step 2: Calculate the Long Side cut locations

- A) Take the Long Side Dimension – 625mm
- B) Divide the remainder by 2
- C) Write down the result. You will use this Long Result

Example:

$$1217\text{mm} - 625\text{mm} = 592\text{mm}$$

$$592\text{mm} / 2 = \underline{296\text{mm}}$$

Step 3: Calculate the Short Side cut locations

- A) Take the Short Side Dimension – 375 mm
- B) Divide the remainder by 2
- C) Write down the result. You will use this Short result

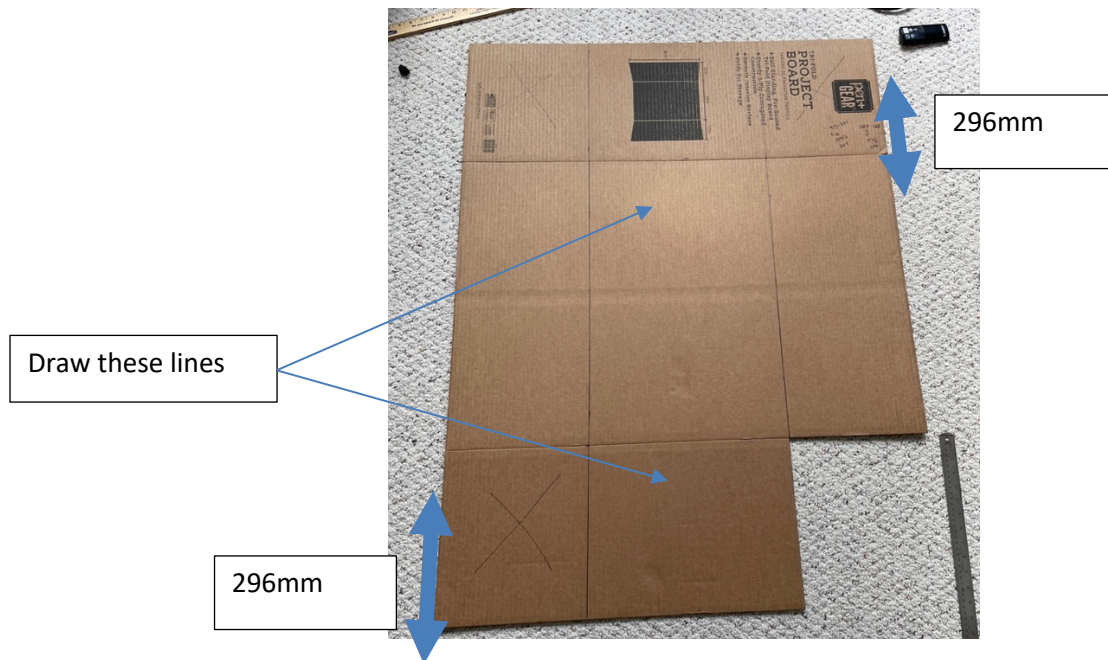
Example:

$$913\text{mm} - 375\text{mm} = 528\text{mm}$$

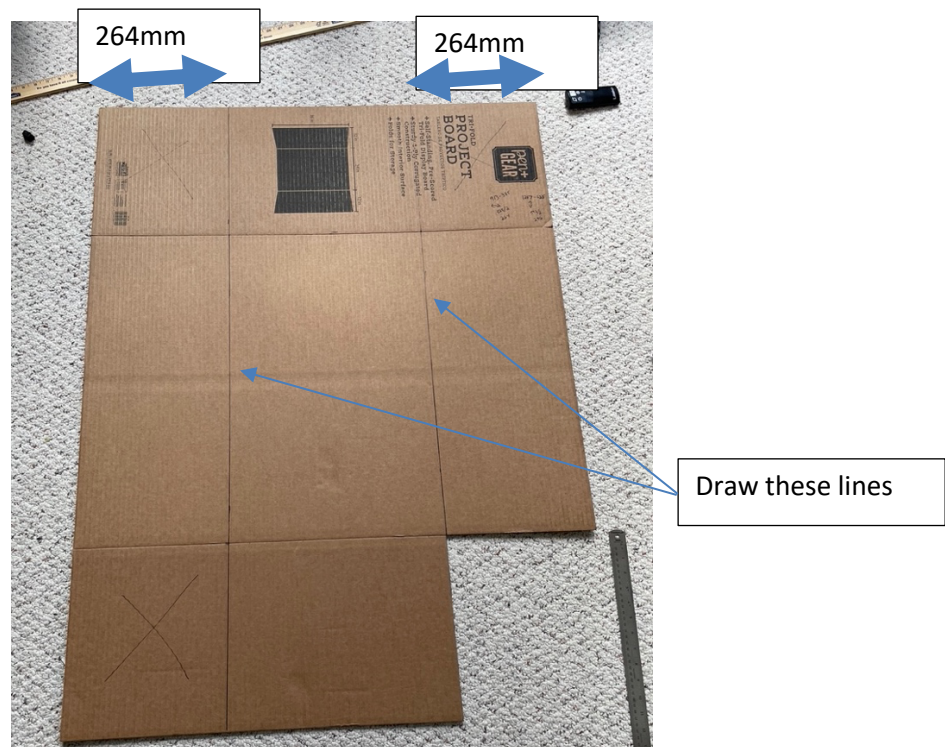
$$528\text{mm} / 2 = \underline{264\text{mm}}$$

Step 4: Measure and Mark

- A) For the Long Edge, measure the Long Result distance from the edge and make a mark across the surface.
- B) Repeat the process for the other end

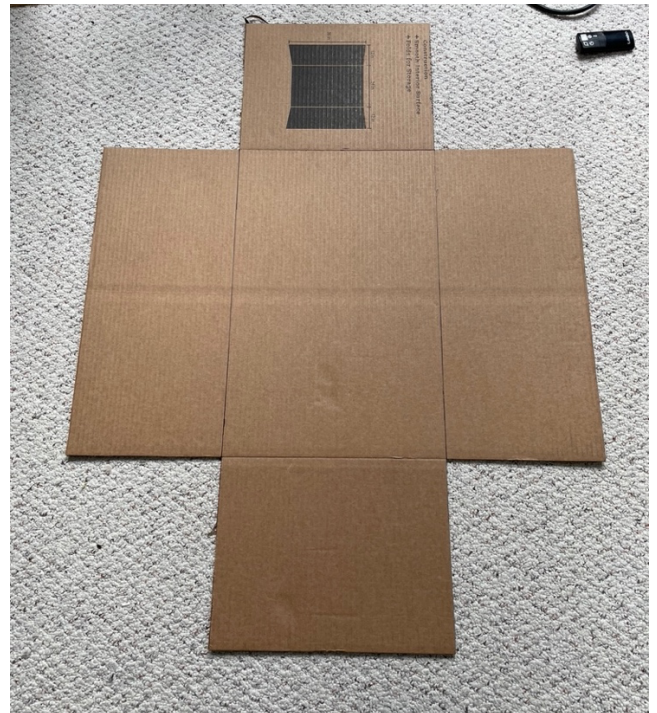


- C) For the Short Edge, measure the Short Result distance from the edge and make a mark across the surface.
- D) Repeat the process for the other side

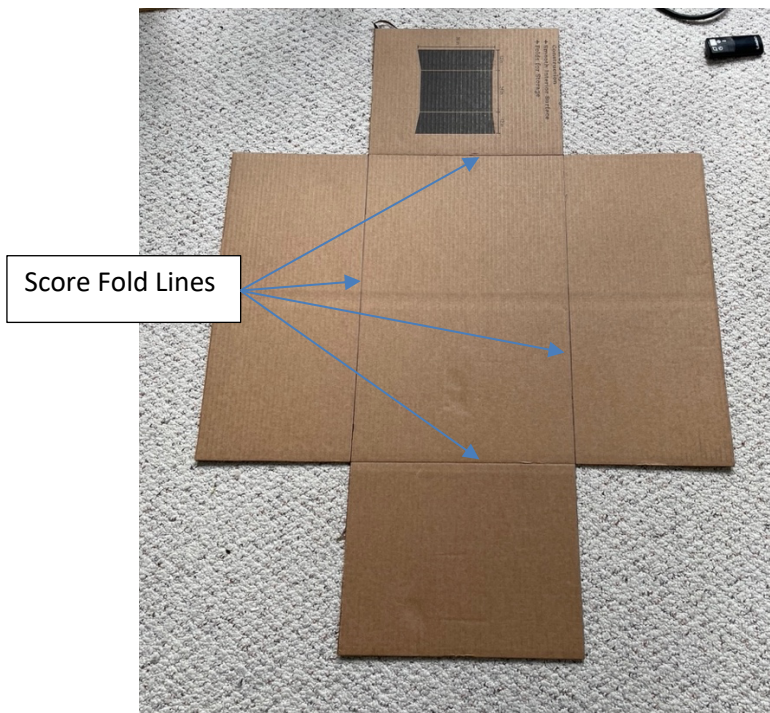


Step 4: Cut off the corners

A) Carefully cut off the corners. These are marked with the X in this example

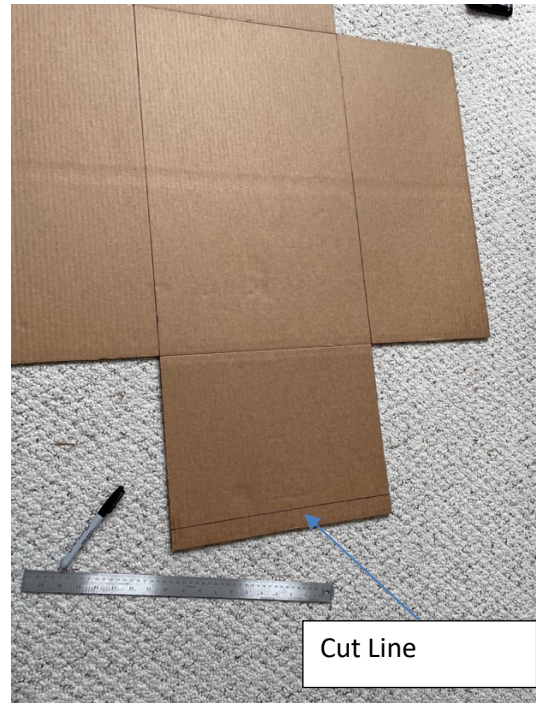


B) Lightly score the remaining fold lines. Do not cut all the way through



Step 5: Cut the sides

- A) Measure and Cut each of the 4 sides to 27 cm to be below the rules requirements for height.



Step 6: Fold the Box and Tape

- A) Fold the box and tape
B) Verify the final dimension. Adjust if needed



Step 7: Assembly is complete

