

OCCUPATIONAL QUALIFICATION STANDARD

Apprentice Oven Builder, EstQF Level 3

An occupational qualification standard is a document which describes the set of skills, knowledge and attitudes, i.e. competence requirements, needed to successfully accomplish duties. Occupational qualification standards are used for compiling curricula and awarding qualifications.

Occupational title	Level of Estonian Qualifications Framework (EstQF)
Apprentice Oven Builder, EstQF Level 3	3

Part A DESCRIPTION OF WORK

<p>A.1 Description of work</p> <p>The main tasks of an oven builder are the construction, demolition, installation, renovation and modification of solid-fuel heating systems and parts thereof.</p> <p>Solid-fuel heating systems include solid-fuel masonry heaters made of bricks, tiles, blocks, rubble and other materials (stoves, cookers, fireplaces, etc.) and their accompanying systems (flues, chimneys, etc.) as well as prefabricated heating appliances and chimney systems under manufacturer's liability (small hot-air stoves, sauna stoves, etc.).</p> <p>Three occupational qualification standards have been developed for the occupation of oven builder:</p> <p>Apprentice Oven Builder, EstQF Level 3; Oven Builder, EstQF Level 4; Master Oven Builder, EstQF Level 5.</p> <p>Apprentice Oven Builder, EstQF Level 3 carries out, under the supervision of an oven builder with a higher qualification, the construction, demolition, renovation and modification of solid-fuel heating appliances and chimney systems as well as prefabricated heating appliances and chimney systems under manufacturer's liability. Their work is guided by the requirements of the professional ethics of oven builders (see Annex 3 – Oven builder's professional ethics). They adhere to legislation in force and other relevant instructions and normative documents (EVS 812-3 Fire safety of constructions, Part 3: Heating systems, EVS-EN 15544, etc.)</p>
<p>A.2 Tasks</p> <p>A.2.1 Designing of a heating system to be built and/or installed or part(s) thereof</p> <ol style="list-style-type: none"> 1. Calculating the heat demands of a building or space 2. Performing thermal technical calculations 3. Selecting materials and calculating quantities <p>A.2.2 Preparing for the construction or installation of a solid-fuel heating appliance</p> <ol style="list-style-type: none"> 1. Preparing the work environment 2. Preparing and constructing the foundations or underlying surface of the heating system 3. Installing fasteners and carriers <p>A.2.3 Installing heating systems under manufacturer's liability or parts thereof</p> <ol style="list-style-type: none"> 1. Installing a heating appliance under manufacturer's liability on a pre-prepared surface 2. Installing a chimney under manufacturer's liability 3. Renovating or modifying a heating system under manufacturer's liability or parts thereof <p>A.2.4 Carrying out custom construction of a solid-fuel heating system</p> <ol style="list-style-type: none"> 1. Carrying out custom construction of a solid-fuel heating system on a pre-prepared surface 2. Constructing a masonry chimney 3. Providing decorative finishing for heating system parts

A.2.5 Carrying out custom demolition, renovation or modification of a solid-fuel heating appliance or system

1. Demolishing a heating appliance
2. Renovating a masonry heating system or parts thereof
3. Modifying a masonry heating system or parts thereof

A.3 Work environment and specific nature of work

Oven builders have a flexible work schedule. Depending on agreements with the employer or the client, the volume of work and other peculiarities of work organisation, the work may also take place on weekends and public holidays or in the evenings.

The work may be fast-paced and stressful, depending on the nature and volume of the order.

The work is physically demanding. It often involves lifting heavy construction materials, working in a forced position or on temporary scaffolding and other structures. The work takes place both indoors and outdoors, at different heights and in changing environmental conditions.

The work of an oven builder is associated with an increased risk of injury, which is why oven builders must comply with work regulations and occupational health and safety requirements. Dust, airborne chemicals, noise, temperature fluctuations and drafts are also risk factors, requiring the use of protective clothing and equipment.

A.4 Tools

An oven builder's main tools are various hand tools (trowels, brick hammers, etc.), measuring instruments (measuring tapes, levels, etc.), electrical equipment (cutters, saws, mixers, etc.), lifting equipment and tools (hoists etc.) and marking tools.

A.5 Personal qualities required for work: abilities and characteristics

The work of an oven builder requires accuracy, precision, tolerance of routine, concentration and learning ability.

Good coordination, physical endurance and a tolerance of heights are also required.

Oven builders must have good stress tolerance and a sense of duty and they must be fluent communicators. Spatial imagination and an appreciation of aesthetics are also useful in the work.

A.6 Professional preparation

Apprentice Oven Builder, EstQF Level 3 has specialised vocational education or acquired their professional competence in the course of in-service training and practical work experience.

A.7 Most common occupational titles

Oven builder, stove builder, chimney builder, chimney repairer.

A.8 Regulations governing profession

Building Code and its relevant implementing acts;

Fire Safety Act and its relevant implementing acts;

Normative documents of the Estonian Centre for Standardisation.

Part B COMPETENCY REQUIREMENTS

B.1 Structure of occupation

The occupational qualification standard of Apprentice Oven Builder, EstQF Level 3 consists of five mandatory competences (B.2.1-B.2.5) and one recurring competence (B.2.6). All competences (B.2.1-B.2.6) must be certified when applying for the qualification.

B.2 Competences

MANDATORY COMPETENCES

B.2.1 Designing of a heating system to be built and/or installed or part(s) thereof

EstQF Level 3

Performance indicators:

1. Calculates the approximate heat demands of a building or part thereof under the guidance of an oven builder with higher qualifications, based on the specific use and location of the building and/or space and the minimum requirements of energy efficiency.
2. Calculates the thermal technical parameters and combustion air intake volume of the heating appliance under the guidance of an oven builder with higher qualifications, based on valid instruction materials.
3. Calculates the volume of materials needed for work based on the task in question.

Knowledge:

- 1) concepts and principles of thermal engineering and heating systems;
- 2) basics of technical drawing and symbols used in working drawings;
- 3) EVS EN 15544 and other relevant instruction materials;
- 4) principles and minimum requirements of energy efficiency;
- 5) basics of calculating approximate heat demand;
- 6) basics of calculating combustion air intake volume;
- 7) basics of construction (materials science and mechanics of materials);
- 8) construction materials used in the profession and their properties and uses.

B.2.2 Preparing for the construction or installation of a solid-fuel heating appliance	EstQF Level 3
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Performance indicators:

1. Familiarises themselves with the working drawings provided by their supervisor and determines the initial organisational tasks required for the work.
Prepares a suitable workplace within the limits of their work section: installs a work platform and builds the necessary work surfaces, ramps, ladders and railings based on the specific nature of the working site, following occupational safety requirements and installation instructions. Prepares the necessary tools, equipment, materials and accessories in accordance with the given task. Stores the necessary elements and parts in accordance with the given task, ensuring that the quality of the materials is maintained. Ensures the availability of personal protective equipment.
2. Digs a trench to the specified level and builds a sand and/or gravel base in accordance with the working drawing. Builds the formwork and conducts localised concreting work with the necessary reinforcement. Installs waterproof and thermal insulation under the guidance of an oven builder with higher qualifications. Installs a suitable (EVS 812-3) fireproof base on a combustible underlying surface depending on the heating appliance and under the guidance of an oven builder with higher qualifications.
3. Installs the necessary fasteners or carriers according to the specified markings.

Knowledge:

- 1) occupational health and safety requirements;
- 2) basics of technical drawing and symbols used in working drawings;
- 3) requirements of construction material storage;
- 4) basics of manufacturing concrete constructions;
- 5) basics of the construction and installation of combustion air supply systems;
- 6) fastening solutions and their implementation technologies;
- 7) waterproof and thermal insulation materials and their installation technologies.

B.2.3 Installing heating systems under manufacturer's liability or parts thereof	EstQF Level 3
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Performance indicators:

1. Installs a heating appliance under manufacturer's liability (air heater, sauna stove, modular fireplace or other heating appliance) under the guidance of an oven builder with higher qualifications, in accordance with the manufacturer's instructions and valid fire safety requirements.
2. Installs a chimney and connection flue under the guidance of an oven builder with higher qualifications, in accordance with the working drawing, the manufacturer's installation instructions and valid fire safety requirements.
3. Renovates heating systems or appliances under manufacturer's liability under supervision and in accordance with the given task, observing valid fire safety requirements and best practice in construction.

Knowledge:

- 1) valid fire safety standards and requirements;
- 2) materials and installation technologies used in the installation of heating systems under manufacturer's liability;
- 3) mechanical and electrical tools and other equipment;
- 4) working plans and keywords;
- 5) heating systems under manufacturer's liability and parts thereof.

B.2.4 Carrying out custom construction of a solid-fuel heating system	EstQF Level 3
<p>Performance indicators:</p> <ol style="list-style-type: none"> 1. Builds a masonry heating appliance (brick oven, sheet metal stove, cooking stove, etc.) under the guidance of an oven builder with higher qualifications, in accordance with the working drawing, valid fire safety requirements and best practice in construction. 2. Builds a chimney and connection flue under the guidance of an oven builder with higher qualifications, in accordance with the working drawing and valid fire safety requirements. 3. Provides finishing to the heating appliance under supervision and in accordance with the working drawing. 	
<p>Knowledge:</p> <ol style="list-style-type: none"> 1) occupational health and safety requirements; 2) fire safety requirements related to oven building; 3) construction materials used in the profession and their properties and uses; 4) mechanical and electrical tools and other equipment used in the profession; 5) working plans and keywords; 6) heating systems and parts thereof. 	
B.2.5 Carrying out custom demolition, renovation or modification of a solid-fuel heating appliance or system	EstQF Level 3
<p>Performance indicators:</p> <ol style="list-style-type: none"> 1. Carries out the demolition of solid-fuel heating appliances based on the given task. 2. Renovates heating systems or parts thereof under supervision and in accordance with the given task, observing valid fire safety requirements and best practice in construction. 3. Modifies heating systems or parts thereof under supervision and in accordance with the given task, observing valid fire safety requirements and best practice in construction. 	
<p>Knowledge:</p> <ol style="list-style-type: none"> 1) occupational health and safety requirements; 2) fire safety requirements related to oven building; 3) construction materials used in the profession and their properties and uses; 4) mechanical and electrical tools and other equipment used in the profession; 5) working plans and keywords; 6) heating systems and parts thereof. 	

RECURRING COMPETENCES

B.2.6 Recurring competences of Apprentice Oven Builder, EstQF Level 3	EstQF Level 3
<p>Performance indicators:</p> <ol style="list-style-type: none"> 1. Follows best practice in customer service and adapts their communication style to the people and situations they encounter. 2. Expresses a respectful attitude towards clients through their behaviour and conduct (neat clothes, work culture, etc.). 3. Pays heed to schedules, deadlines and stages of work. 4. Follows the principles of confidentiality when communicating with clients and does not disclose information related to clients to any third parties. 5. Treats a client's property and living environment with respect and care. 6. Has a constructive and understanding attitude towards criticism and endeavours to find solutions to problems. 7. Plans their activities and sets specific work goals. 8. Uses time efficiently and plans and organises their use of resources. 9. Uses their field-specific knowledge to handle work tasks and develops their competence through continuous professional development, making use of the development and training opportunities offered to them. 10. Is responsible towards the environment. Complies with waste management requirements in their activities. 11. Understands the possibilities and necessity of saving energy and material resources. 12. Takes into account the risks of work and the surrounding environment in their activities, using safety and personal protective equipment and ensuring that it is in working order. 13. Uses tools and equipment economically and prudently. 	

14. Uses a computer on a daily basis at the following levels: Information-processing, communication, content creation, safety and problem-solving at the Basic user level (see Annex 1 – Scale of self-assessment in digital competence).

Assessment method(s):

Recurring competences are assessed as part of the assessment of the other competences listed in the occupational standard.

Part C

GENERAL INFORMATION AND ANNEXES

C.1 Information concerning compilation and certification of occupational qualification standard and reference to classification of occupations

1. ID of occupational qualification standard in register of occupational qualifications	22-06052019-4.2/6k
2. Occupational qualification standard compiled by:	Andrus Schults, OÜ Raidkivi Henri Huberg, UÜ Robert, MTÜ Eesti Pottsepad Mati Malm, Kodu Soojaks OÜ, MTÜ Eesti Pottsepad, Tartu Kutsehariduskeskus Paul Pääso, Paul Pääso FIE, MTÜ Eesti Pottsepad, Kehтна Kutsehariduskeskus Chris Süldre, Ahilus OÜ, MTÜ Eesti Pottsepad Urmas Danil, OÜ Monier Hillimar Heinroos, Korstnaabi OÜ, MTÜ Eesti Korstnapühkijate Koda Sigrid Ester Tani, Tartu Kutsehariduskeskus, MTÜ Kütte - ja Ventilatsioonisüsteemide Teabekeskus Ivar Kohjus, Järvamaa Kutsehariduskeskus
3. Occupational qualification standard approved by:	Architecture, Geomatics, Construction and Real Estate
4. No. of decision of Sectoral Council	22
5. Date of decision of Sectoral Council	06.05.2019
6. Occupational qualification standard valid until	31.12.2024
7. Occupational qualification standard version no.	6
8. Reference to International Standard Classification of Occupations (ISCO 08)	7314 Potters and Related Workers
9. Reference to European Qualifications Framework (EQF)	3

C.2 Occupational title in foreign language

English:	Apprentice Oven Builder, EstQF Level 3
English:	chimney repairer

C.3 Annexes

Lisa 1 [Scale of self-assessment in digital competence](#)

Lisa 2 [Terms used in occupational qualification standard of oven builder](#)

Lisa 3 [Oven builder's professional ethics](#)