

# OCCUPATIONAL QUALIFICATION STANDARD

## Security and Fire Protection Systems Project Designer, EstQF Level 6

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)
Security and Fire Protection Systems Project Designer, EstQF Level 6	6

### Part A DESCRIPTION OF WORK

<p><b>A.1 Description of work</b></p> <p>Security and Fire Protection Systems Project Designer, EstQF Level 6 designs security and fire protection systems. A security and fire protection systems project designer works independently.</p> <p>Security and Fire Protection Systems Project Designer, Level 6 operates in at least one of the following areas of activity:</p> <ul style="list-style-type: none"> <li>designing security systems;</li> <li>designing fire alarm systems;</li> <li>designing gas fire-extinguishing systems;</li> <li>designing water and foam fire-extinguishing systems;</li> <li>designing smoke control systems;</li> <li>designing notification systems of buildings;</li> <li>designing emergency lighting.</li> </ul>
<p><b>A.2 Tasks</b></p> <p>A.2.1 Planning and organisation of work</p> <ol style="list-style-type: none"> <li>1) Familiarisation with the content of the task.</li> <li>2) Sequencing activities and compiling a schedule.</li> <li>3) Selection of tools and materials according to the task.</li> <li>4) Assigning tasks to the work group.</li> <li>5) Verifying the existence of or need for approval.</li> </ol> <p>A.2.2 Ensuring working environment safety</p> <ol style="list-style-type: none"> <li>1) Complying with the safety of the working environment at the specified site.</li> <li>2) Maintenance of the work site.</li> </ol> <p>A.2.3 Designing</p> <ol style="list-style-type: none"> <li>1) Setting up the design task.</li> <li>2) Cooperation with various parties.</li> <li>3) Project preparation and coordination.</li> <li>4) Project transfer and protection.</li> <li>5) Compliance with legislation and technical regulations.</li> <li>6) Professional self-development.</li> </ol>
<p><b>Elective areas of work</b></p> <p>A.2.4 Designing security systems</p> <ol style="list-style-type: none"> <li>1) Preparing the security system project.</li> <li>2) Selection and assembly of security systems.</li> </ol>

**A.2.5 Designing fire alarm systems**

- 1) Preparing the fire alarm system project.
- 2) Selection and assembly of a fire alarm system.

**A.2.6 Designing gas fire-extinguishing systems**

- 1) Preparing the gas fire-extinguishing system project.
- 2) Selection and assembly of a gas fire-extinguishing system.

**A.2.7 Designing water and foam fire-extinguishing systems**

- 1) Preparing the water and foam fire-extinguishing systems project.
- 2) Selection and assembly of water and foam fire-extinguishing systems.

**A.2.8 Designing smoke control systems**

- 1) Preparing the smoke control system project.
- 2) Selection and assembly of a smoke control system.

**A.2.9 Designing notification systems of buildings**

- 1) Preparing a fire notification and evacuation management system project.
- 2) Selection and assembly of a fire notification and evacuation management system.

**A.2.10 Designing emergency lighting**

- 1) Preparing the emergency lighting project.
- 2) Selection and assembly of emergency lighting.

**A.3 Work environment and specific nature of work**

The working hours of a security and fire protection systems project designer are fixed. The need to work outside of working hours may arise. The work may require mental effort and the pace of work is periodically fast and intense.

**A.4 Tools**

In addition to the usual communication tools, computers and their software and office equipment, a security and fire protection systems project designer also uses special calculation programmes and various tools and measuring devices according to their specialisation.

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

The work of a security and fire protection systems project designer requires readiness to learn, creativity, independence, decisiveness, analytical skills, accuracy, a sense of responsibility, willingness to communicate and cooperate and spatial imagination.

**A.6 Professional preparation**

Security and Fire Protection Systems Project Designer, EstQF Level 6 usually has a Bachelor's degree or applied higher education and the work experience required for the development of their competence. In order to obtain the occupational qualification, they have generally previously worked under the guidance of a person qualified as a security and fire protection systems project designer.

**A.7 Most common occupational titles**

Security systems designer.

**A.8 Regulations governing profession**

The work of a security and fire protection systems project designer in their capacity as a responsible specialist is regulated by the Fire Safety Act and the Security Act.

## Part B COMPETENCY REQUIREMENTS

<p><b>B.1 Structure of occupation</b></p> <p>The following competences must be certified when applying for the qualification of Security Systems Project Designer, Level 6: everyone is required to certify competences B.2.1-B.2.3, recurring competence B.2.11 and at least one competence from options B.2.4-B.2.10: Designing security systems, competence B.2.4; Designing fire alarm systems, competence B.2.5; Designing gas fire-extinguishing systems, competence B.2.6; Designing water and foam fire-extinguishing systems, competence B.2.7; Designing smoke control systems, competence B.2.8; Designing notification systems of buildings, competence B.2.9; Designing emergency lighting, competence B.2.10.</p>
---

<p><b>B.2 Competences</b></p>
-------------------------------

### MANDATORY COMPETENCES

<p><b>B.2.1 Töö planeerimine ja korraldamine</b></p>	<p><b>EstQF Level 6</b></p>
<p>Performance indicators:</p> <ol style="list-style-type: none"> <li>familiarises themselves with the content of the task, guided by the terms of reference, technical regulations and legislation;</li> <li>arranges their own activities and those of their subordinates according to the terms of reference and based on the order of priority of tasks and the design schedule;</li> <li>selects standard tools for themselves and their subordinates according to the task, taking into account the specific nature of the task;</li> <li>assigns tasks taking into account the competence of employees;</li> <li>checks the need for approval based on legislation and the tasks set; informs the parties involved in accordance with procedure if deficiencies are detected.</li> </ol>	
<p><b>B.2.2 Töökeskkonna ohutuse tagamine</b></p>	<p><b>EstQF Level 6</b></p>
<p>Performance indicators:</p> <ol style="list-style-type: none"> <li>complies with the rules of occupational safety imposed on the site;</li> <li>keeps the workplace well organised.</li> </ol>	
<p><b>B.2.3 Designing</b></p>	<p><b>EstQF Level 6</b></p>
<p>Performance indicators:</p> <ol style="list-style-type: none"> <li>collects the basic data needed for designing and sets design tasks accordingly;</li> <li>cooperates with the necessary parties and involves them in design activities according to the specific nature of the project and the site;</li> <li>prepares a proper project (preliminary, master and work project); analyses/inspects the results obtained from the use of software and makes changes, if necessary; checks the need for approval according to legislation and the tasks set; provides the required approval;</li> <li>hands over the project to the customer and justifies the technical solutions selected in their project;</li> <li>complies with legislation, technical standards, the manufacturer's instructions and good practice when designing;</li> <li>keeps up to date on the latest equipment, materials, products and regulations, participating in training, reading professional literature, etc.; analyses their work taking into account expert opinions, familiarising themselves with best practice, etc.</li> </ol>	

## OPTIONAL COMPETENCES

Everyone is required to certify at least one competence from options B.2.4-B.2.10.

<b>B.2.4 Designing security systems</b>	<b>EstQF Level 6</b>
Performance indicators: 1. prepares the security system design according to the terms of reference, taking into account legislation, technical standards and relevant regulations; 2. develops a solution for the installation of security systems and/or system parts according to the special nature of the site, taking into account technical compatibility and suitability.	
Hindamismeetod(id): portfoolio, situatsioonülesanne, vestlus.	
<b>B.2.5 Designing fire alarm systems</b>	<b>EstQF Level 6</b>
Performance indicators: 1. prepares the fire alarm system project according to the terms of reference, taking into account legislation, the specific nature of the site, the integrity of the system, technical standards and appropriate regulations; 2. develops a solution for the installation of fire alarm systems and/or system parts according to the special nature of the site, taking into account technical compatibility and suitability.	
Hindamismeetod(id): portfoolio, situatsioonülesanne, vestlus.	
<b>B.2.6 Designing gas fire-extinguishing systems</b>	<b>EstQF Level 6</b>
Performance indicators: 1. prepares the gas fire-extinguishing system project according to the terms of reference, taking into account legislation, the specific nature of the site, the integrity of the system, technical standards and appropriate regulations; 2. develops a solution for the installation of a gas fire-extinguishing system and/or system parts according to the special nature of the site, taking into account technical compatibility and suitability.	
Hindamismeetod(id): portfoolio, situatsioonülesanne, vestlus.	
<b>B.2.7 Designing water and foam fire-extinguishing systems</b>	<b>EstQF Level 6</b>
Performance indicators: 1. prepares the water and foam fire-extinguishing system project according to the terms of reference, taking into account legislation, the specific nature of the site, the integrity of the system, technical standards and appropriate regulations; 2. develops a solution for the installation of water and foam fire-extinguishing systems and/or system parts according to the special nature of the site, taking into account technical compatibility and suitability.	
Hindamismeetod(id): portfoolio, situatsioonülesanne, vestlus.	
<b>B.2.8 Designing smoke control systems</b>	<b>EstQF Level 6</b>
Performance indicators: 1. prepares the smoke control system project according to the terms of reference, taking into account legislation, the specific nature of the site, the integrity of the system, technical standards and appropriate regulations; 2. develops a solution for the installation of smoke control systems and/or system parts according to the special nature of the site, taking into account technical compatibility and suitability.	
Hindamismeetod(id): portfoolio, situatsioonülesanne, vestlus.	
<b>B.2.9 Designing notification systems of buildings</b>	<b>EstQF Level 6</b>
Performance indicators: 1. prepares the fire notification and evacuation management system project according to the terms of reference, taking into account legislation, the specific nature of the site, the integrity of the system, technical standards and appropriate regulations; 2. develops a solution for the installation of fire notification and evacuation management systems and/or system parts according to the special nature of the site, taking into account technical compatibility and suitability.	
Hindamismeetod(id): portfoolio, situatsioonülesanne, vestlus.	

<b>B.2.10 Designing emergency lighting</b>	<b>EstQF Level 6</b>
Performance indicators: 1. prepares the emergency lighting project according to the terms of reference, taking into account legislation, the specific nature of the site, the integrity of the system, technical standards and appropriate regulations; 2. develops a solution for the installation of emergency lighting according to the special nature of the site, taking into account technical compatibility and suitability.	
Hindamise meetod(id): portfoolio, situatsioonülesanne, vestlus.	

## RECURRING COMPETENCES

<b>B.2.11 Recurring competences of Security and Fire Protection Systems Project Designer, EstQF Level 6</b>	<b>EstQF Level 6</b>
Performance indicators: 1. uses Estonian at the B2 level (see Annex 1 'Language skills level descriptions'); 2. uses a computer in their work according to the base modules of computer use skills Computer basics, Internet basics, Word processing, Spreadsheets, standard modules Presentation, Databases, Image processing, IT security and Cooperation on the Internet (Annex 2 'Computer skills') and the programmes and software needed for designing; 3. complies with relevant regulations.	
Assessment method(s): Recurring competences are evaluated as part of the assessment of the other competences listed in the occupational qualification standard.	

## Part C GENERAL INFORMATION AND ANNEXES

<b>C.1 Information concerning compilation and certification of occupational qualification standard and reference to classification of occupations</b>	
1. ID of occupational qualification standard in register of occupational qualifications	26-16012018-03/3k
2. Occupational qualification standard compiled by:	Vassil Hartšuk, Päästeamet Ülo Kala, Eltron AS Marina Koit, Henert Grupp OÜ Kaupo Kuusik, Eesti Turvaettevõtete Liit Martin Lambing, Siseministeerium Tarmo Nigols, G4S Eesti AS Erik Pikknum, Antifire Tuleohutuslahendused OÜ Jüri Teder, G4S Eesti AS Tamur Vaher, Päästeamet
3. Occupational qualification standard approved by:	Property and Personal Protection
4. No. of decision of Sectoral Council	9
5. Date of decision of Sectoral Council	16.01.2018
6. Occupational qualification standard valid until	31.03.2021
7. Occupational qualification standard version no.	3
8. Reference to International Standard Classification of Occupations (ISCO 08)	2152 Electronics Engineers
9. Reference to European Qualifications Framework (EQF)	6
<b>C.2 Occupational title in foreign language</b>	

English:	Security and Fire Protection Systems Project Designer, EstQF Level 6
<b>C.3 Annexes</b>	
Lisa 1 <a href="#">Language skills level descriptions</a>	
Lisa 2 <a href="#">Computer Skills</a>	