

Plumbing and Heating – DVS 5833

Skills

A skill is the level of competence a person has in relation to a given objective. Skills may be learned or inherent. With practice, training, and experience one can vastly improve one's skills.

Adapted from: <http://lesdefinitions.fr/habilete#ixzz2WrSEJkg3>



The skills required to practice the Plumbing and Heating trade are the following:

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| Cognitive Skills | Mathematics | The trade requires knowledge of basic math operations with or without fractions and mastery of the conversion of units of measurement. Geometrical notions and a sound knowledge of trigonometry are particularly important for calculating surfaces, volume, angles, and slopes. Pipefitters must also be familiar with both metric and imperial systems. |
| | English | Reading competency is essential to acquire and understand technical terminology and vocabulary. It is also paramount to the comprehension and interpretation of information found in plans, written estimates, as well as the various norms and standards governing the trade. |
| | Other | Pipefitters must have a working knowledge of the chemistry and the applied physics involved in the material, the substances, and the products used in pipefitting. Problem-solving and decision-making are particularly essential to the practice of this trade. |
| Technical Skills | | The pipefitter trade requires good manual dexterity and coordination of movement to manipulate small objects and to work in confined spaces or at heights. |
| Perceptual Skills | | Pipefitting demands good spatial perception and the ability to visualize a pipe network from drawings. A good sense of observation and smell are helpful in detecting leaks. A keen sense of touch is essential to perceive vibrations, seepage, surface defaults and alignment problems. |
| Social Skills | | Pipefitters must be able to express themselves clearly and establish sound working relationships with fellow members of the construction crew. |

Requirements related to working conditions

The information contained in this document comes from the professional analysis report provided by the *Commission de la construction du Québec* in collaboration with its private sector partners, which include licensed pipefitters. We find it extremely important to provide complete information to you on the particular features of the trade to allow you to make an enlightened decision in line with your own interests and aptitudes.



The table below outlines the requirements pertaining to the working conditions of pipefitters in the province.

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| <i>Health and Safety</i> | Health and safety risks are related to the misuse of tools and equipment, the mishandling of construction material, and the displacement of loads. Tasks associated with the trade also carry ergonomic risks and as such require top physical form. Working in closed or confined spaces is frequent. General safety rules must be understood and respected to minimize work-related injury. |
| <i>Stress</i> | Pipefitting tasks can be stress inducing due to the pressure of deadlines and the risk of work-related accident or injury. |

Attitudes

General behaviour refers to a manner or a way in which one should comport oneself in given situations. It is less of a skill and more of a specific way to do things. Attitudes and deeply ingrained habits are part of this category.



These are the main attitudes that a pipefitter must adopt:

- Autonomy;
- Efficient communication;
- A sense of organization;
- Punctuality and diligence in the workplace;
- Respect for timeframes;
- Concern for precision and quality in the finishing stage of one's work;
- Concern for safety in the workplace for oneself and others.