

## Insulator (Heat and Frost) Compulsory Certified Designation Discussion Paper

### Background

The Nova Scotia Apprenticeship Board accepted an application to change the designation of the Insulator (Heat and Frost) trade from voluntary to compulsory certified. The Board established a Trade Advisory Committee (TAC) to review the application, consult with the industry and make a recommendation to the Board. The TAC completed their discussions and drafted recommendations according to their mandate to:

- Review the application to specify Insulator (Heat and Frost) as a compulsory certified trade
- Review the scope of the Insulator (Heat and Frost) trade and identify cross-over work with other trades and occupations and Firestopping
- Review and verify trade-specific labour market information and outlooks
- Consider ways to advance diversity and inclusion in the trade
- Determine the level of industry support for compulsory certification, upon Board approval of the timing and method of consultation

### Current Situation

Insulators install insulating materials in residential, commercial, and industrial structures, perform firestopping, apply spray foam insulation and remove asbestos. This work has a significant impact on the health and safety of people, buildings, and structures. Insulator (Heat & Frost) is a Red Seal Trade. Currently In Nova Scotia it is a voluntary trade with a 7200-hour apprenticeship training pathway, delivered by the International Association of Heat and Frost Insulators, Local 116. This training has four levels with the standard Apprentice: Journeyman ratio.

Mechanical insulation uses specialized materials, customized and engineered for mechanical systems to insulate piping, equipment, HVAC, boilers, and other applications where temperatures are above and/or below ambient. It is a vital component in maintaining structures that both integrate and optimize, on a life cycle basis, high performance operational attributes such as energy conservation, environmental health, safety, security, accessibility, cost benefit, productivity, sustainability, and functionality. There is a high demand for Residential Insulation in single family and multi-unit dwellings driven by Provincial and Federal Incentive programs for energy efficiency to better manage the increasing costs of home heat. This work is different from Mechanical Insulation, as typically, the workers performing this work are not certified journeymen trained through the apprenticeship program.

Firestopping is performed within the Insulator trade, as a stand-alone process or in conjunction with other trades including/not limited to Bricklayer, Carpenter, Construction Electrician, Communications Technician, Industrial Electrician, Sheet Metal Worker, and Plumber. Firestopping prevents the spread of smoke and fire in case of fire by compartmentalizing and allowing sufficient time for safe evacuation. Product knowledge and how to apply the proper materials is essential. When products are installed as per the manufacturer's installation instructions and tested, the result is an installed firestop.

The demand for the work of this trade has increased as well as the complexity of work in step with new products, materials, and installation environments. Demand for certified Journeypersons is primarily in mechanical insulation. Mechanical insulation, when installed properly ensures energy efficiency, lowers environmental emissions, and improves the longevity and health of the building and occupants. Improper application does not achieve these benefits and moreover causes costly rework and damages the environment. The TAC is recommending compulsory certification of mechanical insulation and firestopping and application of spray foam insulation components of the trade, *indicated in blue*. Residential insulation and asbestos removal *indicated in green*, would not be included or compulsory certified.

## Insulator (Heat and Frost)

Mechanical  
Insulation

Firestopping  
Spray Foam

Asbestos  
Removal

Residential  
Insulation

A five-year implementation window is recommended, for compulsory certification, to allow industry sufficient time to respond, plan and adjust. Compulsory certification may present a challenge for uncertified Firestop and Spray Foam workers. To mitigate this the TAC is recommending uncertified Firestop and Spray Foam workers complete the related training offered in the apprenticeship training pathway and based on the Insulator Red Seal Occupational Standard. This recommendation supports Environmental Sustainability and Climate Reduction objectives within trades programs. The TAC is seeking input from industry stakeholders, via online survey. There is an option for in-person face to face discussion by request to the NSAA. Your name and contact information are required to complete the survey, identifying information will not be shared. Thank you for taking the time to offer your thoughts, there are 12 questions.