

CONTEST DESCRIPTION

# Cabinetmaking

TEAM CANADA

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# 1 THE SKILLS FOR SUCCESS FOR CAREERS IN THE SKILLED TRADES AND TECHNOLOGY

In response to the evolving labour market and changing skill needs, the Government of Canada has launched the new Skills for Success (former Essential Skills) model defining nine key skills needed by Canadians to participate in work, in education and training, and in modern society more broadly. SCC is currently working with Employment and Social Development Canada (ESDC) to bring awareness of the importance of these skills that are absolutely crucial for success in Trade and Technology careers. Part of this ongoing initiative requires the integration and identification of the Skills for Success in contest descriptions, projects, and project documents. The next phase and very important aspect of our Skills for Success (SfS) initiative is to provide a Skills Report Card to each competitor at the Skills Canada National Competition. The purpose of the report card is to inform the competitor about their current level of nine identified Skills for Success based on their competition scores. With this knowledge, the competitor will be made aware which skill may require improvement. Full implementation is expected in the next Skills Canada National Competition.

The following 9 skills have been identified and validated as key skills for success for the workplace in the legend below:

<sup>1</sup>Numeracy, <sup>2</sup>Communication, <sup>3</sup>Collaboration, <sup>4</sup>Adaptability, <sup>5</sup>Readingt, <sup>6</sup>Writing, 7Pr oblem Solving, <sup>8</sup>Creativity and Innovation, <sup>9</sup>Digital

These Skills for Success have been identified in section 2.4 and/or 3.2 of your Contest Description and if applicable, in your Project and supporting documents.

# **2** CONTEST INTRODUCTION

- 2.1 Description of the associated work role(s) or occupation(s) https://www.skillscompetencescanada.com/en/skill\_area/cabinetmaking/
- 2.2 Purpose of the Challenge

The winner of this competition will be eligible to be a member of Team Canada, competing in Cabinetmaking at WorldSkills Shanghai 2022.

2.3 Duration of contest

The competition will take place over 2 days with 14 hours of competition time.



#### **2.4** Skills and Knowledge to be tested.

The project will test the full range of skills needed by a competent Cabinetmaker.

- Interpretation of drawings and specifications
- Planning and scheduling of processes
- Accurate measuring and mark out of joinery
- Safe use of edge cutting hand tools such as chisels and hand planes
- Safe use of woodworking machinery such as: table saw, mitre saw, router table, drills, biscuit joiner
- Proper gluing techniques
- Final surface preparation before finishing
- Using critical thinking to solve construction problems

#### **3 CONTEST DESCRIPTION**

**3.1** List of documents produced and timeline for when competitors have access to the documents on the Skills/Compétences Canada website

There will be up to a 30% change in the actual competition project but no change to the materials list.

DOCUMENT	DATE OF DISTRIBUTION
Project Drawings	January 2022
Materials List	January 2022

**3.2** Tasks that may be performed during the contest

The following tasks will be part of the competition project:

- Veneer Work
  - $\circ~$  Layout, cutting, gluing and clean-up of veneer applications^7  $\,$
- Hand cut Joinery
  - Use of hand saws and chisels to cut interlocking wood joinery
- Layout and machining of wooden components
  - Sizing and shaping of components to match project specifications <sup>1,5</sup>
- Assembly
  - Proper glue up and assembly of the project including the use of
  - clamps and other mechanical fasteners<sup>7</sup>
- Surface Preparation
  - Proper sanding of components prior to and after assembly<sup>7</sup>

Skills for Success - <sup>1</sup>Numeracy, <sup>5</sup>Reading, <sup>7</sup>Problem Solving

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#### 4 EQUIPMENT, MATERIAL, CLOTHING

4.1 Equipment and material provided by Skills/Compétences Canada

#### **Project Materials**

The project materials and a check list will be provided and laid out on competitor benches.

Prior to the competition starting, competitors will be given a chance to confirm all components are present and able to check parts for quality. If there are any issues with part quality they can be swapped out at this time without penalty.

Once the competition has started there will be a penalty if extra material is required.

#### **Machinery and Equipment**

Machinery available to competitors will include the following:

- Table saws with crosscut and/or ripping blades
- Sliding compound mitre saws
- Band saws
- Edge Sanders
- Router tables with straight and profiling bits as required
- Floor model drill press and drill bits
- Cordless drills with drill bits and drivers as required
- Biscuit Joiners
- Adhesives and sandpaper will be available (competitors may also bring their own if desired, subject to inspection for approval)
- Fasteners required for the project will be provided (competitors may bring their own if desired for jig fabrication etc. subject to inspection for approval)

# COMPETITORS WILL BE REQUIRED TO USE THE MATERIAL AND EQUIPMENT PROVIDED BY SCC. ALL OTHER MATERIAL AND EQUIPMENT WILL BE SUBJECT TO INSPECTION FOR APPROVAL.

4.2 Equipment and material provided by the competitor

Any and all conventional hand tools commonly found in a cabinetmaker's tool box may be supplied by a competitor. No pre-made, project specific jigs or fixtures may be used in the competition. No commercial jigs or fixtures may be used for cutting dovetails. *Dovetail layout markers are allowed*.



Recommended list of competitor tooling:

- Metric tape measure
- pencils
- calculator (not on phone)
- combination or try square
- marking gauge
- sliding T-bevel
- utility knife
- set of bench chisels
- wooden mallet

- hammer
- dovetail saw
- coping or fret saw
- flush trim saw
- block or smooth plane
- masking, packing or fibre tape
- clamps to assemble project
- sanding block

#### **4.2.1** Toolboxes Guidelines

One of the objectives of SCC is the sustainability of the Competition. As a result, the toolboxes brought by Competitors will be restricted to the following maximum specifications.

The Competitor toolbox must not exceed 1.5 meters<sup>3</sup> in volume. It can be multiple toolboxes but the total of all toolboxes must not exceed the maximum volume indicated. There is no exception to this rule. If the Competitor toolbox is larger than what is indicated, the Competitor with the guidance of the Expert, will need to remove items from the toolbox and those items will not be used during the competition. All tools must fit inside one or more toolboxes. Tools outside of a toolbox will not be permitted.

There will be a toolbox inspection the day prior to the competition or the in morning, prior to the competition starting.

4.3 Required clothing provided by the competitor

- CSA approved steel toed shoes or boots
- CSA approved safety glasses\*\*
- CSA approved hearing protection\*\*
- Shorts are not allowed during the competition
- T-shirts or long-sleeved shirts only (no sleeveless tops)
- Loose fitting clothing or jewelry, eg. "hoodie strings" are not allowed while working on machinery
- Ear buds for music playback are not allowed during the competition

\*\* Safety glasses and hearing protection will be provided but competitors may bring their own as well.



## 5 HEALTH AND SAFETY

#### 5.1 Safety program

SCC has implemented a comprehensive safety program as health and safety is an integral part of our competitions. Our safety program includes guidelines and procedures to make the work environment in each skill area safer.

#### 5.1.1 Safety manual

As part of our program a safety manual has been created in order to monitor and document health and safety within each skill area. It includes a definite plan of action designed to prevent accidents. The safety manual will be provided for every skill and these instructions must be followed and respected by all participants and officials at the SCNC.

#### 5.1.2 Safety workshop

During orientation, Competitors will participate in a Safety workshop and they will be expected to work and maintain a safe working area during the competition. Any Competitor breaking any health, safety, and environmental rules, may be required to undertake a second safety workshop, this will not affect the Competitor's competition time.

#### **5.2** List of required personal protective equipment (PPE) provided by <u>competitors</u>

- Competitors will be required to wear safety glasses at all times in the competition area
- Hearing protection must be worn while in the machining area but can be removed at the benches if desired
- Proper footwear must be worn at all times in the competition area

#### 5.3 COVID-19 Protocol

The COVID-19 guidelines will be shared as soon as they are available.

The COVID-19 guidelines will be subject to change based on the BC COVID-19 guidelines in place at the time of the competition.

#### 6 SAFETY REQUIREMENTS

6.1 Safety workshop

Upon arrival at the Skill area, Competitors will participate in a Safety workshop and they will be expected to work and maintain a safe working area during the



competition. Any Competitor breaking any health, safety and environmental rules, may be required to undertake a second safety workshop, this will not affect the Competitor's competition time.

**6.2** List of required personal protective equipment (PPE) provided by <u>Skills/Compétences Canada</u>

- Safety glasses
- Hearing protection
- 6.3 List of required personal protective equipment (PPE) provided by the <u>competitor</u>
  - CSA approved safety shoes or boots
  - Personal safety glasses and hearing protection are recommended (will be provided as necessary)

**Note:** Contestants who do not have the required protective gear will not be allowed to participate in the contest

#### 7 ASSESSMENT

7.1 Point breakdown

**Note:** This list is subject to change.

TASKS	/100
Overall dimensions	10
Detail dimensions	10
Joinery	30
Assembly	30
Surface preparation, sanding	20

#### 8 CONTEST SPECIFIC RULES

Contest specific rules cannot contradict or take priority over the Competition Rules. They do provide specific details and clarity in areas that may vary from contest to contest. Any additional contest rules will be reviewed during the competitor orientation.

TOPIC/TASK	CONTEST SPECIFIC RULE
Use of technology - personal laptops, tablets and mobile phones	<ul> <li>Use of personal technology, phones, laptops, tablets are not allowed during the competition time (breaks &amp; lunch excluded)</li> </ul>

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Coach and competitor time	<ul> <li>There will be 15 minutes of CC time at the beginning of each competition day (C1 &amp; C2) and when competition ends on C1</li> <li>Coach and competitor interaction are also allowed during breaks and lunch</li> </ul>
Tools / Infrastructure / Orientation sign-off	<ul> <li>There will be a tool box inspection on C-1 (the day prior to the competition)</li> <li>There will be a workbench setup and tool orientation and familiarity time on C-1</li> <li>Following tool/machine orientation, there will be a sign-off form for each competitor regarding machine safety and familiarity</li> </ul>

## 9 ADDITIONAL INFORMATION

#### 9.1 Interpreter

If a competitor requires the help of an interpreter once onsite during the competition, the Skills/Compétences Canada Provincial/Territorial offices must advise Skills/Compétences Canada National Secretariat a minimum of 1 month prior to the competition or this service might not be guaranteed.

#### 9.2 Ties

- Tiebreaker #1: Dovetail Joints prior to assembly
- Tiebreaker #2: Quality (fit and flushness) of mitred top edges
- Tiebreaker #3: Score of Overall Dimensions section

#### 9.3 Test Project change at the Competition

Where the Test Project has been circulated to Competitors in advance, Expert shall change a maximum of 30% of the work content. Please refer to the Competition Rules.

#### 9.4 Competition rules

Refer to the competition rules of the Skills Canada National Competition which can be found on our website.

# **10 TEAM CANADA EXPERT**

#### Harold Bergmann

Contact the Skills/Compétences Canada national secretariat for any questions or concerns: Sophie Courchene at sophiec@skillscanada.com