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OCCUPATIONAL STANDARD OF A STOVE BUILDER

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CONTENTS:

No	Title	Page
1.	Description of the Occupational Standard of a Stove builder	3
1.1.	Purpose and object of the occupational standard of a stove builder	3
1.2.	Main terms and definitions	3
1.3.	Titles of qualifications and their levels	4
1.4.	Job content of a stove builder	4
1.5.	Work environment, specifics of a trade and work conditions	4
1.6.	Personal (essential) characteristics and general skills needed by a stove builder	4
1.7.	Stove builder's work regulation	4
2.	Description of Stove builder's qualifications	4
2.1.	Assistant stove builder, EQF level 3	4
2.2.	Stove builder, EQF level 4	6
2.3.	Master stove builder, EQF level 5	8

1. DESCRIPTION OF THE OCCUPATIONAL STANDARD OF A STOVE BUILDER

1.1. Purpose and object of the occupational standard of a stove builder (hereinafter **Standard**):

The standard aims to define the qualifications of a stove builder. It provides the basis for the assessment and awarding (certification) of a stove builder's qualification. The standard regulates the content of the formal training programmes for acquiring a stove builder's qualification.

The standard describes processes, conditions, environment relevant to a stove builder's activities, defines levels of qualifications, competencies and their limits, and other requirements that regulate the stove builder's performance.

1.2. Main terms and definitions:

European Qualifications Framework (EQF) is a translation tool that helps communication and comparison between qualifications systems in Europe. It has been developed to promote workers' and learners' mobility between countries and facilitating their lifelong learning.

National Qualifications Framework (NQF) is a formal system describing qualifications by level, based on learning outcomes.

Occupational standard is a document that describes the job and competence requirements, i.e. a set of skills, knowledge and attitudes required for successful job performance in a particular occupation.

Qualification is the entirety of person's possessed competencies or professional experience and possessed competencies necessary for a certain professional activity, recognised in accordance with the procedure laid down by legal acts of the country.

Levels of qualification are descriptions of what a learner knows, understands and is able to do in terms of learning outcomes.

Competence is the ability to perform a certain activity on the basis of the entirety of acquired knowledge, skills, abilities and values.

Limits of competencies are restrictions of activity, evidences of competencies.

Heat release appliances are fireplaces, stoves, cookers and other types of similar appliances (except boilers), made from natural or artificial stone or pre-fabricated elements, fired by wood or

any other type of solid fuel. These appliances also include connecting flueways and chimneys (built and pre-fabricated) used for removal of combustion residue.

1.3. Titles of qualifications and their levels:

No	Titles of qualification	EQF level	National Qualifications Framework level			
			Lithuania	Estonia	Finland	Germany
1	Assistant stove builder	3	3	3	3	4
2	Stove builder	4	4	4	4	-
3	Master stove builder	5	5	5	5	5

1.4. Job content of a stove builder:

Building and maintenance of solid fuel heat release appliances (except boilers) and their systems.

1.5. Work environment, specifics of a trade and work conditions:

The work of the stove builder requires physical effort and accuracy of performance. Work is done predominantly indoor.

1.6. Personal (essential) characteristics and general skills needed by a stove builder:

Spatial imagination, accuracy, concentration, good coordination, physical endurance, awareness of risks in construction works.

1.7. Stove builder's work regulation:

Stove builder operates in accordance to the occupational health and safety, fire safety regulations, national and EU requirements and regulations in the field of stove-building, energy efficiency and protection of the environment.

2. DESCRIPTION OF STOVE BUILDER'S QUALIFICATIONS

2.1. Assistant stove builder, EQF level 3

2.1.1. Job content:

Building and maintenance of solid fuel heat release appliances (except boilers) and their systems.

2.1.2. Description of a qualification level (complexity, independence, variability, responsibility, etc):

Operation of an **Assistant stove builder, EQF level 3**, (hereinafter – assistant) is coordinated and supervised by a stove builder, EQF level 4, or by a master stove builder (hereinafter – higher

qualified stove builder). Assistant can perform simple actions and operations following instructions and can help higher qualified workers. Assistant performs the tasks according to his/her competencies and takes responsibility for the quality of the work done. Supervision of his/her performance is limited to the control of the quality of the work done. Assistant is able to plan his/her work according to the given tasks, using help of a higher qualified stove builder, adapts himself/herself to the variety of working methods, materials and tools. Performs different actions and operations applying known and tested solutions, using specifications and verbal information.

2.1.3. Requirements for awarding the qualification:

The qualification of assistant stove builder is awarded to a person upon acquiring all the competencies described in Part 2.1.5. No specific requirements are set for education level or prior work experience.

2.1.4. Qualification assessment criteria and methods:

The assessment and recognition of a stove builder's qualification is described in the certification procedure of a stove builder.

2.1.5. Competencies, limits of competencies:

No	Competencies	Limits of competencies
1.	Prepares work place	Prepares the work place according to work safety requirements. Installs scaffolding and working platform. Ensures that the materials are stored according to the producer requirements and ensures their quality is maintained during storage. Prepares and sets required materials and tools in the working zones.
2.	Builds simple structures	Selects and prepares mortar and other necessary materials. Knows types of natural and artificial stones (bricks, blocks), their characteristics, purpose, laying methods. Builds simple structures: walls, partitions, pillars.
3.	Builds solid fuel heat release appliances (except boilers) under supervision of a higher qualified stove builder.	Builds solid fuel heat release appliances following the instructions and under the supervision of a higher qualified stove builder. Fills the seams in the construction, including the joints between built structure and the connection flue. Uses appropriate, certified materials and ensures the fire safety of the appliance.
4.	Builds solid fuel heat release appliances (except boilers), chimneys from pre-fabricated elements under supervision of a higher qualified stove builder.	Builds stoves, fireplaces, cookers, combustion chambers and other heat release appliances, flues, chimneys from pre-fabricated elements following the instructions of a higher qualified stove builder and with regard to fire safety regulations. Uses appropriate, certified materials and ensures the fire safety of the appliance.
5.	Performs repair work of solid fuel heat release appliances (except boilers),	Performs repair and renovation work of individually built and pre-fabricated stoves, fireplaces, cookers and

	chimneys under supervision of a higher qualified stove builder.	other heat release appliances, flues, chimneys and other type of solid fuel heating appliances (including renovation of their finishing) following the instructions and under the supervision of a higher qualified stove builder. Uses appropriate, certified materials and ensures the fire safety of the repaired appliance.
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2.2. Stove builder, EQF level 4

2.2.1. Job content:

Building and maintenance of solid fuel heat release appliances (except boilers) and their systems, organisation of stove builders' work.

2.2.2. Description of a qualification level (complexity, independence, variability, responsibility, etc):

Stove builder, EQF Level 4, (hereinafter – stove builder) operates independently, taking responsibility for the performance procedure and quality of the results. Stove builder is able to select working methods, materials and tools and controls quality of performance. Assesses the possibility of building a stove, fireplace and other appliances with regard to environmental conditions and room plan and takes decision about preparation works, coordinates stove building works with other construction activities (e.g., finishing, installation of network systems, etc.). Uses technical drawings, specifications and other project related documentation. Plans, organizes, supervises own performance as well as performance of a small group (up to 3 stove builders) of lower qualified workers. The tasks for stove builder, Level 4, are set by a master stove builder.

2.2.3. Requirements for awarding the qualification:

Stove builder, Level 4, is expected to have a secondary general education. Qualification is awarded to persons having all the competencies listed under 2.2.5. and a 2 year work experience according to the stove builder's competencies listed under 2.2.5.

2.2.4. Qualification assessment criteria and methods:

The assessment and recognition of a stove builder's qualification is described in the certification procedure of a stove builder.

2.2.5. Competencies, limits of competencies:

No	Competencies	Limits of competencies
1.	Prepares work place	Prepares the work place according to work safety requirements. Installs scaffolding and working platform. Selects and prepares necessary materials and tools. Makes calculation of materials needed. Ensures that the materials are stored according to the producer requirements and ensures their quality is maintained during storage. Makes necessary markings and measurements according to the technical drawings and using appropriate measuring

		tools.
2.	Builds simple structures	Selects and prepares mortar and other necessary materials. Knows types of natural and artificial stones (bricks, blocks), their characteristics, purpose, laying methods. Builds simple structures: walls, partitions, pillars, simple and arched lintels from natural and artificial stones.
3.	Advises customers on the installation of solid fuel heat release appliances (except boilers)	Advises customers on the installation of solid fuel heat release appliances (except boilers), based on the heat load requirement of the building and fire safety regulations. Prepares all documentation regarding the construction of the heating system (except boilers).
4.	Prepares the project and technical drawings for building solid fuel heat release appliances (except boilers)	Calculates the heat load of a given building or part of the building. Designs solid fuel heat release appliances (except boilers) and their system, based on the heat load requirement of the building, the use of the building and fire safety regulations. Chooses the appropriate, certified materials and calculates the amount of materials necessary for building the heating appliance, chimney and connection flue. Plans the work according to drawings and/or work instructions. Compiles a price offer to the customer.
5.	Builds solid fuel heat release appliances (except boilers)	Builds a solid fuel heat release appliance (except boiler) or their complex according to drawings and fire safety regulations. Uses certified, appropriate finishing techniques in accordance with customer requests (plastering, tiling, natural stone, etc.). Fills the seams with appropriate filler.
6.	Builds solid fuel heat release appliances (except boilers) from pre-fabricated elements	Knows instructions for using pre-fabricated solid fuel heat release appliances (except boilers), calculates their dimensions according to the room space. Installs a prefabricated solid fuel heat release appliance (except boiler) or parts of their system according to drawings, producer's requirements and with regard to fire safety regulations. Uses certified, appropriate finishing techniques in accordance with customer requests (plastering, tiling, natural stone, etc.).
7.	Builds, installs chimneys	Calculates height and size of a chimney. Builds or installs a chimney following the technical drawings and fire safety regulations. Uses appropriate finishing techniques in accordance with customer requests (plastering, tiling, natural stone, etc.). Ensures the chimney meets the heat release appliance's technical requirements.
8.	Performs repair and renovation of solid fuel heat release appliances (except boilers)	Makes an assessment of the existing heat release appliances (except boilers) and evaluates the

		condition of the system. Suggests methods of repair and materials suitable for it. Renovates the existing heat release appliances (except boilers) following the fire safety regulations and using appropriate building materials. Estimates cost effectiveness of renovation or repair work.
9.	Organizes and supervises stove builders' work	Supervises work of a small group (up to 3 stove builders): plans and organizes own and subordinates' performance, distributes working time, completes documentation, calculates necessary amounts of materials and scope of performed work, analyses work project, evaluates the quality of subordinates' work. Selects methods and tools necessary for task performance.

2.3. Master stove builder , EQF level 5

2.3.1. Job content:

Building and maintenance of solid fuel heat release appliances (except boilers) and their systems, organisation and assesment of performance of stove builders, assesment of the condition of the heat release appliances system, training of stove builders and assesment of competencies.

2.3.2. Description of a qualification level (complexity, independence, variability, responsibility, etc):

Master stove builder, EQF Level 5, (hereinafter – master) performs the stove building tasks that require high workmanship. Master organizes the work of lower qualified stove builders: formulates tasks, plans and divides activities within the group, assesses the results and their correspondence to quality requirements, controls time of task performance, completes timesheets, calculates required material amounts and quantity of performed work. Independently selects methods and tools for task solution. Takes decisions in unforeseen situations. Gives expert opinion and assesment about performance of the heat release appliances system. Trains lower qualified workers and assesses their competencies. Master coordinates his/her tasks with higher qualified professionals.

2.3.3. Requirements for awarding the qualification:

Master stove builder, Level 5, is expected to have a secondary general education. Qualification is awarded to persons having all the competencies listed under 2.3.5. and a 5 year working experience according to the stove builder's competencies.

2.3.4. Qualification assessment criteria and methods:

The assessment and recognition of a stove builder's qualification is described in the certification procedure of a stove builder.

2.3.5. Competencies, limits of competencies:

No	Competencies	Limits of competencies
1.	Prepares work place	Performs all tasks defined under the limits of

		<p>competencies of Level 4. Organises that the work place is prepared according to work safety requirements. Organises preparation of all necessary tools and materials, ensures the materials are stored according to the producer requirements and ensuring their quality is maintained during storage. Ensures the protective equipment to workers is available. Organises that necessary markings and measurements are made according to the technical drawings and using appropriate measuring tools. If necessary organises the making of a foundation for solid fuel heat release appliances (except boilers). Compiles the price offer to the customer.</p>
2.	Builds structures	Builds using different methods and different systems of laying natural and artificial stones (bricks, blocks). Builds walls, partitions, pillars, arches, architectural details.
3.	Advises customers on the installation of solid fuel heat release appliances (except boilers)	<p>Interviews the customer in order to find out the customer's needs and wishes. Gives an evaluation on the possible execution of the project. Advises the customer on the selection of the solid fuel heat release appliance (except boilers) based on the heat load requirement of the building and fire safety regulations. Offers alternative solutions to the customer.</p> <p>Gives to the customer all documentation regarding the construction of the solid fuel heat release appliance system (except boilers) upon delivery.</p>
4.	Prepares the project and technical drawings for building solid fuel heat release appliances (except boilers)	Estimates the heat load of a given building or part of the building. Designs a solid fuel heat release appliances (except boilers) system, based on the heat load requirement of the building, the use of the building and fire safety regulations. Chooses the appropriate, certified materials and calculates the amount of materials necessary for building the heat release appliances. Plans the work according to drawings and/or work instructions.
5.	Builds solid fuel heat release appliances (except boilers)	Performs all tasks defined under the limits of competencies of Level 4. Organizes building solid fuel heat release appliances (except boilers) or their complex according to drawings and fire safety regulations. Organizes using of certified, appropriate finishing techniques in accordance with customer requests (plastering, tiling, natural stone, etc.).

6.	Builds solid fuel heat release appliances (except boilers) from pre-fabricated elements	Performs all tasks defined under the limits of competencies of Level 4. Organizes building, installation and finishing of solid fuel heat release appliances (except boilers) or their complex from pre-fabricated elements.
7.	Builds, installs chimneys	Performs all tasks defined under the limits of competencies of Level 4. Organizes building or installing a chimney following the technical drawings and fire safety regulations.
8.	Performs repair and renovation of solid fuel heat release appliances (except boilers)	Performs all tasks defined under the limits of competencies of Level 4. Organizes renovation of the existing solid fuel heat release appliances (except boilers) following the fire safety regulations and using appropriate building materials.
9.	Organizes and supervises the work of a group of stove builders	Supervises a team of stove builders: plans and organizes own and subordinates' performance, distributes working time, completes documentation, calculates necessary amounts of materials and scope of performed work, analyses work project, evaluates the quality of subordinates' work. Selects methods and tools necessary for task performance.
10.	Trains lower qualified stove builders, assesses their qualification	Trains and assesses competencies of persons seeking to acquire stove builder's qualification.
11.	Takes decisions on stove builder's actions in unforeseen situations	Takes independent decisions on problem solving in non-typical situations, not described in the project. Improves stove builder's working methods and technologies.
12.	Performs assessment of the condition of solid fuel heat release appliances (except boilers) and their systems	Gives professional evaluation on the condition of the solid fuel heat release appliances (except boilers) by assessing the system both visually and carrying out measurements using appropriate tools. If necessary opens up the construction of the heating system for evaluation purposes. Documents professional evaluation in accordance with fire safety regulations and construction legislation.