



# Bricklayer

# Guide to Course Content

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Saskatchewan  
Apprenticeship and  
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Commission



Online: [www.saskapprenticeship.ca](http://www.saskapprenticeship.ca)

Recognition:

*To promote transparency and consistency, this document has been adapted from the 2021 Bricklayer Red Seal Occupational Standard (Employment and Social Development Canada).*

A complete version of the Occupational Standard can be found at [www.red-seal.ca](http://www.red-seal.ca)



# STRUCTURE OF THE GUIDE TO COURSE CONTENT

To facilitate understanding of the occupation, this guide to course content contains the following sections:

**Task Matrix:** a chart which outlines graphically the major work activities, tasks and sub-tasks of this standard detailing the essential skills and the level of training where the content is covered.

**Major Work Activity (MWA):** the largest division within the standard that is comprised of a distinct set of trade activities.

**Task:** distinct actions that describe the activities within a major work activity.

**Sub-task:** distinct actions that describe the activities within a task.

**Training Profile Chart:** a chart which outlines the model for Saskatchewan Apprenticeship and Trade Certification Commission (SATCC) technical training.

**Technical Training Course Content for the Bricklayer trade:** a chart which outlines the model for SATCC technical training sequencing. For the harmonized level of training, a cross reference to the Harmonized apprenticeship technical training sequencing, at the learning outcome level, is provided.

# TRAINING REQUIREMENTS FOR THE BRICKLAYER TRADE

To graduate from each level of the apprenticeship program, an apprentice must successfully complete the required technical training and compile enough on-the-job experience to total at least 1500 hours each year. Total trade time required is 6000 hours and at least 4 years in the trade.

There are three levels of technical training delivered by Saskatchewan Polytechnic in Saskatoon.

Level One: 8 weeks

Level Two: 8 weeks

Level Three: 8 weeks

The information contained in this document serves as a guide for employers and apprentices, as well as briefly summarizes the training delivered at each level of apprenticeship training. An apprentice spends approximately 15% of the apprenticeship term in a technical training institute learning the technical and theoretical aspects of the trade. The hours and percentages of technical and practical training may vary according to class needs and progress.

The content of the technical training components is subject to change without notice.

## Entrance Requirements for Apprenticeship Training

Your grade twelve transcripts (with no modified classes) or GED 12 is your guarantee that you meet the educational entrance requirements for apprenticeship in Saskatchewan. In fact, employers prefer and recommend apprentices who have completed high school. This ensures the individual has all of the necessary skills required to successfully complete the apprenticeship program and receive journeyman certification.

Individuals with “modified” or “general” classes in math or science do not meet our entry requirements. These individuals are required to take an entrance assessment prescribed by the SATCC.

English is the language of instruction in all apprenticeship programs and is the common language for business in Saskatchewan. Before admission, all apprentices and/or “upgraders” must be able to understand and communicate in the English language.

Designated Trade Name	Math Credit at the Indicated Grade Level❶	Science Credit at Grade Level
Bricklayer	Grade 10	Grade 10
<p>❶ - (One of the following) WA – Workplace and Apprenticeship; or F – Foundations; or P – Pre-calculus, or a Math at the indicated grade level (Modified and General Math credits are not acceptable.).</p> <p>*Applicants who have graduated in advance of 2015-2016, or who do not have access to the revised Science curricula will require a Science at the minimum grade level indicated by trade.</p> <p>For information about high school curriculum, including Math and Science course names, please see:  <a href="http://www.curriculum.gov.sk.ca/#">http://www.curriculum.gov.sk.ca/#</a></p> <p><b>Individuals not meeting the entrance requirements will be subject to an assessment and any required training.</b></p>		

# BRICKLAYER TASK MATRIX

This chart outlines the major work activities, tasks and sub-tasks from the 2021 Bricklayer Red Seal Occupational Standard. Each sub-task details the corresponding essential skill and level of training where the content is covered.

\*Sub-tasks with numbers in the boxes are where the content will be delivered in training. Harmonization for the Bricklayer trade has been fully implemented for each technical training level.

## A - Performs common occupational skills

**12%**

<b>Task A-1 Performs safety-related functions</b>	<b>A-1.01 Maintains safe work environment</b>  1	<b>A-1.02 Uses personal protective equipment (PPE) and safety equipment</b>  1		
<b>Task A-2 Uses and maintains tools and equipment</b>	<b>A-2.01 Maintains tools and equipment</b>  1	<b>A-2.02 Uses rigging, hoisting and lifting equipment</b>  1	<b>A-2.03 Uses access equipment</b>  1	
<b>Task A-3 Uses scaffolding</b>	<b>A-3.01 Erects scaffolding</b>  1	<b>A-3.02 Dismantles scaffolding</b>  1	<b>A-3.03 Maintains scaffolding</b>  1	
<b>Task A-4 Organizes work</b>	<b>A-4.01 Uses drawings and specifications</b>  1, 2, 3	<b>A-4.02 Plans daily tasks and activities</b>  1	<b>A-4.03 Prepares jobsite and materials</b>  1	<b>A-4.04 Protects surrounding areas</b>  1
<b>Task A-5 Uses communication and mentoring techniques</b>	<b>A-5.01 Uses communication techniques</b>  1	<b>A-5.02 Uses mentoring techniques</b>  3		

## B - Performs general masonry practices

19%

<b>Task B-6 Performs substrate preparation</b>	<b>B-6.01 Prepares vertical substrates and foundations</b>  1	<b>B-6.02 Applies parging</b>  1	<b>B-6.03 Installs anchoring/tie systems</b>  1	<b>B-6.04 Installs membrane and flashing</b>  1	<b>B-6.05 Installs insulation</b>  1
<b>Task B-7 Performs fundamental masonry tasks</b>	<b>B-7.01 Lays out wall and coursing</b>  1	<b>B-7.02 Finishes joints</b>  1	<b>B-7.03 Cleans new masonry surfaces</b>  1	<b>B-7.04 Seals masonry surfaces</b>  1	
<b>Task B-8 Uses mortars, grouts and adhesives</b>	<b>B-8.01 Mixes mortar, concrete, grout and adhesives</b>  1, 2, 3	<b>B-8.02 Uses mortars</b>  1, 2, 3	<b>B-8.03 Uses concrete and grout</b>  1, 2, 3	<b>B-8.04 Uses adhesives</b>  1, 2, 3	

## C - Builds masonry systems

22%

<b>Task C-9 Builds masonry walls</b>	<b>C-9.01 Builds non-load-bearing walls</b>  1	<b>C-9.02 Builds load-bearing walls</b>  2
<b>Task C-10 Builds horizontal masonry surfaces</b>	<b>C-10.01 Prepares horizontal substrate</b>  3	<b>C-10.02 Lays masonry units on horizontal surfaces</b>  3
<b>Task C-11 Builds and installs prefabricated masonry</b>	<b>C-11.01 Builds prefabricated masonry</b>  2	<b>C-11.02 Erects prefabricated masonry</b>  2

**Task C-12 Installs surface-bonded masonry units**

**C-12.01 Prepares substrate for surface-bonded masonry units**

2

**C-12.02 Applies surface-bonded masonry units**

2

## D – Builds natural stone systems

**10%**

**Task D-13 Builds natural stone walls**

**D-13.01 Prepares natural stone**

2

**D-13.02 Lays natural stone**

2

**D-13.03 Damp cures walls**

2

**Task D-14 Performs mechanically-fastened natural stone cladding procedures**

**D-14.01 Prepares substrate for cladding**

3

**D-14.02 Prepares natural stone for cladding**

3

**D-14.03 Installs natural stone cladding**

3

## E – Builds chimneys and fireplaces

**10%**

**Task E-15 Builds chimneys**

**E-15.01 Builds foundation supports for chimneys**

3

**E-15.02 Lays masonry units to build chimneys**

3

**E-15.03 Installs flue lining**

3

**E-15.04 Installs related flashings**

3

**E-15.05 Installs caps**

3

**Task E-16 Builds fireplaces**

**E-16.01 Builds foundation for hearth, firebox, backup material and veneer**

3

**E-16.02 Builds hearth, firebox and backup**

3

**E-16.03 Installs damper**

3

**E-16.04 Builds smoke chamber**

3

**E-16.05 Prepares existing fireplace for insert**

3

**E-16.06 Faces  
fireplaces and inserts**

3

## **F - Installs refractories and corrosion resistant materials**

**9%**

**Task F-17 Installs and maintains refractories**

**F-17.01 Prepares for installation of refractories and accessories**

3

**F-17.02 Prepares mortar for refractories**

3

**F-17.03 Removes existing refractories**

3

**F-17.04 Installs refractories**

3

**F-17.05 Repairs refractories**

3

**Task F-18 Installs and maintains corrosion resistant materials**

**F-18.01 Prepares for installation of corrosion resistant materials and accessories**

3

**F-18.02 Prepares mortar for corrosion resistant materials**

3

**F-18.03 Removes existing corrosion resistant materials**

3

**F-18.04 Installs corrosion resistant materials**

3

**F-18.05 Repairs corrosion resistant materials**

3

## **G - Performs restoration**

**11%**

**Task G-19 Rebuilds masonry work**

**G-19.01 Disassembles unit masonry**

2

**G-19.02 Prepares restoration work area**

2

**G-19.03 Reinstalls masonry and accessories**

2

**Task G-20 Repairs and cleans existing masonry work**

**G-20.01 Removes deteriorated masonry units**

2, 3

**G-20.02 Repoints joints**

2, 3

**G-20.03 Repairs masonry units**

2, 3

**G-20.04 Reinstalls masonry units and accessories**

2, 3

**G-20.05 Cleans existing masonry surfaces**

2, 3

## H – Performs additional masonry

7%

<b>Task H-21 Installs glass blocks</b>	<b>H-21.01 Prepares work area for installation of glass blocks</b>  2	<b>H-21.02 Lays glass blocks</b>  2			
<b>Task H-22 Installs ornamental and sculpted masonry</b>	<b>H-22.01 Prepares for installation of ornamental and sculpted masonry units</b>  3	<b>H-22.02 Installs ornamental and sculpted masonry units</b>  3			
<b>Task H-23 Builds arches</b>	<b>H-23.01 Prepares location for installation of arch</b>  2,3	<b>H-23.02 Builds template</b>  2,3	<b>H-23.03 Places template</b>  2,3	<b>H-23.04 Installs arch masonry units</b>  2,3	<b>H-23.05 Removes template</b>  2,3



# TRAINING PROFILE CHART

This Training Profile Chart represents Saskatchewan Apprenticeship and Trade Certification Commission (SATCC) technical training at the topic level.

Level One	Transcript Code	Hours
Construction Documents 1	BRPT 124	18
Tools and Equipment	EQPT 134	24
Masonry Materials	MATE 121	12
Mortars Grouts and Adhesives	MSON 124	24
Layout and Fundamental Tasks	MSON 104	18
Building Enclosure & Substrate Preparation	MSON 105	24
General Safety & Job-site Communication	SFTY 121	18
Scaffolding	SCAF 121	12
Masonry Systems 1	MSON 106	84
Practical Final Assessment	ASMT 100	6
		240

Level Two	Transcript Code	Hours
Construction Documents 2	BPRT 221	30
Basic Masonry Arches	CNST 203	42
Stone Masonry	MSON 200	42
Surface Bonded Masonry	MSON 204	30
Masonry Restoration 1	MSON 205	36
Masonry Systems 2	MSON 206	54
Practical Final Assessment	ASMT 200	6
		240

Level Three	Transcript Code	Hours
Construction Documents 3	BPRT 320	24
Refractories and Corrosion Resistant Materials	CNST 323	30
Masonry Restoration 2	MSON 327	12
Advanced Masonry Arches	CNST 324	24
Project Planning	PROJ 301	24
Chimney and Fireplace Construction	CNST 325	60
Masonry Systems 3	MSON 330	24
Masonry Review	REV 320	30
Mentoring	MENT 300	6
Practical Final Assessment	ASMT 300	6
		240

# TECHNICAL TRAINING COURSE CONTENT

This chart outlines the model for Saskatchewan Apprenticeship and Trade Certification Commission (SATCC) technical training sequencing. For the harmonized level of training, a cross reference to the Red Seal Occupational Standard (RSOS) apprenticeship technical training sequencing, at the learning outcome level, is provided.

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<b>Level One</b>	<b>8 weeks</b>	<b>240 hours</b>
<b>Construction Documents 1</b>		<b>18 hours</b>
<ul style="list-style-type: none"><li>• identify construction documents</li><li>• interpret measurement systems and scales</li><li>• identify construction drawing language</li><li>• compare various types of drawings</li><li>• perform basic math used in construction</li></ul>		
<b>RSOS topics covered in this section of training:</b>		
<b>A-4 Organizes Work</b>		
A-4.01 Uses drawings and specifications		
<hr/>		
<b>Tools and Equipment</b>		<b>24 hours</b>
<ul style="list-style-type: none"><li>• identify measuring and layout tools</li><li>• identify masonry hand tools</li><li>• identify portable power tools used in the masonry trade</li><li>• identify tools and equipment used to mix mortar and grout</li><li>• identify tools and equipment used for moving materials</li><li>• operate tools and equipment used in the masonry trade</li><li>• describe the safe use of powder actuated tools</li></ul>		
<b>RSOS topics covered in this section of training:</b>		
<b>A-2 Uses and maintains tools and equipment</b>		
A-2.01 Maintains tools and equipment		
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<b>Masonry Materials</b>		<b>12 hours</b>
<ul style="list-style-type: none"><li>• describe clay products</li><li>• describe concrete products</li><li>• describe additional masonry products</li></ul>		
<b>RSOS topics covered in this section of training:</b>		
<b>B-7 Performs fundamental masonry tasks</b>		
B-7.01 Lays out wall and coursing		
<b>C-9 Builds masonry walls</b>		
C-9.01 Builds non-load bearing wall		

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## **Mortars, Grouts and Adhesives**

**24 hours**

- identify the characteristics and properties of mortar
- mix mortar to a workable state
- perform mortar joint finishes
- describe concrete design and mixing
- identify adhesives used in masonry construction
- identify building code requirements for mortar and concrete

### **RSOS topics covered in this section of training:**

#### **B-7 Performs fundamental masonry tasks**

B-7.02 Finishes joints.

#### **B-8 Uses mortar, grouts and adhesives**

B-8.01 Mixes mortar, grout and adhesives

B-8.02 Uses mortars

B-8.03 Uses concrete and grout

B-8.04 Uses adhesives

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## **Layout and Fundamental Tasks**

**18 hours**

- practice job-site setup
- perform building layout procedures
- identify masonry unit positions and bond patterns
- describe procedures for masonry wall layout
- describe cleaning and sealing new masonry surfaces

### **RSOS topics covered in this section of training:**

#### **A-4 Organizes work**

A-4.02 Plans daily tasks and activities

A-4.03 Prepares jobsite and materials

A-4.04 Protects surrounding areas.

#### **B-7 Performs fundamental masonry tasks**

B-7.01 Lays out walls and coursing.

B-7.03 Cleans new masonry surfaces

B-7.04 Seals masonry surfaces.

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## **Building Enclosure & Substrate Preparation**

**24 hours**

- describe substrates, foundations and parging procedures
- identify masonry anchors and ties
- describe the building enclosure
- identify air barriers
- identify vapour barriers
- identify insulations

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**RSOS topics covered in this section of training:**

**B-6 Performs substrate preparation**

- B-6.01 Prepares vertical substrates and foundations
- B-6.02 Applies parging
- B-6.03 Installs anchor and tie systems
- B-6.04 Installs membranes and flashing
- B-6.05 Installs insulation

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**General Safety and Jobsite Communications**

**18 hours**

- identify occupational health and safety regulations
- select personal protective equipment
- identify fall protection equipment
- identify unsafe working environments and hazard control
- practice hazard identification and control
- identify WHMIS 2015 (GHS)
- use effective communication techniques

**RSOS topics covered in this section of training:**

**A-1 Performs safety related functions**

- A-1.01 Maintains safe work environment
- A-1.02 Uses PPE and safety equipment

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**Scaffolding**

**12 hours**

- describe the safe use of ladders and scaffolding
- describe the erection, maintenance, and dismantling of metal access scaffolds
- identify basic rigging operations

**RSOS topics covered in this section of training:**

**A-2 Uses and maintains tools and equipment**

- A-2.02 Uses rigging, hoisting and lifting equipment
- A-2.03 Uses access equipment

**A-3 Uses Scaffolds**

- A-3.01 Erects scaffolding
- A-3.02 Dismantles scaffolding
- A-3.03 Maintains scaffolding

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**Masonry Systems 1**

**84 hours**

- identify masonry wall systems
- identify masonry wall elements
- identify ornamental bond patterns
- identify building code requirements for masonry wall systems

- describe procedures for laying masonry units
- construct various wall systems

**RSOS topics covered in this section of training:**

**C-9 Builds masonry walls**

C-9.01 Builds non-load bearing walls

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**Practical Final Assessment 1**

**6 hours**

- Construct a masonry wall using concrete masonry units and clay face brick
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**No Level One topics from the RSOS are taught in context.**

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## Level Two

8 weeks

240 hours

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### Construction Documents 2

30 hours

- interpret various types of drawings
- use residential construction documents
- solve geometric problems in the construction industry
- perform material estimating procedures

#### RSOS topics covered in this section of training:

#### A-4 Organizes work

A-4.01 Uses drawings and specifications

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### Basic Masonry Arches

42 hours

- identify types of arches and their components
- calculate arch geometries
- construct a temporary arch support
- construct a rough masonry arch

#### RSOS topics covered in this section of training:

#### B-8 Uses mortar, grouts and adhesives

B-8.01 Mixes mortar, grout and adhesives

B-8.02 Uses mortars

B-8.03 Uses concrete and grout

B-8.04 Uses adhesives

#### H-23 Builds arches

H-23.01 Prepares location for installation of arch

H-23.02 Builds template

H-23.03 Places template

H-23.04 Installs masonry arch units

H-23.05 Removes template

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### Stone Masonry

42 hours

- identify classifications of stone
- prepare stone for installation
- identify techniques for laying stone
- construct a natural full bed stone wall

#### RSOS topics covered in this section of training:

#### B-8 Uses mortar, grouts and adhesives

B-8.01 Mixes mortar, grout and adhesives

B-8.02 Uses mortars

B-8.03 Uses concrete and grout

B-8.04 Uses adhesives

### **D-13 Builds natural stone walls**

D-13.01 Prepares natural stone

D-13.02 Lays natural stone

D-13.03 Damp cures walls

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### **Surface Bonded Masonry**

**30 hours**

- identify surface bonded masonry
- prepare substrate for surface bonded masonry
- apply surface bonded masonry units

**RSOS topics covered in this section of training:**

### **C-12 Installs surface bonded masonry units**

C-12.01 Prepares substrate for surface-bonded masonry units.

C-12.02 Applies surface bonded masonry units.

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### **Masonry Restoration 1**

**36 hours**

- analyze restoration requirements for existing buildings
- demonstrate restoration procedures

**RSOS topics covered in this section of training:**

### **B-8 Uses mortar, grouts and adhesives**

B-8.01 Mixes mortar, grout and adhesives

B-8.02 Uses mortars

B-8.03 Uses concrete and grout

B-8.04 Uses adhesives

### **G-19 Rebuilds masonry work**

G-19.01 Disassembles unit masonry

G-19.02 Prepares restoration work area

G-19.03 Reinstalls masonry and accessories

### **G-20 Repairs and cleans existing masonry work**

G-20.01 Removes deteriorated masonry units.

G-20.02 Repoints joints

G-20.03 Repairs masonry units

G-20.04 Reinstalls masonry units and accessories

G-20.05 Cleans existing masonry surfaces

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### **Masonry Systems 2**

**54 hours**

- identify load-bearing masonry assemblies
- identify reinforced masonry principles
- construct reinforced masonry
- identify prefabricated masonry
- construct glass block masonry

**RSOS topics covered in this section of training:**

**B-8 Uses mortar, grouts and adhesives**

B-8.01 Mixes mortar, grout and adhesives

B-8.02 Uses mortars

B-8.03 Uses concrete and grout

B-8.04 Uses adhesives

**C-9 Builds masonry walls**

C-9.02 Builds load-bearing walls

**C-11 builds and installs prefabricated masonry**

C-11.01 Builds prefabricated masonry

C-11.02 Erects prefabricated masonry

**H-21 Installs glass blocks**

H-21.01 Prepares work area for installation of glass blocks

- glass blocks, their characteristics and applications
- procedures to install glass blocks

H-21.02 Lays glass blocks

- glass blocks, their characteristics and applications
- procedures to install glass blocks

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**Practical Final Assessment 2**

**6 hours**

- construct a masonry column following project drawing specifications using concrete masonry units and clay face brick

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**Level Two topics from the RSOS that are taught in context:**

*Tools and Equipment*

*Substrate Preparation*

*Scaffolding*

*For details regarding the In Context Topic, see page 28*

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## Level Three

8 weeks

240 hours

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### Construction Documents 3

24 hours

- interpret specifications and contracts
- interpret drawings and details for renovations
- interpret institutional, commercial and industrial type drawings

**RSOS topics covered in this section of training:**

#### A-4 Organizes work

A-4.01 Uses drawings and specifications

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### Refractories and Corrosion Resistant Materials

30 hours

- define refractory safety procedures
- identify common refractory vessels and their use
- identify refractory materials and accessories
- identify corrosion resistant materials and accessories
- describe the removal and repair of refractory and corrosion resistant materials
- describe installation procedures for refractory and corrosion resistant materials

**RSOS topics covered in this section of training:**

#### B-8 Uses mortar, grouts and adhesives

B-8.01 Mixes mortar, grout and adhesives

B-8.02 Uses mortars

B-8.03 Uses concrete and grout

B-8.04 Uses adhesives

#### F-17 Installs and maintains refractories

F-17.01 Prepares for installation of refractories and accessories

F-17.02 Prepares mortar for refractories

F-17.03 Removes existing refractories

F-17.04 Installs refractories

F-17.05 Repairs refractories

#### F-18 Installs and maintains corrosion resistant materials

F-18.01 Prepares for installation of corrosion resistant materials and accessories

F-18.02 Prepares mortar for corrosion resistant materials

F-18.03 Removes existing corrosion resistant materials

F-18.04 Installs corrosion resistant materials

F-18.05 Repairs corrosion resistant materials

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## **Masonry Restoration 2**

**12 hours**

- describe restoration procedures
- perform restoration procedures

### **RSOS topics covered in this section of training:**

#### **B-8 Uses mortar, grouts and adhesives**

- B-8.01 Mixes mortar, grout and adhesives
- B-8.02 Uses mortars
- B-8.03 Uses concrete and grout
- B-8.04 Uses adhesives

#### **G-19 Builds masonry work**

- G-19.01 Disassembles unit masonry
- G-19.02 Prepares restoration work area
- G-19.03 Reinstalls masonry and accessories

#### **G-20 Repairs and cleans existing masonry work**

- G-20.01 Removes deteriorated masonry units
- G-20.02 Repoints joints
- G-20.03 repairs masonry units
- G-20.04 Reinstalls masonry units and accessories
- G-20.05 Cleans existing masonry surfaces

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## **Advanced Masonry Arches**

**24 hours**

- identify procedures for constructing gauged arches
- review arch terminology and arch types
- construct a gauged arch

### **RSOS topics covered in this section of training:**

#### **B-8 Uses mortar, grouts and adhesives**

- B-8.01 Mixes mortar, grout and adhesives
- B-8.02 Uses mortars
- B-8.03 Uses concrete and grout
- B-8.04 Uses adhesives

#### **H-23 Builds arches**

- H-23.01 Prepares location for installation of arch
- H-23.02 Builds template
- H-23.03 Places template
- H-23.04 Installs arch masonry units
- H-23.05 Removes template

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## **Project Planning**

**24 hours**

- identify quantity survey procedures for masonry construction
- identify procedures for calculating labour costs
- prepare a job cost estimate

**RSOS topics covered in this section of training:**

**A-4 Organizes work**

A-4.02 Plans daily tasks and activities

A-4.03 Prepares jobsite and materials

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**Chimney and Fireplace Construction**

**60 hours**

- describe chimneys
- identify components of masonry fireplaces
- identify building code requirements for masonry chimneys and fireplaces
- construct a masonry fireplace and chimney

**RSOS topics covered in this section of training:**

**B-8 Uses mortar, grouts and adhesives**

B-8.01 Mixes mortar, grout and adhesives

B-8.02 Uses mortars

B-8.03 Uses concrete and grout

B-8.04 Uses adhesives

**E-15 Builds chimneys**

E-15.01 Builds foundation supports for chimneys

E-15.02 Lays masonry units to build chimneys

E-15.03 Install flue lining

E-15.04 Installs related flashings

E-15.05 Installs caps

**E-16 Builds fireplaces**

E-16.01 Builds foundation for hearth, firebox, backup material and veneer

E-16.02 Builds hearth, firebox and backup

E-16.03 Installs damper

E-16.04 Builds smoke chamber

E-16.05 Prepares existing fireplace for insert

E-16.06 Faces fireplaces and inserts

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**Masonry Systems 3**

**24 hours**

- describe horizontal masonry construction
- construct horizontal masonry
- describe natural stone cladding systems
- describe installation procedures for sculpted and ornamental masonry

**RSOS topics covered in this section of training:**

**B-8 Uses mortar, grouts and adhesives**

B-8.01 Mixes mortar, grout and adhesives

B-8.02 Uses mortars

B-8.03 Uses concrete and grout

B-8.04 Uses adhesives

### **C-10 Builds horizontal masonry surfaces**

C-10.01 Prepares horizontal substrate

C-10.02 Lays masonry units on horizontal surfaces

### **D-14 Performs mechanically fastened natural stone cladding procedures**

D-14.01 Prepares substrate for cladding

D-14.02 Prepares natural stone for cladding

D-14.03 Installs natural stone cladding

### **H-Installs ornamental and sculpted masonry**

H22.01 Prepares for installation of ornamental sculpted masonry units

H22.02 Installs ornamental and sculpted masonry units

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## **Masonry Review**

**30 hours**

- review common occupational skills
- review general masonry practices
- review masonry systems
- review natural stone systems
- review chimneys and fireplaces
- review refractories and corrosion resistant materials
- review restoration
- review additional masonry

### **RSOS topics covered in this section of training:**

**A-Performs common occupational skills**

**B-Performs general masonry practice**

**C-Builds masonry systems**

**D-Builds natural tone systems**

**E-Builds chimneys and fireplaces**

**F-Installs refractories and corrosion resistant materials**

**G-Performs restoration**

**H-Performs additional masonry**

## **Mentoring**

**6 hours**

- describe mentoring techniques
- use mentoring techniques

### **RSOS topics covered in this section of training:**

**A-5 Uses communication and mentoring techniques**

A-5.02 Uses mentoring techniques

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## **Practical Final Assessment 3**

**6 hours**

- Construct a multi-whythe composite wall system following project drawing specifications with the use of concrete masonry units and clay face brick

**Level Three topics from the RSOS that are taught in context:**

***Tools and Equipment***

***Substrate Preparation***

***Natural Stone Walls***

***Scaffolding***

***Prefabricated Mason***

***For details regarding the In Context Topic, see page 22***



# In Context Topics

In context means learning that has already taken place and is being applied to the applicable task. Learning outcomes for in context topics are accomplished in other topics in that level.

## **A – Performs common occupational skills**

**A-2 Uses and maintains tools and equipment**

A-2.01 Maintains tools and equipment

A-2.02 Uses rigging, hoisting and lifting equipment.

A-2.03 Uses access equipment.

A-2.03 Uses access equipment.

## **A-3 Uses Scaffolding**

A-3. Erects scaffolding

A-2.03 Dismantles scaffolding

A-2.03 Maintains scaffolding.

## **B – Performs general masonry practices**

### **B-6 Performs substrate preparation**

B-6.01 Prepares vertical substrates and foundations

B-6.02 Applies parging

B-6.03 Installs anchoring/ tie systems

B-6.04 Installs membrane and flashing

B-6.05 Installs insulation

### **C-11 Builds and installs prefabricated masonry**

C-11.01 Builds prefabricated masonry

C-11.02 Erects prefabricated masonry

## **D- Building natural stone systems**

### **D-13 Builds natural stone walls**

D-13.01 Prepares natural stone

D-13.02 Lays natural stone

D-13.03 Damp cures walls