

Engineering principles are put to the test as your team works to survive an impending windstorm. Can you create a structure that will keep you safe against the elements.

- 4 index cards
- 2 pieces of construction paper
- 10 craft sticks
- Masking tape, 36 in.
- 4 straws
- Ruler
- Small fan or hair dryer

1. Design and construct a structure to withstand a windstorm (small fan or hair dryer).
 - a. Structure must have a roof and a working door.
 - b. Structure can only use the materials provided
2. Test your structure!
 - a. Place your structure on a table. Do not attach your structure in any way to the table.
 - b. Place the small fan or hair dryer 6-12 in. from your structure – choose a consistent distance for testing all structures.
 - c. Turn fan on for 10 seconds. Successful structures should not move.

- What did you learn from other teams' designs? Could elements of their designs be used to improve your structure?
- Introduce height and size constraints or limit the use of certain materials. Can your design adapt to meet the constraints?
- What other natural forces might a building need to withstand? Consider all types of environments – are there some forces that are unique to certain locations?

<https://tryengineering.org/teacher/desert-island-survival/>

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