



Roofer

Course Outline

2023

TRAINING PROFILE CHART

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

Level One	Transcript Code
Safety, Worksite, ergonomics and general	RFH 100
Tools and Scaffold Safety	RFH 105
Roofer Workplace Skills	RFH 110
Built Up Roofing	RFH 115
Steep Roofing- Asphalt Shingles	RFH 120

Level Two	Transcript Code
Decks, Insulation, Vapour Barriers	RFH 200
Print Reading and Math	RFH 205
Air Tool Safety, Hydraulics and Small Motors	RFH 210
Power Roof Tools	RFH 215
Cedar Shakes and Shingles	RFH 220
SBS Modified Bitumen	RFH 225
Waterproofing	RFH 230

SATCC Level Three	Transcript Code
Estimating, Planning and WHMIS	RFH 300
Metal Flashing and Flat Roof Flashing	RFH 305
Metal Roofs	RFH 310
Concrete, Tile and Slate Roofs	RFH 315
Single Ply Membrane	RFH 320
EPDM	RFH 325
Waterproofing and Vegetative Roofing	RFH 330

TECHNICAL TRAINING COURSE OUTLINE

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.

Level One

Safety, Worksite, Ergonomics and General

- uses PPE and safety equipment
- demonstrate good housekeeping
- describe roof safety
- describe fire safety

Tools and Scaffold Safety

- use basic hand tools
- use on-deck equipment
- use kettles, burners and propane
- use ladders, scaffolds, roof jacks and fall arrest equipment
- perform vehicle maintenance

Roofer Workplace Skills

- demonstrate knowledge of trade terminology
- identify types of roof structures
- identify roofing materials
- perform moving and storage of equipment and supplies
- interpret prints and working drawings
- uses communication techniques

Built up Roofing

- preparation of deck surfaces for covering
- describe sloped insulation principles
- identify types of built-up roofing (bur) and styrene butadiene styrene (sbs) roofing
- identify types of bur and sbs materials
- install bur and sbs roofing

Steep Roofing - Asphalt Shingles

- install 3-tab and architectural asphalt shingles
- install mechanical fasteners
- apply sealants

Fall Protection Certification (Pass/Fail)

Fire Extinguisher (Pass/Fail)

Level Two

Deck, Insulation, Vapour Barriers

- prepare deck
- identify roof deck types
- describe deck conditions
- identify insulation
- identify, interpret and install cover boards
- identify and install vapour barrier

Print Reading and Math

- interpret specifications
- interpret sketches
- prepare trade math calculations
- interpret prints and working drawings
- determine material quantities

Air Tools Safety, Hydraulics and Small Motors

- identify power tools and equipment
- tool safety practices
- hydraulic maintenance
- small engine troubleshooting

Power Roof Tools

- operate powered deck equipment
- operate hoists
- perform rigging operations

Cedar Shakes and Shingles

- identify cedars shake and shingles
- identify steep roofing material
- cold roof system details
- prepare steep roof
- install cedar shakes and shingles
- lift shingle without damaging
- select and apply adhesive
- demonstrate knowledge of shingles that require tabbing, their characteristics and applications
- demonstrate knowledge of procedures to tab shingles

SBS Modified Bitumen

- installs support panels, drains, vents, curbs and penetrations
- applies vapour barrier
- installs insulation
- installs substrate
- installs membrane and membrane flashings
- install protective coverings

Waterproofing

- identify rubberized roofing and application procedures
- prepares waterproofing substrates
- applies waterproofing membrane
- maintains low slope roofing

Level Three

Estimating, Planning and WHIMIS

- determine equipment requirements
- calculate and order material calculation
- schedule a work crew
- perform troubleshooting

Metal Flashing, Flat Roof Flashing

- perform estimation of flashing requirements
- perform fabrication of roof flashing
- install roof flashing
- perform fabrication of a gum box
- maintains and repairs low slope roofing

Metal Roofs

- identifies metal roofing components
- prepares for metal roofing
- installs metal roofing

Concrete, Tile and Slate Roofs

- Identifies roof components
- prepares roof and deck
- install concrete tiles

Single Ply Membrane

- identify types of single-ply roofs
- identify single-ply materials
- apply polyvinyl chloride (PVC) and thermoplastic (TPO) membranes

EPDM

- prepare deck
- install ethylene propylene diene monomer (EPDM) roofing system
- determine material quantities

Waterproofing and Vegetative Roofing

- prepares waterproofing substrates
- identify procedures for applying hot rubberized material
- apply self-adhering modified bitumen membrane
- apply damp-proofing
- installs green, sustainable, vegetative and protected membrane components

Task A-4
Uses communication and mentoring techniques

A-4.01 Uses communication techniques

1, 3

A-4.02 Uses mentoring techniques

3

B – Prepares roof and deck

Task B-5 Prepares roof for replacement

B-5.01 Protects surrounding area

1

B-5.02 Removes loose debris

1

B-5.03 Removes roofing and flashing

1

B-5.04 Prepares roof substrate

2

B-5.05 Performs minor adjustments to penetrations, curbs and parapets

2

Task B-6 Prepares deck for roof installation

B-6.01 Inspects deck

2, 3

B-6.02 Cleans surface of deck

1, 3

B-6.03 Verifies placement of roof penetrations, curbs and parapets

2, 3

B-6.04 Dries deck

1

C – Installs low slope roofing

Task C-7 Applies low slope roofing components

C-7.01 Installs support panels

1, 2, 3

C-7.02 Primes substrate

1, 2, 3

C-7.03 Applies vapour retarder, vapour barrier and air barrier

1, 2, 3

C-7.04 Installs insulation

1, 2, 3

C-7.05 Installs cover board

1, 2, 3

C-7.06 Installs drains, vents, curbs and penetrations

1, 2, 3

C-7.07 Applies ballast, walkways and protective surfaces

1, 2, 3

C-7.08 Installs metal flashings

1, 2, 3

Task C-8 Applies low slope roofing membranes

C-8.01 Relaxes membranes 1, 2, 3	C-8.02 Sets membranes 1, 2, 3	C-8.03 Applies membranes using hot liquid process 1, 2, 3	C-8.04 Applies membranes using torched-on method 2	C-8.05 Applies membranes using hot-air welding 2, 3
C-8.06 Applies membranes using cold applied methods 1, 2, 3	C-8.07 Applies membranes using mechanical fasteners 1, 2, 3	C-8.08 Applies loose-laid membranes 3	C-8.09 Applies liquid-applied membranes 3	C-8.10 Installs membrane flashings 1, 2, 3
C-8.11 Installs temporary seals and temporary drains 1, 2, 3				

D – Installs steep slope roofing

Task D-9 Performs common steep slope practices

D-9.01 Installs steep slope underlayment 1	D-9.02 Installs steep slope venting 1	D-9.03 Installs steep slope valley applications 1	D-9.04 Installs steep slope saddles/crickets 1	D-9.05 Installs steep slope penetration flashings 1
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Task D-10 Applies shingles

D-10.01 Determines layout of shingles 1, 2, 3	D-10.02 Installs starter strip and starter course 1, 2, 3	D-10.03 Fastens shingles 1, 2, 3	D-10.04 Cuts shingles 1, 2, 3	D-10.05 Tabs shingles 1
D-10.06 Installs metal flashings for shingled roofs 1, 2, 3				

Task D-11 Applies roof tiles

D-11.01 Installs battens/strapping for roof tiles

3

D-11.02 Fastens roof tiles

3

D-11.03 Cuts roof tiles

3

D-11.04 Installs closure strips for roof tiles

3

D-11.05 Installs ridge and hip caps

3

D-11.06 Installs metal flashings for tiled roofs

3

Task D-12 Applies pre-formed metal roofing

D-12.01 Installs battens/strapping for pre-formed metal roofing

3

D-12.02 Fastens pre-formed metal roofing

3

D-12.03 Cuts sheet metal

3

D-12.04 Installs closure strips for pre-formed metal roofing

3

D-12.05 Installs snow guards

3

D-12.06 Installs metal flashings for pre-formed metal roofs

3

E – Waterproofs and damp proofs surfaces

Task E-13 Waterproofs surfaces

E-13.01 Prepares waterproofing substrates

2

E-13.02 Applies waterproofing membrane

2

E-13.03 Installs green, sustainable, vegetative and protected membrane components

3

Task E-14 Damp-proofs surfaces

E-14.01 Applies damp-proofing materials

2

E-14.02 Applies protection layer

2

F – Assesses, maintains and repairs roof

Task F-15 Assesses roof condition	F-15.01 Performs roof inspections 3	F-15.02 Performs cut test 3	F-15.03 Determines maintenance or repair required 3
Task F-16 Maintains and repairs low slope roofing	F-16.01 Maintains low slope roofing 2, 3	F-16.02 Repairs low slope roofing 2, 3	
Task F-17 Maintains and repairs steep slope roofing	F-17.01 Maintains steep slope roofing 2, 3	F-17.02 Repairs steep slope roofing 2, 3	

**The Roofer Red Seal Occupational Standard (RSOS), describing the “full scope” of the trade, can be found at www.red-seal.ca*

For more detailed information on course content, please refer to the Roofer Guide to Course Content at www.saskapprenticeship.ca.