

Instructor Guide

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BRIEF TIMELINE

A more <u>in-depth</u> Timeline can be found in the Design Build Resources folder.

Please submit forms at www.CIE.Foundation/DBsubmit. The links found on this submission page will direct you to your region's Google Folder.

October - November	Instructor Kick-off Dinners
December 15	School Commitment Due
January	Beginning in January, instructors will have the opportunity to collaborate
	virtually on the first Fridays of each month. ** Please notify staff of your
	interest so you may be sent calendar invitations. **
January 1 - 26	Identify Client/Structure Purpose and Design Phase
February 1	Category, T-Shirt & Door Form Due
	Preliminary Plans & Fall Protection Plan Due
March 1	Removal, Roster, and Release Forms Due
March 1	Student Registration Due
March 1	Scholarship Applications Due
March 1	Construction Manager Video Due
March 27 & 28	Southeast Texas Competition at Lone Star College-North Harris,
	Houston, TX
April 10 & 11	SoCal Competition at Golden West College, Huntington Beach, CA
April 24 & 25	North Texas Competition at Collin College Technical Campus, Allen TX
May 1 & 2	NorCal Competition at Cosumnes River College, Sacramento, CA

SUBMITTALS

Teams MUST complete and upload the following through their Google Folder at www.CIE.Foundation/DBSubmit.

Construction Manager Video

Structure Removal Form

Team Roster Form

Ladder Inspection Form

Preliminary Plans

Power Tool Training Form

Parent/Guardian Release Forms



COMPETITION SCHEDULE

DAY 1 – WEDNESDAY		
7:45 AM — 8:00 AM	Mandatory Welcome and Safety Meeting for all students and instructors	
8:00 AM — 8:15 AM	Meeting with Safety Judges and Designated Safety Person (DSP) from each team	
8:00 AM — 4:00 PM	Teams begin building	
11:30 AM	Student Lunches (Lunch will be provided for instructors/students)	
All day, both days	Safety Judging occurs throughout the competition	
DAY 2 – THURSDAY		
7:45 AM — 8:00 AM	Mandatory Welcome and Safety Meeting for all students and	
	instructors. Group photo.	
8:00 AM — 3:00 PM	Teams continue building. The deadline is 3:00 PM. If a team has not	
	finished their structure by completion time, they must cease work at	
	3:00 PM. At the completion of the Awards Ceremony, teams may continue	
	to work on their structures to ensure that they can be transported.	
	Please have removal vehicles in place by 3:00 PM.	
11:30 AM	Student Lunches (Lunch will be provided for instructors/students)	
12:00 PM — 1:00 PM	Industry Lunch	
1:00 PM — 3:00 PM	Judging - Building Code, Construction, Construction Management,	
	Architecture, and Electrical	
3:30 PM – 4:00 PM	Awards Presentation	
4:00 PM	Teams must clean their build areas and check in with staff for clearance before they leave.	

♣ ALL instructors and student participants MUST attend the morning safety meetings.

♦ DSPs are also encouraged to conduct their own Team Safety Meetings.

Eams are encouraged to attend the Awards Presentation at the end of Day Two.



HISTORY

Recognizing the need for a well-trained workforce in the construction industry, the Construction Industry Education Foundation (CIEF) sponsors an annual Design Build Competition. The event was founded in Northern California in 1986; since then, it has expanded across the US. For more in-depth history, visit the program's website at **www.designbuildcompetition.com**.

PURPOSE

While hosted as a "competition" to simulate a real-world experience, the program is first and foremost a workforce development opportunity to introduce students to career opportunities in the built environment.

- Appropriate Promote career awareness of the construction industry among high school students.
- Recognize student achievement.
- Opportunity for the industry to support schools, students, and career technical education programs.
- Students gain firsthand knowledge and hands-on experience in the construction process.

GOALS

Each team will be challenged to:

- Design and prepare construction documents according to criteria outlined by CIEF.
- Build their structure at the competition site.
- Build skills in the completion of design, plan review, safety, and construction phases of a structure.
- Connect with a Team Sponsor for career presentations and job site visits.
- Challenge themselves on creativity and work ethic.
- Establish Industry connections and a pathway to career choice.
- ldentify student leadership roles within their teams.



COMPETITION CATEGORIES

Shed Competition

- Standard set of materials provided by CIEF.
- Maximum size is 96 square feet with the freedom for various roofing styles or other alternative designs.
- Responsible for transportation of structure.
- Structure must utilize a door and window provided.
 - Examples: playhouse, storage shed, snack shack, or pool cabana
- See the Materials List for reference.

Open Competition

- Standard set of materials provided by CIEF, **PLUS any addition of extra materials** for which the school will be responsible for procuring.
- Creative license with the size of the structure.
- Responsible for transportation of structure.
- To Qualify, teams may use or add additional materials not provided by CIEF.
 - Examples: slide, extra window, chicken wire, solar panels & masonry
- Challenges instructors and students to be creative in design and completion.
 - Examples: concession stand, chicken coop, kid play structure, greenhouse, or windmill
- See the Materials List for reference.
- See photos below for Shed Competition examples.









See photos below for Open Competition examples.



SITE LAYOUT

- Specific region layouts with assigned build sites will be sent out <u>prior</u> to the competition.
 - Each team's work area will be clearly marked.
 - Each team's building materials, toolboxes, tools, and construction activity must take place within the designated area.
 - Teams must contact CIEF staff if they plan to drop off their tools and supplies the afternoon before the competition.
 - Overnight security will be in place the night before the competition starts and after the first day of the competition.
 - Teams are not to unbundle their materials until the start of the competition.
 - lf two teams are sharing tools, please alert CIEF staff ONE MONTH prior to Day one of the competition to ensure teams are placed beside each other.
- See samples of site layout photos on the next page.







INSTRUCTORS

Each team must be monitored by an instructor or a responsible adult during the entire competition. Instructors may be within the designated area.



Instructors may not use tools to remain eligible for awards.

TEAMS

No more than fifteen (15) students are allowed on a team and ten (10) is the maximum number of students allowed to be working on the structure at any one time. CIEF will accommodate as many high school teams that are interested in participating as possible. We encourage schools to let CIEF know as soon as possible of their desire to participate, as determination may be made on a first-come, first-served basis.



STUDENT LEADERSHIP ROLES

Designated Safety Person (DSP)

The Designated Safety Person is responsible for promoting safe behaviors including the use of personal protective equipment (PPE), and safe work practices, taking accountability, and being knowledgeable of their responsibilities as a safety leader. The DSP responds to potential hazards, makes decisions, and authorizes corrective actions. DSPs oversee safety board postings and should be knowledgeable of injury and heat illness prevention. This position will be the first in command to communicate with safety judges, report any injuries, and show proof of medical release forms when necessary. The Designated Safety Person (DSP) must always be identifiable with a special-colored safety vest.

Construction Manager (CM)

At the start of the process, teams can select a student who exemplifies leadership qualities to perform the Construction Manager (CM) role. The CM is responsible for leading the team to the completion of deadlines on schedule, including submitting documents and deliverables on time. The CM student assigns team roles to accomplish tasks, is accountable for overall team communications, and meets the quality expectations for their client/end user. The CM will also submit a 30 to 60-second video into their school's Google Folder. Videos should include the name of the school, the purpose of the structure, challenges overcome, and how this experience may have influenced their career decision. They can present themselves as individuals or include their team members in the video, and creativity is encouraged. Judges will observe leadership skills and interview members of the team, the instructor, and/or the CM at the competition. Visit the scoring rubric for specific criteria.



SAFETY

Required PPE for Students & Instructors

Instructors are <u>required</u> to follow the PPE guidelines. Anyone in the workspace, including visitors, needs to abide by the guidelines below.

- Hard hat
- Safety glasses
- Long pants
- Gloves
- Closed-toed shoes
- T-shirt
- Hearing protection (as needed)
- Fall protection (as needed)

Proof of Training

- Proof of Training document can be found in the Design Build Resources Folder.
- MUST be submitted to your school's Google Folder **ONE WEEK** before <u>Day One</u> of the competition.
- MUST be posted on the Safety Board to receive points.

OSHA 10 Training

- CIEF offers OSHA 10 training at **no cost** to all participating schools, upon request.
- OSHA standards will be followed during the competition.
 - It is highly encouraged that all students complete the course.
- Teams who are fully OSHA-trained will receive **EXTRA CREDIT** points.
- Please be good stewards of sponsor funding by ensuring all students COMPLETE the online classes before the expiration date.



The Designated Safety Person (DSP)

Each team's **DSP** will be identified by a colored/labeled vest, provided by CIEF.



- Promoting safe behaviors (Proper use of PPE, safe work practices, taking accountability, and being knowledgeable of their responsibilities).
- Responding to potential hazards.
- Authorizing corrective action(s) reporting any safety issues or concerns to instructors.
- Being knowledgeable of injury and heat illness prevention.
- Overseeing safety board postings.
- Being "first in command" communicating with safety judges, reporting any injuries, and showing proof of medical release forms when necessary.
- Student accountability for their represented team.

Roof Safety

- Structures <u>more than</u> 6 feet tall **MUST** have a Fall Protection plan in place, such as the following examples:
 - Appropriate use of a personal fall-arrest system (i.e. body harness, retractable (no lanyards allowed), and approved anchor point).
 - Guard rails at all roof edges.
 - Scaffolding on all four sides (to catch potential falls).
- Structures <u>less than</u> 6 feet tall Fall Protection Guidelines **are not necessary.**
- CIEF will provide ONE SCAFFOLD PER SCHOOL, upon request.
 - Additional scaffolding will be at the school's cost.
- Under NO circumstances will the students be allowed to lift the completed roof structure into place (this is for their own health and safety).
- Teams that DO NOT follow these safety guidelines WILL NOT be allowed to build their roof at the competition.

Ladder Inspection

The Ladder Inspection Form **MUST** be completed each morning and posted on your Safety Board. It can be found in the Design Build Resources Folder.

Hazardous ladders at the competition will be removed.



Daily Pre-Task Plan (PTP)

- Oaily PTP documents can be found in the Design Build Resources Folder.
- PTP's MUST identify possible hazards and how to reduce possible injuries.
- PTP's MUST be completed each morning <u>prior</u> to the start of work.
- PTP's MUST be posted on your safety board each morning <u>prior</u> to working.
- PTP's are to be reviewed in the morning with their team and updates are made throughout the day should hazards arise.

Safety Audit

- Safety Audit document can be found in the Design Build Resources Folder.
- lnstructors are encouraged to utilize this document as a guide for teaching points.
- OSP's are <u>highly encouraged</u> to use this document as a reflective tool prior to the competition.
 - This form is used by the judges to assess the safety aspect of your team.

Housekeeping

- Obsites are to be kept clean throughout the workday and at the completion of each workday to decrease any potential safety or health risks/hazards.
- Teams MUST follow these housekeeping guidelines:
 - Materials neatly stacked.
 - Cords wrapped and organized.
 - Cut pieces are under the table saw and out of walking pathways.
 - Walking pathways are free of slip and trip hazards.
 - Saw dust and debris are swept and discarded off the site.

Daily Inspection of Tools & Equipment

- Students MUST inspect ALL equipment and power tools (anything with a cord).
- Tools found to be in good condition and working properly should be marked daily with a special-colored zip tie or tape as a visual indicator of inspection completion.
- Any damaged equipment or tools being used will be removed from the work area immediately. <u>Judges will deduct points.</u>



POWER TOOLS

Safety Judges will inspect each team's tools at the start of the competition.

Prohibited tools or tools that pose a safety hazard (frayed wires, missing safety guards, etc.) will be removed from use.

All tools passing inspection will be marked with zip ties.

Points will be deducted if teams use unauthorized tools.

Teams MAY Use

Skill saw

Saber saw

Radial arm saw

Power miter box saw

Chop saw

Router

Power drill

Belt sander

Table saw with safety guard

Hand tools

Teams MAY NOT Use

No gas or air-powered tools or saws

No stationary tools

No chain saws

No nail guns

SAFETY BOARD

Refer to the score sheets for the DSP and Team Safety criteria. Found in the Resources Folder.

Each team <u>MUST</u> display the following documents during the competition:

- Completed Instructor Proof of Training
- Injury & Heat Illness Prevention Program (IIPP)
- Pre-Task Plan (PTP)
- Student Release forms with emergency contact information.
- Architectural Plans





Completed Ladder Inspection form for each day.

Each team is **encouraged** to display the following during the competition:

- Completed OSHA 10-hour (*extra credit* if all students are trained)
- Building Department Visit documentation (*extra credit*)

BUILDING DEPARTMENT APPROVAL

Plans and construction documents with proof of approval from the building department having jurisdiction over the site where the structure is to be located are eligible for **10 Bonus Points**.

Let the plans to be displayed at the competition to obtain extra credit points.

We are encouraging teams to submit their plans at the public counter of their respective building department and walk through an on-site or virtual tour of the department. This can easily be arranged and will take only a short time. We are emphasizing this phase, although **not required**, it is a necessary and important part of the construction process.

If your local department is unwilling or unable to check your plans, points will still be given for a visit to the department to see how the process works. A report explaining your visit is required in this case and **MUST** be posted at the competition site to obtain the bonus points.

ARCHITECTURAL MENTORS

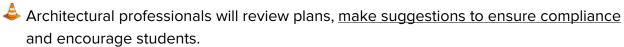
Mentor Expectations

Mentors are utilized as a guide for students as they go through the design phase of their project.

- Mentor time commitment is **2 hours** virtually or in-person (per availability).
- Sessions can take place anytime during the month of January.
- The instructor will contact the mentor(s) to review their mentorship needs prior to meeting with students to maximize their session.
- Architectural mentors should not draw plans for the students.
- riangle The deadline for Architectural Mentor requests is January 1st.



PLAN REVIEW



Teams may choose to re-submit revisions up to two weeks prior to the competition.

Final plans should be on display at the competition.

lf suggestions were made by the Architectural Reviewers, the original plan and the revised plan should be on display. Teams that fail to incorporate design changes recommended during the review process may be ruled ineligible to receive the Best in Show and Architectural Awards.

DESIGN

Preliminary Plans

Due February 1st | Upload through your Google Folder link as PDF files only.

Category, Door & Shirt Size Form

Due February 1st | Submit completed forms at www.CIE.Foundation/DBsubmit.

Design Criteria | SHED COMPETITION

Architectural Plans MUST include the following:

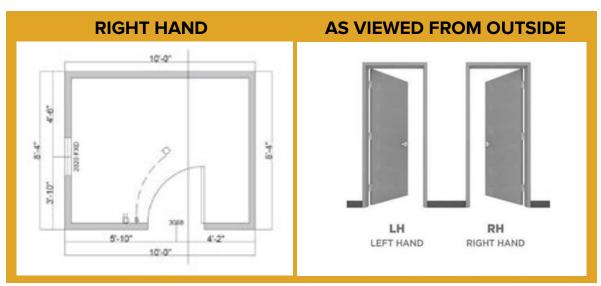
- Nailing Schedule sample can be found in the Design Build Resources Folder.
- A Statement of Intended Use for the structure
- Orawing sheets For printing formats at 11"x17" or 24"x36".
- Site Plans the structure's final destination MUST be identified to receive points.
- Floor Framing Plan (scale $\frac{1}{2}$ " = 1') **MUST** maintain a minimum of 6" nominal clearance below the structure.
- \bigcirc Roof Framing Plan (scale $\frac{1}{2}$ " = 1')
 - If using composition shingle roof covering MUST have a minimum slope of 3" vertical and 12" horizontal pitch.
- Slopes more than 7" vertical and 12" horizontal pitch MUST note in preliminary plans for review.



Teams MUST apply the following criteria to their structures:

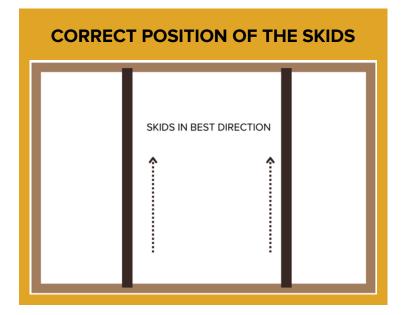
The maximum enclosed square footage for each structure is 96 square feet.

- Window (2'0" x 2'0") CIEF will provide **one** window per team.
 - Teams **MUST** install CIEF-provided window ONLY (no other windows are to be installed for the Shed Category).
 - Teams may frame for more than one window for later installment postcompetition.
- Electrical All electrical devices MUST be indicated on plans noting mounting heights (using industry-standard symbols).
 - Installation of one duplex receptacle, one single pole switch, and one keyless lamp socket utilizing type NM wiring (Romex).
 - Installation MUST abide by the requirements of state Electrical Code (EC)
 - Special note Protection Against Physical Damage including the relative location of bored holes and cable routing; Length of Free Conductor at Outlets Junctions and Switch Points, Bending Radius, Securing and Supporting.
 - All wiring connections and circuitry shall be electrically correct in polarity, properly grounded, functional, and safe for future energization.
- Open (3'0" x 6'8") CIEF will provide **one** in-swing door per team.
 - Teams **MUST** install CIEF-provided door ONLY but may alter as desired. (i.e. change the size and dimensions of door).
 - Teams MUST indicate door handing for door swing (left or right) from an outside perspective.
 - See sample pictures below.





- Skids and Dunnage Placement plan needs to be noted to allow the crane and/or forklift to pick up the structure from the long end.
- See photo below for correct positioning.



HIGHWAY AND TRANSPORTATION LIMITATIONS WHEN MOVING STRUCTURES

- Width in one direction, cannot be more than 8' 6" (including roof overhang).
- Overall height plus its load, cannot be more than 14'.
- The tallest trailer is typically 4' maximum height If the structure is over 10', teams MUST note how they plan to meet highway code during transportation.
- lnvestigate local roads for overpass clearances.
- 📤 KEEP IN MIND your Trailer's MAXIMUM weight capacity.
 - CIEF-provided materials may weigh up to 4,000 lbs.



Design Criteria | OPEN COMPETITION

Architectural Plans MUST include the following:

- Nailing Schedule sample can be found in the Design Build Resources Folder.
- A Statement of Intended Use for structure.
- Orawing sheets for printing formats at 11"x17" or 24"x36".
- Site Plans the structure's final destination MUST be identified to receive points.
- Floor Framing Plan (scale $\frac{1}{2}$ " = 1') **MUST** maintain a minimum of 6" nominal clearance below the structure.
- \bigcirc Roof Framing Plan (scale $\frac{1}{2}$ " = 1'), if applicable
 - If using composition shingle roof covering MUST have a minimum slope of 3" vertical and 12" horizontal pitch, if applicable.
- Slopes more than 7" vertical and 12" horizontal pitch MUST note in preliminary plans for review, if applicable.

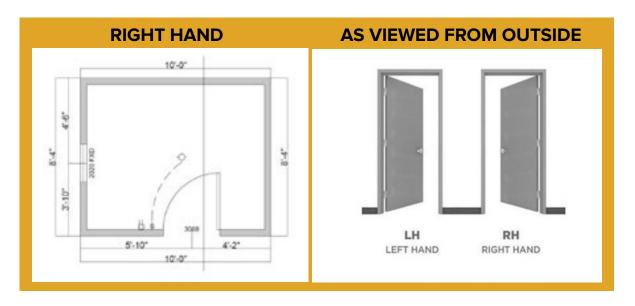
Teams should apply the following criteria to their structures (where applicable):

The enclosed square footage for each structure is not limited but MUST meet highway code for transportation (provided below).

- Any additional materials that you will be using outside of the materials list **MUST** be approved by CIEF and provided by the team/at the team's cost.
 - Hazardous materials will not be allowed.
- Window (2'0" x 2'0"), if applicable CIEF will provide **one** window per team.
 - Teams may frame for more than one window (additional windows will be at the discretion of each school).
- Electrical (If Applicable) All electrical devices **MUST** be indicated on plans noting mounting heights (using industry-standard symbols).
 - Installation of one duplex receptacle, one single pole switch, and one keyless lamp socket utilizing type NM wiring (Romex).
 - Installation MUST abide by requirements of the state Electrical Code (EC)
 - Special note Protection Against Physical Damage including the relative location of bored holes and cable routing; Length of Free Conductor at Outlets Junctions and Switch Points; Bending Radius; Securing and Supporting.
 - All wiring connections and circuitry shall be electrically correct in polarity, properly grounded, functional, and safe for future energization.
- Open (3'0" x 6'8"), if applicable CIEF will provide **one** in-swing door per team.

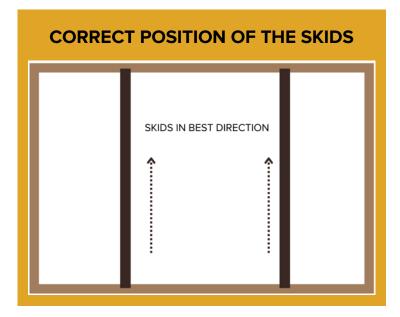


- Teams may frame for more than one door (additional doors will be at the discretion of each school).
- Teams MUST indicate door handing for door swing (left or right) from an outside perspective.
- See sample pictures below.



- Skids and Dunnage Placement. Plan MUST be noted to allow the crane and/or forklift to pick up the structure from the long end.
 - See photo below for correct positioning on the next page.





HIGHWAY AND TRANSPORTATION LIMITATIONS WHEN MOVING STRUCTURES

- Width in one direction, <u>cannot be more than</u> 8' 6" (including roof overhang).
- Overall height plus its load, <u>cannot be more than</u> 14'.
- The tallest trailer is typically 4' maximum height If the structure is over 10' tall, teams MUST note how they plan to meet highway code during transportation.
- lnvestigate local roads for overpass clearances.
- KEEP IN MIND your Trailer's MAXIMUM weight capacity.
 - © CIEF-provided materials may weigh up to 4,000 lbs.



CONSTRUCTION

Materials

Construction materials will be located at the competition site and will be separated into individual team piles (see materials list). All building materials listed are provided by CIEF.

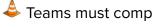


riangle Teams competing in the **Shed C<u>ompetition cannot</u>** bring any additional materials, including any prefabricated materials, to the competition site.

- Painting is not allowed at the competition.
- Any leftover materials must remain within the designated work area until the competition is judged.
- All leftover materials and refuse **MUST** be removed or disposed of before leaving the site on the last day.
- Once the structure's first wall is up, the sponsor sign needs to be displayed on the structure until it is removed from the site.
- Name in the topical topical their own ladders, PPE, and first aid kits.
 - If a team needs assistance with scaffolding or PPE, please notify CIEF at least **one month in advance** of the competition.

Structure Removal/Transport

Each team is responsible for transporting the structure off of the competition site. CIEF will have a crane and forklifts on-site to assist teams in lifting the structures onto a lowboy or trailer of the school's own providing. The structures belong to each team and are for each team to keep. We encourage teams to find a client/end-user for the structure in advance of the competition. Structure Removal/Transport document can be found in the Design Build Resources folder.



Feams must comply with state vehicle codes when transporting their structure on public roads.

All teams **MUST** submit a Structure Removal Form with the name and cell phone number (NOT the school number) of the contact person(s) who will be on-site and is/are responsible for removing the structure. This form is mandatory for team participation in the Design Build Competition.

Removal vehicles must be ready to be <u>loaded at 3:00 p.m.</u> on the second day of the competition, and all structures **MUST** be <u>removed by 5:00 p.m.</u>



Vehicles

Pickup trucks or other team vehicles are not allowed to remain in the designated work area or immediate vicinity of the work area.



Vehicles are allowed in the work area ONLY to unload equipment.

Clean-up

Individual teams will be responsible for daily clean-up of their respective work areas.

- A Ongoing site maintenance and end-of-event clean-up is also a judging consideration under the category of safety.
- All garbage must be walked to the very back of the dumpster so that trash does not overflow.
- Schools must check out with CIEF staff prior to departure on the last day.



GENERATOR CORDS AND ADAPTERS

To alleviate the initial pull of power from the generators at the start of the competition, please bring battery-operated tools and backup chargers already charged.

Exams need to bring adapters (standard 120-volt twist lock to three-prong) and extension cords.

lt is <u>highly suggested</u> to bring between 3-5 (50-ft) 12-gauge extension cords.

Each team will be provided with ONE electrical adapter/pigtail.

See sample photos below.





JUDGES

Teams will be judged by industry professionals and sponsors from the built environment. Most judging will take place after the Industry Lunch after 1:00 p.m. on the second day. Safety Judging will occur all day on both days.



It is encouraged that the Designated Safety Person engages with Safety Judges AND that the Construction Manager serves as the spokesperson for their team with bystanders and judges.

*Teams will receive copies of their scoresheets and judging feedback post-event.

AWARDS



BEST IN SHOW (Each Category)

Awarded to the team which garners the most overall points in the event. The categories that each team will be judged on are Design, Building Code, Electrical, Construction, and Safety.



ARCHITECTURAL AWARD (Each Category)

Awarded to the team that has the most points in the Design portion of the judging. Creativity is a key component of this award. Schools that do not follow the guidelines will not be eligible for this award. The same project design may not be used in successive years.



SAFETY AWARD (Combined Categories)

Awarded to the team which has the best overall points for safety judging. Safety Judges will be judging throughout the two-day event.

SAFETY PERSON OF THE YEAR AWARD (Combined Categories)

Awarded to one individual who has assumed the role of the Designated Safety Person (DSP) during the two-day event. The award winner will exhibit strong leadership qualities as well as knowledge of their responsibilities and safety orders.



CRAFTSMANSHIP AWARD (Shed Category Only)

Awarded to the team with the highest combined Construction & Building Code scores.



CONSTRUCTION MANAGER OF THE YEAR AWARD (Combined Categories)

Awarded to one individual who has assumed the role of the Construction Manager and obtained the highest scores for meeting the schedule of deadlines on time, exemplifies leadership skills, and garners the greatest points for their video.

ROOKIE TEAM OF THE YEAR AWARD (Combined Categories)

Awarded to a first-year or second-year team with the highest number of accumulated points. If a first- or second-year team wins Best in Show, the award will go to the "Rookie" team with the next highest number of points.

This award is available during the third year of the competition.

PEOPLE'S CHOICE AWARD (Combined Categories)

The public will be able to vote for their favorite structure online after the competition. Nominees from both categories will be selected by staff.

ELIGIBILITY FACTORS:

Each team will be eligible to receive one team award at the competition.

Plans:

Teams who submit CIEF-provided sample plans or the same plans that they used within the last two years will not qualify for the Best in Show or Architectural Awards.

Instructors:

Instructors may coach their team but may not use tools if they would like to be eligible for awards. If an instructor plans to be using tools and building the structure, they will need to notify CIEF staff.



2024 MATERIALS LIST

**All nails, screws, and caulking are to be provided by individual teams. **

Qty Per Team	Description
6	4'x8' Sheets of 7/16" OSB Sheathings
4	4'x8' Sheets of 19/32" OSB Subfloor T & G
13	4'x8' Sheets of 7/16", 8" off center inner, seal panel siding, textured and shiplap
2	12' 4"x6" Doug Fir Pressure Treated
1	8' 4"x6" Doug Fir
1	16' 2"x8" Doug Fir
10	18' 2"x6" Doug Fir
14	12' 2"x6" Doug Fir
55	92 1/4" 2"x4" Doug Fir
16	12' 2"x4" Doug Fir
	•
5	8' 2"x4" Doug Fir
20	16' 1"x4" KD Spruce
2	8' Z Metal Trim
50-ft	2"x2" Sheet Metal Flashing
2	10' 6"x6" Wall to Roof Flashing
1	Tyvek Flashing Roll for Window and Door
2	Squares Laminate Composition shingle roofing (6 bundles total)
1	Box of Laminated Composite Hip and Ridge Shingles
1	Roll of 15# felt
1	Bundle of Shim Shingles
1	2'0" x 2'0" single slider vinyl window
1	3'0" x 6'8" Door: Exterior/Steel. Double Bored for Lock Set. Pre-hung includes hinges,
	weatherstripping, and threshold
1	Door hardware- keyed lock and deadbolt
65-ft	12/2 with Ground Romex
25	Romex Staples
2	Plastic Switch/Plug Boxes
1	3/0 Plastic Box
5	Crimp Sleeves for Ground
1	Keyless Light Socket
1	60W Bulb
1	Switch and Plate
1	Duplex Plug and Plate
9	Wire Nuts