Skills Competition

Secondary School Students

PURPOSE OF THE CONTEST

To provide competitors with the opportunity to demonstrate their skills and knowledge in the *Carpentry (2 person)* and building industries through practical, and theoretical application. Build a competitor's confidence by enhancing their knowledge and promoting a healthy attitude toward discovering and managing future challenges.

Challenge a competitor utilizing real life construction skills in an effort to make students aware and prepared for Post Secondary Education.

Promote friendly competition and healthy positive attitudes by providing a safe and fair contest environment which measures success, ability and effort.

SKILLS AND KNOWLEDGE TO BE TESTED

To evaluate each contestant's competency to organize and execute a given work assignment accurately and safely in the carpentry trade.

Practical 85%

Demonstrate safe use of hand and power tools Practice job site management, housekeeping, and safety Demonstrate knowledge and skill in; framing, cutting and drilling materials, fastening techniques, determining elevations, trim & finishing.

Theory15%

Demonstrate the ability to read and interpret construction drawings and apply information Demonstrate the ability to apply onsite math, geometry, and measurements Ability to complete an assignment within a specified time frame Demonstrate the ability to organize and work in a team environment

Skills Competition

Secondary School Students

VARIOUS COMPONENT IDENTIFICATION AND DESCRIPTION

Ability To Interpret A Set Of Plans

Note All measurements will be in **Imperial** Read and interpret industry nomenclature

Understanding drawing views

- > Plans
- > Elevations
- Sections
- Details
- Understand drawing organization and hierarchy
- > Apply information to a project

Ability To Use Tools

- ➤ Work safely
- ➤ Ability to work with both hand and power tools
- > Appropriate tool selection
- Understanding tool limitations
- Proper use of tools and procedures

Building and Construction

- ➤ Work safely
- ➤ Work site tidiness
- > Ability to time manage and complete project
- ➤ Work quality and accuracy
- Project co-ordination
- > Translate drawing information and measurements
- ➤ Attention to project details and construction methods
- ➤ Applying measurements and tolerances
- ➤ Utilize math and geometry to determine cut angles

Skills Competition

Secondary School Students

- ➤ Ability to cut miters accurately
- > Application of various joinery methods
- > Understanding of drilling and material fastening

EQUIPMENT AND MATERIALS

Loyalist College will supply the following:

| Measuring/ Layout | Cutting Tools | Assembly Tools | Miscellaneous |
|---------------------|-------------------------|----------------|--------------------|
| Rafter Quick Square | Power Miter Saw | Cordless Drill | Sawhorses 2 |
| Framing square | Jigsaw | Clamps | CSA Eye Protection |
| Framer's Level | Hand saw (8 point) | Drill Bits | Lumber |
| Sliding T-Bevel | Finishing saw (12point) | Driver Bits | |
| | Cordless circular saw | | Fasteners |
| | | | Glue |

Supplied by competitor:

| Measuring/Layout | Cutting Tools | Assembly Tools | Miscellaneous |
|-----------------------|----------------------|---------------------------|----------------------------|
| Pencils | Utility knife | Carpenters hammer | Apron/Tool belt |
| Imperial tape measure | Wood chisels | Screwdriver(#2 robertson) | Sand paper (various grits) |
| Calculator | | | Sanding block |
| | | | CSA work boots |
| | | | CSA hard hat |
| | | | CSA ear protection |

Note

Exception for above Equipment and Materials

No exceptions

Additional Tools

Any competitor that brings tools not mentioned above will be asked to remove them from the contest site.

Skills Competition

Secondary School Students

Tool Usage

Competitors will need to be knowledgeable in the use of a framing square and a combination or speed square. The following links direct you to online tutorials on how to use these tools. http://www.wonderhowto.com/how-to/video/how-to-use-a-framing-square-198506/http://www.wonderhowto.com/how-to/video/how-to-use-a-rafter-angle-square-78922/http://www.wonderhowto.com/how-to/video/how-to-use-a-combination-square-78936/ ALL competitors are required to be familiar with and able to demonstrate the correct use of the tools (in particular Power tools) as described in the Construction Health and Safety Manual http://www.healthandsafetyontario.ca/HSO/Home.aspx http://www.wsps.ca/Information-Resources/Topics-and-Hazards.aspx http://www.labour.gov.on.ca/english/hs/topics/construction.php

SAFETY

Safety is a priority at the Loyalist College Skills Competition. At the discretion of the judges and technical chairs, any competitor can be removed from the competition site for not having the proper safety equipment and/or not acting in a safe manner.

- **1.** It is mandatory for all competitors to wear CSA approved hard hats
- **2.** It is mandatory for all competitors to wear CSA approved eyewear (including side shields for prescription eyewear).*
- **3.** It is mandatory for all competitors to wear CSA approved footwear.* (Steel Toed, Steel Belted, ESR)
- **4.** It is mandatory for all competitors to wear CSA approved hearing protection while using loud machinery (tools)
- **5.** Jewelry such as rings, bracelets and necklaces, or any items deemed unsafe by competition judges, shall be removed.*
- **6.** Proper shop attire is to be worn (no loose straps, baggy sleeves). Any attire, that is deemed unsafe by competition judges, will not be permitted.*
- 7. Cell phones are not permitted on the shop floor
- **8.** Any competitor with long hair must tie up and affix hair so that it does not pose a hazard. Judges will monitor and may ask competitor adjust hair should it become a hazard.

*Competition judges will have final authority on matters of safety

Skills Competition Secondary School Students

| JUDGING CRITERIA POINT | Secondary |
|-------------------------------------|-----------|
| BREAKDOWN /100 | |
| Safety | 10 |
| Overall frame – (stability / level) | 25 |
| Heights and measurements | 10 |
| Component framing | 10 |
| Joinery | 20 |
| Finish | 10 |
| Efficient use of materials | 10 |

TIE BREAKER

If two or more participants are tied in points at the end of the competition, the following shall apply to determine the placing:

- **Step 1**. Re-evaluate the affected projects with different judges.
- Step 2. Participant with the highest Safety score.
- **Step 3.** Participant who has completed the project in the least amount of time.

RULES AND REGULATIONS

Please be sure to review all rules and regulations in the Complete Competitor Information Package. Immediate disqualification may occur at the discretion of the Technical Chair if a competitor displays any one of the following:

- > Acts inappropriately
- ➤ Shows disregard for the safety of themselves or those around them
- > Breaks the established rules and regulations including:
- Uses equipment or material that is not permitted
- Dishonest conduct (cheating)
- Speaks with those outside the contest area
- Arrives to the contest site late

Skills Competition

Secondary School Students

CLOTHING REQUIREMENTS

Competitors are to be dressed in a clean and appropriate manner, and follow previously stated safety policy

ANY QUESTIONS PLEASE CONTACT

Larry Burnett **lburnett@loyalistcollege.ca**