



CONTEST DESCRIPTION

Architectural Technology & Design

SECONDARY

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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:

¹Numeracy, ²Communication, ³Collaboration, ⁴Adaptability, ⁵Reading, ⁶Writing, ⁷Problem Solving, ⁸Creativity and Innovation, ⁹Digital

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/architectural-technology-and-design/

2.2 Purpose of the Challenge

To assess the competitor's skills in performing architectural design and drawing tasks.

- To assess the competitor's abilities to apply the following key themes:
- Architecture - envelope design, space planning, materials selection
- Knowledge of Canadian Wood-Frame House Construction, CMHC
- Engineering - structural systems and spans
- Construction - regulatory building codes and knowledge of construction assemblies

2.3 Duration of contest

12 hours

2.4 Skills and Knowledge to be tested.

Prior to the arriving at the competition, each competitor shall create an imperial 11x17 size template with the title block containing the information provided in the example posted on the Skills/Compétences Canada website and have this template accessible on their computer for use during the competition.

Skills and knowledge to be test include (but may not be limited to):

- Typical wood-frame residential construction materials, and methods.
- Single detached residential drafting standards.⁷
- Typical working drawings for single detached residential.⁸
- Typical presentation graphics.⁹
- Use of CADD application such as (but not limited to) Autodesk AutoCAD or Revit.⁹

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

DOCUMENT	DATE OF DISTRIBUTION
Project	February 2023
Sample Title Block	February 2023
Competition Drawing Standards	February 2023

3.2 Tasks that may be performed during the contest

- Preparation of Working/Construction Drawings and Presentation Drawings⁸
- BIM / CADD⁹
- Planning and design concepts⁷
- Measuring/scaling, detailing and sketching skill¹
- Exporting drawings as a PDF⁹
- Test knowledge of Wood frame construction⁷
- Open Book Quiz based on Canadian Wood-Frame House Construction, CMHC⁷
- Evaluation of spatial perception

Note: Competition project may include presentation and working drawings of floor plans, elevations, section(s) and construction detail(s).

Skills for Success – ¹Numeracy, ⁷Problem Solving, ⁸Creativity and Innovation, ⁹Digital

4 EQUIPMENT, MATERIAL, CLOTHING

4.1 Equipment and material provided by Skills/Compétences Canada

- Laser printer (11x17) and/or plotter
- Table and chair
- 120VAC power supply
- (1) monitor

COMPETITORS WILL BE REQUIRED TO USE THE MATERIAL AND EQUIPMENT PROVIDED BY SCC. ALL OTHER MATERIAL AND EQUIPMENT WILL BE REMOVED FROM THE SKILL AREA.

4.2 Equipment and material provided by the competitor

- Pre-made title block (Refer to Section 2.4 above for requirements)
- Windows compatible hardware
- Autodesk Products (AutoCAD, AutoCAD Architecture, Revit) (Current Year or Most Recent Version)
- No internet access during competition
- Other than operating software, no files are permitted on the desktop or laptop.
- PDF creation software (i.e. Adobe Acrobat Writer) Competitors are to ensure PDF creation software is installed and tested prior to competition time. Refer below to contest specific rules. Web-based PDF application will not be permitted.
- If competitors are bringing a computer or laptop from their school (instead of their personal computer), please ensure that the computer is unlocked so documents and possibly software can be saved/installed to the hard drive and technology support can be provided onsite. This may require access to CMOS settings.
- Canadian Wood-Frame House Construction, published by CMHC will be permitted. (Digital or Hardcopy)
- Scales (metric and imperial)
- Scales (metric and imperial)
- Calculator
- Pencil
- Paper
- Empty USB Drive
- Software reference manuals, Textbooks and Electronic data (e.g., CD or diskette) will **not** be permitted

4.3 Required clothing provided by the competitor

- N/A

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 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 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 COVID-19 guidelines in place at the time of the competition.

5.3 List of required personal protective equipment (PPE) provided by Skills/Compétences Canada

- No PPE required

5.4 List of required personal protective equipment (PPE) provided by the competitor

- No PPE required

Note: Competitors who do not have the required protective equipment will not be allowed to participate in the competition

6 ASSESSMENT

6.1 Point breakdown

Note: This list is subject to change.

TASKS	/100
Day 1. Working/Presentation Drawing(s)	15
Day 1. Working/Presentation Drawing(s)	30
Day 2. Theory Challenge	5

Day 2. Working/Presentation Drawing(s)	50
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7 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 Resource Materials	The only resource permitted is the CMHC Wood Frame Handbook. Failure to comply with this rule will result in disqualification.
Use of technology - Internet	There will be no access to the Internet during the competition. Failure to comply with this rule will result in disqualification.
Use of technology – Mobile phones and music	MP3 players or cell phones on airplane mode are permitted during the competition to listen to music provided the competitor wears headphones or earbuds. During the competition, competitors are not permitted to use their cell phones for calling, texting or accessing the internet. Failure to comply with this rule will result in disqualification.
Hardware & Software	Computers must remain onsite from Orientation to the conclusion of the competition. No electronic drawing files are permitted to be brought into the competition. The competitor is required to ensure that their computer only contains software application files. Failure to comply with this rule will result in disqualification. Only default software libraries, families, blocks, and components are permitted to use during the competition.

	<p>NTC Members will verify compliance during Orientation.</p> <p>All software must be installed and operational prior to the beginning of competition.</p> <p>Failure to comply with this rule will result in disqualification.</p>
Malfunction of Software/Hardware	<p>Technical support for software will not be provided during the competition. Competitors are assumed to be knowledgeable in their chosen software and should have full working knowledge of its capabilities. If your hardware/software malfunctions you will be provided the equivalent down time to complete the competition up to a maximum of 60 minutes per day. Subject to NTC discretion.</p>

8 ADDITIONAL INFORMATION

8.1 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 may not be guaranteed.

8.2 Ties

- Tiebreaker #1: The competitor with the highest score in the Working/Construction Drawings of the Floor Plan Component of the test will be declared the winner.
- Tiebreaker #2: The competitor with the highest score in the Elevation(s) Component of the test will be declared the winner.
- Tiebreaker #3: The competitor with the highest score in the Wall Section(s) Component of the test will be declared a winner.

8.3 Test Project change at the Competition

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

8.4 Competition rules

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

9 NATIONAL TECHNICAL COMMITTEE MEMBERS

MEMBER ORGANIZATION	NAME
Newfoundland and Labrador	Mike Foley – Chair
Prince Edward Island	Bruceyene Collins
Quebec	Sylvie Faber
Ontario	Joel Foster – Co-chair
Manitoba	Ralph Lata
Saskatchewan	Andrea Clayton
Alberta	Peter Kelly
British Columbia	Wes Macaulay

Contact the Skills/Compétences Canada national secretariat for any questions or concerns: Nathalie Maisonneuve (nathaliem@skillscanada.com).