



**ONTARIO COLLEGE OF TRADES**  

---

**ORDRE DES MÉTIERS DE L'ONTARIO**

Apprenticeship  
Training Standard

Schedule of Training

Exterior Insulated Finish  
Systems Mechanic

Trade Code: 455A

Development Date: December 2009

<b><u>CONTENTS</u></b>	<b><u>PAGE</u></b>
Preface .....	2
Definitions .....	3
Important Directions to the Apprentice .....	5
Important Directions for the Sponsor/Employer & Supervisor/Trainer.....	5
Notice/Declaration for Collection of Personal Information .....	6
Roles and Responsibilities of Apprentice, Sponsor/Employer and Supervisor/Trainer .....	7
Skill Set Completion Form.....	9
Learning Outcome Completion Form .....	9
Apprentice Completion Form.....	10
 <b><u>TRAINING CONTENT</u></b>	
A. Description/Duties.....	11
B. On-the-Job Training Performance Objectives	
5490.0 Protect Self and Others.....	12
5491.0 Prepare for Job.....	16
5492.0 Assess and Prepare Substrates.....	17
5493.0 Apply Membranes and Barriers .....	19
5494.0 Install Rigid Insulation Board .....	20
5495.0 Apply Base Coats and Reinforcing Mesh .....	22
5496.0 Apply Finish Coats.....	23
C. Learning Outcomes.....	24
Apprentice Record.....	26

### **PREFACE**

This Schedule of Training was developed by the Programs Branch of the Ministry of Training, Colleges, and Universities (MTCU), in partnership with the Industry 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 skills following each successful acquisition, unless a skill is marked 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 of the skill. This training standard has been developed specifically for documenting the apprentices acquisition of skills of 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 (CofA)**

Certification issued to individuals who have demonstrated that they have completed an apprenticeship in Ontario.

### **Certificate of Qualification (CofQ)**

Certification issued to C of Q applicants who have achieved a passing grade on the certification exam for their trade.

### **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.

### **Competency Analysis Profile**

A document that identifies the training needs of an individual trade and details the skills/skill sets that must be demonstrated.

### **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 the apprentice 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 the apprentice to complete the program.

### **Schedule of Training**

An apprenticeship training standard which includes the on-the-job performance objectives and off-the-job learning outcomes

**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 (and Learning Outcome 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 individual 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 an sponsor/employer 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 by Provincial Advisory Committees (PACs) or Industry Committees (ICs) to be required for the trade.

**Supervisor**

An individual who oversees the execution of a task, 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 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 local Employment Ontario 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 and Learning Outcome Completion Form must be completed and signed by the current sponsor/employer and presented to the local Employment Ontario Office at the fulfillment of all terms of a Training Agreement.
4. The apprentice completion form with the Completed and Authorized Schedule of Training must be presented to the local Employment Ontario Office.

**Sponsors/Employers and Supervisors/Trainers**

The Schedule of Training identifies skills and supporting learning outcomes required for this trade/occupation and its related training program.

This Schedule of Training has been written in concise statements which describe how an apprentice must perform each skill/outcome 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 Learning On-the-job”**

- 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**

<b>SKILLS SETS</b>	<b>TITLE</b>	<b>SIGNING AUTHORITY</b>
<b>5490.0</b>	<b>PROTECT SELF AND OTHERS</b>	
<b>5491.0</b>	<b>PREPARE FOR JOB</b>	
<b>5492.0</b>	<b>ASSESS AND PREPARE SUBSTRATES</b>	
<b>5493.0</b>	<b>APPLY MEMBRANES AND BARRIERS</b>	
<b>5494.0</b>	<b>INSTALL RIGID INSULATION BOARD</b>	
<b>5495.0</b>	<b>APPLY BASE COATS AND REINFORCING MESH</b>	
<b>5496.0</b>	<b>APPLY FINISH COATS</b>	

**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 learning outcomes will cover all of the skill sets, both shaded and unshaded.

**LEARNING OUTCOMES COMPLETION FORM**

<b>Date of Completion</b>	<b>Organization Name(s)</b>	<b>SIGNING AUTHORITY</b>

**APPRENTICE COMPLETION FORM**

<b>APPRENTICE NAME</b>	
Print	
Signature	
Social Insurance Number	

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

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

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

<b>SPONSOR/EMPLOYER INFORMATION</b>	
Name	
Address	
Telephone	
E-mail Address	
Signature of Signing Authority	

**A. DESCRIPTION/DUTIES**

An **EXTERIOR INSULATED FINISH SYSTEMS MECHANIC** installs building systems that integrate a resinous exterior cladding with a continuous layer of insulation on the exterior of a building or structure by:

- Preparing substrates
- Selecting and Applying Barriers
- Selecting and Applying Adhesive Applications and Mechanical Attachments
- Installing Rigid Insulation Board
- Preparing Rigid Insulation Board for Base Coat Application
- Applying Reinforcing Mesh and Base Coat
- Applying Textured Finish Coat

An **EXTERIOR INSULATED FINISH SYSTEMS MECHANIC** demonstrates knowledge of:

- The Occupational Health and Safety Act
- Manufacturers' Specifications

**BENCHMARK/GUIDELINE TOTAL TRAINING  
TIMEFRAMES: (ON-THE-JOB AND OFF-THE-JOB):**

**5,400 hours**

Includes 400 hours of in-school training.

**B. ON-THE-JOB PERFORMANCE OBJECTIVES**

**5490.0 PROTECT SELF AND OTHERS**

**5490.1 Identify health and safety hazards in the workplace** so that the potential for personal injury, damage to equipment or the environment is prevented and corrective action is taken as defined in the Occupational Health and Safety Act and company standards/procedures, and that all hazards are reported.

_____	_____	_____
Date Completed	Apprentice	Supervisor/Trainer

**5490.2 Wear, adjust and maintain personal protective equipment** including, but not limited to, body harness, eye, ear, hand, foot and skin protectors to ensure correct fit and optimum protection for the wearer and the task being performed, in compliance with company standards/procedures and the Occupational Health and Safety Act.

_____	_____	_____
Date Completed	Apprentice	Supervisor/Trainer

**5490.3 Wear, adjust and maintain respiratory protectors** to ensure correct fit and optimum protection in compliance with company standards/procedures and the Occupational Health and Safety Act.

_____	_____	_____
Date Completed	Apprentice	Supervisor/Trainer

**5490.4 Practise safe work habits** by staying inside guards and barricades, wearing required clothing (not loose or torn), confining long hair, and removing jewellery, in accordance with company standards/procedures and the Occupational Health and Safety Act.

_____	_____	_____
Date Completed	Apprentice	Supervisor/Trainer

**5490.5 Follow fire procedures** including, but not limited to, locating and assessing the severity of the fire, taking appropriate action, suppressing minor fire, activating alarm, and reporting incidents, in compliance with company standards/procedures and the Occupational Health and Safety Act.

_____	_____	_____
Date Completed	Apprentice	Supervisor/Trainer

## EXTERIOR INSULATED FINISH SYSTEMS MECHANIC

---

**5490.6 Operate emergency safety equipment** including, but not limited to, fire extinguishers, respirators, skin protectors and fire blankets, ensuring that procedures are carried out in a safe and efficient manner, in accordance with company standards/procedures and the Occupational Health and Safety Act.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5490.7 Practise industrial hygiene** by wearing required clothing and using eye wash to avoid contamination or injury, in compliance with company standards/procedures and the Occupational Health and Safety Act.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5490.8 Practise good housekeeping in the workplace** by cleaning up spills or leaks, keeping work area clean and clear of obstructions, and storing tools, equipment or material so that the potential for accident or injury is prevented and tools or equipment are in place and available, in compliance with company standards/procedures and the Occupational Health and Safety Act.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5490.9 Conduct pre-operational check of access equipment** by checking that guards and safety devices are in place, secured, and not damaged, in compliance with company standards/procedures and the Occupational Health and Safety Act.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5490.10 Report injuries** to supervisor or first aid personnel promptly and clearly, ensuring that the injured person is attended to and information is reported precisely and accurately describing how incident occurred so that future recurrence of similar accidents is prevented, in compliance with company standards/procedures and the Occupational Health and Safety Act.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

## EXTERIOR INSULATED FINISH SYSTEMS MECHANIC

---

**5490.11**      **Follow procedures for applying first aid** to treat conditions including, but not limited to, sudden illness, burns, cuts, abrasions, sprains, chemical inhalations, falls, and contaminants in eyes, so that the condition of the victim is stabilized and prepared for further first aid treatment, in compliance with company standards/procedures and the Occupational Health and Safety Act.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5490.12**      **Handle designated substances or dangerous goods/commodities** using specified handling and storage equipment, so that the operator is protected from injury, the environment from contamination and safe procedures are followed, in compliance with company standards/procedures, WHMIS and the Occupational Health and Safety Act.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5490.13**      **Operate and handle access equipment** including, but not limited to, scaffolds and swing stages, hoists, power elevated platforms, lift pins, eye bolts, slings, cables, and chains to remove, transport and store materials, parts or equipment, in compliance with company standards/procedures and the Occupational Health and Safety Act.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5490.14**      **Install, wear, adjust and maintain fall protection equipment** including, but not limited to, body harness, lanyards, life safety ropes and roof tie backs, in compliance with company standards/procedures and the Occupational Health and Safety Act.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

## EXTERIOR INSULATED FINISH SYSTEMS MECHANIC

---

**5490.15** **Handle work site hazards** including, but not limited to, inadequate ventilation, confined spaces, noxious fumes, dust, high intensity light, elevated work sites, suspended loads, poor lighting, extreme temperatures, and uncontrolled power sources, by identifying hazards, identifying or activating alarms, notifying others and determining means of emergency containment or site evacuation, so that the potential for personal injury and damage to equipment or the environment is prevented, in compliance with company standards/procedures and the Occupational Health and Safety Act.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer



## EXTERIOR INSULATED FINISH SYSTEMS MECHANIC

---

### 5491.0 PREPARE FOR JOB

**5491.1 Read drawings and specifications** for requirement of EIFS system, including but not limited to, system type, insulation thickness, joints and termination locations, in accordance with company policies and procedures.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5491.2 Identify and select hand tools** such as, but not limited to, hawk, trowels, routers, hot wires, hot knives, rasps, straightedges, levels, mixing drills, screw guns and reveal tools, to be used as required by specified EIFS system.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5491.3 Communicate with other trades** regarding scheduling and/or coordination of work as required by construction schedule.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5491.4 Protect adjacent surfaces** such as door frames, sills and windows, by masking and covering using appropriate materials and methods, in accordance with company policies and procedures.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

## EXTERIOR INSULATED FINISH SYSTEMS MECHANIC

---

### 5492.0 ASSESS AND PREPARE SUBSTRATES

**5492.1 Assess soundness of masonry, concrete or stucco** by checking for spalling and/or cracking, in accordance with manufacturers' standards and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5492.2 Assess soundness of glass mat-faced gypsum, fibre cement or wood-based sheathing**, by checking for surface deterioration, appropriate type, number, spacing and condition of fasteners, rot or mould, in accordance with manufacturers' standards and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5492.3 Check surface** of masonry, concrete, stucco, glass mat-faced gypsum, fibre cement or wood-based sheathing to ensure that the surface is free of foreign matter such as mud, soot, old mortar, paint, release agents, oils or efflorescence, in accordance with manufacturers' standards and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5492.4 Verify substrate trueness** of masonry, concrete, stucco, glass mat-faced gypsum, fibre cement or wood-based sheathing, either visually or by using a straightedge/level or dry line, in accordance with manufacturers' standards and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5492.5 Report any surface deficiencies** that do not comply with manufacturers' specifications, prior to commencement of system installation, according to company policy and procedures.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

## EXTERIOR INSULATED FINISH SYSTEMS MECHANIC

---

**5492.6** **Prepare surface** of masonry, concrete, stucco, glass mat-faced gypsum, fibre cement or wood-based sheathing by using appropriate tools and methods to achieve an acceptable substrate, including but not limited to, removing loose surface material and filling voids, repairing cracks, scraping, power washing or using appropriate cleaners, in accordance with company policy and procedures and to manufacturers' standards and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5492.7** **Repair trueness of surface** of masonry, concrete, stucco, glass mat-faced gypsum, fibre cement or wood-based sheathing by using appropriate tools and methods such as, but not limited to, applying levelling coats to achieve an acceptable substrate, in accordance with company policy and procedures and to manufacturers' standards and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

## EXTERIOR INSULATED FINISH SYSTEMS MECHANIC

---

### 5493.0 APPLY MEMBRANES AND BARRIERS

**5493.1** **Select appropriate barrier** such as moisture, air and/or vapour to be used with job site substrates, as determined by the architect and manufacturers' standards and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5493.2** **Mix moisture, air and/or vapour barrier materials** for installation, by using appropriate tools and/or additives, in accordance with manufacturers' standards and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5493.3** **Apply moisture, air and/or vapour barrier** by using the appropriate tools and methods such as, but not limited to, trowel or spray equipment, in accordance with manufacturers' standards and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5493.4** **Apply transition membranes** such as peel and stick, to ensure continuous integrity of barrier system, in accordance with manufacturers' standards and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

## EXTERIOR INSULATED FINISH SYSTEMS MECHANIC

---

### 5494.0 **INSTALL RIGID INSULATION BOARD**

**5494.1** **Select appropriate adhesives** such as cementitious or non-cementitious, or mechanical attachments such as screws, washers and plugs for rigid insulation attachment to substrates, by using appropriate tools and equipment, in accordance with manufacturers' standards and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5494.2** **Identify and locate areas requiring expansion and/or control joints**, in accordance with architectural drawings and manufacturers' standards and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5494.3** **Install back wrapping starter mesh**, by imbedding starter mesh in adhesive around terminations of rigid insulation board, in accordance with manufacturers' standards and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5494.4** **Install rigid insulation board** using either adhesives with notched trowel or mechanical fasteners, in accordance with manufacturers' standards and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5494.5** **Fill any voids between board joints** with urethane foam or rigid insulation board wedges, in accordance with manufacturers' standards and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5494.6** **Rasp entire surface of exposed insulation board** in order to remove all irregularities and to achieve trueness, in accordance with manufacturers' standards and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

## EXTERIOR INSULATED FINISH SYSTEMS MECHANIC

---

**5494.7**     **Lay out and install aesthetic details** such as reveals and mouldings, in accordance with manufacturers' standards and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

## EXTERIOR INSULATED FINISH SYSTEMS MECHANIC

---

### 5495.0 APPLY BASE COATS AND REINFORCING MESH

**5495.1** **Select appropriate base coat and fibreglass reinforcing mesh** to be used with selected system, as determined by the architect and manufacturers' standards and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5495.2** **Mix base coat materials for installation** by either using appropriate tools and/or additives, in accordance with manufacturers' standards and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5495.3** **Apply base coat**, using properly prepared material, with hawk and trowel and covering over entire surface of rigid insulation board, in accordance with manufacturers' standards and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5495.4** **Embed reinforcing mesh into wet base coat**, ensuring proper mesh overlap, using appropriate tools and application methods, in accordance with manufacturers' standards and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

## EXTERIOR INSULATED FINISH SYSTEMS MECHANIC

---

### 5496.0 APPLY FINISH COATS

**5496.1** **Inspect base coat** visually to ensure that base coat is ready to accept finish coat, in accordance with manufacturers' standards and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5496.2** **Check adjacent surfaces** such as door frames, sills, and windows, to ensure they remain adequately protected, either by masking or covering, in accordance with company policies and procedures.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5496.3** **Repair base coat imperfections** prior to application of finish coat, by patching or sanding, using appropriate tools and methods, in accordance with manufacturers' standards and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5496.4** **Identify location** where specific colours and textures will be applied to base coat, in accordance with architectural specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5496.5** **Apply finish coat** to required texture and thickness, by using correct tools and application techniques such as trowel and spray equipment, in accordance with manufacturers' standards and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**5496.6** **Remove all masking materials** and ensure all adjacent surfaces are clean and free of all EIFS materials, in accordance with company policy and procedures and/or specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer



## **C. LEARNING OUTCOMES**

**400 hours**

### **1. Protect Self And Others**

The apprenticeship is able to:

- identify workplace health and safety hazards
- ability to wear, adjust and maintain personal protective equipment
- identify the steps in operating respiratory protectors
- identify and describe safe work habits
- identify and describe fire procedures
- identify the steps in operating emergency safety equipment
- maintain good housekeeping in a classroom environment
- ability to inspect equipment for defects and safe working conditions
- identify procedures for the report of information about injuries and safety incidents
- identify and describe procedures for applying first aid
- ability to handle, store, and control hazardous materials
- identify and describe procedures for operating lifting equipment
- ability to identify, handle and control hazardous work site conditions
- read and interpret pertinent government legislation.

### **2. Prepare for Job**

The apprenticeship is able to:

- interpret drawings and specifications to plan the job
- identify and select the correct tools and equipment for the given task and to follow manufacturer's instructions.

### **3. Assess and Prepare Substrates**

The apprenticeship is able to:

- identify suitable substrate conditions and materials and take appropriate action through reporting or correcting, selecting correct tools and materials.

### **4. Apply membranes and barriers**

The apprenticeship is able to:

- identify suitable barriers including air, moisture and vapour
- select the required tools to apply barriers following manufacturers' specifications.

**C. Learning Outcomes continued:**

**5. Install Rigid Insulation Board**

The apprenticeship is able to:

- qualify EPS board by running basic on-site tests to determine if further testing may be required, or if EPS is acceptable
- identify starter mesh or alternative trims used to encapsulate the system, and identify location requirements
- describe lay out and installation of rigid insulation in accordance with manufacturers' standards and specifications
- select and use correct tools for rasping and make surface "true" and ready for base coat and reinforcement layer application free from all defects and gaps
- identify and select aesthetic reveals and mouldings, in accordance with manufacturers' standards and specifications.

**6. Apply Base Coats And Reinforcing Mesh**

The apprenticeship is able to:

- demonstrate mixing and applying specified base coat materials and reinforcing mesh correctly in accordance with manufacturers' standards and specifications.

**7. Apply Finish Coats**

The apprenticeship is able to:

- demonstrate application of finish coat in accordance with manufacturers' standards and specifications.

**APPRENTICE RECORD**

<b>APPRENTICE NAME (Print):</b>
---------------------------------

<b>SPONSOR/EMPLOYER INFORMATION</b>	
Training Agreement #	
Name	
Address	
Telephone	
E-mail Address	

<b>SUMMARY OF TRAINING</b>	
Employment Start Date	
Employment End Date	
Total hours of training & instruction between dates of employment.	

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**APPRENTICE RECORD**

<b>APPRENTICE NAME (Print):</b>
---------------------------------

<b>SPONSOR/EMPLOYER INFORMATION</b>	
Training Agreement #	
Name	
Address	
Telephone	
E-mail Address	

<b>SUMMARY OF TRAINING</b>	
Employment Start Date	
Employment End Date	
Total hours of training & instruction between dates of employment.	

\_\_\_\_\_

Date Completed

\_\_\_\_\_

Apprentice

\_\_\_\_\_

Supervisor/Trainer

**APPRENTICE RECORD**

<b>APPRENTICE NAME (Print):</b>
---------------------------------

<b>SPONSOR/EMPLOYER INFORMATION</b>	
Training Agreement #	
Name	
Address	
Telephone	
E-mail Address	

<b>SUMMARY OF TRAINING</b>	
Employment Start Date	
Employment End Date	
Total hours of training & instruction between dates of employment.	

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

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.