**Translation from Finnish**
**Legally binding only in Finnish and Swedish**
**Ministry of the Environment, Finland**

# Government Decree on the Determination of the Difficulty Classes of Building Design and Construction Management Tasks and the Education Required in the Tasks (1063/2024)

By decision of the Government, the following is enacted under section 82, subsection 4 and section 86, subsection 4 of the Construction Act (751/2023), as amended by Act 897/2024:

## Chapter 1
## General provisions

### Section 1
### Scope of application

This Decree lays down provisions on the determination of the difficulty classes of building design and construction management tasks concerning the construction of a new building requiring a construction permit, repair and alteration work on a building requiring a construction permit and landscape construction, and on the education required in design and management tasks:

1) in building design;

2) in the design of load-bearing structures;

3) in the design of foundations and rock structures;

4) in ventilation design;

5) in the design of the water supply and sewage system of a property;

6) in building physics design and the design of moisture damage repair work;

7) in acoustics design;

8) in landscape construction design;

9) in a site manager’s management task;

10) in the management task of a foreman responsible for the construction of the water supply and sewage system of a property, hereinafter a WSS foreman; and

11) in the management task of a foreman responsible for the construction of a ventilation system, hereinafter a VS foreman.

The provisions of this Decree on a building also apply to a part of a building and a structure or its part.

## Chapter 2
## Difficulty of building design tasks

### Section 2
### Minor building design task

A building design task is minor if the building to be designed has one floor and is small in size and intended for a use other than residence or work and the surroundings of the building or the building site does not place any particular requirements on design.

A building design task is minor if the repair and alteration work to be designed constitutes a simple maintenance repair.

### Section 3
### Conventional building design task

A building design task is conventional if the building to be designed has one or two floors and is fairly small in size and conventional in terms of its architectural, technical and functional requirements and the intended use or surroundings of the building or the building site does not place any particular requirements on design.

A building design task in repair and alteration work is conventional if the architectural, technical and functional requirements of the repair and alteration work are conventional and the surroundings of the building, the building site or the intended use or a property of the building does not place any particular requirements on design.

### Section 4
### Difficult building design task

A building design task is difficult if:

1) the building to be designed has more than two floors or the building is otherwise large in size;

2) the building to be designed must meet high architectural, technical or functional requirements due to its intended use or properties;

3) the surroundings of the building place particular requirements on fitting the architecture of the building with the townscape or landscape; or

4) the building site places particular requirements on design.

A building design task in repair and alteration work is difficult if the architectural, technical or functional requirements of the repair and alteration work are high or the surroundings of the building, the building site or the intended use or a property of the building places particular requirements on design.

**Section 5**
**Very difficult building design task**

A building design task is very difficult if:

1) the building to be designed must meet very high architectural, technical or functional requirements due to its intended use or properties;

2) the surroundings of the building place very significant requirements on fitting the architecture of the building with the townscape or landscape;

3) the design requires the use of demanding design, calculation or dimensioning methods; or

4) the building site places very significant requirements on design.

A building design task in repair and alteration work is very difficult if the architectural, technical or functional requirements of the repair and alteration work are very high or the surroundings of the building, the building site or the intended use or a property of the building places very significant requirements on design.

**Section 6**
**Exceptionally difficult building design task**

A building design task is exceptionally difficult if:

1) the building to be designed must meet exceptionally high architectural, technical or functional requirements due to its intended use or properties;

2) the building is designed for an environment that is protected or otherwise valuable in terms of townscape, cultural history or landscape or an environment that is very significant in terms of urban structure; or

3) the design requires the use of new or otherwise very demanding design, calculation or dimensioning methods.

A building design task in repair and alteration work is exceptionally difficult if the architectural, technical or functional requirements of the repair and alteration work are exceptionally high or the valuable surroundings of the building or the intended use or a property of the building places exceptional requirements on design.

## Chapter 3
## Difficulty of design tasks concerning load-bearing structures

### Section 7
### Minor design task concerning load-bearing structures

A design task concerning load-bearing structures is minor if the building to be designed has one floor and is small in size and intended for a use other than residence or work and the load-bearing structures of the building are simple in terms of their technical and functional requirements.

A design task concerning load-bearing structures is minor if the repair and alteration work to be designed constitutes a simple maintenance repair.

### Section 8
### Conventional design task concerning load-bearing structures

A design task concerning load-bearing structures is conventional if the building to be designed has one or two floors and is fairly small in size, the load-bearing structures of the building are simple in terms of their technical and functional requirements and general design guidelines and established solutions can be used in the design.

A design task concerning load-bearing structures in repair and alteration work is conventional if the technical and functional requirements of the repair and alteration work are simple and general design guidelines and established solutions can be used in the design and the properties of the building do not place any particular requirements on design.

**Section 9**

**Difficult design task concerning load-bearing structures**

A design task concerning load-bearing structures is difficult if:

1) the building to be designed has more than two floors or the building is otherwise large in size; or

2) the load-bearing structures must meet high technical or functional requirements due to the size, loads or other property of the building to be designed.

A design task concerning load-bearing structures in repair and alteration work is difficult if the technical or functional requirements of the repair and alteration work are high or properties of the building place particular requirements on design.

**Section 10**

**Very difficult design task concerning load-bearing structures**

A design task concerning load-bearing structures is very difficult if:

1) the load-bearing structures must meet very high technical or functional requirements due to the size, loads or other property of the building to be designed;

2) the design requires the use of demanding design, calculation or dimensioning methods; or

3) any defect or damage in a structure to be designed may cause significant damage to persons or the environment.

A design task concerning load-bearing structures in repair and alteration work is very difficult if the technical or functional requirements of the repair and alteration work are very high or properties of the building place very significant requirements on design.

**Section 11**

**Exceptionally difficult design task concerning load-bearing structures**

A design task concerning load-bearing structures is exceptionally difficult if:

1) the load-bearing structures must meet exceptionally high technical or functional requirements due to the size, loads or other property of the building to be designed;

2) the design requires the use of new or otherwise very demanding design, calculation or dimensioning methods; or

3) any defect or damage in a structure to be designed may cause serious damage to persons or the environment.

A design task concerning load-bearing structures in repair and alteration work is exceptionally difficult if the technical or functional requirements of the repair and alteration work are exceptionally high or properties of the building place exceptional requirements on design.

## Chapter 4
## Difficulty of design tasks concerning foundations and rock structures

### Section 12
### Conventional design task concerning foundations and rock structures

A design task concerning foundations is conventional if the building to be designed is fairly small in size, its foundations are simple in terms of their technical and functional requirements and the surroundings of the building or the building site does not place any particular requirements on design.

A design task concerning rock structures is conventional if the underground rock cavern or construction excavation to be designed is fairly small in size, its structures are simple in terms of their technical and functional requirements and the surroundings of the building site or the building site does not place any particular requirements on design.

A design task concerning foundations and rock structures in repair and alteration work is conventional if the technical and functional requirements of the repair and alteration work are simple and the surroundings of the building or building site, the building site or properties of the building or structures do not place any particular requirements on design.

### Section 13
### Difficult design task concerning foundations and rock structures

A design task concerning foundations is difficult if:

1) the foundations must meet high technical or functional requirements due to the size, loads, demanding structure or other property of the building to be designed; or

2) the surroundings of the building to be designed or the building site places particular requirements on design.

A design task concerning rock structures is difficult if:

1) the underground rock cavern or construction excavation must meet high technical or functional requirements due to the size, loads, demanding structure or other property of the structure to be designed; or

2) the surroundings of the underground rock cavern or construction excavation to be designed or the building site places particular requirements on design.

A design task concerning foundations and rock structures in repair and alteration work is difficult if the technical or functional requirements of the repair and alteration work are high or the surroundings of the building or building site, the building site or properties of the building or structures place particular requirements on design.

**Section 14**

**Very difficult design task concerning foundations and rock structures**

A design task concerning foundations is very difficult if:

1) the foundations must meet very high technical or functional requirements due to the size, loads, demanding structure or other property of the building to be designed;

2) the surroundings of the building to be designed or the building site places very significant requirements on design;

3) the design requires the use of demanding design, calculation or dimensioning methods; or

4) any defect or damage in the structure to be designed may cause significant damage to persons or the environment.

A design task concerning rock structures is very difficult if:

1) the underground rock cavern or construction excavation must meet very high technical or functional requirements due to the size, loads, demanding structure or other property of the structure to be designed;

2) the surroundings of the underground rock cavern or construction excavation to be designed or the building site places very significant requirements on design;

3) the design requires the use of demanding design, calculation or dimensioning methods; or

4) any defect or damage in the structure to be designed may cause significant damage to persons or the environment.

A design task concerning foundations and rock structures in repair and alteration work is very difficult if the technical or functional requirements of the repair and alteration work are very high or the surroundings of the building or building site, the building site or properties of the building or structures place very significant requirements on design.

**Section 15**

**Exceptionally difficult design task concerning foundations and rock structures**

A design task concerning foundations is exceptionally difficult if:

1) the foundations must meet exceptionally high technical or functional requirements due to the size, loads, demanding structures or other property of the building to be designed;

2) the surroundings of the building to be designed or the building site places exceptional requirements on design;

3) the design requires the use of new or otherwise very demanding design, calculation or dimensioning methods; or

4) any defect or damage in the structure to be designed may cause serious damage to persons or the environment.

A design task concerning rock structures is exceptionally difficult if:

1) the underground rock cavern or construction excavation must meet exceptionally high technical or functional requirements due to the size, loads, demanding structure or other property of the structure to be designed;

2) the surroundings of the underground rock cavern or construction excavation to be designed or the building site places exceptional requirements on design;

3) the design requires the use of new or otherwise very demanding design, calculation or dimensioning methods; or

4) any defect or damage in the structure to be designed may cause very significant damage to persons or the environment.

A design task concerning foundations and rock structures in repair and alteration work is exceptionally difficult if the technical or functional requirements of the repair and alteration work are exceptionally high or the surroundings of the building or building site, the building site or properties of the building or structures place exceptional requirements on design.

## Chapter 5
## Difficulty of ventilation design tasks

### Section 16
### Minor ventilation design task

A ventilation design task is minor if the building to be designed is intended for a use other than residence or work and the technical and functional requirements on ventilation are minor.

A ventilation design task is minor if the repair and alteration work to be designed constitutes a simple maintenance repair.

### Section 17
### Conventional ventilation design task

A ventilation design task is conventional if the intended use or size of the building to be designed does not place any particular technical or functional requirements on ventilation or indoor air quality and general design guidelines and established solutions can be used in the design.

A ventilation design task in repair and alteration work is conventional if the technical and functional requirements of the repair and alteration work are simple and general design guidelines and established solutions can be used in the design and the intended use or a property of the building does not place any particular requirements on design.

### Section 18
### Difficult ventilation design task

A ventilation design task is difficult if the ventilation must meet high technical or functional requirements due to the size, number of users or intended use or other property of the building to be designed.

A ventilation design task in repair and alteration work is difficult if the technical or functional requirements of the repair and alteration work are high or the intended use or a property of the building places particular requirements on design.

### Section 19
### Very difficult ventilation design task

A ventilation design task is very difficult if:

1) the ventilation must meet very high technical or functional requirements due to the intended use, indoor climate target level or other property of the building to be designed; or

2) the design requires the use of demanding design, calculation or dimensioning methods.

A ventilation design task in repair and alteration work is very difficult if the technical or functional requirements of the repair and alteration work are very high or the intended use or a property of the building places very significant requirements on design.

**Section 20**
**Exceptionally difficult ventilation design task**

A ventilation design task is exceptionally difficult if:

1) the ventilation must meet exceptionally high technical or functional requirements due to the intended use, indoor climate target level or other property of the building to be designed; or

2) the design requires the use of new or otherwise very demanding design, calculation or dimensioning methods.

A ventilation design task in repair and alteration work is exceptionally difficult if the technical or functional requirements of the repair and alteration work are exceptionally high or the intended use or a property of the building places exceptional requirements on design.

## Chapter 6
## Difficulty of design tasks concerning the water supply and sewage system of a property

**Section 21**
**Minor design task concerning the water supply and sewage system of a property**

A design task concerning the water supply and sewage system of a property is minor if the building to be designed is intended for a use other than residence or work and the technical and functional requirements on the water supply and sewage system are minor.

A design task concerning the water supply and sewage system of a property is minor if the repair and alteration work designed constitutes a simple maintenance repair.

**Section 22**

**Conventional design task concerning the water supply and sewage system of a property**

A design task concerning the water supply and sewage system of a property is conventional if the intended use and size of the building to be designed does not place any particular technical or functional requirements on the water supply and sewage system and general design guidelines and established solutions can be used in the design.

A design task concerning the water supply and sewage system of a property in repair and alteration work is conventional if the technical and functional requirements of the repair and alteration work are simple and general design guidelines and established solutions can be used in the design and the intended use or a property of the building does not place any particular requirements on design.

**Section 23**
**Difficult design task concerning the water supply and sewage system of a property**

A design task concerning the water supply and sewage system of a property is difficult if the water supply and sewage system must meet high technical or functional requirements due to the size, number of users, intended use or other property of the building to be designed.

A design task concerning the water supply and sewage system of a property in repair and alteration work is difficult if the technical or functional requirements of the repair and alteration work are high or the intended use or a property of the building places particular requirements on design.

**Section 24**
**Very difficult design task concerning the water supply and sewage system of a property**

A design task concerning the water supply and sewage system of a property is very difficult if:

1) the water supply and sewage system must meet very high technical or functional requirements due to the intended use or a property of the building to be designed; or

2) the design requires the use of demanding design, calculation or dimensioning methods.

A design task concerning the water supply and sewage system of a property in repair and alteration work is very difficult if the technical or functional requirements of the repair and

alteration work are very high or the intended use or a property of the building places very significant requirements on design.

**Section 25**

**Exceptionally difficult design task concerning the water supply and sewage system of a property**

A design task concerning the water supply and sewage system of a property is exceptionally difficult if:

1) the water supply and sewage system must meet exceptionally high technical or functional requirements due to the intended use or a property of the building to be designed;

2) there are serious environmental risks associated with activities that are in line with the intended use of the building; or

3) the design requires the use of new or otherwise very demanding design, calculation or dimensioning methods.

A design task concerning the water supply and sewage system of a property in repair and alteration work is exceptionally difficult if the technical or functional requirements of the repair and alteration work are exceptionally high or the intended use or a property of the building places exceptional requirements on design.

**Chapter 7**

**Difficulty of building physics design tasks and design tasks concerning moisture damage repair work**

**Section 26**

**Conventional building physics design task and design task concerning moisture damage repair work**

A building physics design task is conventional if the building to be designed is conventional in terms of its technical and functional requirements and general design guidelines and established solutions can be used in the design and the surroundings of the building or the building site does not place any particular requirements on design.

A building physics design task in repair and alteration work is conventional if the technical and functional requirements of the repair and alteration work are simple and the surroundings of the

building, the building site or the intended use or a property of the building does not place any particular requirements on design.

A design task concerning moisture damage repair work is conventional if the object of the design has moisture or mould damage that can be clearly determined and delimited and the intended use or a property of the building does not place any particular requirements on design.

**Section 27**

**Difficult building physics design task and design task concerning moisture damage repair work**

A building physics design task is difficult if:

1) the building physics stress on the building to be designed places particular requirements on design; or

2) the intended use or a property of the building to be designed places particular requirements on building physics design.

A building physics design task in repair and alteration work is difficult if the technical or functional requirements of the repair and alteration work are high or the surroundings of the building, the building site or the intended use or a property of the building places particular requirements on design.

A design task concerning moisture damage repair work is difficult if the object of the design has extensive moisture or mould damage or repairing the damage requires significant alterations to the moisture physical behaviour of the structures or if the intended use, indoor climate target level or other property of the building places particular requirements on design.

**Section 28**

**Very difficult building physics design task and design task concerning moisture damage repair work**

A building physics design task is very difficult if:

1) strong building physics stress on the building to be designed places very significant requirements on design;

2) the intended use, demanding structures or other property of the building to be designed places very significant requirements on building physics design; or

3) the design requires the use of demanding design, calculation or dimensioning methods.

A building physical design task in repair and alteration work is very difficult if the technical or functional requirements of the repair and alteration work are very high or the surroundings of the building, the building site or the intended use or a property of the building places very significant requirements on design.

A design task concerning moisture damage repair work is very difficult if:

1) the building has moisture or mould damage within structures;

2) repairing the damage requires very significant alterations to the moisture physical behaviour of structures; or

3) the intended use, indoor climate target level or other property of the building places very significant requirements on design.

**Section 29**

**Exceptionally difficult building physics design task and design task concerning moisture damage repair work**

A building physics design task is exceptionally difficult if:

1) exceptionally strong building physics stress on the building to be designed places exceptional requirements on design;

2) the intended use, demanding structures or other property of the building to be designed places exceptional requirements on building physics design; or

3) the design requires the use of new or otherwise very demanding design, calculation or dimensioning methods.

A building physics design task in repair and alteration work is exceptionally difficult if the technical or functional requirements of the repair and alteration work are exceptionally high or the surroundings of the building, the building site or the intended use or a property of the building places exceptional requirements on design.

A design task concerning moisture damage repair work is exceptionally difficult if:

1) the building has extensive moisture or mould damage within structures despite previous repairs of moisture damage;

2) the moisture physical behaviour of structures must be ensured by means of special technical systems or special methods; or

3) the intended use, indoor climate target level or other property of the building places exceptional requirements on design.

## Chapter 8
## Difficulty of acoustics design tasks

### Section 30
### Conventional acoustics design task

An acoustics design task is conventional if the building to be designed is conventional in terms of its technical and functional requirements and general design guidelines and established solutions can be used in the design and the surroundings of the building or the building site does not place any particular requirements on design.

An acoustics design task in repair and alteration work is conventional if the technical and functional requirements of the repair and alteration work are simple and the surroundings of the building, the building site or properties of the building do not place any particular requirements on design.

### Section 31
### Difficult acoustics design task

An acoustics design task is difficult if:

1) strong or low-frequency external acoustic or vibration stress on the building to be designed or the location of the building in the vicinity of a main traffic artery, port, power plant or other corresponding function places particular requirements on design; or

2) the intended use or a property such as strong internal acoustic or vibration stress on the building to be designed places particular requirements on design or particular quality is required from the acoustic environment of the building.

An acoustics design task in repair and alteration work is difficult if the technical or functional requirements of the repair and alteration work are high or the surroundings of the building, the building site or properties of the building place particular requirements on design.

**Section 32**

**Very difficult acoustics design task**

An acoustics design task is very difficult if:

1) strong stress on the building to be designed places very significant requirements on acoustics design;

2) the intended use of the building places very significant requirements on spaces being noise-free or vibration-free, on sound insulation or on acoustics; or

3) very high quality is required from the acoustic environment of the building to be designed.

An acoustics design task in repair and alteration work is very difficult if the technical or functional requirements of the repair and alteration work are very high or the surroundings of the building, the building site or properties of the building place very significant requirements on design.

**Section 33**

**Exceptionally difficult acoustics design task**

An acoustics design task is exceptionally difficult if:

1) strong stress on the building to be designed places exceptional requirements on acoustics design;

2) the intended use of the building places exceptional requirements on spaces being noise-free or vibration-free, on sound insulation or on acoustics;

3) exceptionally high quality is required from the acoustic environment of the building to be designed; or

4) an acoustically unique solution is being designed for which there are no pre-prepared design guidelines or on which there is no experience-based knowledge, which means that in-depth mastery of the theoretical fundamentals of acoustics is required.

An acoustics design task in repair and alteration work is exceptionally difficult if the technical or functional requirements of the repair and alteration work are exceptionally high or the surroundings of the building, the building site or properties of the building place exceptional requirements on design.

**Chapter 9**

## Difficulty of landscape construction design tasks

### Section 34
### Conventional landscape construction design task

A landscape construction design task is conventional if the site concerned is conventional in terms of its landscape and nature values and its technical and functional requirements and the surroundings of the site or the building site does not place any particular requirements on design.

A landscape construction design task in repair and alteration work is conventional if the site concerned is conventional in terms of its landscape and nature values and its technical and functional requirements and the surroundings of the site or the building site does not place any particular requirements on design.

### Section 35
### Difficult landscape construction design task

A landscape construction design task is difficult if:

1) the site must meet high landscape, technical or functional requirements due to its intended use or properties;

2) the surroundings of the site place requirements on fitting the design with the townscape, landscape or natural environment; or

3) the building site is technically demanding.

A landscape construction design task in repair and alteration work is difficult if the main intended use of the area concerned changes or when high health and safety requirements significantly influence the design of the area.

### Section 36
### Very difficult landscape construction design task

A landscape construction design task is very difficult if:

1) the site must meet very high landscape, technical or functional requirements due to its intended use or properties;

2) the site features nature values;

3) the surroundings of the site place particular requirements on fitting the design with the townscape, landscape or natural environment; or

4) the building site is technically very demanding.

A landscape construction design task in repair and alteration work is very difficult if the main intended use of the area concerned changes significantly or when high health and safety requirements significantly influence the design of the area.

**Section 37**
**Exceptionally difficult landscape construction design task**

A landscape construction design task is exceptionally difficult if:

1) the site is designed for an environment that is protected or otherwise valuable in terms of townscape, cultural history or landscape or an environment that is very significant in terms of urban structure;

2) the site features significant nature values;

3) the building site is technically exceptionally demanding; or

4) the site is located in an area with significant environmental harm or landscape nuisance factors.

A landscape construction design task in repair and alteration work is exceptionally difficult if the valuable surroundings of the site concerned place exceptional requirements on design, the main intended use of the area concerned changes considerably or if there is a technically or functionally significant change concerning the site.

## Chapter 10
## Difficulty of site manager's management tasks

**Section 38**
**Site manager's minor management task**

A site manager's management task is minor if:

1) the building to be constructed has one floor and is small in size and not intended for residential or work use;

2) the construction work uses simple work methods and technical solutions; and

3) the surroundings, the building site or the construction conditions do not cause impacts greater than minor on the construction work.

A site manager's management task in repair and alteration work is minor if:

1) the construction work is simple in terms of its technical solutions and work and design methods;

2) the construction work only has a minor impact on properties of the building relating to building physics and health, structural and fire loads or load-bearing structures;

3) the construction work does not concern protected properties of a building; and

4) the surroundings, the building site or the construction conditions do not cause impacts greater than minor on the construction work.

**Section 39**
**Site manager's conventional management task**

A site manager's management task is conventional if:

1) the building to be constructed is a building with a maximum of three floors (including any basement and attic levels) and a floor area not exceeding 500 square metres;

2) the building to be constructed is a conventional building in terms of its intended use, properties relating to building physics and health, structural and fire loads, load-bearing structures and work and design methods; and

3) the surroundings, the building site or the construction conditions do not cause requirements greater than conventional on the construction work.

A site manager's management task in repair and alteration work is conventional if:

1) the work in question is repair and alteration work that is conventional in terms of its technical solutions and work and design methods; and

2) the surroundings, the building site or the construction conditions do not cause requirements greater than conventional on the construction work.

**Section 40**
**Site manager's difficult management task**

A site manager's management task is difficult if:

1) the building to be constructed is a building with more than three floors (including any basement and attic levels) or a floor area exceeding 500 square metres;

2) the building to be constructed is a building that is more demanding than conventional in terms of its intended use, properties relating to building physics and health, structural and fire loads, load-bearing structures or work and design methods;

3) the surroundings or the building site places particular requirements on the construction work; or

4) the construction conditions are more demanding than conventional.

A site manager's management task in repair and alteration work is difficult if:

1) the work in question is repair and alteration work that is more demanding than conventional in terms of its technical solutions or work or design methods and that concerns properties of the building relating to building physics and health, structural and fire loads or load-bearing structures;

2) the surroundings or the building site places particular requirements on the construction work;

3) the construction conditions are more demanding than conventional; or

4) the construction work concerns protected properties of a protected building.

**Section 41**
**Site manager's very difficult management task**

A site manager's management task is very difficult if:

1) the building to be constructed is a very tall building;

2) the building to be constructed is a building that is very demanding in terms of its intended use, properties relating to building physics and health, structural and fire loads, load-bearing structures or work and design methods;

3) the surroundings or the building site places very significant requirements on the construction work; or

4) the construction conditions are very demanding and this places very significant requirements on the construction work.

A site manager's management task in repair and alteration work is very difficult if:

1) the work in question is repair and alteration work that is very demanding in terms of its technical solutions or work or design methods and that concerns properties of the building relating to building physics and health, structural and fire loads or load-bearing structures;

2) the surroundings or the building site places very significant requirements on the construction work;

3) the construction conditions are very demanding; or

4) the work in question is very demanding repair and alteration work concerning protected properties of a protected building.

**Section 42**
**Site manager's exceptionally difficult management task**

A site manager's management task is exceptionally difficult if:

1) the building to be constructed is an exceptionally tall or large building;

2) the building to be constructed is a building with exceptional properties relating to building physics and health, structural or fire loads or load-bearing structures;

3) the work or design methods are exceptional;

4) the building site is exceptionally demanding in terms of its foundation conditions or location and this places exceptional requirements on the construction work; or

5) the construction site has an exceptional impact on the environment or townscape.

A site manager's management task in repair and alteration work is exceptionally difficult if:

1) the work in question is repair and alteration work that is exceptional in terms of its technical solutions or work or design methods and that concerns properties of the building relating to building physics and health, structural and fire loads or load-bearing structures;

2) the surroundings or the building site places exceptional requirements on the construction work or because the construction conditions are exceptional; or

3) the work in question is exceptionally demanding repair and alteration work concerning protected properties of a protected building.

**Chapter 11**
**Difficulty of WSS foreman's management tasks**

**Section 43**

**WSS foreman's minor management task**

A WSS foreman's management task is minor if:

1) the work in question is construction of minor water supply and sewage systems outside of a building;

2) the building to be constructed has one floor and is small in size and not intended for residential or work use;

3) the water supply and sewage system constructed is minor and the construction work uses simple work methods and technical solutions; and

4) building protection, the surroundings, the building site or the construction conditions do not cause impacts greater than minor on the specialist construction work.

A WSS foreman's management task in repair and alteration work is minor if:

1) the construction work is simple in terms of its technical solutions and work and design methods;

2) the construction work only has a minor impact on properties of the building relating to building physics and health, structural and fire loads or load-bearing structures;

3) the specialist construction work does not concern protected properties of a building; and

4) the surroundings, the building site or the construction conditions do not cause impacts greater than minor on the specialist construction work.

**Section 44**

**WSS foreman's conventional management task**

A WSS foreman's management task is conventional if:

1) the building to be constructed is a building with a maximum of three floors (including any basement and attic levels) or a floor area not exceeding 500 square metres;

2) the specialist construction work is conventional in terms of its technical solutions and work and design methods;

3) the size and intended use of the building and its properties relating to building physics and health, structural and fire loads or load-bearing structures do not place particular requirements on the specialist construction work; and

4) building protection, the surroundings, the building site or the construction conditions do not place particular requirements on the specialist construction work.

A WSS foreman's management task in repair and alteration work is conventional if:

1) the work in question is repair and alteration work that is conventional in terms of its technical solutions and work and design methods; and

2) the surroundings, the building site or the construction conditions do not cause impacts greater than conventional on the specialist construction work.

**Section 45**
**WSS foreman's difficult management task**

A WSS foreman's management task is difficult if:

1) the building to be constructed is a building with a maximum of eight floors (including any basement and attic levels);

2) the specialist construction work is more demanding than conventional in terms of its technical solutions or work or design methods;

3) the size and intended use of the building and its properties relating to building physics and health, structural and fire loads or load-bearing structures place particular requirements on the specialist construction work; or

4) building protection, the surroundings, the building site or the construction conditions place particular requirements on the specialist construction work.

A WSS foreman's management task in repair and alteration work is difficult if:

1) the work in question is repair and alteration work that is more demanding than conventional in terms of its technical solutions or work or design methods and that concerns properties of the building relating to building physics and health, structural and fire loads or load-bearing structures;

2) the surroundings or the building site places particular requirements on the specialist construction work;

3) the construction conditions are more demanding than conventional; or

4) the construction work concerns protected properties of a protected building.

**Section 46**
**WSS foreman's very difficult management task**

A WSS foreman's management task is very difficult if:

1) the building to be constructed is a building with a maximum of 16 floors (including any basement and attic levels);

2) the specialist construction work is very demanding in terms of its technical solutions or work or design methods;

3) the size and intended use of the building and its properties relating to building physics and health, structural and fire loads or load-bearing structures place very significant requirements on the specialist construction work; or

4) building protection, the surroundings, the building site or the construction conditions place very significant requirements on the specialist construction work.

A WSS foreman's management task in repair and alteration work is very difficult if:

1) the work in question is repair and alteration work that is very demanding in terms of its technical solutions or work or design methods and that concerns properties of the building relating to building physics and health, structural and fire loads or load-bearing structures;

2) the surroundings or the building site places very significant requirements on the specialist construction work;

3) the construction conditions are very demanding; or

4) the work in question is very demanding repair and alteration work concerning protected properties of a protected building.

**Section 47**
**WSS foreman's exceptionally difficult management task**

A WSS foreman's management task is exceptionally difficult if:

1) the building to be constructed is a building with more than 16 floors (including any basement and attic levels);

2) the specialist construction work is exceptional in terms of its technical solutions or work or design methods;

3) the size and intended use of the building and its properties relating to building physics and health, structural and fire loads or load-bearing structures place exceptional requirements on the specialist construction work; or

4) building protection, the surroundings, the building site or the construction conditions place exceptional requirements on the specialist construction work.

A WSS foreman's management task in repair and alteration work is exceptionally difficult if:

1) the work in question is repair and alteration work that is exceptional in terms of its technical solutions or work or design methods and that concerns properties of the building relating to building physics and health, structural and fire loads or load-bearing structures;

2) the surroundings or the building site places exceptional requirements on the specialist construction work or because the construction conditions are exceptional; or

3) the work in question is exceptionally demanding repair and alteration work concerning protected properties of a protected building.

## Chapter 12
## Difficulty of VS foreman's management tasks

### Section 48
### VS foreman's minor management task

A VS foreman's management task is minor if:

1) the building to be constructed has one floor and is small in size and not intended for residential or work use;

2) the ventilation system to be constructed is minor and the construction work uses simple work methods and technical solutions; and

3) building protection, the surroundings, the building site or the construction conditions do not cause impacts greater than minor on the specialist construction work.

A VS foreman's management task in repair and alteration work is minor if:

1) the construction work is simple in terms of its technical solutions and work and design methods;

2) the construction work only has a minor impact on properties of the building relating to building physics and health, structural and fire loads or load-bearing structures;

3) the specialist construction work does not concern protected properties of a building; and

4) the surroundings, the building site or the construction conditions do not cause impacts greater than minor on the specialist construction work.

**Section 49**
**VS foreman's conventional management task**

A VS foreman's management task is conventional if:

1) the building to be constructed is a building with a maximum of three floors (including any basement and attic levels) or a floor area not exceeding 500 square metres;

2) the specialist construction work is conventional in terms of its technical solutions and work and design methods;

3) the size and intended use of the building and its properties relating to building physics and health, structural and fire loads or load-bearing structures do not place particular requirements on the specialist construction work; or

4) building protection, the surroundings, the building site or the construction conditions do not place particular requirements on the specialist construction work.

A VS foreman's management task in repair and alteration work is conventional if:

1) the work in question is repair and alteration work that is conventional in terms of its technical solutions and work and design methods; and

2) the surroundings, the building site or the construction conditions do not cause impacts greater than conventional on the specialist construction work.

**Section 50**
**VS foreman's difficult management task**

A VS foreman's management task is difficult if:

1) the building to be constructed is a building with a maximum of 8 floors (including any basement and attic levels);

2) the specialist construction work is more demanding than conventional in terms of its technical solutions or work or design methods;

3) the size and intended use of the building and its properties relating to building physics and health, structural and fire loads or load-bearing structures place particular requirements on the specialist construction work; or

4) building protection, the surroundings, the building site or the construction conditions place particular requirements on the specialist construction work.

A VS foreman's management task in repair and alteration work is difficult if:

1) the work in question is repair and alteration work that is more demanding than conventional in terms of its technical solutions or work or design methods and that concerns properties of the building relating to building physics and health, structural and fire loads or load-bearing structures;

2) the surroundings or the building site places particular requirements on the specialist construction work;

3) the construction conditions are more demanding than conventional; or

4) the specialist construction work concerns protected properties of a protected building.

**Section 51**
**VS foreman's very difficult management task**

A VS foreman's management task is very difficult if:

1) the building to be constructed is a building with a maximum of 16 floors (including any basement and attic levels);

2) the specialist construction work is very demanding in terms of its technical solutions or work or design methods;

3) the size and intended use of the building and its properties relating to building physics and health, structural and fire loads or load-bearing structures place very significant requirements on the specialist construction work; or

4) building protection, the surroundings, the building site or the construction conditions place very significant requirements on the specialist construction work.

A VS foreman's management task in repair and alteration work is very difficult if:

1) the work in question is repair and alteration work that is very demanding in terms of its technical solutions or work or design methods and that concerns properties of the building relating to building physics and health, structural and fire loads or load-bearing structures;

2) the surroundings or the building site places very significant requirements on the specialist construction work;

3) the construction conditions are very demanding; or

4) the work in question is very demanding repair and alteration work concerning protected properties of a protected building.

**Section 52**
**VS foreman's exceptionally difficult management task**

A VS foreman's management task is exceptionally difficult if:

1) the building to be constructed is a building with more than 16 floors (including any basement and attic levels);

2) the specialist construction work is exceptional in terms of its technical solutions or work or design methods;

3) the size and intended use of the building and its properties relating to building physics and health, structural and fire loads or load-bearing structures place exceptional requirements on the specialist construction work; or

4) building protection, the surroundings, the building site or the construction conditions place exceptional requirements on the specialist construction work.

A VS foreman's management task in repair and alteration work is exceptionally difficult if:

1) the work in question is repair and alteration work that is exceptional in terms of its technical solutions or work or design methods and that concerns properties of the building relating to building physics and health, structural and fire loads or load-bearing structures;

2) the surroundings or the building site places exceptional requirements on the specialist construction work or because the construction conditions are exceptional; or

3) the work in question is exceptionally demanding repair and alteration work concerning protected properties of a protected building.

## Chapter 13
## Education

### Section 53
### Education required in design tasks

The scope and contents of the education of a designer shall meet the requirements set in Annexes 1–10 in accordance with the design tasks and their difficulty classes.

### Section 54
### Education required in management tasks

The scope and contents of the education of a site manager and a specialist foreman shall meet the requirements set in Annexes 11–13 in accordance with the management tasks and their difficulty classes.

## Chapter 14
## Entry into force

### Section 55
### Entry into force

This Decree enters into force on 1 January 2025.

The provisions in force at the time of the entry into force of this Decree apply to projects pending at the time of the entry into force of this Decree.

This Decree repeals the Government Decree on the Determination of Difficulty Classes of Building Design Tasks (214/2015).

*Annex 1*

Education requirements in building design tasks

| **Difficulty class of design task** | **Education requirement** |
|---|---|
| **Conventional** | The designer has completed at least:<br>- the qualification of *talonrakennuksen opintosuunnan teknikko (rakennusmestari)* [technician (construction manager) in building construction][1];<br>- the qualification of *tekniikan kandidaatti (arkkitehtuuri)* [Bachelor of Science (Technology) in Architecture] (180 credits[2]); or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification has included studies relating to building design and construction technology to a total of at least 90 credits, including completed study units totalling at least 40 credits in the following (or equivalent) fields:<br>- housing design;<br>- construction theory and structural technology; and<br>- building services systems.<br><br>A person who has completed the qualification of *muotoilija (AMK)* [Bachelor of Culture and Arts in Design] that included studies relating to space design and interior architecture to a total of at least 90 credits may also act as a designer in a building design task in repair and alteration work of an interior of a building. |
| **Difficult and very difficult** | The designer has completed:<br>- the qualification of *arkkitehti* [Master of Science in Architecture];<br>- the qualification of *rakennusarkkitehti (AMK)* [Bachelor of Construction Architecture];<br>- the qualification of *rakennusarkkitehti* [construction architect][3]; or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification or studies supplementing the qualification have included studies relating to building design and architecture to a total of at least 120 credits, including completed study units totalling at least 70 credits in the following (or equivalent) fields:<br>- history and theory of architecture;<br>- design of public and service buildings;<br>- construction theory and structural technology; and<br>- housing design.<br><br>A person who has completed the qualification of *taiteen maisteri* [Master of Arts in Arts and Design] or the qualification of *sisustusarkkitehti* [interior architect] that included studies relating to space design and interior architecture to a total of at least 120 credits may also act as a designer in a design task in repair and alteration work of an interior of a building. |
| **Exceptionally difficult** | The designer has completed:<br>- the qualification of *arkkitehti* [Master of Science in Architecture]; or<br>- another qualification that is appropriate and equivalent to the above.<br><br>The qualification or studies supplementing the qualification have included studies relating to building design and architecture to a total of at least 150 credits, including completed study units totalling at least 90 credits in the following (or equivalent) fields:<br>- history and theory of architecture;<br>- design of public and service buildings;<br>- construction theory and structural technology; and<br>- housing design. |

[1)] The qualification of *talonrakennuksen opintosuunnan rakennusinsinööri* [construction engineer in building construction] is also appropriate for this class.
[2)] Completed study units are given as credits in accordance with the European Credit Transfer System (ECTS). One credit is equal to 27 hours of work by the student. Where earlier completed study units are expressed as credit units, these are converted to credits by multiplying the credit units by 1.5.
[3)] The qualification of *rakennussuunnitteluun suuntautunut rakennusinsinööri* [construction engineer in building design] completed (before 1972) before the commencement of the *rakennusarkkitehti* [construction architect] degree programmes and the qualification of *rakennussuunnitteluun suuntautunut rakennusinsinööri (AMK)* [Bachelor of Construction Engineering in Building Design (completed in 2000−2006) completed immediately after the discontinuation of the *rakennusarkkitehti* [construction architect] degree programmes are also recognised as equivalent to these qualifications.

*Annex 2*

Education requirements in design tasks concerning load-bearing structures

| **Difficulty class of design task** | **Education requirement** |
|---|---|
| **Conventional** | The designer has completed at least:<br>- the qualification of *teknikko* [technician] in construction engineering or construction production or mechanical engineering;<br>- the qualification of *tekniikan kandidaatti* [Bachelor of Science in Technology] (180 credits[1)]); or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification or studies supplementing the qualification have included studies relating to structural engineering and to the design and functioning of the structures in question to a total of at least 30 credits, including completed study units in the following (or equivalent) fields:<br>- structural mechanics and structural design;<br>- materials and manufacturing engineering; and<br>- studies mentioned under the structural material in question[2)]:<br><br>1) Concrete structures: design of concrete structures and concrete construction.<br>2) Steel structures: design of steel structures and steel construction.<br>3) Timber structures: design of timber structures and timber construction.<br>4) Masonry structures: design of concrete structures and concrete construction, and design of masonry structures. |
| **Difficult and very difficult** | The designer has completed in the field of construction engineering or other appropriate field of engineering or technology:<br>- the qualification of *diplomi-insinööri* [Master of Science in Engineering or Technology];<br>- the qualification of *insinööri (ylempi AMK)* [Master of Engineering];<br>- the qualification of *insinööri (AMK)* [Bachelor of Engineering];<br>- the qualification of *rakennusinsinööri* or *konetekniikan insinööri* [engineer in construction or mechanical engineering]; or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification or studies supplementing the qualification have included studies relating to structural engineering and to the design and functioning of the structures in question to a total of at least 40 credits, including completed study units in the following (or equivalent) fields:<br>- structural mechanics and structural design;<br>- materials and manufacturing engineering; and<br>- studies mentioned under the structural material in question[2)]:<br><br>1) Concrete structures: design of concrete structures and concrete construction.<br>2) Steel structures: design of steel structures and steel construction.<br>3) Aluminium structures: studies as for steel structures.<br>4) Timber structures: design of timber structures and timber construction, and timber product technology.<br>5) Masonry structures: design of concrete structures and concrete construction, and design of masonry structures.<br>6) Composite structures: studies concerning the materials in question as required for difficult design tasks, and knowledge of the functioning of composite structures. |
| **Exceptionally difficult** | The designer has completed in the field of construction engineering or other appropriate field of engineering or technology:<br>- the qualification of *diplomi-insinööri* [Master of Science in Engineering or Technology]; |

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|---|---|
| | - the qualification of *insinööri (ylempi AMK)* [Master of Engineering]; or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification or studies supplementing the qualification have included studies relating to structural engineering and to the design and functioning of the structures in question to a total of at least 45 credits, including completed study units in the following (or equivalent) fields:<br>- structural mechanics and structural design;<br>- materials and manufacturing engineering; and materials models; and<br>- studies mentioned under the structural material in question[2)]:<br><br>1) Concrete structures: design of concrete structures and concrete construction, and design of prestressed structures.<br>2) Steel structures: design of steel structures and steel construction.<br>3) Aluminium structures: studies as for steel structures.<br>4) Timber structures: design of timber structures and timber construction, and timber product technology.<br>5) Masonry structures: design of concrete structures and concrete construction, and design of masonry structures.<br>6) Composite structures: studies concerning the materials in question as required for difficult design tasks and, for one material, as required for exceptionally difficult design tasks. |

[1)] Completed study units are given as credits in accordance with the European Credit Transfer System (ECTS). One credit is equal to 27 hours of work by the student. Where earlier completed study units are expressed as credit units, these are converted to credits by multiplying the credit units by 1.5.

[2)] The completed study units must include the studies concerning the structural materials in which the load-bearing structures of the building are going to be constructed.

*Annex 3*

Education requirements in design tasks concerning foundations

| **Difficulty class of design task** | **Education requirement** |
|---|---|
| **Conventional** | The designer has completed at least:<br>- the qualification of *teknikko* [technician] in construction engineering or production;<br>- the qualification of *tekniikan kandidaatti* [Bachelor of Science in Technology] (180 credits[1)]); or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification or studies supplementing the qualification have included studies relating to the design and functioning of foundations as well as structural engineering to a total of at least 30 credits, including completed study units in the following (or equivalent) fields:<br>- soil mechanics, foundations engineering and earthworks; and<br>- structural mechanics and structural design. |
| **Difficult and very difficult** | The designer has completed in the field of construction engineering or other appropriate field of engineering or technology:<br>- the qualification of *diplomi-insinööri* [Master of Science in Engineering or Technology];<br>- the qualification of *insinööri (ylempi AMK)* [Master of Engineering];<br>- the qualification of *insinööri (AMK)* [Bachelor of Engineering];<br>- the qualification of *rakennusinsinööri* [construction engineer]; or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification or studies supplementing the qualification have included studies relating to the design and functioning of foundations as well as structural engineering to a total of at least 40 credits, including completed study units in the following (or equivalent) fields:<br>- soil mechanics, foundations engineering and earthworks; and<br>- structural mechanics and structural design. |
| **Exceptionally difficult** | The designer has completed in the field of construction engineering or other appropriate field of engineering or technology:<br>- the qualification of *diplomi-insinööri* [Master of Science in Engineering or Technology];<br>- the qualification of *insinööri (ylempi AMK)* [Master of Engineering]; or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification or studies supplementing the qualification have included studies relating to the design and functioning of foundations as well as structural engineering to a total of at least 45 credits, including completed study units in the following (or equivalent) fields:<br>- soil mechanics, foundations engineering and earthworks; and<br>- structural mechanics and structural design. |

[1)] Completed study units are given as credits in accordance with the European Credit Transfer System (ECTS). One credit is equal to 27 hours of work by the student. Where earlier completed study units are expressed as credit units, these are converted to credits by multiplying the credit units by 1.5.

*Annex 4*

Education requirements in design tasks concerning rock structures

| **Difficulty class of design task** | **Education requirement** |
|---|---|
| **Conventional** | The designer has completed at least:<br>- the qualification of *teknikko* [technician] in construction engineering or production;<br>- the qualification of *tekniikan kandidaatti* [Bachelor of Science in Technology] (180 credits[1)]); or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification or studies supplementing the qualification have included studies relating to rock engineering and structural engineering to a total of at least 30 credits, including completed study units in the following (or equivalent) fields:<br>- rock engineering, rock mechanics and engineering geology; and<br>- structural engineering (a).<br><br>a) Structural engineering: strength of materials, concrete engineering, structural mechanics and design of concrete structures. |
| **Difficult and very difficult** | The designer has completed in the field of construction engineering or other appropriate field of engineering or technology:<br>- the qualification of *diplomi-insinööri* [Master of Science in Engineering or Technology];<br>- the qualification of *insinööri (ylempi AMK)* [Master of Engineering];<br>- the qualification of *insinööri (AMK)* [Bachelor of Engineering];<br>- the qualification of *rakennusinsinööri* [construction engineer]; or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification or studies supplementing the qualification have included studies relating to rock engineering and structural engineering to a total of at least 40 credits, including completed study units in the following (or equivalent) fields:<br>- rock engineering, rock mechanics and engineering geology; and<br>- structural engineering (a).<br><br>a) Structural engineering: strength of materials, concrete engineering, structural mechanics and design of concrete structures. |
| **Exceptionally difficult** | The designer has completed in the field of construction engineering or other appropriate field of engineering or technology:<br>- the qualification of *diplomi-insinööri* [Master of Science in Engineering or Technology];<br>- the qualification of *insinööri (ylempi AMK)* [Master of Engineering]; or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification or studies supplementing the qualification have included studies relating to rock engineering and structural engineering to a total of at least 45 credits, including completed study units in the following (or equivalent) fields:<br>- rock engineering, rock mechanics, engineering geology and soil mechanics; and<br>- structural engineering (a).<br>a) Structural engineering: Strength of materials, concrete engineering, structural mechanics and design of concrete structures. |

[1)] Completed study units are given as credits in accordance with the European Credit Transfer System (ECTS). One credit is equal to 27 hours of work by the student. Where earlier completed study units are expressed as credit units, these are converted to credits by multiplying the credit units by 1.5.

*Annex 5*

Education requirements in ventilation design tasks

| **Difficulty class of design task** | **Education requirement** |
|---|---|
| **Conventional** | The designer has completed at least:<br>- the qualification of *lvi-teknikko* [HVAC technician];<br>- the qualification of *tekniikan kandidaatti* [Bachelor of Science in Technology] (180 credits[1)]); or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification or studies supplementing the qualification have included studies relating to ventilation, air conditioning and other HVAC engineering to a total of at least 30 credits, including completed study units in the following (or equivalent) fields:<br>- ventilation and air conditioning engineering;<br>- heating and energy use engineering;<br>- control engineering;<br>- HVAC design; and<br>- HVAC system sizing and documentation.<br><br>At least 25 credits in the above-mentioned studies must be in heating, hydraulic, ventilation and cooling engineering. |
| **Difficult and very difficult** | The designer has completed in the field of construction engineering or other appropriate field of engineering or technology:<br>- the qualification of *diplomi-insinööri* [Master of Science in Engineering or Technology];<br>- the qualification of *insinööri (ylempi AMK)* [Master of Engineering];<br>- the qualification of *insinööri (AMK)* [Bachelor of Engineering];<br>- the qualification of *lvi-insinööri*, *rakennusinsinööri* or *konetekniikan insinööri* [engineer in HVAC, construction or mechanical engineering]; or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification or studies supplementing the qualification have included studies relating to ventilation, air conditioning and other HVAC engineering to a total of at least 40 credits, including completed study units in the following (or equivalent) fields:<br>- ventilation and air conditioning engineering and indoor climate conditions;<br>- heating and energy use engineering;<br>- cooling engineering;<br>- heat transfer and fluid mechanics;<br>- control engineering and building automation;<br>- HVAC design; and<br>- HVAC system sizing and documentation.<br><br>At least 30 credits in the above-mentioned studies must be in heating, hydraulic, ventilation and cooling engineering. |
| **Exceptionally difficult** | The designer has completed in the field of construction engineering or other appropriate field of engineering or technology:<br>- the qualification of *diplomi-insinööri* [Master of Science in Engineering or Technology];<br>- the qualification of *insinööri (ylempi AMK)* [Master of Engineering]; or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification or studies supplementing the qualification have included studies relating to ventilation, air conditioning and other HVAC |

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|---|---|
| | engineering to a total of at least 45 credits, including completed study units in the following (or equivalent) fields:<br>- ventilation and air conditioning engineering and indoor climate conditions;<br>- heating and energy use engineering;<br>- cooling engineering;<br>- heat transfer and fluid mechanics;<br>- control engineering and building automation;<br>- HVAC design; and<br>- HVAC system sizing and documentation.<br><br>At least 35 credits in the above-mentioned studies must be in heating, hydraulic, ventilation and cooling engineering. |

[1)] Completed study units are given as credits in accordance with the European Credit Transfer System (ECTS). One credit is equal to 27 hours of work by the student. Where earlier completed study units are expressed as credit units, these are converted to credits by multiplying the credit units by 1.5.

*Annex 6*

Education requirements in design tasks concerning the water supply and sewage system of a property

| **Difficulty class of design task** | **Education requirement** |
|---|---|
| **Conventional** | The designer has completed at least:<br>- the qualification of *lvi-teknikko* [HVAC technician];<br>- the qualification of *tekniikan kandidaatti* [Bachelor of Science in Technology] (180 credits[1)]); or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification or studies supplementing the qualification have included studies relating to water supply and sewage engineering and other HVAC engineering to a total of at least 30 credits, including completed study units in the following (or equivalent) fields:<br>- water supply and sewage engineering;<br>- heating and energy use engineering;<br>- control engineering;<br>- HVAC design; and<br>- HVAC system sizing and documentation.<br><br>At least 25 credits in the above-mentioned studies must be in heating, hydraulic, ventilation and cooling engineering. |
| **Difficult and very difficult** | The designer has completed in the field of construction engineering or other appropriate field of engineering or technology:<br>- the qualification of *diplomi-insinööri* [Master of Science in Engineering or Technology];<br>- the qualification of *insinööri (ylempi AMK)* [Master of Engineering];<br>- the qualification of *insinööri (AMK)* [Bachelor of Engineering];<br>- the qualification of *lvi-insinööri*, *rakennusinsinööri* or *konetekniikan insinööri* [engineer in HVAC, construction or mechanical engineering]; or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification or studies supplementing the qualification have included studies relating to water supply and sewage engineering and other HVAC engineering to a total of at least 40 credits, including completed study units in the following (or equivalent) fields:<br>- water supply and sewage engineering;<br>- heating and energy use engineering;<br>- heat transfer and fluid mechanics;<br>- control engineering and building automation;<br>- HVAC design; and<br>- HVAC system sizing and documentation.<br><br>At least 30 credits in the above-mentioned studies must be in heating, hydraulic, ventilation and cooling engineering. |
| **Exceptionally difficult** | The designer has completed in the field of construction engineering or other appropriate field of engineering or technology:<br>- the qualification of *diplomi-insinööri* [Master of Science in Engineering or Technology];<br>- the qualification of *insinööri (ylempi AMK)* [Master of Engineering]; or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification or studies supplementing the qualification have included studies relating to water supply and sewage engineering and |

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| | other HVAC engineering to a total of at least 45 credits, including completed study units in the following (or equivalent) fields:<br>- water supply and sewage engineering;<br>- heating and energy use engineering;<br>- heat transfer and fluid mechanics;<br>- control engineering and building automation;<br>- HVAC design; and<br>- HVAC system sizing and documentation.<br><br>At least 35 credits in the above-mentioned studies must be in heating, hydraulic, ventilation and cooling engineering. |

[1)] Completed study units are given as credits in accordance with the European Credit Transfer System (ECTS). One credit is equal to 27 hours of work by the student. Where earlier completed study units are expressed as credit units, these are converted to credits by multiplying the credit units by 1.5.

*Annex 7*

Education requirements in building physics design tasks

| **Difficulty class of design task** | **Education requirement** |
|---|---|
| **Conventional** | The designer has completed at least:<br>- the qualification of *teknikko* [technician] in construction engineering or construction production or mechanical engineering;<br>- the qualification of *tekniikan kandidaatti* [Bachelor of Science in Technology] (180 credits[1)]); or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification or studies supplementing the qualification have included studies relating to building physics as well as structural and materials engineering to a total of at least 20 credits, including completed study units in the following (or equivalent) fields:<br>- building physics;<br>- structural engineering and structural design;<br>- materials engineering; and<br>- building services systems.<br><br>Building physics: Transfer of heat and moisture in building structures, building pressure ratios and airtightness of structures, and the application of these in structural design. |
| **Difficult and very difficult** | The designer has completed in the field of construction engineering or other appropriate field of engineering or technology:<br>- the qualification of *diplomi-insinööri* [Master of Science in Engineering or Technology];<br>- the qualification of *insinööri (ylempi AMK)* [Master of Engineering];<br>- the qualification of *insinööri (AMK)* [Bachelor of Engineering];<br>- the qualification of *rakennusinsinööri* or *konetekniikan insinööri* [engineer in construction or mechanical engineering]; or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification or studies supplementing the qualification have included studies relating to building physics, structural and materials engineering and the field of building physics in question to a total of at least 30 credits, including completed study units in the following (or equivalent) fields:<br>- building physics;<br>- structural engineering and structural design;<br>- materials and manufacturing engineering;<br>- building services systems; and<br>- the studies listed under the field of building physics in question.<br><br>Building physics: Transfer of heat and moisture in building structures, building pressure ratios and airtightness of structures, and the application of these in structural design. |
| **Exceptionally difficult** | The designer has completed in the field of construction engineering or other appropriate field of engineering or technology:<br>- the qualification of *diplomi-insinööri* [Master of Science in Engineering or Technology];<br>- the qualification of *insinööri (ylempi AMK)* [Master of Engineering]; or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification or studies supplementing the qualification have included studies relating to building physics, structural and materials |

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|---|---|
| | engineering and the field of building physics in question to a total of at least 35 credits, including completed study units in the following (or equivalent) fields:<br>- building physics;<br>- structural engineering and structural design;<br>- materials and manufacturing engineering;<br>- building services systems; and<br>- the studies listed under the field of building physics in question.<br><br>Building physics: Transfer of heat and moisture in building structures, building pressure ratios and airtightness of structures, and the application of these in structural design. |

[1)] Completed study units are given as credits in accordance with the European Credit Transfer System (ECTS). One credit is equal to 27 hours of work by the student. Where earlier completed study units are expressed as credit units, these are converted to credits by multiplying the credit units by 1.5.

*Annex 8*

Education requirements in design tasks concerning moisture damage repair work

| **Difficulty class of design task** | **Education requirement** |
|---|---|
| **Conventional** | The designer has completed at least:<br>- the qualification of *teknikko* [technician] in the field of construction engineering or other appropriate field of technology:<br>- the qualification of *tekniikan kandidaatti* [Bachelor of Science in Technology] (180 credits[1)]); or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification or studies supplementing the qualification have included studies relating to building physics and to the design and functioning of the structures in question to a total of at least 20 credits, including completed study units in the following (or equivalent) fields:<br>- building physics (a);<br>- structural engineering and structural design;<br>- materials engineering;<br>- building services systems;<br>- indoor environmental conditions (b); and<br>- condition survey methods (c).<br><br>a) Building physics: transfer of heat and moisture in building structures, building pressure ratios and airtightness of structures, and the application of these in structural design.<br>b) Indoor environmental conditions: foundations of chemical and microbiological contaminants in indoor air.<br>c) Condition survey methods: inspection methods for chemical and microbiological contaminants in indoor air. |
| **Difficult and very difficult** | The designer has completed in the field of construction engineering or other appropriate field of engineering or technology:<br>- the qualification of *diplomi-insinööri* [Master of Science in Engineering or Technology];<br>- the qualification of *insinööri (ylempi AMK)* [Master of Engineering];<br>- the qualification of *insinööri (AMK)* [Bachelor of Engineering] or an appropriate qualification in engineering[2)]; or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification or studies supplementing the qualification have included studies relating to building physics, the design and functioning of the structures in question and repair construction to a total of at least 30 credits, including completed study units in the following (or equivalent) fields:<br>- building physics (a);<br>- structural engineering and structural design (including completed study units in repair construction);<br>- materials and manufacturing engineering;<br>- building services systems;<br>- indoor environmental conditions (b); and<br>- condition survey methods (c).<br><br>a) Building physics: transfer of heat and moisture in building structures, building pressure ratios and airtightness of structures, and the application of these in structural design.<br>b) Indoor environmental conditions: foundations of chemical and microbiological contaminants in indoor air.<br>c) Condition survey methods: inspection methods for chemical and microbiological contaminants in indoor air. |

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| **Exceptionally difficult** | The designer has completed in the field of construction engineering or other appropriate field of engineering or technology:<br>- the qualification of *diplomi-insinööri* [Master of Science in Engineering or Technology];<br>- the qualification of *insinööri (ylempi AMK)* [Master of Engineering][3]; or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification or studies supplementing the qualification have included studies relating to building physics, the design and functioning of the structures in question and repair construction to a total of at least 35 credits, including completed study units in the following (or equivalent) fields:<br>- building physics (a);<br>- structural engineering and structural design (including completed study units in repair construction);<br>- materials and manufacturing engineering;<br>- building services systems;<br>- indoor environmental conditions (b); and<br>- condition survey methods (c).<br><br>a) Building physics: transfer of heat and moisture in building structures, building pressure ratios and airtightness of structures, and the application of these in structural design.<br>b) Indoor environmental conditions: foundations of chemical and microbiological contaminants in indoor air.<br>c) Condition survey methods: inspection methods for chemical and microbiological contaminants in indoor air. |

[1] Completed study units are given as credits in accordance with the European Credit Transfer System (ECTS). One credit is equal to 27 hours of work by the student. Where earlier completed study units are expressed as credit units, these are converted to credits by multiplying the credit units by 1.5.

[2] The qualification of *arkkitehti* [Master of Science in Architecture], the qualification of *rakennusarkkitehti (AMK)* [Bachelor of Construction Architecture] and the qualification of *rakennusarkkitehti* [construction architect] are also regarded as equivalent to these qualifications.

[3] The qualification of *arkkitehti* [Master of Science in Architecture] is also regarded as equivalent to these qualifications.

*Annex 9*

Education requirements in acoustics design tasks

| **Difficulty class of design task** | **Education requirement** |
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| **Conventional** | The designer has completed at least:<br>- the qualification of *teknikko* [technician] in construction engineering or construction production or mechanical engineering;<br>- the qualification of *tekniikan kandidaatti* [Bachelor of Science in Technology] (180 credits[1)]); or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification or studies supplementing the qualification have included studies relating to acoustics, building physics, structural and materials engineering and the design and functioning of the structures in question to a total of at least 20 credits, including completed study units in the following (or equivalent) fields:<br>- acoustics;<br>- building physics;<br>- structural engineering and structural design;<br>- materials engineering; and<br>- building services systems.<br><br>The studies in acoustics include: acoustical and vibration engineering design of structures and buildings, building and room acoustics and noise abatement.<br>The studies in building physics include: transfer of heat and moisture in building structures, building pressure ratios and airtightness of structures, and the application of these in structural design. |
| **Difficult and very difficult** | The designer has completed in the field of construction engineering or other appropriate field of engineering or technology:<br>- the qualification of *diplomi-insinööri* [Master of Science in Engineering or Technology];<br>- the qualification of *insinööri (ylempi AMK)* [Master of Engineering];<br>- the qualification of *insinööri (AMK)* [Bachelor of Engineering];<br>- the qualification of *rakennusinsinööri* or *konetekniikan insinööri* [engineer in construction or mechanical engineering][2)]; or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification or studies supplementing the qualification have included studies relating to acoustics, building physics, structural and materials engineering and the design and functioning of the structures in question to a total of at least 30 credits, including completed study units in the following (or equivalent) fields:<br>- acoustics;<br>- building physics;<br>- structural engineering and structural design;<br>- materials and manufacturing engineering; and<br>- building services systems.<br><br>The studies in acoustics include: acoustical and vibration engineering design of structures and buildings, building and room acoustics and noise abatement.<br>The studies in building physics include: transfer of heat and moisture in building structures, building pressure ratios and airtightness of structures, and the application of these in structural design. |
| **Exceptionally difficult** | The designer has completed in the field of construction engineering or other appropriate field of engineering or technology: |

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| | - the qualification of *diplomi-insinööri* [Master of Science in Engineering or Technology];<br>- the qualification of *insinööri (ylempi AMK)* [Master of Engineering][3]; or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification or studies supplementing the qualification have included studies relating to acoustics, building physics, structural and materials engineering and the design and functioning of the structures in question to a total of at least 35 credits, including completed study units in the following (or equivalent) fields:<br>- acoustics;<br>- building physics;<br>- structural engineering and structural design;<br>- materials and manufacturing engineering; and<br>- building services systems.<br><br>The studies in acoustics include: acoustical and vibration engineering design of structures and buildings, building and room acoustics and noise abatement.<br>The studies in building physics include: transfer of heat and moisture in building structures, building pressure ratios and airtightness of structures, and the application of these in structural design. |

[1] Completed study units are given as credits in accordance with the European Credit Transfer System (ECTS). One credit is equal to 27 hours of work by the student. Where earlier completed study units are expressed as credit units, these are converted to credits by multiplying the credit units by 1.5.
[2] In acoustics design, the qualification of *arkkitehti* [Master of Science in Architecture], the qualification of *rakennusarkkitehti (AMK)* [Bachelor of Construction Architecture] and the qualification of *rakennusarkkitehti* [construction architect] are also regarded as equivalent to these qualifications.
[3] In acoustics design, the qualification of *arkkitehti* [Master of Science in Architecture] is also regarded as equivalent to these qualifications.

*Annex 10*

Education requirements in landscape construction design tasks

| **Difficulty class of design task** | **Education requirement** |
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| **Conventional** | The designer has completed at least:<br>- the qualification of *hortonomi* [horticulturist] (in park design or equivalent);<br>- the qualification of *tekniikan kandidaatti* [Bachelor of Science in Technology] (180 credits[1)]), majoring in landscape architecture, architecture or equivalent;<br>- the qualification of *rakennusarkkitehti* [construction architect]; or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification or studies supplementing the qualification have included studies in landscape construction design to a total of at least 90 credits, including completed study units in the following (or equivalent) fields:<br>- studies in landscape construction design and planting design;<br>- natural factors and knowledge of natural processes (ecology, climatology, hydrology); and<br>- technical studies (structural, infrastructure and geotechnical engineering). |
| **Difficult and very difficult** | The designer has completed:<br>- the qualification of *hortonomi (AMK)* [Bachelor of Natural Resources] (in design of built environment, park design or equivalent);<br>- the qualification of *maisema-arkkitehti* [Master of Science in Landscape Architecture]; or<br>- another qualification that is appropriate and equivalent to those listed above.<br><br>The qualification or studies supplementing the qualification have included studies in landscape construction design or building design and architecture to a total of at least 120 credits, including completed study units in the following (or equivalent) fields:<br>- studies in landscape construction design and planting design;<br>- natural factors and knowledge of natural processes (ecology, climatology, hydrology);<br>- technical studies (structural, infrastructure and geotechnical engineering);<br>- history and theory of landscape architecture, architecture and urban design;<br>- yard design; and<br>- design of public outdoor spaces. |
| **Exceptionally difficult** | The designer has completed:<br>- the qualification of *maisema-arkkitehti* [Master of Science in Landscape Architecture]; or<br>- another qualification that is appropriate and equivalent to that listed above.<br><br>The qualification or studies supplementing the qualification have included studies in landscape construction design to a total of at least 150 credits, including completed study units in the following (or equivalent) fields:<br>- studies in landscape construction design and planting design;<br>- natural factors and knowledge of natural processes (ecology, climatology, hydrology);<br>- technical studies (structural, infrastructure and geotechnical engineering); |

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|---|---|
| | - history and theory of landscape architecture, architecture and urban design;<br>- yard design;<br>- design of public outdoor spaces; and<br>- urban design. |

[1)] Completed study units are given as credits in accordance with the European Credit Transfer System (ECTS). One credit is equal to 27 hours of work by the student. Where earlier completed study units are expressed as credit units, these are converted to credits by multiplying the credit units by 1.5.

*Annex 11*

Education requirements in a site manager's management tasks

| **Difficulty class of management task** | **Education requirement** |
|---|---|
| **Conventional** | The site manager has completed a qualification in construction or engineering appropriate for the task that is:<br>- the qualification of *rakennusmestari (AMK)* [Bachelor of Construction Management];<br>- the qualification of *insinööri (AMK)* [Bachelor of Engineering];<br>- an earlier qualification of *rakennusinsinööri* [construction engineer] appropriate for the management task in question;<br>- the qualification of *teknikko (rakennusmestari)* [technician (construction manager)]; or<br>- another master's degree in construction or engineering.<br><br>The qualification or studies supplementing the qualification have included sufficient completed study units concerning the management task in question, totalling at least 50 credits[1)] and including completed study units in the following (or equivalent) fields:<br>- studies in construction engineering including structural mechanics, concrete, timber, steel and foundations construction and concrete engineering as well as building physics; and<br>- construction site practices and production engineering, project management and leadership, scheduling and project economy.<br><br>Or the manager has acquired corresponding knowledge demonstrated in another manner by completing one of the following:<br>- *rakennusalan työmaajohdon erikoisammattitutkinto työmaapäällikön osaamisala (EAT)* [Specialist Vocational Qualification for Construction Site Managers in the Competence Area of Supervision of Work at a Construction Site];<br>- *rakennusalan työmaajohdon erikoisammattitutkinto rakennustyömaan työnjohdon osaamisala (EAT)* [Specialist Vocational Qualification for Construction Site Managers in the Competence Area for Construction Site Managers];<br>- *rakennusalan työmaapäällikön erikoisammattitutkinto* [Specialist Vocational Qualification in Supervision of Work at a Construction Site]; or<br>- *rakennustuotannon erikoisammattitutkinto* [Specialist Vocational Qualification in Construction Product Industry] or an equivalent earlier vocational qualification in construction production. |
| **Difficult and very difficult** | The site manager has completed a qualification in construction or engineering appropriate for the task that is:<br>- the qualification of *rakennusmestari (AMK)* [Bachelor of Construction Management];<br>- the qualification of *insinööri (AMK)* [Bachelor of Engineering];<br>- an earlier qualification of *rakennusinsinööri* [construction engineer] appropriate for the management task in question;<br>- the qualification of *teknikko (rakennusmestari)* [technician (construction manager)]; or<br>- another master's degree in construction or engineering.<br><br>The qualification or studies supplementing the qualification have included sufficient completed study units concerning the management task in question, totalling at least 60 credits and including completed study units in the following (or equivalent) fields:<br>- studies in construction engineering including structural mechanics, concrete, timber, steel and foundations construction and concrete engineering as well as building physics; and |

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| | - construction site practices and production engineering, project management and leadership, scheduling and project economy.<br><br>In repair and alteration work management tasks, the requirement is that the manager has also completed studies in repair construction. |
| **Exceptionally difficult** | The site manager has completed a qualification in construction or engineering appropriate for the task that is:<br>- the qualification of *rakennusmestari (AMK)* [Bachelor of Construction Management];<br>- the qualification of *insinööri (AMK)* [Bachelor of Engineering]; or<br>- another master's degree in construction or engineering.<br><br>The qualification or studies supplementing the qualification have included sufficient completed study units concerning the management task in question, totalling at least 70 credits and including completed study units in the following (or equivalent) fields:<br>- studies in construction engineering including structural mechanics, concrete, timber, steel and foundations construction and concrete engineering as well as building physics; and<br>- construction site practices and production engineering, project management and leadership, scheduling and project economy.<br><br>In repair and alteration work management tasks, the requirement is that the manager has also completed studies in repair construction. |

[1)] Completed study units are given as credits in accordance with the European Credit Transfer System (ECTS). One credit is equal to 27 hours of work by the student. Where earlier completed study units are expressed as credit units, these are converted to credits by multiplying the credit units by 1.5.

*Annex 12*

Education requirements in a WSS foreman's management tasks

| **Difficulty class of management task** | **Education requirement** |
|---|---|
| **Conventional** | The foreman has completed a qualification in construction or engineering appropriate for the task that is:<br>- the qualification of *rakennusmestari (AMK)* [Bachelor of Construction Management] in HVAC engineering;<br>- the qualification of *insinööri (AMK)* [Bachelor of Engineering];<br>- an earlier qualification of *lvi-insinööri* [HVAC engineer] appropriate for the management task in question;<br>- the qualification of *lvi-teknikko* [HVAC technician]; or<br>- another master's degree in construction or engineering.<br><br>The qualification or studies supplementing the qualification have included sufficient completed study units in HVAC engineering concerning the management task in question, totalling at least 50 credits[1). ] At least 20 credits in the studies must be in heating, hydraulic, ventilation and cooling engineering.<br><br>Or the foreman has acquired corresponding knowledge demonstrated in another manner by completing one of the following:<br>- *talotekniikan perustutkinto* or *ammattitutkinto putkiasennuksen osaamisala* [Vocational or Further Vocational Qualification in Building Maintenance Technology in the Competence Area of Plumbing, Pipe Fitter];<br>- *talotekniikan erikoisammattitutkinto talotekniikkaurakoinnin osaamisala, putkiasentaja (EAT)* [Specialist Vocational Qualification in Building Maintenance Technology in the Competence Area of Building Services Contracting, Pipe Fitter];<br>- *putkiasentajan ammatillinen perustutkinto* or *ammattitutkinto* [Vocational or Further Vocational Qualification of Pipe Fitter];<br>- *putkiasentajan erikoisammattitutkinto* [Specialist Vocational Qualification of Pipe Fitter]; or<br>- the qualification of *lvi-työteknikko* [Technical Training Programme in HVAC]. |
| **Difficult** | The foreman has completed a qualification in construction or engineering appropriate for the task that is:<br>- the qualification of *rakennusmestari (AMK)* [Bachelor of Construction Management] in HVAC engineering;<br>- the qualification of *insinööri (AMK)* [Bachelor of Engineering];<br>- an earlier qualification of *lvi-insinööri* [HVAC engineer] appropriate for the management task in question;<br>- the qualification of *lvi-teknikko* [HVAC technician]; or<br>- another master's degree in construction or engineering.<br><br>The qualification or studies supplementing the qualification have included sufficient completed study units in HVAC engineering concerning the management task in question, totalling at least 60 credits. At least 25 credits in the studies must be in heating, hydraulic, ventilation and cooling engineering.<br><br>Or the foreman has acquired corresponding knowledge demonstrated in another manner by completing one of the following:<br>- *talotekniikan erikoisammattitutkinto talotekniikkaurakoinnin osaamisala, putkiasentaja (EAT)* [Specialist Vocational Qualification in Building Maintenance Technology in the Competence Area of Building Services Contracting, Pipe Fitter];<br>- *putkiasentajan erikoisammattitutkinto* [Specialist Vocational Qualification of Pipe Fitter]; or |

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| | - the qualification of *lvi-työteknikko* [Technical Training Programme in HVAC].<br><br>In repair and alteration work management tasks, the requirement is that the foreman has also completed studies in repair construction. |
| **Very difficult** | The foreman has completed a qualification in construction or engineering appropriate for the task that is:<br>- the qualification of *rakennusmestari (AMK)* [Bachelor of Construction Management] in HVAC engineering;<br>- the qualification of *insinööri (AMK)* [Bachelor of Engineering];<br>- an earlier qualification of *lvi-insinööri* [HVAC engineer] appropriate for the management task in question;<br>- the qualification of *lvi-teknikko* [HVAC technician]; or<br>- another master's degree in construction or engineering.<br><br>The qualification or studies supplementing the qualification have included sufficient completed study units in HVAC engineering concerning the management task in question, totalling at least 60 credits. At least 25 credits in the studies must be in heating, hydraulic, ventilation and cooling engineering.<br><br>In repair and alteration work management tasks, the requirement is that the foreman has also completed studies in repair construction. |
| **Exceptionally difficult** | The foreman has completed a qualification in construction or engineering appropriate for the task that is:<br>- the qualification of *rakennusmestari (AMK)* [Bachelor of Construction Management] in HVAC engineering;<br>- the qualification of *insinööri (AMK)* [Bachelor of Engineering]; or<br>- another master's degree in construction or engineering.<br><br>The qualification or studies supplementing the qualification have included sufficient completed study units in HVAC engineering concerning the management task in question, totalling at least 70 credits. At least 30 credits in the studies must be in heating, hydraulic, ventilation and cooling engineering.<br><br>In repair and alteration work management tasks, the requirement is that the foreman has also completed studies in repair construction. |

[1)] Completed study units are given as credits in accordance with the European Credit Transfer System (ECTS). One credit is equal to 27 hours of work by the student. Where earlier completed study units are expressed as credit units, these are converted to credits by multiplying the credit units by 1.5.

*Annex 13*

Education requirements in a VS foreman's management tasks

| **Difficulty class of management task** | **Education requirement** |
|---|---|
| **Conventional** | The foreman has completed a qualification in construction or engineering appropriate for the task that is:<br>- the qualification of *rakennusmestari (AMK)* [Bachelor of Construction Management] in HVAC engineering;<br>- the qualification of *insinööri (AMK)* [Bachelor of Engineering];<br>- an earlier qualification of *lvi-insinööri* [HVAC engineer] appropriate for the management task in question;<br>- the qualification of *lvi-teknikko* [HVAC technician]; or<br>- another master's degree in construction or engineering.<br><br>The qualification or studies supplementing the qualification have included sufficient completed study units in HVAC engineering concerning the management task in question, totalling at least 50 credits[1). ] At least 20 credits in the studies must be in heating, hydraulic, ventilation and cooling engineering.<br><br>Or the foreman has acquired corresponding knowledge demonstrated in another manner by completing one of the following:<br>- *talotekniikan perus- tai ammattitutkinto ilmanvaihtoasennuksen osaamisala* [Vocational or Further Vocational Qualification in Building Maintenance Technology in the Competence Area of Ventilation Fitter];<br>- *talotekniikan erikoisammattitutkinto talotekniikkaurakoinnin osaamisala, ilmanvaihtoasentaja (EAT)* [Specialist Vocational Qualification in Building Maintenance Technology in the Competence Area of Building Services Contracting, Ventilation Fitter];<br>- *ilmanvaihtoasentajan ammatillinen perustutkinto* or *ammattitutkinto* [Vocational or Further Vocational Qualification of Ventilation Fitter];<br>- *ilmanvaihtoasentajan erikoisammattitutkinto* [Specialist Vocational Qualification of Ventilation Fitter]; or<br>- the qualification of *lvi-työteknikko* [Technical Training Programme in HVAC]. |
| **Difficult** | The foreman has completed a qualification in construction or engineering appropriate for the task that is:<br>- the qualification of *rakennusmestari (AMK)* [Bachelor of Construction Management] in HVAC engineering;<br>- the qualification of *insinööri (AMK)* [Bachelor of Engineering];<br>- an earlier qualification of *lvi-insinööri* [HVAC engineer] appropriate for the management task in question;<br>- the qualification of *lvi-teknikko* [HVAC technician]; or<br>- another master's degree in construction or engineering.<br><br>The qualification or studies supplementing the qualification have included sufficient completed study units in HVAC engineering concerning the management task in question, totalling at least 60 credits. At least 25 credits in the studies must be in heating, hydraulic, ventilation and cooling engineering.<br><br>Or the foreman has acquired corresponding knowledge demonstrated in another manner by completing one of the following:<br>- *talotekniikan erikoisammattitutkinto talotekniikkaurakoinnin osaamisala, ilmanvaihtoasentaja (EAT)* [Specialist Vocational Qualification in Building Maintenance Technology in the |

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| | Competence Area of Building Services Contracting, Ventilation Fitter];<br>- *ilmanvaihtoasentajan erikoisammattitutkinto* [Specialist Vocational Qualification of Ventilation Fitter]; or<br>- the qualification of *lvi-työteknikko* [Technical Training Programme in HVAC].<br><br>In repair and alteration work management tasks, the requirement is that the foreman has also completed studies in repair construction. |
| **Very difficult** | The foreman has completed a qualification in construction or engineering appropriate for the task that is:<br>- the qualification of *rakennusmestari (AMK)* [Bachelor of Construction Management] in HVAC engineering;<br>- the qualification of *insinööri (AMK)* [Bachelor of Engineering];<br>- an earlier qualification of *lvi-insinööri* [HVAC engineer] appropriate for the management task in question;<br>- the qualification of *lvi-teknikko* [HVAC technician]; or<br>- another master's degree in construction or engineering.<br><br>The qualification or studies supplementing the qualification have included sufficient completed study units in HVAC engineering concerning the management task in question, totalling at least 60 credits. At least 25 credits in the studies must be in heating, hydraulic, ventilation and cooling engineering.<br><br>In repair and alteration work management tasks, the requirement is that foreman has also completed studies in repair construction. |
| **Exceptionally difficult** | The foreman has completed a qualification in construction or engineering appropriate for the task that is:<br>- the qualification of *rakennusmestari (AMK)* [Bachelor of Construction Management] in HVAC engineering;<br>- the qualification of *insinööri (AMK)* [Bachelor of Engineering];<br>- another master's degree in construction or engineering.<br><br>The qualification or studies supplementing the qualification have included sufficient completed study units in HVAC engineering concerning the management task in question, totalling at least 70 credits. At least 30 credits in the studies must be in heating, hydraulic, ventilation and cooling engineering.<br><br>In repair and alteration work management tasks, the requirement is that the foreman has also completed studies in repair construction. |

[1)] Completed study units are given as credits in accordance with the European Credit Transfer System (ECTS). One credit is equal to 27 hours of work by the student. Where earlier completed study units are expressed as credit units, these are converted to credits by multiplying the credit units by 1.5.