



CALIFORNIA STATE SCIENCE FAIR 2015 PROJECT SUMMARY

| | |
|---|---------------------------------------|
| Name(s) Sarah E. Scherzinger | Project Number J2030 |
| Project Title Modern Insulators | |
| Abstract Objectives/Goals The objective of this experiment was to find out which commonly used, modern insulation retains the most heat. Methods/Materials To complete this experiment three different types of modern insulation were cut, and inserted into cardboard file boxes. The insulations used were fiberglass, polystyrene board, and polyurethane foam. One file box was left without insulation to serve as the control. The file boxes were brought inside, so they could rise to a internal temperature of over 70°F. Then the boxes were moved outside, into a colder environment in order to observe the internal temperature fall to that of the external. The internal temperature of each box was taken every 15 minutes, and recorded. Results The results of this project showed that polystyrene board retained the most heat over time, while fiberglass retained the least. Conclusions/Discussion In conclusion, the data showed that polystyrene retained the most heat the majority of the time. It also showed that though fiberglass is the most commonly used insulation in modern structures, it does not retain heat as well as the other 2 insulations tested. | |
| Summary Statement This project was conducted to determine which commonly used insulation would retain the most heat. | |
| Help Received My father supported me with the construction of the boxes. | |