## Tilesetter

# **On-the-Job Training Guide**

Tilesetters construct, alter and repair structures with tile, granite, slate, marble, terrazzo, and other similar materials.

**Training Requirements:** 7200 hours (4 years) including three 4-week training sessions in Surrey, British Columbia.

Journeyperson to apprentice ratio for this trade is: 1:2

The information contained in this document serves as a guide for employers and apprentices. Apprenticeship training is mutually beneficial to both employer and apprentice. The employer's investment in training apprentices results in skilled and certified workers. The document summarizes the tasks to be covered by the apprentice during the on-the-job portion of apprenticeship training. An apprentice spends approximately 85% of the apprenticeship term training on-the-job.

It is the employer's, or journeyperson's training responsibility to supervise an apprentice's practical skills development until a satisfactory level of proficiency has been reached.

## **EMPLOYER TRAINING RESPONSIBILITY**

- introduce the apprentice to daily practice in approved safety procedures
- provide guided, hands-on, practical experience in the tasks and skills of the tilesetter trade
- where possible, expose the apprentice to new technology in the tilesetter trade

Employers should make every effort to expose their apprentices to work experience in as many areas of the trade as possible.

Below, in-school instruction is listed first; suggestions to help employers assist the apprentice to prepare for in-school training are listed next.



#### Level One - 4 Weeks

#### **Use Safe Work Practices**

Control workplace hazards
Information in the WorkSafe BC OHS Regulations
WHMIS
Personal protective equipment
Fire prevention procedures

The employer can assist the apprentice to prepare for this section of technical training by:

- training in the application of codes, standards and regulations
- providing basic safety equipment such as hard hat, safety glasses
- offering toolbox meetings and WHMIS training
- providing literature on proper lifting techniques and other safety regulations for the trade

# **Use Tools and Equipment**

Hand tools
Power tools
Measuring and levelling tools
Access equipment

The employer can assist the apprentice to prepare for this section of technical training by:

- encouraging the apprentice in the ownership of basic tools
- demonstrating the proper use and maintenance of basic hand tools and power tools for specific tasks
- demonstrating the process required to measure and lay out various surface areas
- instruction in the types and uses of air, electric and hydraulic power tools

## **Organize Work**

Tilesetter trade history
Trade related mathematics
Construction documents

The employer can assist the apprentice to prepare for this section of technical training by:

- supplying literature relevant to history and scope of the trade
- instruction in the use of measuring equipment
- instruction in mixing ratios
- ensuring that the relevant information on a drawing can be interpreted, i.e. directions and work area identification
- ensuring that the relevant information on a drawing can be interpreted, such as details, floor plan, key, and architectural plans
- assisting apprentice in transferring information from the drawings to the installation



## **Prepare Worksite and Materials**

Substrate and preparation
Membranes
Tile materials and classifications
Backing and base materials
Layout tools
Measuring and layout grids

The employer can assist the apprentice to prepare for this section of technical training by:

- demonstrating proper mixing techniques
- providing instruction in the application of various backings and base materials
- Identifying types of wood substrate, block walls, concrete and backer board
- providing instruction in the application of various backings and base materials
- discussing various in-floor heating systems
- encouraging the apprentice in the ownership of basic layout tools
- demonstrating the process required to measure and layout various surface areas

#### **Install Material**

Tile on the vertical
Tile on floors and the horizontal
Stairways

The employer can assist the apprentice to prepare for this section of technical training by:

- identifying that the surfaces are sound and suitable for the application of wall tiles
- ensuring that the proper adhesive is used to suit the requirements of the wall tiles being applied
- instruction ensuring tiles are set level and flush
- explaining floor surface requirements for setting floor tile
- instruction in the proper layout of a floor, in relation to the different types and sizes of tile being installed
- explaining tolerances accepted in the installation of floor tiles
- providing adequate hands-on time alongside journeyperson in the application of tiles
- ensuring the apprentice assists journeyperson in layout of different types and patterns
- identifying the rise and run of treads
- explaining terms used for stairways, i.e. treads, risers, stringers

#### **Finish Installed Product**

Grouting Caulking and sealing

The employer can assist the apprentice to prepare for this section of technical training by:

• journeyperson instruction on non-sanded, sanded, and epoxy grout and the proper mixing and application of each



- ensuring manufacturer's instructions are followed
- providing safety equipment required to safely apply grouts, such as rubber gloves

#### Level Two - 4 Weeks

## **Use Tools and Equipment**

Rigging and hoisting equipment

The employer can assist the apprentice to prepare for this section of technical training by:

demonstrating the proper use of hoisting, lifting and rigging equipment

## **Organize Work**

Trade related mathematics
Read and interpret Construction Documents

The employer can assist the apprentice to prepare for this section of technical training by:

- instruction in the use of measuring equipment
- instruction in mixing ratios
- ensuring that the relevant information on a drawing can be interpreted, i.e. directions and work area identification
- ensuring that the relevant information on a drawing can be interpreted, such as details, floor plan, key, and architectural plans
- assisting apprentice in transferring information from the drawings to the installation

#### **Prepare Worksite and Materials**

Layout Special Applications

The employer can assist the apprentice to prepare for this section of technical training by:

- demonstrating the process required to measure and layout various surface areas
- explaining how to calculate estimates for quantities of materials and labour using plans and specifications

#### **Install Material**

Tile on the vertical
Tile on floors and the horizontal
Stairways
Glass and mosaics
Ceramic veneer
Columns and walls
Marble and stone slabs
Terrazzo
Arches



The employer can assist the apprentice to prepare for this section of technical training by:

- providing adequate hands-on time alongside journeyperson in the application of tiles
- ensuring the apprentice assists journeyperson in layout of different types and patterns
- journeyperson instruction on efficient layout procedures required
- allowing for hands-on training in back buttering and handling of glass and marble mosaics
- journeyperson instruction in the proper handling and application of ceramic veneer
- ensuring that the apprentice understands the importance of plumb surfaces
- allowing for hands-on training in back buttering and handling of glass and marble mosaics
- demonstrating terrazzo types, and mixes for underbeds
- training in rollers and grinders, divider strip placement and other installation procedures for epoxy terrazzo
- ensuring that the apprentice assists in layout procedures for arches and domes
- providing literature on various previous installations, which may assist in understanding layout for arches and domes

#### **Finish Installed Product**

Caulking and sealing Terrazzo and Stone

The employer can assist the apprentice to prepare for this section of technical training by:

- instruction in terrazzo trowelling and compacting and curing, grinding and finishing terrazzo
- describing conditions that cause terrazzo and stone to deteriorate
- reviewing the procedures to patch and/or repair terrazzo and stone
- training in the proper handling and setting of stone
- training in the anchoring processes for stone slabs
- instruction in types and application of setting materials and in setting stone slabs

## Level Three - 4 Weeks

#### **Use Tools and Equipment**

Rigging and hoisting equipment

The employer can assist the apprentice to prepare for this section of technical training by:

• demonstrating the proper use of hoisting, lifting and rigging equipment

## **Organize Work**

Trade related mathematics

The employer can assist the apprentice to prepare for this section of technical training by:

- instruction in the use of measuring equipment
- instruction in mixing ratios



## **Prepare worksite and materials**

Layout work area Special applications

The employer can assist the apprentice to prepare for this section of technical training by:

- demonstrating the process required to measure and layout various surface areas
- explaining how to calculate estimates for quantities of materials and labour using plans and specifications
- instruction in the proper materials required for special applications

#### **Install Material**

Stairways columns and walls Swimming pools

The employer can assist the apprentice to prepare for this section of technical training by:

- identifying that the surfaces are sound and suitable for the application of wall tiles
- ensuring that the proper adhesive is used to suit the requirements of the wall tiles being applied
- instruction ensuring tiles are set level and flush
- explaining floor surface requirements for setting floor tile
- demonstrating layout of various sizes and types of tile on columns
- ensuring that the apprentice understands the importance of plumb surfaces
- instruction in the order of installation of various parts of stairs i.e. treads, risers, stringers
- explaining the code requirements pertaining to application before installation



Consider apprenticeship training as an investment in the future of your company and in the future of your workforce. Ultimately, skilled and certified workers increase your bottom line.

Get involved in the apprenticeship training system. Your commitment to training helps to maintain the integrity of the trade.

Do you have employees who have been working in the trade for a number of years but don't have trade certification? Contact your local apprenticeship office for details on how they might obtain the certification they need.

## Saskatchewan Apprenticeship & Trade Certification Commission

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