

# OALCF Tasks for the Apprenticeship Goal Path: Prepared for the Project, *Developing Best Practices for Increasing, Supporting and Retaining Apprentices in Northern Ontario (2014)*

#### **OALCF** Task Cover Sheet

Task Title: Reading Blueprint Notes

Learner Name:				
Date Started:	Date Completed:			
Successful Completion: Yes No	)			
Goal Path: Employment 🗸 Apprenticeship 🗸 Se	econdary School Post Secondary Independence			
Task Description:				
Carpenters read blueprint notes to find informa	ation about products, installation, processes, and other details			
to meet codes and engineering specifications.	These notes may be unique to a structure, local practice, or			
manufacturer.				
Competency:	Task Group(s):			
A: Find and Use Information	A1: Read continuous text			
B: Communicate Ideas and Information	A2: Interpret documents			
C: Understand and Use Numbers	B2: Write continuous text			
	C3: Use measures			
Level Indicators:				
A1.1: Read brief texts to locate specific detail	S			
A1.2: Read texts to locate and connect ideas				
A2.2: Interpret simple documents to locate a	nd connect information			
A2.3: Interpret somewhat complex document	s to connect, evaluate and integrate information			
B2.1: Write brief texts to convey simple ideas and factual information				
B2.2: Write texts to explain and describe ideas and information				
C3.1: Measure and make simple comparisons and calculations				
Performance Descriptors: see chart on last page				
Materials Required:				
• Pencil				
Blueprint Notes document				

Task Title: Reading Blueprint Notes

Carpenters read blueprint notes to find information about products, installation, processes and other details to meet codes and engineering specifications.

Look at the Blueprint Notes document.

#### Learner Information and Tasks:

- **Task 1:**Circle, underline, or highlight which sections of the Ontario Building Code (O.B.C.)refer to concrete's air entrainment percentages?
- **Task 2:** Under what conditions are double joists required?
- **Task 3:** One note refers to installing factory built fireplaces. The O.B.C. is one document that addresses the installation. List the two other documents that inform the particulars about the installation.
- **Task 4:** Under what conditions must the carpenter use reinforcement bars?
- **Task 5:** Do all garage walls have to be gas sealed? Explain your answer.
- **Task 6:**Which structure, a garage slab or a foundation wall, requires a higher MPa value?Calculate the difference between the MPa values.

## Blueprint Notes

Double Joists: All non-load bearing partitions running parallel to the span of the floor joists are to be supported on double joists, or on min. 2" x 4 blocking @ max. 3'-11" centres between the joists.

> Garage Gas Sealing: Garage walls and ceiling to be drywalled and gas sealed adjacent to dwelling. Door between garage and house to be tight fitting and weatherstripped, and shall be fitted with a self closing device.

O.B.C. 4.2.4.1 (1) (b) – Design conforms to established local practice.

Concrete used for garage slab and exterior work including steps and porch slab is 32MPa with 5%-8% air entrainment. (O.B.C.

9.3.1.6 & 9.3.1.7)

Fireplaces: Direct vent factory built fireplaces to be installed as per O.B.C., manufacturers specifications and CAN/CGA B149 "Installation Codes for Gas Burning Appliances and Equipment".

O.B.C. Foundation Design: 9.4.4.1 (2) and 9.15.1.1 (3) – Foundations on filled ground to conform to Section 4.2

Backfill: Min. 4'0" from underside of the footing to grade where on undisturbed soil. Max. 7'7" backfill to 10" 20MPa poured concrete. Where backfill to foundation wall exceeds heights shown, foundation wall to incorporate reinforcement bars in accordance with Structural Engineers details.

#### Task Title: Reading Blueprint Notes

#### Answer Key – one way to get these answers are:

Task 1:Scan notes to find O.B.C. Scan those notes to find "air entrainment". Circle, underline, or<br/>highlight the sections of the O.B.C.

#### 9.3.1.6 & 9.3.1.7

Task 2:Scan notes to find "double joists". Record the conditions.

Double joists are required for all non-load bearing partitions running parallel to the span of the floor joists.

Task 3:Scan notes to find information about fireplaces. Scan the note to find "O.B.C.". Record the<br/>other two documents.

# The other two documents to be used to install factory built fireplaces are manufacturers specifications and CAN/CGA B149 "Installation Codes for Gas Burning Appliances and Equipment".

Task 4:Scan notes to find "Structural Engineers". Scan the note to locate "reinforcement bars". Locate<br/>the conditions when reinforcement bars must be used. Find the maximum height of backfill<br/>referred to earlier in the note.

#### When the backfill exceeds the height shown (7'7"), reinforcement bars must be used.

Task 5:Scan notes to find information about the garage. Locate information about walls and gas<br/>sealing. Infer that not all walls are adjacent to the dwelling. Record answer.

#### No. Only the walls that are adjacent to the dwelling must be gas sealed.

Task 6:Scan the notes for "concrete". Scan these notes for "garage slab" and "foundation wall".Locate the term "MPa" in each note as it refers to "garage slab" and "foundation wall". Recordthe MPa for the garage wall and the MPa for the foundation wall. Realize that subtraction willbe used to derive the difference between the garage wall MPa and the foundation wall MPa.Record the answer (difference). Record the answer.

#### The garage slab has the higher MPa value. 32 - 20 = 12 MPa

Performance Descriptors		Needs Work	Completes task with support from practitioner	Completes task independently
A1.1	reads short texts to locate a single piece of information			
	follow simple, straightforward instructional texts			
A1.2	scans text to locate information			
	locates multiple pieces of information in simple texts			
	makes low-level inference			
A2.2	performs limited searches using one or two search criteria			
	uses layout to locate information			
	makes connections between parts of documents			
	makes low-level inferences			
	begins to identify sources and evaluate information			
A2.3	performs complex searches using multiple search criteria			
	• manages unfamiliar elements (e.g. vocabulary, context, topic) to complete tasks			
	integrates several pieces of information from documents			
	compares or contrasts information between two or more documents			
	uses layout to locate information			
	identifies the purpose and relevance of documents			
	makes inferences and draws conclusions from information     displays			
	identifies sources, evaluates and integrates information			
B2.1	writes simple texts to request, remind or inform			
	conveys simple ideas and factual information			
	demonstrates a limited understanding of sequence			

	uses sentence structure, upper and lower case and basic punctuation		
	uses highly familiar vocabulary		
B2.2	writes texts to explain and describe		
	• conveys intended meaning on familiar topics for a limited range of purposes and audiences		
	<ul> <li>begins to sequence writing with some attention to organizing principles (e.g. time, importance)</li> </ul>		
	<ul> <li>uses limited range of vocabulary and punctuation appropriate to the task</li> </ul>		
	begins to select words and tone appropriate to the task		
	begins to organize writing to communicate effectively		
C3.1	adds and subtracts whole number measurements		
	recognizes values in number and word format		
	• begins to interpret integers (e.g. temperature, elevation)		
	<ul> <li>chooses appropriate units (e.g. metres, inches) and non- standard units (e.g. paces, cupfuls, scoops)</li> </ul>		
	identifies and performs required operation		
	<ul> <li>interprets and represents measures using symbols and abbreviations (e.g. inches as ", centimeters as cm, pounds as lbs, kilograms as kilos or kg)</li> </ul>		
	follows apparent steps to reach solutions		

This task: was successfully completed\_\_\_\_

needs to be tried again\_\_\_\_

### Learner Comments

Instructor (print)

Learner Signature