



ONTARIO COLLEGE OF TRADES

ORDRE DES MÉTIERS DE L'ONTARIO

Apprenticeship
Training Standard

Terrazzo, Tile and
Marble Setter

Trade Code: 241A

Development Date: June 2008

| <u>CONTENTS</u> | <u>Page</u> |
|---|--------------------|
| Apprenticeship Program Summary/Guidelines..... | 2 |
| Competency Analysis Profile..... | 9 |
| Preface..... | 13 |
| Definitions..... | 14 |
| Important Directions to the Apprentice..... | 16 |
| Important Directions for the Sponsor/Employer & Supervisor/Trainer | 16 |
| Notice/Declaration for Collection of Personal Information..... | 17 |
| Roles and Responsibilities of Apprentice, Sponsor/Employer and Supervisor/Trainer | 18 |
| Skill Set Unit Completion Form..... | 20 |

SKILL SETS

| | |
|--|----|
| U0851.0 Work safely on the job | 21 |
| U0852.0 Use and maintain trade tools and equipment | 24 |
| U0853.0 Communicate in the workplace..... | 25 |
| U0854.0 Plan and organize job site | 28 |
| U0855.0 Prepare job..... | 30 |
| U0856.0 Prepare sub-surface | 32 |
| U0857.0 Install terrazzo | 36 |
| U0858.0 Install tile..... | 39 |
| U0859.0 Perform mechanical installation of natural stone on walls | 43 |
| U0860.0 Install natural stone indoors by conventional or stacking method | 46 |
| U0861.0 Install natural stone slabs on floors..... | 48 |
| U0862.0 Install natural stone counter tops..... | 51 |
| Apprentice Record | 53 |
| Apprentice Completion Form | 56 |

APPRENTICESHIP PROGRAM SUMMARY/GUIDELINES

1. **Program Definition:** **Terrazzo, Tile and Marble Setter** is defined as a person who covers, repairs and decorates exterior and interior walls, floors, swimming pools, saunas and other surfaces using ceramic, mosaics, marble, quarry tile, slate, stone or granite slabs, or terrazzo.
 - **Terrazzo, Tile and Marble Setter** is an approved apprenticeship program for the purposes of the *Trades Qualification and Apprenticeship Act (TQAA)*.

2. **Program Guidelines**
 - **On-The-Job Training Duration (for apprentices)**

The Industry Committee has identified 5600 hours as the duration generally necessary for any apprentice to become competent in the skills required. There may be individual circumstances where the duration varies from this guideline.

 - **In-School Training Duration**

The Industry Committee has identified 720 hours of in-school training as the duration generally necessary for an apprentice to complete the in-school curriculum for this program, except where an apprentice has been exempted from any level of that curriculum.

 - **Ratio**

As per the General Regulation, the Industry Committee has identified a journeyman- to-apprentice ratio of one journeyman or individuals who are deemed equivalent to a journeyman status to one apprentice plus an additional apprentice for each additional three journeymen as the ratio generally necessary for an apprentice to be properly trained on the job in this program. There may be individual circumstances where the ratio varies from this guideline.

Trades Qualification and Apprenticeship Act

R.R.O. 1990, REGULATION 1055

Amended to O. Reg. 326/07

GENERAL

Notice of Currency:* This document is up to date.

*This notice is usually current to within two business days of accessing this document. For more current amendment information, see the [Table of Regulations – Legislative History Overview](#).

This is the English version of a bilingual regulation.

0.1 For the purpose of paragraph 19 of subsection 1.1 (1) of the Act, the following trades in the construction industry are prescribed as additional trades to which the Act applies:

0.1 Architectural Glass and Metal Mechanic.

1. Cement finisher.

2. Drywall, acoustic and lathing applicator.

2.1 Drywall finisher and plasterer.

3. Floor covering installer.

4. Heat and frost insulator.

4.0.1 Ironworker and Reinforcing Rodworker.

4.1 Pre-cast concrete erector.

5. Precast concrete finisher.

6. REVOKED: O. Reg. 326/07, s. 1 (2).

7. Restoration mason.

8. Roofer.

9. REVOKED: O. Reg. 95/01, s. 1 (3).

10. Terrazzo, tile and marble setter. O. Reg. 567/99, s. 1; O. Reg. 95/01, s. 1; O. Reg. 71/05, s. 1; O. Reg. 326/07, s. 1.

1. This Regulation applies to any trade for which an apprentice training program is, (a) established by regulation; or

(b) established by an employer and approved by the Director. R.R.O. 1990, Reg. 1055, s. 1.

2. An application for apprenticeship in a trade shall be in a form provided by the Minister. R.R.O. 1990, Reg. 1055, s. 2.

3. No person shall become an apprentice in a trade unless he or she,

(a) is at least sixteen years of age and has Grade 10 standing or other qualifications determined by the Minister as equivalent thereto; or

(b) has the qualifications that are prescribed in the regulations for the trade. R.R.O. 1990, Reg. 1055, s. 3.

4. (1) An applicant for apprenticeship in a trade or for a certificate of qualification shall, if requested by the Director, produce a birth certificate for inspection. R.R.O. 1990, Reg. 1055, s. 4 (1).

(2) Where the Director is satisfied that the apprentice is unable to produce a birth certificate, the Director may accept as proof, (a) one item of Class A evidence of birth as prescribed in section 8 of Regulation 1094 of the Revised Regulations of Ontario, 1990;

(b) two items of Class B evidence of birth as prescribed in section 10 of Regulation 1094 of the Revised Regulations of Ontario, 1990. R.R.O. 1990, Reg. 1055, s. 4 (2).

5. (1) Section 9 and subsection 10 (2) of the Act do not apply to persons,
- (a) permanently employed in an industrial plant while performing work entirely within the plant and premises or on the land appertaining thereto, except work performed in the maintenance and repair of motor vehicles, trailers or conversion units registered for use on a highway under the *Highway Traffic Act*; 1
 - (b) who hold of qualification issued by the Province of Quebec, or are registered as apprentices in the Province of Quebec, in one of the following trades: valid equivalent certificates
 - 1. Electrician.
 - 2. Hoisting engineer.
 - 3. Plumber.
 - 4. Refrigeration and air-conditioning mechanic.
 - 5. Sheet metal worker.
 - 6. Steamfitter; or
 - (c) who are receiving training and work experience in a trade and who are enrolled, (i) in the Ontario Youth Apprenticeship Program,
 - (ii) in a program that is similar to the Ontario Youth Apprenticeship Program, approved by the Director and operated under the supervision of,
 - (A) a board as defined in the Education Act, or
 - (B) a band, council of a band or education authority authorized by the Crown in right of Canada to provide education to persons who are Indians within the meaning of the Indian Act (Canada), or
 - (iii) in a pre-apprenticeship program approved by the Director. R.R.O. 1990, Reg. 1055, s. 5 (1); O. Reg. 228/95, s. 1; O. Reg. 352/01, s. 1; O. Reg. 71/05, s. 2.
- (2) Section 9 of the Act and section 10 of this Regulation do not apply to each person who is engaged in a trade for which an apprenticeship training program is established by an employer and approved by the Director. R.R.O. 1990, Reg. 1055, s. 5 (2).

TRAINING AND INSTRUCTION

6. (1) The Director may approve an apprentice training program established by an employer if, in the opinion of the Director, the program,
- (a) is of sufficient duration and content to warrant a training program; (b) contains both practical work and related units of study;
 - (c) meets or satisfies a perceived need of an employer; and
 - (d) provides a marketable skill in an identifiable occupation. R.R.O. 1990, Reg. 1055, s. 6 (1).
- (2) An apprentice in a trade shall complete to the satisfaction of the Director an apprentice training program, (a) established for the trade by regulation; or
- (b) established for the trade by an employer and approved by the Director under subsection (1). R.R.O. 1990, Reg. 1055, s. 6 (2).
7. (1) Every employer in a trade shall,
- (a) provide an apprentice with practical training and instruction; and
 - (b) permit the apprentice to attend such educational classes as are prescribed by an apprentice training program established for the trade. R.R.O. 1990, Reg. 1055, s. 7 (1).
- (2) Where the employer is unable to provide an apprentice with practical training and instruction, the employer and the apprentice shall each forthwith notify the Director. R.R.O. 1990, Reg. 1055, s. 7 (2).

8. (1) The regular daily hours of practical training and instructions of an apprentice shall not begin sooner or end later in each day than the regular daily working hours of the journeyman with whom the apprentice is working. R.R.O. 1990, Reg. 1055, s. 8 (1); O. Reg. 71/05, s. 3.

(2) Any hours worked by an apprentice in excess of his or her regular daily hours of practical training and instruction shall not be included in computing the hours spent in training and instruction, unless otherwise prescribed or approved by the Director. R.R.O. 1990, Reg. 1055, s. 8 (2).

9. (1) Hourly credits as the Director determines may be granted to an applicant for a certificate of apprenticeship or qualification,

(a) for the successful completion of a course of study or training; or

(b) for work performed or experience gained in the trade prior to the application. R.R.O. 1990, Reg. 1055, s. 9 (1). (2)

No credits shall be granted under subsection (1) unless the applicant, 2

(a) supplies documentary evidence satisfactory to the Director of the completion of the course of study or training, or of the work performed or the experience gained, as the case may be; or

(b) passes such tests or examinations as are required by the Director. R.R.O. 1990, Reg. 1055, s. 9 (2).

10. (1) Unless otherwise prescribed, the rate of wages for an apprentice whether for his or her regular daily hours or for hours in excess of those regular daily hours shall be not less than,

(a) 40 per cent during the first period;

(b) 50 per cent during the second period; (c)

60 per cent during the third period;

(d) 70 per cent during the fourth period; and

(e) 80 per cent during the fifth period,

of the average rate of wages for journeymen employed by the employer in that trade, or where the employer is the only journeyman employed, of the average rate of wages for journeymen in the area. R.R.O. 1990, Reg. 1055, s. 10 (1); O. Reg. 71/05, s. 4 (1).

(2) Unless otherwise prescribed, the number of apprentices who may be employed by an employer in a trade shall not exceed,

(a) where the employer is a journeyman in the trade, one apprentice plus an additional apprentice for each additional three journeymen employed by the employer in that trade and with whom the apprentice is working; or

(b) where the employer is not a journeyman in the trade, one apprentice for the first journeyman employed by the employer plus an additional apprentice for each additional three journeymen employed by the employer in that trade and with whom the apprentice is working. R.R.O. 1990, Reg. 1055, s. 10 (2); O. Reg. 71/05, s. 4 (1).

(3) The rate of wages for an apprentice or worker and the number of apprentices or workers who may be employed by an employer prescribed by this Regulation or any other Regulation under the Act do not apply to persons who are receiving training and work experience in a trade and who are enrolled,

(a) in the Ontario Youth Apprenticeship Program as an apprentice;

(b) in a program that is similar to the Ontario Youth Apprenticeship Program, approved by the Director and operated under the supervision of,

(i) a board as defined in the Education Act, or

(ii) a band, council of a band or education authority authorized by the Crown in right of Canada to provide education to persons who are Indians within the meaning of the Indian Act (Canada); or

(c) in a pre-apprenticeship program approved by the Director. O. Reg. 352/01, s. 2; O. Reg. 71/05, s. 4 (2).

11. (1) A contract of apprenticeship shall be in a form provided by the Minister. R.R.O. 1990, Reg. 1055, s. 11 (1).

(2) The apprentice shall use to the best of his or her ability any facilities provided for technical instruction. R.R.O. 1990, Reg. 1055, s. 11 (2).

(3) The apprentice shall obey all lawful orders given by the employer or by a person delegated by the employer to supervise the work and training of the apprentice. R.R.O. 1990, Reg. 1055, s. 11 (3).

(4) The apprentice shall furnish to the employer satisfactory reasons for any absence from employment. R.R.O. 1990, Reg. 1055, s. 11 (4).

(5) The employer shall not employ any person in the trade other than a journeyman while the apprentice is idle. R.R.O. 1990, Reg. 1055, s. 11 (5); O. Reg. 71/05, s. 5.

12. (1) A transfer of a contract of apprenticeship shall be in a form provided by the Minister. R.R.O. 1990, Reg. 1055, s. 12 (1).

(2) The employer to whom the contract is transferred shall perform the contract as fully and completely as if the employer were the employer with whom the contract was made. R.R.O. 1990, Reg. 1055, s. 12 (2).

CERTIFICATES

13. A certificate of apprenticeship shall be in Form 1. R.R.O. 1990, Reg. 1055, s. 13.

14. (1) Where an apprentice has completed an apprentice training program, and has passed such final examinations as are prescribed by the Director, the Director shall issue a certificate of apprenticeship to the apprentice. R.R.O. 1990, Reg. 1055, s. 14 (1). 3

(2) Where an examination for a certificate of apprenticeship in a trade has been established as an Interprovincial Standards Examination, an apprentice who obtains more than 69 per cent on that examination shall be awarded the Interprovincial seal on his or her certificate. R.R.O. 1990, Reg. 1055, s. 14 (2).

(3) Where a certificate of apprenticeship is obtained before an Interprovincial Standards Examination for the trade is established, the holder of the certificate may write the examination referred to in subsection (2) and if he or she obtains more than 69 per cent on that examination the holder shall be awarded the Interprovincial seal on his or her certificate. R.R.O. 1990, Reg. 1055, s. 14 (3).

15. (1) An application for a certificate of qualification in a trade designated as a certified trade under section 10 of the Act shall be in a form provided by the Minister. R.R.O. 1990, Reg. 1055, s. 15 (1).

(2) An application for renewal of a certificate of qualification in a trade designated as a certified trade under section 10 of the Act shall be in a form provided by the Minister. R.R.O. 1990, Reg. 1055, s. 15 (2).

(3) A certificate of qualification shall be in Form 2. R.R.O. 1990, Reg. 1055, s. 15 (3).

16. (1) Where an applicant for a certificate of qualification is the holder of a certificate of apprenticeship in the trade issued under the Act or a predecessor of the Act, the Director may, upon payment of the prescribed fee, issue to the applicant, without examination, a certificate of qualification. R.R.O. 1990, Reg. 1055, s. 16 (1).

(2) Where an applicant for a certificate of qualification is the holder of a certificate of apprenticeship in the trade that is issued by another Province and that bears a seal awarded for passing an Interprovincial Standards Examination, the Director may, upon payment of the prescribed fee, issue to the applicant, without examination, a certificate of qualification. R.R.O. 1990, Reg. 1055, s. 16 (2).

(3) Where an applicant for a certificate of qualification is required to write an examination, he or she shall pay the fee prescribed therefor. R.R.O. 1990, Reg. 1055, s. 16 (3).

(4) Where an applicant for a certificate of qualification who is not the holder of a certificate of apprenticeship in the trade, (a) has attended a trade school licensed under the Act and has completed the period of training and instruction provided by the trade school;

(b) after graduation from the licensed trade school, works as an apprentice in the trade for a period prescribed by the Director; and

(c) passes such examination as is prescribed by the Director,

the Director may, upon payment of the prescribed fee, issue to the applicant a certificate of qualification. R.R.O. 1990,

17. (1) Where an applicant for a certificate of qualification who is not the holder of a certificate of apprenticeship in a certified trade,

(a) has successfully completed a training program approved by the Director as an alternative to an apprentice training program established for a certified trade;

(b) satisfies the Director that he or she has been continuously engaged in the alternate training program for a period equal to or greater than the apprenticeship training period prescribed by regulation for the certified trade; and

(c) passes such examination as is prescribed by the Director in the certified trade,

the Director may, upon payment of the prescribed fee, issue to the applicant a certificate of qualification. R.R.O. 1990, Reg. 1055, s. 17 (1).

(2) Where an applicant for a certificate of qualification who is not the holder of a certificate of apprenticeship in a certified trade,

(a) has successfully completed a training program approved by the Director as an alternative to an apprentice training program established for a certified trade;

(b) satisfies the Director that he or she has been continuously engaged in the alternate training program but where the period of training in the alternate training program is less than the apprenticeship training period prescribed by regulation for the certified trade; and

(c) passes such examination as is prescribed by the Director in the certified trade,

the Director may, upon payment of the prescribed fee issue to the applicant a provisional certificate of qualification valid until the expiry date specified thereon. R.R.O. 1990, Reg. 1055, s. 17 (2).

(3) Where an applicant for a certificate of qualification referred to in subsection (2) satisfies the Director that the total period of time that he or she has been continuously engaged in the alternate training program and as a journeyman in the certified trade equals or is greater than the apprenticeship training period prescribed by regulation for the certified trade, the Director may, upon payment of the prescribed fee, issue to the applicant, without examination a certificate of qualification. R.R.O. 1990, Reg. 1055, s. 17 (3); O. Reg. 71/05, s. 6. 4

18. An applicant for a certificate of apprenticeship or a certificate of qualification who has failed to pass an examination may rewrite the examination at such times and places as are fixed by the Director. R.R.O. 1990, Reg. 1055, s. 18.

19. An applicant for a certificate of apprenticeship or a certificate of qualification who fails to pass on rewriting the examination referred to in section 18 on two occasions shall attend and complete such training courses as the Director may determine before being permitted to rewrite the examination a third time. R.R.O. 1990, Reg. 1055, s. 19.

20. Where an applicant for a certificate of qualification, who is not the holder of a certificate of apprenticeship in the trade, supplies evidence satisfactory to the Director of having been continuously engaged in the trade as a journeyman in Ontario or elsewhere for a period equal to or greater than the apprenticeship period prescribed for the trade, the Director may issue to the applicant a provisional certificate of qualification valid until the expiry date specified thereon. R.R.O. 1990, Reg. 1055, s. 20; O. Reg. 71/05, s. 7.

21. Where an applicant for a certificate of qualification referred to in section 20 passes such examination as is prescribed by the Director, the Director may, upon payment of the prescribed fee, issue to the applicant a certificate of qualification. R.R.O. 1990, Reg. 1055, s. 21.

22. A provisional certificate of qualification shall be in Form 3. R.R.O. 1990, Reg. 1055, s. 22.

23. (1) Where a certificate of qualification that is in force on the 31st day of January, 1983, expires and is renewed, it shall be renewed for a period of three years from the date of expiry and any subsequent renewal shall be for a period of three years. R.R.O. 1990, Reg. 1055, s. 23 (1).

(2) Unless otherwise prescribed by regulation, where a certificate of qualification issued on or after the 1st day of February, 1983, expires and is renewed, it shall be renewed for a period of three years from the date of expiry and any subsequent renewal shall be for a period of three years. R.R.O. 1990, Reg. 1055, s. 23 (2).

(3) A certificate of qualification may be renewed by the holder upon application and payment of the prescribed fee to the Director. R.R.O. 1990, Reg. 1055, s. 23 (3).

(4) Upon renewal of a certificate of qualification, a seal provided by the Director indicating the year for which the certificate is renewed shall forthwith upon its receipt by the applicant be affixed to the certificate of qualification in the space provided thereon. R.R.O. 1990, Reg. 1055, s. 23 (4).

24. Where a person proves to the satisfaction of the Director that,

(a) his or her certificate of qualification has been lost or destroyed; or

(b) his or her name has been changed,

the Director shall issue a duplicate certificate of qualification. R.R.O. 1990, Reg. 1055, s. 24.

25. The holder of a certificate of qualification shall carry the certificate on his or her person and, when requested to do so, produce to a person designated by the Director, the certificate of qualification or such other evidence of qualification as the Director may prescribe. R.R.O. 1990, Reg. 1055, s. 25.

26. A person who, after applying for or receiving a certificate of qualification, changes his or her address shall within fifteen days thereafter notify the Director in writing of the former and new addresses and, where the certificate has been received the number thereof. R.R.O. 1990, Reg. 1055, s. 26.

FEES

27. (1) The fees payable under this Regulation are as follows:

| | | |
|----|---|-----------------|
| 1. | For registering a contract of apprenticeship | \$40.00 |
| 2. | For issuing an initial certificate of qualification without examination | 60.00 |
| 3. | For renewing a certificate of qualification, other than where paragraph 4 applies | 60.00 |
| 4. | For renewing a certificate of qualification that has been expired for more than one year plus For each full year during which the certificate of qualification has been expired | 160.00 20.00 |
| 5. | For issuing a duplicate certificate of apprenticeship or a duplicate certificate of qualification | 60.00 |
| 6. | For examination leading to the initial issuing of a certificate of apprenticeship, for examination leading to the initial issuing of a certificate of qualification or for examination leading to the initial issuing of both a certificate of apprenticeship and a certificate of qualification | 100.00 |
| 7. | For re-examination leading to the initial issuing of a certificate of apprenticeship, for re-examination leading to the initial issuing of a certificate of qualification or for re-examination leading to the initial issuing of both a certificate of apprenticeship and a certificate of qualification | 100.00 |

O. Reg. 193/98, s. 1.

(2) Where application is made for renewal of a certificate of qualification on or before the expiry date of the certificate, the date of renewal shall be the anniversary of the date of the initial issuance of the certificate that immediately follows the making of the application for renewal. O. Reg. 193/98, s. 1.

(3) Where application is made for renewal of a certificate of qualification after the expiry date of the certificate, the date of renewal shall be the anniversary of the date of the initial issuance of the certificate that immediately precedes the making of the application for renewal. O. Reg. 193/98, s. 1.

(4) Paragraph 4 of subsection (1) does not apply where the application for renewal is made on or before December 31, 1998. O. Reg. 193/98, s. 1. 8

**COMPETENCY ANALYSIS PROFILE
Terrazzo, Tile and Marble Setter – 241A**

(All unshaded skill sets must be demonstrated/completed)

SKILL SETS

SKILLS

| | | | | | |
|---|---|---|--|---|--|
| WORK SAFELY ON THE JOB U0851.0 | Perform housekeeping duties U0851.01 | Follow company or worksite fire procedures U0851.02 | Manually move equipment, supplies, and components U0851.03 | Use and maintain personal protective equipment U0851.04 | Employ simple first aid relating to illness and occupational injury U0851.05 |
| | Report injuries to supervisor or first-aid personnel U0851.06 | Identify, handle, store, and use hazardous materials U0851.07 | | | |
| USE AND MAINTAIN TRADE TOOLS AND EQUIPMENT U0852.0 | Use and maintain hand tools and accessories U0852.01 | Use and maintain electrical, pneumatic and hydraulic power tools U0852.02 | Use and maintain measuring devices and layout equipment U0852.03 | | |
| | | | | | |
| COMMUNICATE IN THE WORKPLACE U0853.0 | Communicate orally U0853.01 | Use documentation to communicate U0853.02 | Use graphics to communicate U0853.03 | Confirm work details with clients U0853.04 | Use computers U0853.05 |
| | Use audio communication devices U0853.06 | Build and maintain interpersonal relationships U0853.07 | Coach and mentor co-workers U0853.08 | Keep current with the trade U0853.09 | |

TERRAZZO, TILE AND MARBLE SETTER

| | | | | | |
|---|--|--|--|--|---|
| PLAN AND ORGANIZE JOB SITE U0854.0 | Assess job site conditions U0854.01 | Verify drawings U0854.02 | Resolve work stoppage issues U0854.03 | Handle materials U0854.04 | Store materials at the job site U0854.05 |
| | Use personnel-lifting devices and access equipment U0854.06 | Dispose of materials U0854.07 | | | |
| PREPARE JOB U0855.0 | Interpret blueprints and specifications U0855.01 | Obtain materials U0855.02 | Inspect and verify materials and tools U0855.03 | Set plumb, level and square lines and surfaces U0855.04 | |
| | | | | | |
| PREPARE SUB-SURFACE U0856.0 | Prepare mortar and bonding materials U0856.01 | Apply wire lath and scratch coat U0856.02 | Apply cementitious backer unit U0856.03 | Mix and apply mortar U0856.04 | Apply polyethylene sheeting and wire mesh U0856.05 |
| | Install forms in structures U0856.06 | Apply a sub-surface U0856.07 | Install expansion and control joints U0856.08 | Construct mortar walls U0856.09 | Layout design and patterns U0856.10 |
| | Perform cleaning, U0856.11 | Install crack isolation membrane U0856.12 | Patch and repair substrate areas U0856.13 | | |

TERRAZZO, TILE AND MARBLE SETTER

| | | | | | |
|-------------------------|---|--|----------------------------|---|-----------------------------------|
| INSTALL TERRAZZO | Lay-out and install base bead top strip | Clean base slab and prepare underbed | Prepare terrazzo mixes | Install standard Portland cement terrazzo topping | Install specialty terrazzo floors |
| U0857.0 | U0857.01 | U0857.02 | U0857.03 | U0857.04 | U0857.05 |
| | Finish terrazzo floors | Apply terrazzo to stairs, bases, curbs and walls | Install specialty flooring | | |
| | U0857.06 | U0857.07 | U0857.08 | | |

| | | | | | |
|---------------------|---|-----------------------------------|--------------------------|------------------------|--|
| INSTALL TILE | Inspect the installation site for defects | Fasten board units | Check tiles for defects, | Perform a trial layout | Layout out the pattern |
| U0858.0 | U0858.01 | U0858.02 | U0858.03 | U0858.04 | U0858.05 |
| | Install waterproofing membranes | Install crack isolation membranes | Install tiles | Install mosaic tiles | Cut and drill tiles |
| | U0858.06 | U0858.07 | U0858.08 | U0858.09 | U0858.10 |
| | Mitre tiles | Back-butter tiles | Grout tiles | Finish tiles | Install surface-mounted and recessed accessories |
| | U0858.11 | U0858.12 | U0858.13 | U0858.14 | U0858.15 |
| | Protect newly installed tiles | | | | |
| | U0858.16 | | | | |

| | | | | | |
|--|----------------------------------|---|--------------------|---|---|
| PERFORM MECHANICAL INSTALLATION OF NATURAL STONE ON WALLS | Set up working platforms | Inspect and repair natural stone slabs | Confirm the layout | Confirm the supply of mounting hardware | Drill holes and cut slots in marble |
| U0859.0 | U0859.01 | U0859.02 | U0859.03 | U0858.04 | U0858.05 |
| | Install inserts in concrete | Confirm that each slab is independently supported | Install overhangs | Cut out for accessories | Set slabs of marble and granite in place manually |
| | U0858.06 | U0858.07 | U0858.08 | U0858.09 | U0858.10 |
| | Clean marble or granite surfaces | | | | |
| | U0858.11 | | | | |

TERRAZZO, TILE AND MARBLE SETTER

| | | | | | |
|---|--|------------------------------------|-------------------|----------------------------------|-----------|
| INSTALL NATURAL STONE INDOORS BY CONVENTIONAL OR STACKING METHOD U0860.0 | Drill holes in marble | Install inserts in concrete | Install overhangs | Cut out holes for accessories | Set slabs |
| | U0860.01 | U0860.02 | U0860.03 | U0860.04 | U0860.05 |
| | Finish marble or granite joints and surfaces | Perform specialty installations | | | |
| | U0860.06 | U0860.07 | | | |

| | | | | | |
|--|---|--|---|------------------------------------|--|
| INSTALL NATURAL STONE SLABS ON FLOORS U0861.0 | Visually inspect natural stone slabs | Inspect the subfloor for defects | Check the layout | Apply crack isolation membranes | Apply polyethylene film over sand |
| | U0861.01 | U0861.02 | U0861.03 | U0861.04 | U0861.05 |
| | Prepare a solid and sound surface | Prepare a solid and sound surface | Install expansion and control joints in underbed | Install slab on floors | Install pre-cast and natural stone steps, |
| | U0861.06 | U0861.07 | U0861.08 | U0861.09 | U0861.10 |
| | Repair defective natural stone slabs | | | | |
| | U0861.11 | | | | |

| | | | | | |
|---|--|--|--|-------------------------------------|----------------------------------|
| INSTALL NATURAL STONE COUNTER TOPS U0862.0 | Apply blueprint information and specifications | Calculate length and weight of countertops | Determine transportation and storage requirements | Assess site dimensions | Visually inspect counter tops |
| | U0862.01 | U0862.02 | U0862.03 | U0862.04 | U0862.05 |
| | Review template for sink site | Install countertop panels | Grout all joints | Repair natural stone countertops | |
| | U0862.06 | U0862.07 | U0862.08 | U0862.09 | |

PREFACE

This training standard was developed by the Ministry of Training, Colleges, and Universities (MTCU), in partnership with the Provincial Advisory Committee and in consultation with representatives from the industry. This document is intended to be used by apprentice, supervisor/trainer and sponsor/employer as a "blueprint" for training and as a prerequisite for completion and certification.

This training document becomes the apprentice's only record of workplace training performance.

Supervisor/trainer and apprentice are required to sign off and date the skill following each successful acquisition, unless a skill is shaded (optional).

The care and maintenance of this training document are the joint responsibility of the apprentice and the sponsor/employer. By signing off the skill, the supervisor/trainer and the apprentice are indicating that the apprentice has demonstrated competence in the skill. This training standard has been developed specifically for documenting the apprentice's acquisition of skills in the trade.

Please Note: Apprenticeship Training and Curriculum Standards were developed by the Ministry of Training, Colleges and Universities (MTCU). As of April 8th, 2013, the Ontario College of Trades (College) has become responsible for the development and maintenance of these standards. The College is carrying over existing standards without any changes.

However, because the Apprenticeship Training and Curriculum Standards documents were developed under either the Trades Qualification and Apprenticeship Act (TQAA) or the Apprenticeship and Certification Act, 1998 (ACA), the definitions contained in these documents may no longer be accurate and may not be reflective of the Ontario College of Trades and Apprenticeship Act, 2009 (OCTAA) as the new trades legislation in the province. The College will update these definitions in the future.

Meanwhile, please refer to the College's website (<http://www.collegeoftrades.ca>) for the most accurate and up-to-date information about the College. For information on OCTAA and its regulations, please visit: <http://www.collegeoftrades.ca/about/legislation-and-regulations>

DEFINITIONS

ACA

Apprenticeship and Certification Act, 1998

Certificate of Apprenticeship (C of A)

Certification issued to individuals who have demonstrated that they have completed the trade or occupation in-school training and on-the-job training.

Certificate of Qualification (C of Q)

Certification issued to qualified applicants who have achieved a passing grade on the certification examination for their trade.

Competency Analysis Profile

A document that identifies, in compressed, graphic format, the training requirements of an individual trade and that details the skills/skill sets that must be demonstrated.

Competence

The ability of an individual to perform a skill repeatedly and without assistance in the workplace to the standard set out in the Training Standard or Schedule of Training.

General Performance Objective (On-the-job Skill Set)

Describes the skill set, including all performance objectives under that skill set.

Industry Committee (IC) - under the ACA and Provincial Advisory Committee (PAC) under the TQAA

Under the ACA and TQAA, the Minister may appoint a provincial committee in any trade or group of trades to advise the Minister in matters relating to the establishment and operation of apprenticeship training programs and trades qualifications.

Journeyman or Equivalent

A person who has acquired the knowledge and skills in a trade, occupation or craft as attested to by a provincial or territorial authority.

Mandatory

Status assigned to unshaded individual skills, skill sets or general performance objective which must be signed off for apprentices to complete their program.

Optional

Status assigned to shaded individual skills, skills sets or general performance objective for which sign-off is not required for apprentices to complete their program.

Sign -off

Signature of the sponsor/employer of record or an individual to whom, that sponsor or employer has delegated signing authority, indicating an apprentice's achievement of competence.

Skill

Individual skill described in the Training Standard (note: does not mean the larger skill groups referred to in the Training Standard as Skill Sets, Training Units, or General Performance Objective, but the individual skills that make up those groups).

Skill Sets

Group of individual skills found in the Training Standard (may also be called Training Unit or General Performance Objective)

Skill Set Completion Form

Lists all skill sets and includes space for sign-off by sponsor/employer of record.

Sponsor/Employer

Means a person that has entered into a registered training agreement under which the person is required to ensure that an apprentice is provided with workplace-based training in a trade, other occupation or skill set as part of an apprenticeship program approved by the Director.

Sponsor/Employer of Record

Refers to the sponsor or employer documented as the signatory to the current training agreement or contract. In order for a-sponsors/employers to be considered for the training of apprentices, they must identify that the workplace has qualified journeypersons or equivalent on site and can identify that the workplace has the tools, equipment, materials, and processes which have been identified to be required for the trade by Provincial Advisory Committees (PACs) or Industry Committees (ICs).

Supervisor

An individual, who oversees the execution of a task or oversees the actions or work of others.

Trainer

A qualified trainer in a compulsory trade is a journeyperson with a Certificate of Qualification or in a voluntary trade is an individual who, at a minimum, is considered equivalent to a journeyperson with a Certificate of Qualification.

TQAA

Trades Qualification and Apprenticeship Act.

Training Standard

A document that has been written in concise statements, which describe how well an apprentice must perform each skill in order to become competent. In using the document, trainers will be able to ensure that the apprentice is developing skills detailed for the occupation.

IMPORTANT DIRECTIONS

Apprentice

1. All complete skills or skill sets must be signed and dated by both the apprentice and sponsor/employer when either all terms of the contract have been completed or the apprentice leaves the employ of the employer.
2. It is the responsibility of the apprentice to inform the apprenticeship staff at the local Ministry of Training, Colleges and Universities office regarding the following changes:
 - change of sponsor/employer address
 - change of apprentice name or address
 - transfer to a new sponsor/employer.
3. The Skill Set Completion Form must be completed and signed by the current sponsor/employer and presented to the local Apprenticeship Client Services Office at the fulfillment of all terms of a Contract of Apprenticeship/Training Agreement.
4. The apprentice completion form with the Completed and Authorized Training Standard must be presented to the local Apprenticeship Client Services Unit.

Sponsors/Employers and Supervisors/Trainers

The Training Standard identifies skills required for this trade/occupation and its related training program.

This Training Standard has been written in concise statements, which describe how an apprentice must perform each skill in order to become competent. Competence means being able to perform the task to the required standard.

In using this Training Standard, supervisors/trainers will be able to ensure that the apprentice is developing the skills detailed for the trade/occupation.

Supervisors/Trainers and apprentices are required to sign off and date the skills following each successful acquisition.

Sponsors/Employers participating in this training program will be designated as the Signing Authority and are required to attest to successful achievement by signing the appropriate box included at the end of each skill set.

NOTICE OF COLLECTION OF PERSONAL INFORMATION

1. At any time during your apprenticeship training, you may be required to show this training standard to the Ministry of Training, Colleges and Universities (the Ministry). You will be required to disclose the signed Apprenticeship Completion form to the Ministry in order to complete your program. The Ministry will use your personal information to administer and finance Ontario's apprenticeship training system, including confirming your completion and issuing your certificate of apprenticeship.
2. The Ministry will disclose information about your program completion and your certificate of apprenticeship to the Ontario College of Trades, as it is necessary for the College to carry out its responsibilities.
3. Your personal information is collected, used and disclosed by the Ministry under the authority of the Ontario College of Trades and Apprenticeship Act, 2009.
4. Questions about the collection, use and disclosure of your personal information by the Ministry may be addressed to the:

Manager, Employment Ontario Contact Centre
Ministry of Training, Colleges and Universities
33 Bloor St. E, 2nd floor, Toronto, Ontario M7A 2S3
Toll-free: 1-800-387-5656; Toronto: 416-326-5656
TTY: 1-866-533-6339 or 416-325-4084.

ROLES & RESPONSIBILITIES OF APPRENTICE, SPONSOR/EMPLOYER AND SUPERVISOR/TRAINER

Apprentice “Apprenticeship is a learning exercise”

- Practice safe work habits.
- Use your apprenticeship training standard as a journal to keep track of which skills you have achieved.
- Talk over your training plan with your Training Consultant, Employer, Union, or Sponsor.
- Know what tools are required for your trade and how to use them.
- Ask questions and keep asking.
- Talk to your employer about your training needs.
- Demonstrate enthusiasm and good work habits.
- Ensure that you and your supervisor/trainer sign off skill/skill sets upon demonstration of competency.

Sponsor/Employer “Training is an Investment”

- Demonstrate safe work habits.
- Attest to successful achievement by signing the skill/skills sets.
- Provide opportunities and time for the apprentice to learn the trade.
- Offer practical trade training experiences that cover all of the skill sets.
- Foster work ethics that support training while minimizing productivity losses.
- Set out clear expectations, then recognize or reward performance excellence.
- Involve both the apprentice and supervisor/trainer in developing the training plan.
- Use the Training Standard as a monitoring tool and part of regular performance evaluations.
- Select supervisors/trainers with good communication skills and who work well with others.
- Encourage supervisors/trainers to take upgrading courses - (e.g. Train the Trainer, Mentor Coach, etc).
- Complete the Skill Set Completion Form once the apprentice has demonstrated competency in the training.
- Ensure that the apprentice always works under the direction of or has access to a qualified supervisor/trainer.
- Vary the apprentice’s exposure to all the skills set out in the training standard.

Supervisor/Trainer

- Demonstrate safe work habits.
- Treat apprentices fairly and with respect.
- Use the Training Standard as a guide to evaluating competence in each skill area. In using the Training Standard, supervisors/trainers will be able to ensure that the apprentice is developing skills detailed for the trade/occupation.
- Review the Training Standard with the apprentice and develop a training plan.
- Respond fully to all questions.
- Be patient. Explain what is to be done, then show how it is done, and then let the apprentice demonstrate the task.
- Provide continuous feedback.
- Sign off individual skills/skill sets once the apprentice demonstrates competence in the skill.

Suggestions for Assessing the Progress of the Apprentice in the Workplace

- Use informal daily observation.
- Provide constructive feedback to build confidence.
- Allow the supervisor/trainer time to teach and demonstrate the skills.
- Take prompt action wherever problems occur.
- Conduct regular performance reviews involving the apprentice, supervisor/trainer and sponsor/employer.
- Use the Training Standard as the reference for establishing the competency of the apprentice.

SKILL SET COMPLETION FORM

| SKILL SET | TITLE | SIGNING AUTHORITY |
|----------------|---|-------------------|
| U0851.0 | WORK SAFELY ON THE JOB | |
| U0852.0 | USE AND MAINTAIN TRADE TOOLS AND EQUIPMENT | |
| U0853.0 | COMMUNICATE IN THE WORKPLACE | |
| U0854.0 | PLAN AND ORGANIZE JOB SITE | |
| U0855.0 | PREPARE JOB | |
| U0856.0 | PREPARE SUBSURFACE | |
| U0857.0 | INSTALL TERRAZZO | |
| U0858.0 | INSTALL TILE | |
| U0859.0 | PERFORM MECHANICAL INSTALLATION OF NATURAL STONE ON WALLS | |
| U0860.0 | INSTALL NATURAL STONE INDOORS BY CONVENTIONAL OR STACKING METHOD | |
| U0861.0 | INSTALL NATURAL STONE SLABS ON FLOORS | |
| U0862.0 | INSTALL NATURAL STONE COUNTER TOPS | |

NOTE ON SHADED PERFORMANCE OBJECTIVES AND SKILLS:

- Shaded performance objectives and skill sets are optional. The shaded skills do not have to be demonstrated or signed-off for completion of the on-the-job component of the apprenticeship
- The in-school curriculum learning outcomes will cover all of the skill sets, both shaded and unshaded.
- The Certificate of Qualification examination will test the whole of the trade and may test both shaded and unshaded performance skill sets.

U0851.0 WORK SAFELY ON THE JOB

GENERAL PERFORMANCE OBJECTIVE

Work safely on the job by complying with acts, regulations, codes, standards, and directives; following company or worksite fire procedures; performing housekeeping duties; manually moving equipment, supplies, and components; using hand tools and accessories; maintaining hand tools and accessories; using power tools and accessories; maintaining power tools and accessories; utilizing personal protective equipment; maintaining personal protective equipment; employing simple first aid; reporting injuries to supervisor or first-aid personnel; identifying, handling, storing, and using hazardous materials in accordance with regulatory requirements, codes, site procedures, manufacturers' recommendations and specifications, company policies and procedures, and safety requirements.

PERFORMANCE OBJECTIVES

SKILLS

U0851.01 Perform housekeeping duties by removing and disposing of excess or unwanted materials; positioning equipment; identifying the location of first-aid supplies and equipment; erecting protective barriers and signs; recycling, removing and disposing of excess or unwanted materials; ensuring work area is free of obstructions; and storing tools and equipment so that the potential for accident or injury is minimized and tools and equipment are in place and available for the next job, in accordance with legislation, job requirements, site procedures, safety requirements, and company policy and procedures.

Date Completed

Apprentice

Supervisor/Trainer

U0851.02 Follow company or worksite fire procedures by assessing the type and severity of the fire; taking action to suppress a minor fire; activating the alarm system; reporting the fire; and following evacuation procedures, in accordance with safety and regulatory requirements, codes, site procedures, manufacturers' recommendations and specifications, and company policies and procedures.

Date Completed

Apprentice

Supervisor/Trainer

U0851.0 WORK SAFELY ON THE JOB...cont'd

U0851.03 Manually move equipment, supplies, and components by utilizing safe lifting, lowering, carrying, pushing, and pulling techniques to protect self and others against injury, in accordance with regulatory requirements, codes, job requirements, site procedures, company policies and procedures, and safety requirements.

Date Completed

Apprentice

Supervisor/Trainer

U0851.04 Use and maintain personal protective equipment including hard hats, gloves, glasses, goggles, masks, face shields, ear protectors/plugs, coveralls, reflector vests, safety footwear, knee protectors, fall-protection equipment, respirators, harnesses, and breathing apparatuses, by inspecting, selecting, wearing, adjusting and replacing to ensure the safety of self and others, in accordance with regulatory requirements, site conditions, manufacturers' recommendations and specifications, company policies and procedures, and safety requirements.

Date Completed

Apprentice

Supervisor/Trainer

U0851.05 Employ simple first aid relating to illness and occupational injury including sudden illness, burns, cuts, sprains, chemical and smoke inhalations, and contaminants in eyes, so that the condition of the victim is stabilized and prepared for further first-aid treatment; and obtaining emergency medical assistance as required, in accordance with the victim's condition, regulatory requirements, manufacturers' recommendations and specifications, company policies and procedures, and safety requirements.

Date Completed

Apprentice

Supervisor/Trainer

U0851.06 Report injuries to supervisor or first-aid personnel promptly and clearly, ensuring that the injured person is attended to; and describing precisely how the incident occurred, in accordance with regulatory requirements, company policies and procedures, site procedures, and safety requirements.

Date Completed

Apprentice

Supervisor/Trainer

U0851.0 WORK SAFELY ON THE JOB...cont'd

U0851.07 Identify, handle, store, and use hazardous materials including cleaning solvents, adhesives, sealants, and finishes, ensuring that individuals are protected from injury, the environment is protected from contamination, and that safety practices are followed, in accordance with the Workplace Hazardous Materials Information System (WHMIS) guidelines, the Occupational Health and Safety Act (OHSA), manufacturers' instructions and company procedures and policies.

Date Completed

Apprentice

Supervisor/Trainer

Sponsor/Employer Name

Sponsor/Employer Signature

U0852.0 USE AND MAINTAIN TRADE TOOLS AND EQUIPMENT

GENERAL PERFORMANCE OBJECTIVE

Use and maintain trade tools and accessories, electrical, pneumatic and hydraulic power tools and measuring devices and layout equipment in accordance with job requirements, site conditions, manufacturers' recommendations and specifications, workplace standards, and company policies and procedures.

PERFORMANCE OBJECTIVES

SKILLS

U0852.01 Use and maintain hand tools and accessories including cutting, striking, turning, levelling, mortar handling, measuring and inspection tools including trowels, cove trowels, shovels, rakes, wheel barrows, hammers and chisels by selecting the correct tool for the job, testing it and using it in accordance with job requirements, manufacturers' recommendations, company procedures and safety requirements.

U0852.02 Use and maintain electrical, pneumatic and hydraulic power tools and associated equipment and supplies such as circular saws, grinders, floor grinders, mixing drums, power trowels and tub saws by ensuring appropriate power supply sources, selecting the correct tool for the job, setting up and testing the tool, replacing consumables and repairing or replacing user maintainable parts in accordance with manufacturers' specifications and, company policies and procedures.

U0852.03 Use and maintain measuring devices and layout equipment including measuring tapes, plumb bobs, levels, chalk lines, lasers and transits by determining the correct device or equipment for the job, selecting the device and required components, setting up the device, testing it, applying it to the job, monitoring its performance and modifying its operation as necessary, identifying deficiencies, replacing consumables and repairing or replacing user maintainable parts in accordance with manufacturers' specifications and company policies and procedures.

Sponsor/Employer Name

Sponsor/Employer Signature

U0853.0 COMMUNICATE IN THE WORKPLACE

GENERAL PERFORMANCE OBJECTIVE

Communicate in the workplace by communicating orally; using documentation; using graphics; confirming work details with clients; using computers; using audio communication devices; building and maintaining interpersonal relationships; presenting a professional image; coaching and mentoring co-workers; and keeping current with the profession, in accordance with job requirements, site conditions, manufacturers' recommendations and specifications, workplace standards, and company policies and procedures.

PERFORMANCE OBJECTIVES

SKILLS

U0853.01 Communicate orally by speaking clearly and concisely and listening attentively so that understanding and accurate information are conveyed in accordance with workplace requirements and company policies and procedures.

Date Completed

Apprentice

Supervisor/Trainer

U0853.02 Use documentation to communicate in such text material as letters, memos, work and change orders, check-off forms/sheets, estimates or accident forms by writing clearly and concisely, verifying details, checking for correct language, completeness, and accuracy and signing as required in accordance with job requirements and company policies and procedures.

Date Completed

Apprentice

Supervisor/Trainer

U0853.03 Use graphics to communicate including diagrams, sketches and construction drawings by ensuring that visual materials are detailed, clear, concise and accurate in accordance with job requirements and company policies and procedures.

Date Completed

Apprentice

Supervisor/Trainer

U0853.0 COMMUNICATE IN THE WORKPLACE...cont'd

U0853.04 Confirm work details with clients, agents or other trades people by verifying the scope of work and design; setting out work sequence; identifying such details as areas of coverage, seam locations, time of completion, and required materials in order to fulfill contractual obligations in accordance with building codes, job specifications, site conditions and, company policies and procedures.

Date Completed Apprentice Supervisor/Trainer

U0853.05 Use computers on the job to verify that instructions and procedures are conveyed accurately and efficiently in accordance with job requirements, manufacturers' recommendations, and company policies and procedures.

Date Completed Apprentice Supervisor/Trainer

U0853.06 Use audio communication devices such as public address systems, telephones, pagers, radios, and wireless devices in accordance with job requirements, site conditions, company policies and procedures, and safety requirements.

Date Completed Apprentice Supervisor/Trainer

U0853.07 Build and maintain interpersonal relationships by networking, maintaining confidentiality, respecting others, collaborating, consulting, participating at meetings, demonstrating availability, utilizing conflict resolution and problem-solving methodologies, identifying and recommending alternative solutions, listening effectively, using verbal and non-verbal methods to convey messages/meaning, using acceptable language in the workplace, recognizing and respecting the chain of authority on the job site, explaining problems and procedures, and obtaining approvals from clients, in accordance with business etiquette, workplace standards, and company policies.

Date Completed Apprentice Supervisor/Trainer

U0853.0 COMMUNICATE IN THE WORKPLACE...cont'd

U0853.08 Coach and mentor co-workers by demonstrating and/or explaining workplace practices, procedures, and requirements; by promoting company policies and procedures; by assessing workplace performance and progress; and by ensuring timely feedback is provided; using communication skills and physical demonstration, in accordance with business etiquette, workplace standards, and company policies and procedures.

Date Completed Apprentice Supervisor/Trainer

U0853.09 Keep current with the trade by researching and identifying new trends, practices, and applications; and participating in training programs, product seminars, trade shows, on-line training, and professional development workshops, in accordance with business practices and company standards.

Date Completed Apprentice Supervisor/Trainer

Sponsor/Employer Name

Sponsor/Employer Signature

U0854.0 PLAN AND ORGANIZE JOB SITE

GENERAL PERFORMANCE OBJECTIVE

Plan and organize job site by assessing job site conditions; verifying drawings; resolving work stoppage issues; handling materials; storing materials at the job site; using personnel lifting devices and access equipment and; disposing of materials, in accordance with regulatory requirements, codes, job requirements, site conditions, and company policies and procedures.

PERFORMANCE OBJECTIVES

SKILLS

U0854.01 Assess job site conditions by checking for conformance to job specification, plans, and other information received; referring to checklists of questions; measuring equipment parameters; checking for obstructions; checking that power and utilities are available; visually inspecting the site; and verifying accessibility for people and equipment, in accordance with regulatory requirements, codes, job requirements, site conditions, company policies and procedures, and safety requirements.

Date Completed

Apprentice

Supervisor/Trainer

U0854.02 Verify drawings, written specifications, and correct materials for work site location, and designated coverage areas, by identifying drawing, written and product specification deficiencies, such as errors in layout plan, material type, and material quantity, in accordance with job requirements, site conditions, company policies and procedures manufacturers' recommendations and government regulations.

Date Completed

Apprentice

Supervisor/Trainer

U0854.03 Resolve work stoppage issues such as moisture, unstable substrate, lack of security, and insufficient light, water, ventilation, or power by reporting obstacles to supervisors or fixing deficiencies, so that the work can continue safely and in accordance with site condition requirements and manufacturers' recommendations.

Date Completed

Apprentice

Supervisor/Trainer

U0854.0 PLAN AND ORGANIZE JOB SITE...cont'd

U0854.04 Handle materials around the job site, using appropriate motorized and non-motorized vehicles, dollies, hoisting, and rigging equipment; and ensuring materials are correctly secured and in good condition for installation, in accordance with manufacturers' recommendations, and government regulations.

Date Completed

Apprentice

Supervisor/Trainer

U0854.05 Store materials at the job site by determining how the work areas and materials can be protected; protecting materials from the elements by covering, sheltering or insulating as required; and ensuring that the work site and materials are safe, secure, and functionally effective for future use, in accordance with job specifications, manufacturers' recommendations, and government regulations.

Date Completed

Apprentice

Supervisor/Trainer

U0854.06 Use personnel-lifting devices and access equipment such as scissor lifts, "cherry pickers", hydraulic lifts, ladders, basic scaffolds and swing stages only for their intended function according to manufacturers' instructions and OHSA.

Date Completed

Apprentice

Supervisor/Trainer

U0854.07 Dispose of materials both removed from the job-site in preparation for installation, and remaining in excess of installation by recycling, removing, and disposing of excess or unwanted material; leaving adequate material with the end user for future repairs; and ensuring that the job site is left in a clean and safe condition, in accordance with manufacturers' recommendations, company policy and procedures, and government regulations.

Date Completed

Apprentice

Supervisor/Trainer

Sponsor/Employer Name

Sponsor/Employer Signature

U0855.0 PREPARE JOB

GENERAL PERFORMANCE OBJECTIVE

Prepare a job by interpreting blueprints and specifications, ordering materials, inspecting and verifying materials and tools, and setting plumb, level and square lines and surfaces in accordance with job specifications, site conditions, manufacturers' recommendations, and company policies and procedures.

PERFORMANCE OBJECTIVES

SKILLS

U0855.01 Interpret blueprints and specifications to correctly identify required materials, patterns, bond types, and other specified construction details.

Date Completed

Apprentice

Supervisor/Trainer

U0855.02 Obtain materials based on calculated estimates, by taking quantities and types of materials off blueprints and specifications and ordering so that there are sufficient materials for production and installation with less than 5% wastage.

Date Completed

Apprentice

Supervisor/Trainer

U0855.03 Inspect and verify materials and tools by checking for materials' consistency of brand, colour, dye-lot, pattern, roll sequence, quality, and quantity; comparing with the approved sample; reporting any deficiencies or problems to the supervisor, and ensuring appropriate hand and power tools are available in accordance with job specifications, site conditions, manufacturers' recommendations, and company policies and procedures.

Date Completed

Apprentice

Supervisor/Trainer

U0855.0 PREPARE JOB...cont'd

U0855.04 Set plumb, level and square lines and surfaces by checking installation area with blue print measurements, using measuring tape, plumb bobs, transit levels, water/hand levels, straight edges, carpenter's squares, chalk lines and mason lines and employing, for example, the 3-4-5 method or the diagonal-comparison method for squaring.

Date Completed

Apprentice

Supervisor/Trainer

Sponsor/Employer Name

Sponsor/Employer Signature

U0856.0 PREPARE SUB-SURFACE

GENERAL PERFORMANCE OBJECTIVE

Prepare sub-surface by preparing mortar and bonding materials, applying wire lath and scratch coat, applying cementitious backer unit, mixing and applying mortar, applying polyethylene sheeting and wire mesh, installing forms in structures, applying a sub-surface, installing expansion and control joints, constructing mortar walls, laying out designs and patterns, performing cleaning, installing crack isolation membrane, and patching and repairing substrate areas in accordance with regulatory requirements, job specifications, site conditions, manufacturers' recommendations, and company policies and procedures.

PERFORMANCE OBJECTIVES

SKILLS

U0856.01 Prepare mortar and bonding materials including dry-set, latex, epoxy, organic, cement and sand "underbed mortars", using heavy-duty electric mixers, mortar mixers, shovels, rakes, pails, wheelbarrows, brooms, trowels, wood floats, and straight edges, combining and mixing materials so that the mortar has the correct consistency, plasticity, workability and setting time; and ensuring prepared for the application, ensuring minimal wastage, and that mixing is done in a timely manner, in accordance with regulatory requirements, job specifications, site conditions, manufacturers' recommendations, company policies and procedures, and safety requirements.

Date Completed

Apprentice

Supervisor/Trainer

U0856.02 Apply wire lath and scratch coat by installing lath, applying a scratch coat using tin snips, hammers, galvanized nails, screws/washers, screw guns and drivers, wire, pliers, polyethylene film, mortar boards/stands, hawks, and trowels, ensuring that lath is positioned for optimum adhesion of the mortar, in accordance with regulatory requirements, job specifications, site conditions, manufacturers' recommendations, company policies and procedures, and safety requirements.

Date Completed

Apprentice

Supervisor/Trainer

U0856.0 PREPARE SUB-SURFACE...cont'd

U0856.03 Apply cementitious backer unit (CBU) to wood studs, metal studs, plumb, square using utility knife, hammers, galvanized nails, corrosion resistant fasteners, screw guns, fibre-mesh tape, polyethylene film latex Portland cement mortars, hawk, trowels, wood or metal straight edge, backer scaffold, benches, by installing cement board, applying fibre-mesh tape making sure all joints are taped filled and sanded smooth.

Date Completed

Apprentice

Supervisor/Trainer

U0856.04 Mix and apply mortar, screed and float walls and floors, using mortar boards/stands, hawks and trowels, floating strips, straight edges, hand levels, water level, plumb bobs, combination squares, measuring tapes, wood floats, mixing boxes, shovels, water, concrete fine concrete sand, lime and latex by determining the quantity of mortar to apply, installing and plumbing wood floating strips (wall), mixing and applying mortar, mixing and screeding underbeds, and finish-floating when the mortar is still in a plastic state (partially set, all procedures being carried out according to specifications.

Date Completed

Apprentice

Supervisor/Trainer

U0856.05 Apply polyethylene sheeting and wire mesh to a floating floor by unrolling and spreading the polyethylene and wire mesh out and cutting over expansion joints, overlapping widths of polyethylene 100mm and tying the widths of wire mesh to prevent cracks, making sure that the mortar bed embeds the mesh completely, all the work being performed according to specifications.

Date Completed

Apprentice

Supervisor/Trainer

U0856.06 Install forms in structures such as stairs and curbs according to specifications, using a hammer, wedges and forming materials, and making sure that the forms are rigid and able to hold concrete or sand and cement underbeds (dry-pack) at specified heights and angles.

U0856.0 PREPARE SUB-SURFACE...cont'd

U0856.07 Apply a sub-surface employing snips, hammers, trowels, shovels, straight edges, floats, transit, laser and water levels and using the bond, scratch-coat, thin-set or floating-floor method so that the sub-surface is solid and sound and all the work is performed according to specifications.

Date Completed

Apprentice

Supervisor/Trainer

U0856.08 Install expansion and control joints in screeded mortar bed, while in a workable plastic state, directly above control and expansion joints in the substrate, using circular saws with masonry blades, snips, hacksaw, levels, trowel, hammer, chalk line and caulking guns, which are appropriate for the application of terrazzo, tile and natural stone floors, according to specifications.

Date Completed

Apprentice

Supervisor/Trainer

U0856.09 Construct mortar walls by installing polyethylene if required; covering with overlapping lath positioned in the most effective direction; applying a mortar scratch coat which is roughened and cured; set wood floating strips on the walls, plumb and in line with each other, using, trowels, hawks, wood float, square and straight edges; apply a setting bed of mortar and float to a smooth finish when mortar is in a semi-plastic state.

Date Completed

Apprentice

Supervisor/Trainer

U0856.10 Layout designs and patterns by identifying the starting point for layout and placement of pattern from blue prints using measuring tape, chalk line, mason lines and employing the 3, 4, 5 method of squaring; confirming with supervisor the most attractive unspecified placement and reporting recommended adjustments to specified designs resulting from previous errors to the supervisor.

U0856.0 PREPARE SUB-SURFACE...cont'd

U0856.11 Perform cleaning including chemical, sweeping, vacuuming, washing, scrubbing, scarifying, grinding and scraping by using sponges, brooms, wire brushes, scrapers, rubbing stones, shovels, squeegees! mops, dry or wet shop vacuum cleaners, scrub brushes, hand grinders, floor grinders and rotary scrubber to achieve a smooth clean surface, free of contaminants such as oil, sealers and hardening or curing chemicals.

Date Completed Apprentice Supervisor/Trainer

U0856.12 Install crack isolation membrane to provide protection against substrate cracks telegraphing through to the terrazzo surface and to accommodate minor substrate movements caused by shrinkage or by structural factors; using trowels, brooms, shovel, brushes, paint rollers, scissors, utility knife, primers, setting material and tool-cleaning solutions; by preparing the crack, applying primer if required, overlapping the crack with elastomeric, fibreglass or trowel applied membrane, according to manufacturers' directions.

Date Completed Apprentice Supervisor/Trainer

U0856.13 Patch and repair substrate areas where non-conformity is evident holes, cracks, unevenness, concave and convex substrate irregularities, with sand cement (plus latex additive), latex Portland cement mortar or epoxy; using trowels, wood floats, aluminum or wood straight edges, hand level, mixing tools and equipment; by sweeping or vacuuming the defective area, applying primer if required and levelling coat, while meeting the requirements of manufacturers' directions and the specifications.

Date Completed Apprentice Supervisor/Trainer

Sponsor/Employer Name

Sponsor/Employer Signature

U0857.0 INSTALL TERRAZZO

GENERAL PERFORMANCE OBJECTIVE

Install terrazzo by laying out and installing base bead top strips, cleaning base slab and preparing underbed, preparing terrazzo mixes, installing standard Portland cement terrazzo topping, installing and finishing standard and specialty terrazzo floors, applying terrazzo to stairs, bases, curbs and walls and installing specialty flooring according to specifications.

PERFORMANCE OBJECTIVES

SKILLS

U0857.01 Lay-out and install base bead top strip at specified height, straight and level, applying metal lath if required, applying underbed to backing, trowelling underbed to between 8 and 10mm of finish surface, installing divider strips, coving base dividers in semi-plastic setting bed, aligning with floor strips, or using epoxy-based methods to install on finished concrete slabs, according to specifications.

Date Completed

Apprentice

Supervisor/Trainer

U0857.02 Clean base slab and prepare underbed by saturating with water, removing excess, applying a slurry bond coat of cement, water and latex-additive for standard Portland cement terrazzo, placing and screeding underbed mix to 13mm below finish floor elevation, laying out pattern, installing divider strips in semi-plastic underbed and on mortar for walls, or using epoxy-based methods to install to either steel trowel or fine broom finish concrete slabs or walls, and curing for a minimum of 24 hours. Sweep or vacuum underbed and after strips are installed apply a slurry bond coat, adding colour pigment if required, omitting water and priming floor for thin-set epoxy bonded terrazzo, according to specifications.

Date Completed

Apprentice

Supervisor/Trainer

U0857.0 INSTALL TERRAZZO...cont'd

U0857.03 Prepare terrazzo mixes by combining single or a variety of coloured marble, or granite, allowing a limited amount of plastic or glass chips to be added to the mix of specified size with cement white, grey or a combination of both, or epoxy, using electrical or manual mixing tools, according to specifications.

Date Completed

Apprentice

Supervisor/Trainer

U0857.04 Install standard Portland cement terrazzo topping using trowels, rollers of different weights and sizes, by spreading terrazzo mixture with trowel level to top of strips, sprinkling topping with dry aggregate chips, rolling to compact topping, removing excess cement and water by sweeping, rolling and trowelling flush to top of divider strips to create a smooth surface by closing all voids and pin holes, and allowing to cure for 48 hours or as specified.

Date Completed

Apprentice

Supervisor/Trainer

U0857.05 Install specialty terrazzo floors such as Venetian (aggregate chips sizes 1-8), palladiana (fractured slabs of marble or granite), epoxy terrazzo (seeding into epoxy), conductive terrazzo (to reduce static discharge), polyacrylate terrazzo (with latex mix) and rustic terrazzo, (exposed aggregate) by spreading appropriate terrazzo mixture with trowel level to top of strips, selecting appropriate aggregate, packing or seeding aggregate, rolling and/or trowelling and then grinding and/or washing so that the specific process results in the specialty finish required.

Date Completed

Apprentice

Supervisor/Trainer

U0857.06 Finish terrazzo floors using floor and base grinding machines by grinding to expose full-size aggregate chips, grouting with matching coloured matrix using hand trowel or by machine to fill all voids and pin-holes, allowing to cure for 24 hours, final grinding with finer stones to remove all the grout from the surface, removing excess slurry, rinsing with clean water, letting surface dry thoroughly and sealing the floor so that floor is smooth and free from defects.

Date Completed

Apprentice

Supervisor/Trainer

U0857.0 INSTALL TERRAZZO...cont'd

U0857.07 Apply terrazzo to stairs, bases, curbs and walls by priming surface as required, apply a slurry bond coat (except for epoxy terrazzo); apply a stiff workable mix of terrazzo to prepared surface, trowel to compact the aggregate for uniformity to cove base or curb shape as specified or detailed, using tools such as flat trowels, cove trowels, small hand roller, brushes, or whisks and then grinding, polishing and sealing as per requirements, using base grinders with cup and round stones, and sanding discs so that the completed area blends with existing floors.

Date Completed

Apprentice

Supervisor/Trainer

U0857.08 Install specialty flooring including resinous flooring, coved base, and seamless flooring, placed by either machine or by hand trowel and any other kind of mixture of plastic composed of chips or granules of marble, granite and any other suitable materials where no machine grinding is required but application of top coating is required, according to specifications.

Date Completed

Apprentice

Supervisor/Trainer

Sponsor/Employer Name

Sponsor/Employer Signature

U0858.0 INSTALL TILE

GENERAL PERFORMANCE OBJECTIVE

Install tile by inspecting the installation site, fastening the board units, checking tiles, performing trial layout, laying out the pattern, installing waterproofing membranes, installing crack isolation membranes, installing tiles, installing paper-faced mosaic tiles, cutting and drilling tiles, mitring tiles, back-buttering tiles, grouting and finishing tiles, installing accessories and protecting newly installed tiles so that the tiles are installed in accordance with standard industry procedures and specifications.

PERFORMANCE OBJECTIVES

SKILLS

U0858.01 Inspect the installation site for defects such as water leaks, cracks, unevenness of substrate, incorrect slopes, out of plumb walls and out of level floors, inspect substrates for contamination (such as oil, sealers and curing compounds), report inconsistencies to the supervisor and take corrective action.

Date Completed

Apprentice

Supervisor/Trainer

U0858.02 Fasten board units using drill, hammer, galvanized nails or screws, fibreglass tape, utility knife and trowel by screwing to wood or metal studs with corrosion resistant fasteners, ensuring that they are plumb, square and flush to minimize breakage; repairing defects; applying a levelling coat as required; taping joints with fibre-mesh tape and filling with latex Portland cement mortar and sand according to blueprints or specifications.

Date Completed

Apprentice

Supervisor/Trainer

U0858.03 Check tiles for defects, colours/shades, sizes, consistency and batch numbers, according to specifications, and report any discrepancy to the supervisor.

Date Completed

Apprentice

Supervisor/Trainer

U0858.0 INSTALL TILE...cont'd

U0858.04 Perform a trial layout prior to installation to identify the appropriate starting point and to confirm layout by reviewing blueprints and specifications, doing the layout and reporting any problems to the supervisor.

Date Completed

Apprentice

Supervisor/Trainer

U0858.05 Layout out the pattern using straight edges, chalk lines, mason lines, level, trowels, tile cutters, combination square, measuring tape, tile spacers and employing an appropriate method of squaring; ensuring that the starting point is level and plumb and located so that the pattern allows all cut tiles to be no less than half size according to blue prints and specifications.

Date Completed

Apprentice

Supervisor/Trainer

U0858.06 Install waterproofing membranes in "wet areas" (such as shower receptors, steam rooms, whirlpools, swimming pools), using brushes, paint rollers, trowels, scissors and drills with mixing paddles by using various installation methods such as trowel-applied, built-up membranes, liquid, or sheet applied according to specifications.

Date Completed

Apprentice

Supervisor/Trainer

U0858.07 Install crack isolation membranes over cracked substrates on floors or walls using trowels, brushes or paint rollers, by preparing the crack, applying primer, installing elastomeric, rubber, fibreglass or nylon - mesh membranes and overlapping the crack according to installation specifications.

Date Completed

Apprentice

Supervisor/Trainer

U0858.08 Install tiles including wall base tiles using specified bonding agents, applying the bonding material, backbuttering the tile with bonding material when using cementitious products, setting the tiles, tapping them in place, cleaning excess from surface and joints, allowing the bond coat to set, grouting, washing, cleaning and sealing if required in accordance with good tiling practice.

Date Completed

Apprentice

Supervisor/Trainer

U0858.0 INSTALL TILE...cont'd

U0858.09 Install mosaic tiles to walls, floors, and ceilings, including paper-faced, mash-mounted and dot-mount by applying the sheets and aligning the joints right after the initial set, wetting and removing the paper when working with paper-faced mosaic and making a final adjustment to align the vertical and horizontal joints to maintain a uniform joint appearance.

Date Completed Apprentice Supervisor/Trainer

U0858.10 Cut and drill tiles using drills, tile cutters, grinders, tile hammers, and masonry drill bits, in order to accommodate and to fit units around corners, fittings, fixture, drains, building services and other built-in objects to maintain a uniform joint appearance.

Date Completed Apprentice Supervisor/Trainer

U0858.11 Mitre tiles for external corners using grinders and wet saws with mitre-plate accessories so that mitres are accurate.

Date Completed Apprentice Supervisor/Trainer

U0858.12 Back-butter tiles with specified bonding agents for cases where tile is larger than 305mm², with textured backs or natural stone, for exterior installations, wet areas and areas rated heavy or extra heavy duty so that bond is improved under demanding conditions.

Date Completed Apprentice Supervisor/Trainer

U0858.13 Grout tiles by cleaning any excess bonding material from joints and surface of tile, mixing grout (e.g., Portland cement, dry-set, Polymer modified, epoxy as specified) and using a rubber float, force grout into full depth of joints flush with tile surface, remove excess grout using float at 90 degree angle, clean with sponge or other means and water, allow to cure according to specifications.

Date Completed Apprentice Supervisor/Trainer

U0858.0 INSTALL TILE...cont'd

U0858.14 Finish tiles by cleaning using rags, sponges, brushes, brooms, mops chemicals, steam, water, tile cleaners, wet pick-up vacuum or rotary scrubber and finish floor by sealing with water based sealers or applying silicone impregnators according to specifications, following manufacturers' directions.

Date Completed Apprentice Supervisor/Trainer

U0858.15 Install surface-mounted and recessed accessories such as handicapped safety rails, towel bars, soap and shampoo dishes and prefabricated stair nosings, carborundum inserts or tactile surfaces correctly un accordance with specifications.

Date Completed Apprentice Supervisor/Trainer

U0858.16 Protect newly installed tiles on floors and walls until the setting material has sufficiently cured by sealing off the area from traffic and other trades, protecting wall tile base from impact, vibration or heavy hammering on adjacent and opposite walls, and protect grouted areas for 24 hours to allow the bond coat and grout to set undisturbed, using barricades or guard rails in accordance with manufacturer's directions.

Date Completed Apprentice Supervisor/Trainer

Sponsor/Employer Name

Sponsor/Employer Signature

U0859.0 PERFORM MECHANICAL INSTALLATION OF NATURAL STONE ON WALLS...cont'd

U0859.04 Confirm the supply of mounting hardware including anchors, shims, copper wire, stainless steel angles and bolts against the specifications, and report any deficiencies to the Supervisor.

Date Completed Apprentice Supervisor/Trainer

U0859.05 Drill holes and cut slots in marble as specified and according to blueprints, using carboloy masonry bits, circular saws, hammers, chisels, adjustable clamps, crow bars, rubber mallets or pliers so that holes and slots are the correct sizes and in the proper locations.

Date Completed Apprentice Supervisor/Trainer

U0859.06 Install inserts in concrete such as angle irons in the first course, galvanized or stainless steel struts and expansion shields, screwing into existing structures where required, and re-setting insulation as needed and in accordance with specifications.

Date Completed Apprentice Supervisor/Trainer

U0859.07 Confirm that each slab is independently supported and that the joint size is as specified.

Date Completed Apprentice Supervisor/Trainer

U0859.08 Install overhangs for doors, bases and openings with dowelled liners or "J" plates and epoxy, drilling and dowelling the holes, and tightening the wall fasteners with a wrench.

Date Completed Apprentice Supervisor/Trainer

U0859.0 PERFORM MECHANICAL INSTALLATION OF NATURAL STONE ON WALLS...cont'd

U0859.09 Cut out for accessories in floors and walls such as electrical outlets, light switches and floor drains using saws, drills and grinders, in accordance with blueprints and specifications.

Date Completed

Apprentice

Supervisor/Trainer

U0859.10 Set slabs of marble and granite in place manually or using fork lifts and chain hoists and install according to specifications, caulking around inserts if required, caulking the slots or holes, using dovetails or stainless steel dowels as specified, and ensuring that slabs are plumb and level.

Date Completed

Apprentice

Supervisor/Trainer

U0859.11 Clean marble or granite surfaces, applying caulking to the joints or grouting and pointing the joints as specified, and protect the finished work against damage.

Date Completed

Apprentice

Supervisor/Trainer

Sponsor/Employer Name

Sponsor/Employer Signature

U0860.0 INSTALL NATURAL STONE INDOORS BY CONVENTIONAL OR STACKING METHOD

GENERAL PERFORMANCE OBJECTIVE

Install marble and granite indoors by the conventional or stacking method by drilling holes and preparing anchoring devices, installing inserts in concrete, installing overhangs, placing slabs, cutting out for accessories, setting and installing slabs, finishing marble or granite joints and surfaces and performing specialty installations in accordance with standard industry procedures and specifications.

PERFORMANCE OBJECTIVES

SKILLS

U0860.01 Drill holes in marble as specified and according to blueprints, using carboloy masonry bits, hammers, adjustable clamps, crow bars, rubber mallets, pliers and adjustable wrenches, and prepare specified anchoring devices, using hooks, wire and plaster as per specifications (making sure that cedar wood plugs are not used).

Date Completed

Apprentice

Supervisor/Trainer

U0860.02 Install inserts in concrete such as angle irons in the first course and expansion shields, screwing into existing structures where required, according to specifications.

Date Completed

Apprentice

Supervisor/Trainer

U0860.03 Install overhangs for doors, bases and openings with dowelled liners or "J" plates and epoxy, drilling and dowelling the holes, and tightening the wall fasteners with a wrench.

Date Completed

Apprentice

Supervisor/Trainer

U0860.04 Cut out holes for accessories such as electrical outlets, light switches and floor drains into floors and walls, using saws, drills and grinders, in accordance with blueprints and specifications.

Date Completed

Apprentice

Supervisor/Trainer

U0860.0 INSTALL NATURAL STONE INDOORS BY CONVENTIONAL OR STACKING METHOD...cont'd

U0860.05 Set slabs of marble and granite in place by manually lifting, using fork lifts or chain blocks, and installing according to specifications, ensuring that it is plumb, level and square, caulking around inserts if required, applying spots of plaster or alternative in wet areas in accordance with specifications.

Date Completed

Apprentice

Supervisor/Trainer

U0860.06 Finish marble or granite joints and surfaces by applying caulking or grout to the joints and finishing or pointing the joints as specified, and cleaning and protecting the finished work against damage.

Date Completed

Apprentice

Supervisor/Trainer

U0860.07 Perform specialty installations such as thresholds, shower seats, window sills, mantels, shower jams, door and window jams, cutting for utilities and accessory, using carboloy masonry bits, skill saw, hammers chisels, adjustable clamps, trowels, rubber mallet, level, square, anchors, hooks, wire and plaster, latex Portland cement mortar, epoxy, sanding, polishing, buffing, cleaning and sealing, applying specified bonding agents to units.

Date Completed

Apprentice

Supervisor/Trainer

Sponsor/Employer Name

Sponsor/Employer Signature

U0861.0 INSTALL NATURAL STONE SLABS ON FLOORS

GENERAL PERFORMANCE OBJECTIVE

Install natural stone slabs on floors by visually inspecting natural stone slabs, inspecting the subfloor for defects, checking the layout, applying crack isolation membranes, applying polyethylene film over sand, preparing a solid and sound surface, placing and screed mortar bed, installing expansion and control joints in underbed, installing slab on floors, installing pre-cast and natural stone steps and repair defective natural stone slabs in accordance with standard industry procedures and specifications.

PERFORMANCE OBJECTIVES

SKILLS

U0861.01 Visually inspect natural stone slabs to confirm the absence of defects, structural soundness and, size and colour uniformity compared with the approved sample and the specifications and repair chips and voids with appropriate bonding materials so that the original match is maintained and the aesthetic appearance is maintained.

Date Completed

Apprentice

Supervisor/Trainer

U0861.02 Inspect the subfloor for defects such as cracks, unevenness of substrate and incorrect slopes, inspect concrete slabs for contamination (such as oil, sealers and curing agents) and report deficiencies to the supervisor and repair as required.

Date Completed

Apprentice

Supervisor/Trainer

U0861.03 Check the layout through a trial fit according to the blueprints and specifications, book-matching if specified by locating the starting point and finish elevation, checking measurements, setting level lines, square lines and main lines using measuring tape, water level, hand level, laser level, straight edges, carpenter's square, chalk line and/ or mason's lines and employing appropriate squaring method to ensure that the site is prepared for installation.

Date Completed

Apprentice

Supervisor/Trainer

U0861.0 INSTALL NATURAL STONE SLABS ON FLOORS...cont'd

U0861.04 Apply crack isolation membranes to prevent or reduce the telegraphing of cracks from the substrate to the surface, using trowels, brushes, rollers, utility knives or scissors by preparing the crack, applying primer and bonding material, installing elastomeric or trowel applied material over cracks in a band wider than 305 mm centred on the cracks, or over the entire area according to specifications.

Date Completed Apprentice Supervisor/Trainer

U0861.05 Apply polyethylene film over sand, overlapping edges a minimum of 100 mm, applying wire mesh on top of slip sheet by rolling the mesh out, cutting over expansion and control joints, overlaying 100 mm at edges and end, and tying to prevent cracks, making sure that the mesh is completely embedded in the underbed, all the work being performed according to specifications.

Date Completed Apprentice Supervisor/Trainer

U0861.06 Prepare a solid and sound surface using shovel, rake, water hose and wheelbarrow by mixing one part Portland cement to four parts sand, adding water and mixing thoroughly to a low slump to provide workability.

Date Completed Apprentice Supervisor/Trainer

U0861.07 Place and screed mortar bed to pre-determined elevation, using hand trowels, shovels, rake, wheelbarrow, wood or aluminum straight edges, wood float, hand level, transit and water level by the "bond method", the "floating -floor method or using the medium bed system method according to specifications.

Date Completed Apprentice Supervisor/Trainer

U0861.08 Install expansion and control joints in underbed using a circular saw with masonry blade, snips, hacksaw, trowels, hammer, chisels, wrenches, screwdrivers, pliers and caulking guns as appropriate to the application of natural stone slabs, directly above control joints in the substrate while the underbed is in a workable plastic state, in accordance with specifications.

Date Completed Apprentice Supervisor/Trainer

U0861.0 INSTALL NATURAL STONE SLABS ON FLOORS...cont'd

U0861.09 Install slab on floors by checking materials and layout, wiping any dust residue from back side of slab, screeding for each slab individually; placing the slab to ensure proper fit, lifting slab and backbutter underside of stone with latex Portland cement mortar and setting in place; hammering slab into place with a rubber mallet to ensure a level plane and secure bond of a minimum of 95% coverage; cleaning, grouting and cleaning again; and protecting the area while curing, all according to specifications.

Date Completed

Apprentice

Supervisor/Trainer

U0861.10 Install pre-cast and natural stone steps, using water level, measuring tape, combination square, hand level, trowels, wood floats, masons line, chalk line, straight edges, stainless steel or copper wire, electric drill, pliers, hammer, chisel, wood plugs and caulking gun by confirming materials with blueprints, laying out the stairs, placing a screed mix to the required stair elevation to even out the treads and risers, placing setting material/ epoxy on steel stairs, latex Portland cement mortar on cured underbed and concrete stairs, backbutter bonding material to back of treads and risers, anchoring the risers, setting and aligning stone treads and risers to conform with all detail dimensions, cleaning, grouting and cleaning again, protecting the area while curing, all according to specifications.

Date Completed

Apprentice

Supervisor/Trainer

U0861.11 Repair defective natural stone slabs by repairing chips, cracks and breaks using epoxies by filling voids or joining parts, scraping and cleaning with acetone and polishing so that the appearance is uniform.

Date Completed

Apprentice

Supervisor/Trainer

Sponsor/Employer Name

Sponsor/Employer Signature

U0862.0 INSTALL NATURAL STONE COUNTER TOPS

GENERAL PERFORMANCE OBJECTIVE

Install natural stone counter tops by applying blueprint information and specifications, calculating length and weight of countertops, determining transportation and storage requirements, assessing site dimensions, visually inspecting counter tops, reviewing template for sink site, installing countertop panels, grouting all joints and repairing natural stone countertops in accordance with standard industry procedures and specifications.

PERFORMANCE OBJECTIVES

SKILLS

U0862.01 Apply blueprint information and specifications to identify required materials, bond types and other specified details.

Date Completed

Apprentice

Supervisor/Trainer

U0862.02 Calculate length and weight of countertops to ensure counter structure can handle the weight and determine manpower and delivery route needed to handle pieces safely and effectively.

Date Completed

Apprentice

Supervisor/Trainer

U0862.03 Determine transportation and storage requirements including proper packing techniques to avoid breakage and damage and on-site storage prior to installation.

Date Completed

Apprentice

Supervisor/Trainer

U0862.04 Assess site dimensions including squareness, regularity of surfaces, tolerance of joint widths and irregularities of millwork and drywall in order to plan for operations required on countertop.

Date Completed

Apprentice

Supervisor/Trainer

U0862.0 INSTALL NATURAL STONE COUNTER TOPS ...cont'd

U0862.05 Visually inspect counter tops, backsplash, vanity tops, and aprons for soundness to confirm defect free and of uniform size, report defects to the supervisor and return to fabricating plant any defective piece for repair or replacement.

Date Completed

Apprentice

Supervisor/Trainer

U0862.06 Review template for sink site to confirm over hang, ensure the sink fits in the opening provided, ensure the substrate is level and true and that all faucets and fixture are laid out prior to measuring.

Date Completed

Apprentice

Supervisor/Trainer

U0862.07 Install countertop panels by ensuring the cabinets are level and plumb, cleaning the wood substrate, ensuring cabinets match drawings and stone panels, install panels in a linear sequence, dry set panels to ensure fit and check levels, shim the underside of the stones panels as required, remove panels and apply adhesive to substrate, install panels and level as required, epoxy all joints with colour matched adhesive, dry set back splash to ensure fit and levels, apply adhesive to wall and horizontal stone panels, caulk joint between horizontal and vertical stone surfaces.

Date Completed

Apprentice

Supervisor/Trainer

U0862.08 Grout all joints with colour matched epoxy or silicone, remove excess grout, remove any film residue with clean cloth and buff dry so that surface is smooth and waterproof.

Date Completed

Apprentice

Supervisor/Trainer

U0862.09 Repair natural stone countertops by repairing chips, cracks and breaks using epoxies by filling voids or joining parts with polyester adhesive such as Tenax, scraping and cleaning with acetone and polishing so that the appearance is uniform.

Date Completed

Apprentice

Supervisor/Trainer

APPRENTICE RECORD

APPRENTICE NAME (Print):

SPONSOR/EMPLOYER INFORMATION

| | |
|----------------------|--|
| Training Agreement # | |
| Name | |
| Address | |
| Telephone | |
| E-mail Address | |

SUMMARY OF TRAINING

| | |
|--|--|
| Employment Start Date | |
| Employment End Date | |
| Total hours of training & instruction between dates of employment. | |

Date Completed

Apprentice

Supervisor/Trainer

APPRENTICE RECORD

APPRENTICE NAME (Print):

SPONSOR/EMPLOYER INFORMATION

| | |
|----------------------|--|
| Training Agreement # | |
| Name | |
| Address | |
| Telephone | |
| E-mail Address | |

SUMMARY OF TRAINING

| | |
|--|--|
| Employment Start Date | |
| Employment End Date | |
| Total hours of training & instruction between dates of employment. | |

Date Completed

Apprentice

Supervisor/Trainer

APPRENTICE RECORD

APPRENTICE NAME (Print):

SPONSOR/EMPLOYER INFORMATION

| | |
|----------------------|--|
| Training Agreement # | |
| Name | |
| Address | |
| Telephone | |
| E-mail Address | |

SUMMARY OF TRAINING

| | |
|--|--|
| Employment Start Date | |
| Employment End Date | |
| Total hours of training & instruction between dates of employment. | |

Date Completed

Apprentice

Supervisor/Trainer

APPRENTICE COMPLETION FORM

| APPRENTICE INFORMATION | |
|-------------------------------|--|
| Name (Print) | |
| Signature | |
| Client ID | |

Skill Sets when completed should be signed by the Supervisor/Trainer and presented with this completion form to your local Apprenticeship Client Services Office. Any supporting documentation should also be attached.

In-school Completed Yes () No () Not applicable ()
 (Proof to be provided)

Hours completed as Yes () No () Not applicable ()
 Per Contract:

| SPONSOR/EMPLOYER INFORMATION | |
|-------------------------------------|--|
| Name (Print) | |
| Address | |
| Telephone | |
| E-mail Address | |
| Signature of Signing Authority | |

You will be required to disclose this signed form to the Ministry of Training, Colleges and Universities in order to complete your program. The Ministry will use your personal information to administer and finance Ontario's apprenticeship training system. For further information please see the notice/declaration for collection of personal information that is referenced in the table of contents of this training standard.