



CANADIAN URETHANE FOAM CONTRACTORS ASSOCIATION INC.  
ASSOCIATION CANADIENNE DES ENTREPRENEURS EN MOUSSE DE POLYURETHANE INC.

# CUFCA SPF INSTALLER CERTIFICATION HANDBOOK

*Essential Learning  
for Compliance  
with CAN/ULC  
S/705.2 Installation  
Standards*

This handbook contains information on how to become a CUFCA SPF certified Installer. Information in this Handbook represents current policies for the CUFCA SPF installer certification program. Information in this Handbook supersedes information contained in previously published documents by CUFCA or its Training Provider.

**Disclaimer:**

CUFCA will make a reasonable effort to keep the most up to date version of the document posted at [www.cufca.ca/certification](http://www.cufca.ca/certification)  
All documents are subject to change. Before applying for certification through CUFCA, it is recommended that you check with the CUFCA office to make sure that you have most current document available.



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## TERMS & DEFINITIONS

**accreditation** Confirmation that a legal corporation has policies and procedures in place to meet the requirements of a certification scheme. *(example: ISO-17024)*

**appeal** Request by applicant, candidate or certified person for reconsideration of any adverse decision made by the certification organization related to her/his desired certification status.

**candidate** Applicant who has fulfilled specified prerequisites, allowing his/her participation in the certification process.

**certification administrator** Person approved by CUFCA, competent to assess and approve an applicant for certification.

**certification process** All activities by which a certification organization (CO) establishes that a person fulfills specified competence requirements, including application, evaluation, decision on certification, surveillance and recertification, use of certificates and logo/marks.

**certified SPF Installer** Individual who successfully passes the CUFCA written and practicum examination requirements for certification.

**certification scheme** Specific certification requirements related to specific categories of persons to which the same particular standards, rules and same procedures apply.

**competence** Demonstrated ability to apply knowledge and/or skills and, where relevant, demonstrated personal attributes, as defined in the certification scheme established by CUFCA.

**complaint** Conformity assessment request, other than an appeal, by any organization or individual to a certification body, for corrective action relating to the activities of that body or to those of any of its customers.

**evaluation** Process that assesses a person's fulfillment of the requirements of the scheme, leading to a decision on certification.

**examination** Mechanism that is part of the evaluation, which measures a candidate's competence by one or more means such as written, oral, practical and observational.

**evaluators** Individuals selected according to their experience and knowledge of the industry and the certification scheme, trained to administer written examinations and practicum evaluations.

**knowledge essential task list (KETL)** The comprehensive list of knowledge, skills and tasks an individual is expected to demonstrate mastery of in order to earn CUFCA certification.

**qualification** Demonstration of personal attributes, education, training and/or work experience.

**recertification** Process of confirming conformity with current certification requirements.

**scheme committee** Group of people chosen by the Executive Director to provide input, recommendation, guidance and reviews of a certification scheme.

**surveillance** The act of performance of random periodic monitoring, between the periods of certification, of a certified person's performance to ensure continued compliance with the certification scheme.

## CUFCA Vision

Recognition of the value of Training, Certification and Field Auditing of Installers of Site Manufactured Spray Applied Foam Systems providing a superior performance product in the pursuit of Improved Energy Efficiency and Best Practices in the Building Construction Industry.

## CUFCA Mission Statement

To champion the Spray Polyurethane Foam Industry as a whole while sustaining high Industry Standards and encouraging ongoing professional development; to make the Spray Polyurethane Foam Industry both Professional and Profitable.

## About the CUFCA Certification Program

The Canadian Urethane Foam Contractors Association (CUFCA) is recognized as the first organization to provide certification of workers and individuals in the Spray Polyurethane Foam (SPF) Industry in Canada. CUFCA has a wealth of experience dealing with the installer in the field, and is one of the only organizations that focus on the on-site qualification of installers.

CUFCA has a certification appeal board that is responsible for providing oversight to ensure CUFCA is safeguarding impartiality, acting in a fair and transparent fashion and upholding a high level of conduct. The certification appeal board shall:

- Provide oversight to the Executive Director on how CUFCA operates to ensure it is safeguarding impartiality in its operations.
- Review complaints or appeals from candidates, certified installers, or any other individual or party about the certification process, criteria, or performance.

CUFCA has certification scheme committee members that are responsible for providing input and insight into the certification processes, recertification, surveillance audit activities and other related training and credentialing matters. The certification scheme committee members:

- Assist CUFCA in defining and setting of clear learning objectives for the examinations.
- Support the initial functional task analysis process as well as the ongoing updating of tasks which will form the basis of a complete, consensus driven



knowledge base for each exam/designation and provide a mechanism of periodic review.

- Continually produce and review a bank of psychometrically valid exam questions that are accurate, credible, and defensible. This is a continual process which will evolve over time with the introduction of new technologies and systems. This work represents a considerable portion of the work performed by each of our committee members at each meeting.
- Each test item is created from a task on the CUFCA Knowledge Essential Task List (KETL) for each exam module
- Review the statistical information from the examinations for test items to ensure that each is properly discriminating and make any adjustments necessary.
- Identify additional industry experts for participation on committees or subcommittees.
- Assist CUFCA with finding potential candidates who can beta-test examinations.
- Participate in the process of development of final test protocols and content on an ongoing basis.

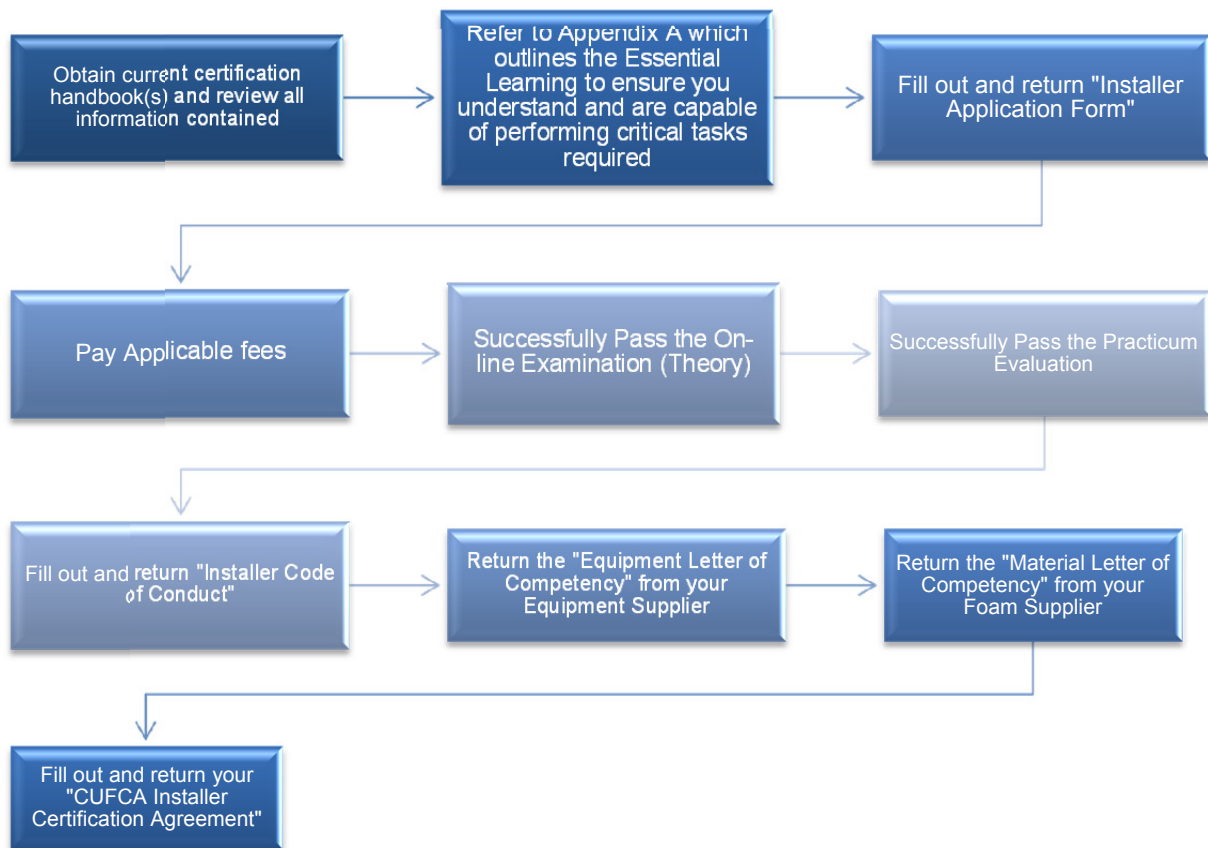
CUFCA has recently been accredited in both our Installer Training Program and our Field Inspection Body Services. The two ISO standards are ISO/IEC 17024:2012 for Certification Organization (CO) and the ISO/IEC 17020:2012 for the operation of an Inspection Body (IB). CUFCA has consistently set the standard in the Canadian SPF Industry.

## About ISO Certification

ISO is an International Organization that sets forth global standards by which conformance will ensure the integrity of the delivery of systems, products, or services to the end users.

Essentially it will provide a third party audit and certification of our policies, procedures and functionality to ensure that we are delivering the best possible training, certification, licensing, and inspection services to the SPF marketplace in Canada. Our ISO standards are available for review by any of our stakeholders at any time.

## Steps to become a Certified SPF Installer:



1. Make sure you have the latest copy of this handbook by calling CUFCA at 866-467-7729 or email us at [training@cuftca.ca](mailto:training@cuftca.ca)
2. Review all information contained in this handbook completely and feel comfortable with understanding the material.
3. Refer to "Appendix A" which outlines the essential learning to be sure that you understand and are capable of performing the critical tasks required of certified installers of spray applied polyurethane foam (SPF).
4. Obtain the reference materials and training handbook prior to attempting the two primary examinations. (Candidates may elect to perform a challenge exam without taking the course material)
5. Fill out and return the "Installer Application Form" found in Annex B.
6. Pay your certification registration fee.
7. Successfully PASS the Written Examination. (On-line web based exam)
8. Successfully PASS the Practicum Evaluation.
9. Sign and return the "Installer Code of Conduct".
10. Fill out and return the "CUFCA Installer Certification Agreement".

## Introduction to Certification Schemes

### Medium Density Spray Applied Polyurethane Foam

This certification scheme is specifically designed for individuals involved in the installation of medium density spray polyurethane foam in applications such as thermal insulation, air barrier, water resistive barriers and water vapour control.

These applications are included in the construction of residential, commercial and institutional buildings that fall under the National Building Code of Canada and subsequent Provincial/Municipal Building Codes.

These applications can also be done in buildings which do not fall under the building code and on non-building application such as truck bodies, pipe, tanks, roofs, spas, swimming pools, movie sets and on many other items of personal and commercial use.

The CUFCA Certification Program will ensure that the Installer will be fully aware of the **CAN/ULC S705.2 Installation Standards** Requirements.

### Light Density Spray Applied Polyurethane Foam

This certification scheme is specifically designed for individuals involved in the installation of light density polyurethane foam in applications such as thermal insulation and sound control.

These applications are included in the construction of residential, commercial and institutional buildings that fall under the National Building Code of Canada and subsequent Provincial/ Municipal Building Codes.

The applications are limited to the interior side of the wall and interior partition walls. The installation of this material is limited to placement between framing members or specific applications approved by the manufacturer of the open cell polyurethane foam system.

The S700 Sub Task Group for SPF has been working on creating and adopting standards for the currently unregulated half pound open cell light density marketplace. There is currently a material standard CAN/ULC S712.1. The corresponding CAN/ULC S712.2 is currently in development and not yet published. Once these two standards become published, they will then be referenced in the National Building Code of Canada.

## Outline of Spray Polyurethane Foam (SPF) Certification Scheme for Medium & Light Density Foam

### Rationale

The requirements to apply medium density or light density SPF are 80% to 90% the same. Therefore, all requirements to become certified in either products are virtually the same and consists of a written examination and practical evaluation on the product you are applying.

Medium density and light density spray polyurethane foam is a site-manufactured material that is supplied to the candidate as two separate chemical components; the final quality product is directly related to the skills of the polyurethane foam sprayer.

The process of installation requires specialized knowledge, skills, equipment, and aspects of the SPF process including safety, an understanding of the related health & safety issues of handling chemicals and the associated off-gassing of materials during installation and post-installation.

The National Building Code of Canada references the installation standard (**CAN/ ULC S705.2**) for the medium density spray polyurethane foam product, which requires that polyurethane foam sprayers be certified in order to apply the product.

There is a new material standard for the half pound open cell light density foam products. This is the **CAN/ULC S712.1** and there will soon be a new standard that will be similar to the existing medium density foam standards for installation. While not yet published, this will be the **CAN/ULC S712.2** Installation Standard

### Essential Learning & Skills

The essential learning task listing shall be reviewed every five years. The essential task listing is available on the website. The listing shall take into account a wide range stakeholder interest including, but not limited to:

- ✓ current certified candidates
- ✓ spray polyurethane foam system manufacturers
- ✓ equipment manufacturers
- ✓ health & safety agencies
- ✓ code officials
- ✓ trade associations & quality assurance agencies
- ✓ independent third party auditor/inspectors
- ✓ general contractors/builders/architects

## Critical Tasks List

The important critical tasks performed by a certified medium density and/or light density polyurethane foam sprayer consist of:

- ✓ Spray Polyurethane Foam product knowledge
- ✓ Equipment and start up procedures
- ✓ Installation & Application
- ✓ Personal Health and Safety /Job Site Health & Safety
- ✓ Quality Control

## Pre-Qualifications or Pre-Requisites

While there are no mandatory pre-qualifications for candidates to become a certified installer of medium or light density spray polyurethane foam (SPF), there are issues to consider prior to investing your time and money to ensure that this career is right for you.

Some considerations and CUFCA recommendations are:

- ❖ Local or Regional Authorities may have further requirements to be involved in the construction industry. You will need to research and comply with these requirements.
- ❖ Further Training in Health and Safety (First Aid), WHMIS, Fall Arrest, Arial Platform Operation and others are strongly recommended or may be mandatory.
- ❖ As work may involve confined spaces or heights, any aversion to these may be a consideration.
- ❖ Personal Protective Equipment (PPE) requirements involve use of full face respirators. You will need to be completely comfortable with the prolonged wearing of such equipment.
- ❖ The handling of the equipment ( gun, hose, airline, etc.) will present physically demanding tasks that are fundamental to the installation of SPF.

## Examination Procedures

### Written Examination

A combined medium density and light density SPF certification exam developed in accordance with the **knowledge essential task listing** that has been approved by the certification scheme committee, will be administered. The exam can be administered at any location and is proctored by an approved CUFCA proctor. The examination is also available on-line and CUFCA has a number of locations across Canada in which candidates to write their exam online, under the supervision of an exam proctor.

## Practicum Evaluation

When the polyurethane foam installer is ready to perform the practicum evaluation, the polyurethane foam installer or their employer shall make arrangements for a medium density SPF practicum evaluation or light density SPF practicum evaluation. The practicum evaluation shall confirm the hands-on skills of the candidate. The practicum evaluation is based upon the ***knowledge essential task listing*** outlined by the certification scheme committee.

## Training and SPF Installation Experience

While CUFCA does not require training or previous spray experience prior to attempting certification, individuals who complete training or obtain experience typically perform better on CUFCA examinations. The ***knowledge essential task listing*** presented to the installer or candidate will provide the core competency needed. SPF spray technique is achieved through experiential learning and as such requires months and years of hands-on or on the job execution.

CUFCA does provide training services in co-operation with our chemical and equipment members. Training programs may be made available by other chemical manufacturers or by equipment and product manufacturers. CUFCA cannot guarantee that these programs will provide sufficient knowledge in order to pass our Examination Process. In order to gain experience under the supervision of an existing certified installer, an applicant may be registered in our CUFCA apprentice program.

## Written Examination

### Written Examination Knowledge Base

The written examination for SPF Licensing created by CUFCA will cover all critical areas of knowledge that each Installer candidate will be required to demonstrate. The written examination will provide documented proof of the SPF Installer's knowledge to produce good quality foam on site (in-situ) in a safe and consistent manner. The written exam will have specific questions in both 2 lb. Closed Cell SPF and ½ lb. Open Cell SPF

Area of Knowledge	Per Cent (%) Weighting
Spray Polyurethane Foam (SPF) Product Knowledge	<b>20%</b>
Equipment & Start Up Procedures	<b>15%</b>
Installation and Applications (1/2 lb. & 2 lb )	<b>35%</b>
Health & Safety (PPE) / Jobsite Safety	<b>15%</b>
Site Quality Control (SQAP)	<b>15%</b>

The Exam is available in English and French.

### Exam Questions Asked

The written exam is in a multiple choice format in order to maintain objectivity. Each question will have four possible answers with only one correct answer and three distractor questions. All of the questions shall be constructed to reference the knowledge essential task list.

#### *Written Exam Sample Questions:*

**1) Medium density spray polyurethane foam is a:**

- Rigid, predominantly closed cell plastic material
- Rigid, predominantly open cell plastic material
- Flexible, predominantly closed cell plastic material
- Flexible, predominantly open cell plastic material

**2) The maximum continuous service temperature of 2 lb. closed cell SPF is:**

- 66°C (150°F)
- 82°C (180°F)
- 180°C (350°F)
- 99°C (210°F)

Answers: 1. (a), 2. (b)
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## Time Length for Examination

The time length for the written examination will be 3 hours in length.

## Method for Establishing Acceptance Level of the Mark

The passing mark for the written examination has been set by the certification body at 75%

## Exam Registration

### Scheduling an Exam

Appointments are scheduled on a first come, first serve basis. Register early to get your preferred date. To schedule an exam contact CUFCA at 866-467-7729

### Exam Fees

Written examination fee of \$200.00 covers the costs of exam location coordination and staffing, exam development, review, production and scoring. Please refer to the latest registration package or call the CUFCA office at 866-467-7729 for current exam fees.

### Hours of Operation

The CUFCA business hours are between 8:00 am and 5:00 pm EST, Monday to Friday. The exam may be administered Monday to Friday at the CUFCA Technical Training Centre or arranged at other times in any of our testing centres across Canada.

### Cancelling or Rescheduling an Exam

To change or cancel your reservation you must notify the CUFCA office no later than 2 business days prior to your scheduled test appointment. Changes or cancellation requests made less than 2 business days before your scheduled exam time will result in a \$50.00 fee.

You can reschedule your exam date by calling 866-467-7729 between 8:00 am and 5:00 pm EST, Monday to Friday.

### Failure to Appear for a Scheduled Exam

If you are absent from an examination that you were scheduled to attend, and you did not make arrangements to reschedule or cancel according to the policy above, you will forfeit the entire examination fee paid. You will be charged for any rebooking of the examination.

There are no refunds for examinations not taken. All individuals seeking excused absences must submit written verification and supporting documents of the situation to CUFCA within 5 days of the original examination date. If on the day of your exam you are unable to attend the examination for which you were scheduled, you may be excused without monetary penalty for the following reasons:

- Documented illness, either yourself or an immediate family member



- Death in the immediate family
- Documented traffic accident
- Court appearance or jury duty; or
- Military duty

### **Inclement Weather or Other Emergencies**

Exam administration may be delayed or cancelled only in emergencies. If severe weather or a natural disaster makes the exam location inaccessible or unsafe, the exam administration may be cancelled. In the event of the exam location closing due to inclement weather, individuals will be contacted by CUFCA to reschedule the exam free of charge.

### **Re-examination**

There is no limit to the number of times candidates may register to re-write the exam. Installer candidates will be charged the exam fee for each test scheduled.

### **Individuals with Disabilities**

Installer Candidates for certification shall meet the standard physical requirements for working in the construction industry on a jobsite. If you have a disability that would prevent you from taking the examination under standard conditions, such as a visual or hearing impairment, you may request a reasonable accommodation as permitted by law. Disabled applicants must request an accommodation prior to taking the exam. Reasonable accommodations are granted to ensure that every individual has the opportunity to test on a level field with other individuals, but not to provide any individual with an unfair advantage over other individuals. Accommodation requests will be reviewed on a case by case basis.

To request an exam with special conditions, please contact the CUFCA office at 1-866-467-7729

***Please request your accommodation at least 30 days prior to your preferred exam date.***

## Examination Day

### Admitting the Candidates to the Exam

Candidates should enter and leave the exam room through a single check in point staffed by one or more proctors. Candidates will be required to present government issued photo identification and their exam notice at the check-in table. Acceptable ID will be a driver's license, or Passport.

### What to Bring

You must present your photo ID to the office proctor. Please ensure that your photo ID bears the exact name as you had registered when booking the exam.

### Arrival Time

It is recommended that you arrive at the exam location at least 30 minutes prior to your schedule exam appointment so that you may get prepared and check-in. Individuals who arrive at the exam location 30 minutes late for their appointment will be considered absent and as such forfeit their exam fee as per the policy on [Failure to Appear for a Scheduled Exam](#).

### Writing the Exam

You must remain in your seat during the examination except when excused by the exam administrator. As you take your exam via our online portal, you may ask questions should clarification be required. The CUFCA SPF Installer Exam is also hosted online. As your test is delivered by electronic medium, there is no hardcopy provided. Your test will be taken on the computer or table provided by the test centre. This will allow us to have your test marked immediately upon completion. Therefore, there will be no delay in your marks for the exam. Both the CUFCA office and your supplied email address will receive the test results along with the questions that were answered incorrectly

During the exam raise your hand to notify the examination administrator if:

- You need additional scratch paper or pencil
- You need to take a washroom break
- You need to leave for another reason ( your exam time will continue )

### After the Exam

If you complete the exam before the time limit has expired you may advise the administrator and be excused. Your exam summary will be printed out for your personal records.

## Exam Integrity

### Written Exam Security

To ensure the integrity of the CUFCA Certified SPF Installer Certification Program, specific measures are enforced during the administration of the exam.

Exam questions and answers have been developed by the CUFCA Scheme Committee and are proprietary to our Certification Programs. As such, any attempt to copy or memorize test questions for further distribution is strictly prohibited. Each test given is individually unique as the questions on each exam are randomly distributed from a databank of questions.

### Exam Allowances

The following is a list of items you are permitted to have with you and review during your exam.

- Your CUFCA SPF Training Manuals (Light Density & Medium Density)
- CAN/ULC S705.1 or and S712.1 Standard
- CAN/ULC S705.2 or and S712.2 Standard
- Manufacturer Instructions, guidance and technical manuals

The following is a list of items that you are **not** permitted to have with you during the exam.

- A cell phone or other camera equipped device
- Other books and materials not listed above
- Food, beverages, bags , purses, or other electronic devices

Eating, Drinking, and smoking are prohibited in the examination room. You may only leave the examination room with the permission of the examination administrator. You will have to present your photo ID at each re-entry to the exam room.

### Grounds for Dismissal from the Exam Location

Anyone who engages in disruptive behavior or does not follow the rules as advised by the administrator may be dismissed from the exam location and have your exam results invalidated. The list of unacceptable behavior includes but is not limited to the following:

- Giving or receiving assistance of any kind from fellow test takers
- Using any prohibited aids or devices that would provide an unfair advantage
- Attempting to take the exam for another individual
- Creating a disturbance of any kind
- Use of electronic devices in an attempt to copy the test questions

- Failure to comply with warnings from the Exam Administrator

### Examination Irregularities

Fraud, deceit, dishonesty, or other poor behavior in connection with taking the exam is strictly prohibited. The examination administrator, in their sole discretion, may eject any individual that is deemed to have breached the terms of the testing protocol in use by CUFCA and subject to the compliance requirements of our ISO-17024 Accreditation as a Personnel Certification Organization (CO).

### Exam Statistics

Official statistics regarding the CUFCA Installer Certification Exam including all course data, individual data, and demographic data will be collected and retained by CUFCA. Your individual data will be treated as confidential and only officially released to the necessary authority having jurisdiction as mandated by any applicable standards. Individual test scores are kept confidential unless released by the Installer in writing.

### After the Exam

#### Certification Process

The successful completion of the exam and a passing grade of 75% or higher will be recognized with a Certificate of Completion. This is the first step towards your Certification and Licensing process with CUFCA.

The practicum evaluation is the next step in the certification process.

### Practicum Evaluation

#### Practicum Evaluation Knowledge Base

The medium density spray polyurethane practicum evaluation covers critical tasks and skills that each candidate must have in order to pass. Each area has a specific weighting based on importance. The practicum evaluation is conducted by an approved and accredited Auditor engaged by CUFCA. The practicum evaluation process will ensure that the individual possesses the necessary knowledge and essential skills to safely and correctly manufacture SPF on-site (in-situ) subject to the CAN/ULC S705.2 Installation Standards.

Knowledge Base	Per Cent (%) Weighting
<b>Environmental Conditions</b>	10%
<b>Substrate Conditions</b>	10%
<b>Personal Safety, handling and protection</b>	10%
<b>Jobsite management, Safety, &amp; WHMIS</b>	5%
<b>Daily spray machine operation &amp; verification</b>	10%
<b>Test Spray Pattern</b>	10%
<b>Spray atomization process &amp; application</b>	20%
<b>Daily equipment shutdown procedures</b>	5%
<b>SQAP Site Testing Procedures</b>	15%
<b>Daily Worksheets, Jobsite Labels, MDS, TDS, CCMC</b>	5%

Passing marks for the practicum evaluation is 75%.

The practicum evaluation is available in English or French language only.

## Practicum Evaluation Duration

The time length of the practicum evaluation may range from 2 hours or more due to many factors. The practicum performed at our CUFCA technical training centre will be faster as we are in a controlled environment. If you choose to have your practicum evaluation performed on site at your location, the duration may be longer. Please plan accordingly.

## Administration

The training handbook(s) and any additional course material shall be sent out to the applicant upon receipt of their full payment and complete registration documents at the CUFCA office. The applicant should allow up to 5 days processing in order to schedule an on-site evaluation appointment with one of the CUFCA Licensed Field Auditors.

The practicum evaluations that are part of our completed training course will be held on the Thursday or Friday of the regularly scheduled courses held at the CUFCA technical training centre. Scheduling within the two days will be done during the course to accommodate travel requirements of our out of town participants.

*During an on-site evaluation by one of our CUFCA Licensed Field Auditors the Applicant must provide the following documentation:*

- A filled out CUFCA Daily Work Sheet (DWS)
- MSDS sheets for all chemical materials in use on the Spray Rig
- Technical data sheets (TDS) from the manufacturer of the SPF material
- Jobsite specification, drawings, or installation work order in use by Contractor & Customer
- A CUFCA Jobsite Label
- The CUFCA SQAP Manual (which will be supplied to Licensed Members of CUFCA)

***Test Equipment Requirements:***

- Depth Gauges
- Truck Mounted Weather Station or Online web access to wind speed for exterior work. Or demonstrated knowledge by installer of ability to gauge wind speeds.
- Infrared Surface Temperature Reader
- Humidity Gauge
- A Complete Site Test Kit which meets all requirements as outlined in the CAN/ULC S705.2 Standard

Again, the duration of the evaluation should not exceed the allotted two hours. However, if there may be extenuating circumstances which may require additional time. The decision to extend the time of the evaluation will rest with the Licensed Auditor from CUFCA and will be communicated to the applicant at the time of the evaluation.

The Evaluator may use their discretion to extend the examination time due to delays such as:

- Equipment breakdown
- Weather related delays
- Substrate or Jobsite preparation issues
- Any other construction jobsite issues that may prevent the safe completion of the evaluation process.

## Arranging for the Practicum Evaluation

The candidate shall have completed all of the following steps in order for their evaluation to be made:

- ✓ Completed the Evaluation Request Form from CUFCA.
- ✓ Paid the Evaluation Fees in advance.
- ✓ Allow a minimum of 7 days scheduling notice.
- ✓ The Auditor will confirm that the Candidate received their “Certification Handbook” 5 days prior to the practicum evaluation date.
- ✓ The candidate shall address any questions on the policies and procedures for the evaluation to CUFCA at least 3 days prior to the schedule examination date.

## Cancellation Policies

Any evaluations that occur at the CUFCA Technical Training Centre will be flexible in scheduling. Should any situation arise that prevents the Candidate from proceeding with their Practicum Evaluation, they may advise the Administrator at the time and reschedule at a later date without penalty.

Should the Evaluation have been scheduled as an On-Site Evaluation, there is a cancellation fee if the evaluation is cancelled for any reason without sufficient notice provided to CUFCA. The amount of the fees will be handled on a case by case basis with the office. As our licensed Auditors have to make travel arrangements in advance, they may not be able to cancel flights etc. depending on the date of the cancellation.

If the licensed Auditor cancels an evaluation prior to the evaluation, the Candidate will be contacted accordingly. The Auditor shall provide a written notification of the cancellation to both the Candidate and the CUFCA office stating the reason for the cancellation. The Auditor shall propose a new date and time to reschedule the evaluation. CUFCA or the Auditor will contact the Candidate to confirm further revised scheduling details.

If the Auditor is delayed in arriving at a scheduled evaluation, the Auditor shall contact the Candidate to inform them of the delay and a new anticipated time of arrival.

## Suspending the On-Site Evaluation

The licensed Auditor from CUFCA can, at their full discretion, cancel or suspend an on-site evaluation for any reason. Some of the conditions that would lead to a suspension of the evaluation may include:

- 1) The installer/candidate did not supply or have available:
  - a. Personal protective equipment (PPE)
  - b. Fire Extinguishers per the Installation Standard
  - c. SPF equipment
  - d. CAN/ULC S-705.1 evaluated foam for the application process
  - e. A CUFCA approved Field Test Kit that complies with CAN/ULC S-705.2
- 2) Health & Safety of anyone is being jeopardized
- 3) Weather/Environmental conditions are not acceptable to spray SPF
- 4) Equipment is unsafe or non-operational
- 5) Equipment malfunction or breakdown that will take too long to repair
- 6) Candidate suspected of being under the influence of alcohol or drugs.
- 7) Candidate or helper is not co-operating or complying with the instructions from the Auditor.
- 8) Candidate Smoking on the truck or at work area. (after 1 warning)

## Location of Practicum Evaluation

The practicum evaluation may be taken on your jobsite with your equipment or at our Technical Training Centre in Mississauga in a mock up or simulated setting. The practicum evaluation is a component of both the original Installer Certification Process and the Five Year re-certification process as required in our CAN/ULC S705.2 standard and our CUFCA SQAP manual.

## Mock up Requirements

The mock up shall consist of a minimum of one 4' x 8' (1200mm x 2400mm) sheet of substrate with wood or metal framing on one side to simulate a stud cavity wall assembly.

The framing shall have studs spaced at 16" on centre (400mm) or 24" on centre (600mm). The candidate shall spray a simulated stud cavity on the panel in; 1" (25mm), 2" (50mm), and 3" (75mm) depths to demonstrate control of the foam.

The candidate will also spray a full sheet 4' x 8' (1200mm x 2400mm) as an example of an exterior open wall application process.

When evaluations are conducted with the use of mock ups, the candidate shall follow the procedures set out in the CAN/ULC S705.2 installation standard for the application of spray polyurethane foam. The evaluation shall be conducted as if the work was occurring at a construction jobsite.



## Construction Site Requirements

The candidate shall ensure that a minimum of 64 square feet (5.95 sq. metres) of wall space is available on the building to conduct the practicum evaluation. The candidate shall spray a simulated area in; 1" (25mm), 2" (50mm), and 3" (75mm) depths to demonstrate control of the foam. The evaluation may take place in the interior or exterior of a project. The CUFCA Licensed Auditor shall confirm that the area selected will be satisfactory for the purposes of the evaluation.

### Helper / Assistant to the Candidate

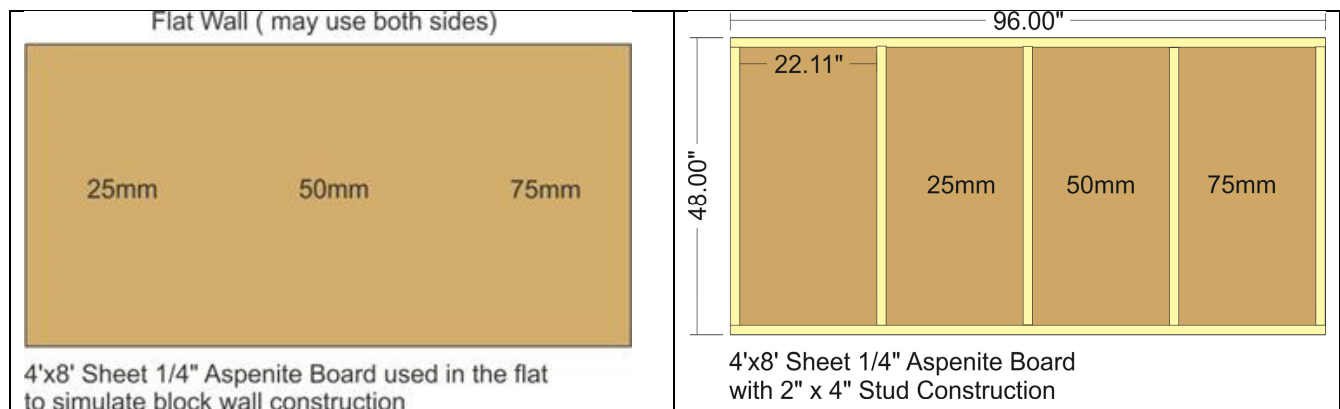
It is acceptable for the candidate in the evaluation to have an assistant or helper available as they would in the typical application scenario at a given jobsite installation. The Auditor shall instruct the helper that they cannot, in any way, interfere with the evaluation process by coaching, assisting, or talking to the candidate while the evaluation is in process. The helper is only allowed to mask off the area, assist in hose preparation, and general jobsite preparation as the normally would.

If the licensed Auditor feels that the helper is attempting to interfere with the evaluation process, they will be asked to leave for the duration of the evaluation. If the helper does not comply with the request of the Auditor, the evaluation may be terminated.

### Evaluation Requirements

The purpose of the practicum evaluation is to ensure that the candidate demonstrates competency and proficiency in all of the requirements of the installation of SPF in any given situation on a jobsite. The Candidate will adhere to the CAN/ULC S705.2 installation standards at all times.

The evaluation process will be documented by either video or photographs that will become part of the final auditor's report.



## Evaluation Procedures

As a general guide, the candidate should be familiar with the Auditor's Procedures as follows:

- Step 1. Evaluate knowledge and processes for environmental conditions check.
- Step 2. Evaluate steps to complete substrate conditions check
- Step 3. Observe Installer adherence to personal safety, use of personal protective equipment during the setup phase
- Step 4. Observe Installer adherence to safety precautions in the SPF jobsite area (*i.e.* *demonstrate use of caution tape and SPF Warning Signs*)
- Step 5. Evaluate ability to startup proportioner and related equipment based on settings from the manufacturer.
- Step 6. Observe candidate spray a test pattern to determine proper equipment settings and working condition
- Step 7. Observe the spray process and correct ratio of atomization.
- Step 8. Observe and verify spray thickness control by the applicator at 25mm, 50mm, and 75mm
- Step 9. Evaluate the process to shut down the Spray Machine
- Step 10. Observe the candidate perform the mandatory site test of adhesion/cohesion, density, depth and record visual observations
- Step 11. Evaluate the candidates ability to fill out the Daily Worksheet and the Jobsite label as required by CAN/ULC S705.2
- Step 12. Evaluate the installers knowledge of location and use of required fire extinguishers (on truck and at worksite)
- Step 13. Evaluate the candidates' knowledge and discuss use of spill containment measures and drum decontamination.

## Process to Challenge Written Exam and Practicum Evaluation Results

Should the candidate have any questions regarding either the written exam or the practicum evaluation or their marks earned, they may contact the CUFCA office. Should you disagree with the assessment made during the practicum evaluation, you may bring your concerns to CUFCA. CUFCA will review your concerns. Any concerns with your final marks in both areas need to be brought to the attention of the office within 10 days of your receipt of results. The CUFCA office will respond to your inquiry once reviewing your tests and conducting a review process with the licensed Auditor. You will receive our complaint findings within 10 days.

The installer candidate shall have the opportunity to appeal the complaint findings under the procedures listed in our complaint appeal process.

## Certification Maintenance

### Surveillance

Surveillance audits may be conducted on the Installer throughout the certification period by a variety of methods that have been approved by the certification scheme committee. The use of random audits or inspections is a requirement of the CAN/ULC S705.2 Installation Standard and the SQAP of CUFCA.

### Surveillance Methods & Frequency

The surveillance may include but is not limited to the following:

- ✓ Feedback from Customers (Complaints/Concerns)
- ✓ Confirmation of continued compliance with installation standards (declaration)
- ✓ Require evidence of continuing education during the 5-year certification period provided by CUFCA, Material suppliers, other industry accredited programs
- ✓ Random on-site audits by licensed auditors of CUFCA
- ✓ Re-certification assessment (5-year cycle)
- ✓ Site SQAP review & test kit confirmation

### Annual Activities

- ✓ Confirmation of status of customer complaints (if any) have been resolved
- ✓ Review of and action based on outstanding demerit points on record
- ✓ Confirmation of Account status (Fees Paid)
- ✓ Update of Personal contact information sheet.

## CUFCA Demerit Point System

As part of our Site Quality Assurance Program, CUFCA maintains a demerit point system as part of both our initial certification program and our continuing site quality assurance program. Demerit points are assigned when infractions are committed by the Installer. When these infractions are reported to the office they are recorded against the installers' record. If a certified installer accumulates 250 demerit points, they will receive a written warning letter and be advised to provide evidence of corrective action or steps taken to prevent any future repeat of the infractions.

If an installer accumulates 500 demerit points, the installer will have their certification suspended. The length of suspension will be decided by the Certification Scheme Committee on a case by case basis. When the installer is permitted to be reinstated, there will be a reinstatement fee due.

The schedule of Infractions and their assigned point values are listed in the following table. These demerit points are assigned by the licensed auditor of CUFCA during any inspection or audit process.

INFRACTION	DEMERIT POINTS
<b>Environmental Conditions</b>	25
<b>Substrate</b>	15-25
<b>Application Methodology</b>	50
<b>Foam Thickness</b>	50
<b>Visual Inspection</b>	50
<b>Testing</b>	10-25
<b>Documentation</b>	5-50
<b>Material</b>	10-100
<b>Safety</b>	5-100
<b>Waste Disposal</b>	25
<b>Installer Awareness</b>	100

The demerit point ranges allow final demerits assessed by the auditor.

### Re-Certification

The re-certification of certified installers is conducted at 5 year intervals and shall include the following:

- ✓ Successfully complete and pass a practicum evaluation
- ✓ All outstanding complaint, audits, or Certification deficiencies must be resolved
- ✓ All demerit points (if any) must be addressed and corrected
- ✓ All fees must be up to date and paperwork complete

The re-certification requirements shall be complete prior to the issuance of a new certificate and new photo identification card.

The Certification status of any CUFCA Installer who fails to perform their mandatory 5-year re-certification procedure will have their status revoked.

### Withdrawal of Certification

The certification shall be withdrawn in cases where the installer does not maintain their skills or proven competency or has accumulated an excessive number of demerits. Should any installer be found in contravention of the code of conduct, or their licensing agreement, they may have their status revoked.

The certification administrator shall review the SPF Installers record and provide a documented path for re-certification or certification re-instatement.

The following circumstances shall require the certification to be withdrawn:

- ✓ Failure to abide by the Code of Conduct
- ✓ Accumulation of demerit points over time.
- ✓ Verified Consumer complaints and refusal to correct deficiencies
- ✓ Failure to complete and pass practicum evaluation
- ✓ Failure to complete and pass the written exam

## Complaint Procedure

When CUFCA receives a complaint from a consumer on the performance of one of its certified installers' performance, the first step is to instruct the complainant to formalize the details of the incident in writing on our CUFCA compliant form. The written complaint shall start the investigation. The installer will be advised of the nature of the complaint and be given the opportunity to respond to or remedy the complaint with the complainant. CUFCA encourages installers and contractors to solve issues directly with Customers if at all possible as further steps that involve CUFCA become increasingly costly. Should there be no resolution to the satisfaction of the complaint at the initial phase, then a site inspection process will be conducted by a licensed CUFCA auditor. The inspection will be conducted and photographs taken. The report will be made available to the installer/contractor for review and comment. CUFCA will work to find a solution for any Consumer complaint in cooperation with the installer and contractor. Should the installer not agree with any findings in a CUFCA complaint or auditor inspection, they will have an opportunity to appeal the complaint following the appeal procedures outlined below.

## Appeal Procedure

CUFCA maintains a three level appeal process for the review of suspensions or withdrawal of certification or the assessment of demerit points. The Executive Director shall make all appeal decisions in consultation with the Certification Board.

Should the installer feel that the decision made by the Executive Director is not fair and balanced, the installer may request an audience with the Certification Board. The certification board may overturn the decision of the Executive Director should there be grounds to do so.

Should the installer feel that the decision made by the board is unsatisfactory; the installer may request a review from an independent commissioner. Should the installer feel that the documented certification process has not been followed, they may register a written complaint with CUFCA and request an appointed mediator to hear the case. CUFCA will use the services of an accredited independent arbitrator from the ADR Institute of Ontario <http://www.adrontario.ca>

## Level 1 Appeal Process with the Executive Director

For a review of a suspension or withdrawal of certification or assessment of the demerit points assessed to them, the installer must follow the procedure outlined below.

- A request for review must be made within 10 business days from the original ruling. The request for review must be in writing and sent via email, mail or fax to CUFCA, 3200 Wharton Way, Mississauga, ON L4X 2C1, [cufca@cufca.ca](mailto:cufca@cufca.ca), or fax: 877-416-3626.
- The request for review must specifically state the reason why the installer believes the initial decision should be modified or overturned.
- The request must provide new information on the issue or provide a specific reason where required procedures have not been followed.
- The review will be carried out by the Executive Director who will then arrive at a decision in writing within 30 business days of receiving the written request for review.
- If the Executive Director concludes that based on the current version of the certification scheme as adopted at the time of the suspension or withdrawal, that the demerit points should not have been assessed based on the newly provided evidence or information from the installer then the demerit points will be removed and the installer certification will be removed from suspension or the withdrawal rescinded.
- Should the Executive Director conclude that the actions taken are still valid and that the new information or evidence has no impact on the outcome of the case, the installer will be notified of such decision in writing. The installer will receive a letter by email, fax, and hard copy by mail. The installer will have been deemed to have received the written decision 5 days after the notice was mailed.

## Level 2 Appeal Process with the Certification Board

If the installer does not agree with the final decision from the Executive Director, the installer may appeal to the certification board.

- A request for review must be made within 10 business days from the level 1 decision. The request for review must be in writing and sent via email, mail or fax to CUFCA, 3200 Wharton Way, Mississauga, ON L4X 2C1, [cufca@cufca.ca](mailto:cufca@cufca.ca), or fax: 877-416-3626.
- The request for review must specifically state the reason why the installer believes the level 1 decision should be modified or overturned.
- The request must provide new information on the issue or provide a specific reason where required procedures have not been followed.
- The review will be carried out by the Certification Board who will then arrive at a decision in writing within 30 business days of receiving the written request for review.
- If the Certification Board concludes that based on the current version of the certification scheme as adopted at the time of the suspension or withdrawal, that the demerit points should not have been assessed based on the newly provided evidence or information from the installer then the demerit points will be removed and the installer certification will be removed from suspension or the withdrawal rescinded.
- Should the Certification Board conclude that the actions taken are still valid and that the new information or evidence has no impact on the outcome of the case, the installer will be notified of such decision in writing. The installer will receive a letter by email, fax, and hard copy by mail. The installer will have been deemed to have received the written decision 5 days after the notice was mailed.

### Level 3 Appeal Process with an Independent Commissioner

If the installer does not agree with the final decision from the Certification Board, the installer may appeal to the independent commissioner.

- A request for review must be made within 10 business days from the level 2 decision. The request for review must be in writing and sent via email, mail or fax to CUFCA, 3200 Wharton Way, Mississauga, ON L4X 2C1, [cufca@cufca.ca](mailto:cufca@cufca.ca), or fax: 877-416-3626.
- The request for review must specifically state the reason why the installer believes the level 2 decision should be modified or overturned.
- The request must provide new information on the issue or provide a specific reason where required procedures have not been followed.
- In order for the engagement of services from an accredited independent commissioner member of the ADR Institute of Ontario the installer will be required to forward a bank draft or other form of certified payment in the amount of \$1,000.00 to CUFCA as a deposit fee with the notice of appeal.
- All of the previous documentation will be provided to all participants and also to the independent commissioner.
- Once the commissioner has reviewed the documentation an appointment for a hearing will be made.
- The hearing will be carried out by the independent commissioner who will then arrive at a decision.
- If the independent commissioner concludes that based on the current version of the certification scheme as adopted at the time of the suspension or withdrawal, that the demerit points should not have been assessed based on the newly provided evidence or information from the installer then the demerit points will be removed and the installer certification will be removed from suspension or the withdrawal rescinded. In the case of an overturned decision the \$1,000.00 fee deposit paid by the installer will be returned.
- Should the independent commissioner conclude that the actions taken are still valid and that the new information or evidence has no impact on the outcome of the case, the installer will be notified of such decision in writing of the decision and will also forfeit the deposit fee. The installer will receive the final judgment of the commissioner in the form of a final report.

## Frequently Asked Questions

- 1. How do I sign up to take the written exam or practicum evaluation?**
  - a. For the most current information on registration contact the CUFCA office directly or your CUFCA members spray foam supplier or Equipment Dealer.
- 2. Can I register for the exam over the phone?**
  - a. Yes, you are free to contact the CUFCA office for immediate registration and make payment arrangements.
- 3. Where can I take the written exam?**
  - a. Examinations are administered at the head office on a regular training schedule at our Technical Training Centre. In addition, you may arrange to write the exam at any number of testing facilities that we have available across Canada. Please contact CUFCA to make specific arrangements to write the exam at a location near you.
- 4. Can I get my results over the phone?**
  - a. The new online testing format that is used by CUFCA will provide you with your test results immediately. As the test is in a multiple choice format, each test is totally unique based on random generated questions from a constantly upgraded database that has been developed by our Scheme Committee. When you complete the online exam, you will be given your test results. The report will be forwarded to CUFCA from our third party testing website.
- 5. When will I receive my exam results and confirmation of Certification status?**
  - a. The result of your written exam will be available at the completion of your exam. The results of the practicum evaluation will be available within two weeks of the evaluation date.
- 6. Does CUFCA offer prep courses to pass the examination?**
  - a. No, we do not. Once you have enrolled for our CUFCA training program you will be sent a package of our workbooks and other reference materials. These will form your complete study guides. We recommend that you review the books at your convenience. Your training course instructor will review all of the requirements again and your final exam is an open book exam so that you may reference the material as needed.
- 7. Can I review my exam that I recently took?**
  - a. No, we do not allow for review of full exams taken. As these exams are taken online you will be able to see immediately your test results. As no two tests are the same there is no way to be assured that the same question may be present on your next exam.
- 8. How often can I take the written exam?**
  - a. You may take the exam as many times as you like. We suggest that you review the study material again. All of the information needed to pass the exam will be included in your study guide.
- 9. Can I reschedule my exam?**
  - a. Yes you can but you must provide sufficient notice period of at least two days.
- 10. Is the written exam open book?**



- a. Yes the written exam is administered as an online exam that you will take on a computer under the supervision of an administrator and subject to the rules as outlined in this handbook. You may bring your workbooks, manufacturer supplied instruction manuals.
- 11. How long is the written exam?**
- a. The length of time to take the exam will vary from student to student depending on your grasp of the information. We allow for three hours to take the exam in our training program
- 12. What is the format of the exam?**
- a. The exam is made in a multiple choice format. For each question there will be one correct answer and three distractors. Read the question carefully while there is only one answer that is valid there may be others that may be mistakenly chosen.
- 13. Should I guess if I do not know the question?**
- a. You may guess your answer, however as you have the ability to reference your course material and you do have a generous amount of time to select your answers, we would suggest that you reread any section in question in order to find the right answer.
- 14. What is the passing score?**
- a. The passing score for your written exam and your practicum evaluation are both set at 75%. This is due to the fact that you do have your materials to reference and you will find that it will not benefit you to know less than 75% of the job requirement when you start spraying foam. For your own benefit and success, CUFCA wants to ensure that you know all you need to know to be a successful SPF installer.
- 15. Can I write the exam in my own language?**
- a. At this time the exams are available in both official languages of Canada, French and English. We are working on making the exams available in other languages in order to accommodate applicants that may benefit from testing in their own language. We will advise of any new versions of the exams as soon as they are available.

## Other Information

### Contact Information

Canadian Urethane Foam Contractors Association  
3200 Wharton Way  
Mississauga, ON  
L4X 2C1  
Phone: 866-467-7729  
Fax: 877-416-3626  
Email: [cufca@cufca.ca](mailto:cufca@cufca.ca)

## Appendix A: Essential Function / Tasks for Medium Density SPF

### Function A: Introduction to Spray Polyurethane Foam

- Task A.1 What is Spray Polyurethane Foam?
- Task A.2 History of Spray Polyurethane Foam

### Function B: Codes & Standards

- Task B.1 Building Code
- Task B.2 Material Standards
- Task B.3 Application Standard
- Task B.4 CUFCA Standards
- Task B.5 Job Standards

### Function C: Health & Safety

- Task C.1 First Aid Level One
- Task C.2 WHMIS
- Task C.3 WCB / Regulations
- Task C.4 Personal Protection
  - Task C.4.1 Head
  - Task C.4.2 Respirator
  - Task C.4.3 Eye
  - Task C.4.4 Ear
  - Task C.4.5 Body
  - Task C.4.6 Hands
  - Task C.4.7 Feet
- Task C.5 Transportation of Dangerous Goods
- Task C.6 Confined Spaces
- Task C.7 Electrical Hazards
- Task C.8 Trenching / Excavation / Shoring

### Function D: Site Equipment

- Task D.1 Ladders
- Task D.2 Scaffolding
- Task D.3 Hoisting / Rigging / Swing Stage
- Task D.4 Fall Protection
- Task D.5 Fork Lift / Scissor Lift / Zoom Boom

**Function E: Fire Protection**

- Task E.1 Fire Extinguishers
- Task E.2 Warning Signs
- Task E.3 Smoking
- Task E.4 Welding
- Task E.5 Cutting
- Task E.6 Grinding

**Function F: Site Isolation**

- Task F.1 Warning Signs
- Task F.2 Barriers
- Task F.3 Protection of Helper
- Task F.4 Protection of Others
  - Task F.4.1 Trades
  - Task F.4.2 Vehicles
  - Task F.4.3 Building Components

**Function G: Environmental Conditions**

- Task G.1 Ambient Temperature
- Task G.2 Humidity
- Task G.3 Wind
- Task G.4 Substrate Temperature

**Function H: Material Selection**

- Task H.1 Factors Effecting Material Selection

**Function I: Equipment**

- Task I.1 Drum Heaters
- Task I.2 Transfer Pumps
- Task I.3 Proportioner
- Task I.4 Hoses
- Task I.5 Hose Heaters
- Task I.6 Guns
- Task I.7 Compressor
- Task I.8 Generators

**Function J: Start Up Procedures**

- Task J.1 Check Equipment
  - Task J.1.1 Pressures
  - Task J.1.2 Temperatures
  - Task J.1.3 Conditions
- Task J.2 Check Material Supply
- Task J.3 Test Pattern
- Task J.4 Check List
- Task J.5 Work Order / Job Requirements
- Task J.6 Manufacturer Instructions (TDS)

**Function K: Substrate Preparation**

- Task K.1 Material
- Task K.2 Moisture
- Task K.3 Cleaning
- Task K.4 Priming
- Task K.5 Masking

**Function L: Application Methodology**

- Task L.1 Distance from Wall
- Task L.2 Angle of Spray
- Task L.3 Cross Hatching
- Task L.4 Thickness
- Task L.5 Finish
- Task L.6 Coverage
- Task L.7 Hot/Cold Weather Application
- Task L.8 High Wind Application

**Function M: Air Barrier Requirements**

- Task M.1 Material Requirements
- Task M.2 Transition Membrane
- Task M.3 Testing Requirements

**Function N: Thermal Barrier Requirements**

- Task N.1 Building Code Requirements
- Task N.2 Contractor's Responsibilities
- Task N.3 Installer's Responsibilities

**Function O: Heating & Hording of Material**

- Task O.1 Heater Requirements

**Function P: Troubleshooting**

- Task P.1 Blisters
- Task P.2 Resin Rich
- Task P.3 ISO Rich
- Task P.4 Thermal Cracks
- Task P.5 Scorching
- Task P.6 Friability
- Task P.7 Tackiness

**Function Q: Quality Control**

- Task Q.1 Site Testing
  - Task Q.1.1 Visual
  - Task Q.1.2 Density
  - Task Q.1.3 Adhesion
  - Task Q.1.4 Cohesion
  - Task Q.1.5 Temperature
  - Task Q.1.6 Adhesion to Failure
  - Task Q.1.7 Air Barrier Testing
- Task Q.2 Documentation
  - Task Q.2.1 Checklist
  - Task Q.2.2 Daily Work Records
  - Task Q.2.3 Jobsite Label

**Function R: Storage & Handling**

- Task R.1 Proper Storage of material
- Task R.2 Handling of Drums
- Task R.3 Water Contamination

**Function S: Maintenance**

- Task S.1 Equipment

**Function T: Isolation & Ventilation**

- Task T.1 Isolation Requirements
- Task T.2 During Spraying
- Task T.3 Post Installation Ventilation

**Function U: Drum Decontamination**

- Task U.1 ISO Drums
- Task U.2 Resin Drums

### **Function V: Spill Handling**

- Task V.1 Spill Containment
- Task V.2 Spill Clean Up
- Task V.3 Decontamination
- Task V.4 Disposal

### **Function W: Housekeeping**

- Task W.1 Removing Excess Foam
- Task W.2 Clean Up
- Task W.3 Site Waste
- Task W.4 Buns of Foam
- Task W.5 Disposal

### **Function X: Job Management**

- Task X.1 Customer Relations
- Task X.2 Time Management
- Task X.3 Selling Your Company
- Task X.4 Communications

### **Function Y: Installer Ethics**

- Task Y.1 Work Habits
- Task Y.2 Attitudes

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