

What's the problem?

Engineering Energy Efficient Buildings

SCITEC Design Challenge '09-'10

Maine students & teachers: exercise your engineering & building skills.

Engineering energy efficient buildings has never been as important as it is now. The ideas and answers that really work can come from anywhere—why not from you?

What's the design challenge?

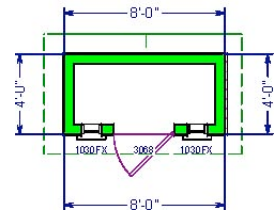
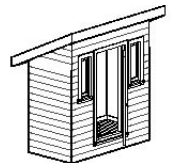
Design and construct a functional shed type building (e.g., storage, potting shed, hydroponic lab) that stays as warm as possible when left outside unheated over a 24-hour period.

Who can take part?

Students and teachers from schools and Career and Technical Education centers anywhere in Maine. Teams that include members from both a CTE center and one of its sending schools will receive additional points during the scoring process. (See rubric)

The process:

- Contact Scott or Lynn for registration form, design brief & scoring rubric (see below)
- Form your team
- Follow the engineering/technological design process model provided, archiving the steps of the process (e.g., brainstorming notes, scale models, prototypes).
- Construct your final design
- Prepare your presentation
- Bring your building to the Capital Area Technical Center for judging in the spring.



Judging criteria: (Note: Registration materials will have the detailed scoring rubric.)

- Meeting design criteria and constraints
- Construction quality
- Efficiency, heat gain, and heat loss
- Students' presentation
- Technological design and construction process

For more information and for the technological design process model to be used contact:

Scott Phair at sphair@augustaschools.org or Lynn Farrin at lfarrin@mmsa.org.

Interested but not sure the full scale challenge works for you?

Contact Lynn Farrin (lfarrin@mmsa.org) if you would be interested in participating in a 1/4 or 1/8 scale version of this challenge!

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