

## CALIFORNIA SCIENCE & ENGINEERING FAIR 2018 PROJECT SUMMARY

Name(s)

Sofia Kvaternik

**Project Number** 

J1414

#### **Project Title**

# The Effect of Different Hurricane Wind Categories on Different Building Materials

#### **Abstract**

## **Objectives/Goals**

The objective of my project is to find the most convenient material for building structures in a hurricane danger zone

#### Methods/Materials

I tested balsa wood, basswood, aluminum, brass and plywood against 3 different hurricane wind categories. I used a leaf blower and leaf blower attachment nozzles with a different area for the wind to exit in order to create higher wind speeds

#### **Results**

The plywood had the highest flex in the wind categories 5 and 3, balsa wood had the highest flex in category 1, and brass had the lowest flex in all of the wind categories. The material that had the most average flex in all three categories was the basswood.

#### **Conclusions/Discussion**

This experiment demonstrated that basswood would be the most convenient option for building out of the materials I tested because it has a sturdy structure and a flex that would not cave in on you.

### **Summary Statement**

To find the most effective material for construction in hurricane danger areas

#### Help Received

My teacher who helped me create and edit my writing pieces and my father who helped me carry out my experiment.