



HIKLU

Installation of a public authority network and communications service in buildings

Use: For use by external customers and the rescue department

Area of use: City of Helsinki, areas of the rescue departments of Eastern Uusimaa, Central Uusimaa and Western Uusimaa

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1 Legislation

The area's rescue authority may order the owner of the building or structure to acquire the equipment necessary for ensuring the usability of the public authority network and communications service (authority communications service) related to the authority's communications to its building or structure and to maintain the equipment in working order. The prerequisite for issuing the order is that the availability of the public authority network or the authority communications service referred to in Section 250(1) of the Act on Electronic Communications Services in the building or structure in question with a higher personal safety risk than usual is prevented due to a structural reason arising from the building or structure, and the availability of the public authority network or the authority communications service is not sufficient for the proper performance of rescue operations. (Rescue Act 379/2011, Section 109 (15 July 2021/739))

The owner of the building is obliged to keep the equipment and devices required by the Rescue Act or prescribed by the authorities operational, as well as to maintain and inspect the equipment and devices appropriately (Rescue Act 379/2011, Section 12).

2 Premises for which a public authority network and communications service is required

The coverage of the public authority network (Virve tetra) and the authority communications service (Virve 2 broadband) must be ensured in buildings and structures with *a higher than normal risk to personal safety*. The rescue authority of the area shall order the owner of a particular building or structure to examine coverage if it considers that the requirements of Section 109 of the Rescue Act (379/2011) are met.

Needs assessment should be carried out on the following premises, for example:

- 1) Taller and larger buildings than usual



- Buildings where the distance between the entrance level and the floor level of the top floor is more than 38 metres
 - Meeting and business premises as well as workplace premises:
 - o the number of people is more than 500 or
 - o the size of the largest fire compartment in the building is larger than the maximum area of the fire compartment without automatic fire extinguishing equipment or a fire alarm connected to the Emergency Response Centre, as set out in Section 15 of Decree 848/2017.
 - Industrial and warehouse buildings; the size of the largest fire compartment in the building is larger than the maximum area of the fire compartment without automatic fire extinguishing equipment or fire alarm connected to the Emergency Response Centre, as set out in Section 15 of Decree 848/2017.
- 2) Premises where the intended use and a larger number of people pose a higher personal safety risk than usual
- Accommodation facilities with accommodation for more than 50 people
 - Care facilities, such as hospitals and care homes with more than 25 beds
 - Prisons
 - Schools with more than 500 pupils
 - 24/7 daycare centres with more than 50 beds
- 3) Underground facilities
- Underground facilities below the first basement floor that is mainly or entirely under the ground
 - The facilities of the first basement floor, in which:
 - o the size of the largest fire compartment is larger than the maximum area of the fire compartment without automatic fire extinguishing equipment or a fire alarm connected to the Emergency Response Centre, as set out in Section 15 of Decree 848/2017, or
 - o the labyrinthine nature of the facilities slows down the effective execution of fire-fighting and rescue operations.



- Extensive underground facilities and tunnels (facilities for road traffic, metro, etc.)

4) In addition,

- Places critical to infrastructure maintenance
- In industrial and warehouse buildings, if the activity belongs to fire hazard class II
- In buildings where the unsafe nature of the activity itself poses a greater personal safety risk than usual in the event of an accident or fire
- On a site-by-site basis, when the preconditions of Section 109 of the Rescue Act (379/2011) are met, if required by preconditions for rescue operations, for example, as justified by:
 - o a large number of people or
 - o poor opportunities for unassisted exiting or long distances to exits, or
 - o large, labyrinthine and difficult to perceive properties.

3 Ensuring the coverage of the public authority network and communications service in the building

3.1 Needs assessment form and floor plans

In the case of Virve and Virve 2, a coverage needs assessment must be defined with a separate form with the rescue authority of the area (The link to the needs assessment form can be found in the section More information).

The owner of the building or their representative shall pre-complete and sign the needs assessment form and mark on the building floor plans the areas that must be covered by Virve and Virve 2. The coverage areas are set out in Section 3.2 of these instructions.

After this, the needs assessment form and floor plans are reviewed with the rescue authority of the area and the form and floor plans are finalised. The area's rescue authority will sign the needs assessment form when it is acceptable.

Virve / Virve 2 process

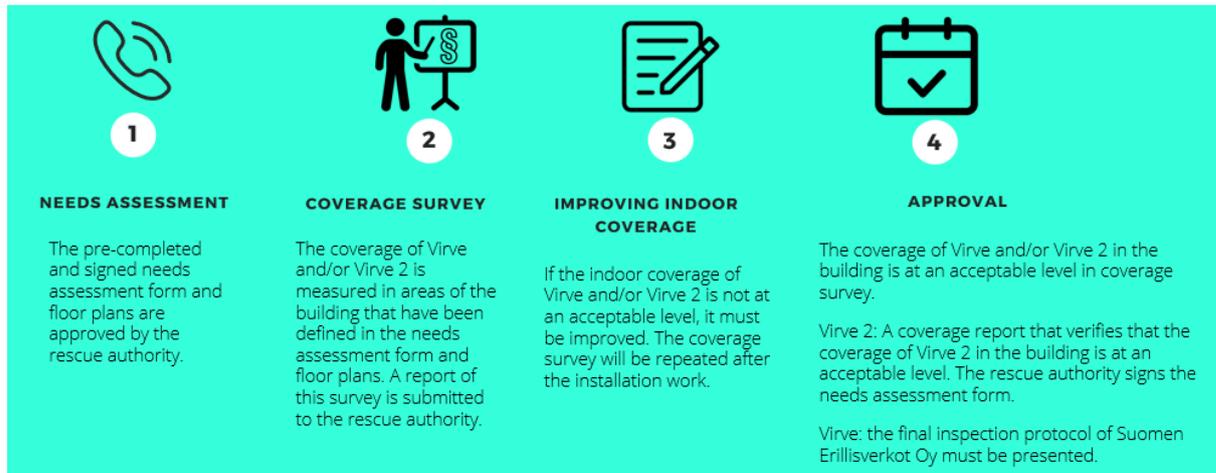


Figure 1 Virve / Virve 2 process

3.2 Coverage areas in buildings

In particular, the coverage of Virve and Virve 2 must be ensured in:

- the main premises of the building,
- underground facilities,
- access routes, exit routes and staircases,
- extinguishing and attack passages,
- lifts for rescue and firefighting operations,
- fire alarm, sprinkler and smoke extraction centres, as well as access routes leading to these,
- the facility's security control rooms, and
- on premises with rescue equipment.

3.3 Coverage survey

Next, a coverage survey is carried out in the building, i.e. the indoor coverage of Virve and Virve 2 is measured in areas that have been defined in the needs assessment form's floor plans. A report of this survey is submitted to the rescue authority of the area. If the coverage of Virve and/or Virve 2 in the building is at an acceptable level, the rescue authority of the area will sign the needs



assessment form to confirm that the coverage of Virve and/or Virve 2 in the building is at an acceptable level.

3.4 Improving indoor coverage

If the indoor coverage of Virve and/or Virve 2 is not at an acceptable level, it must be improved. When the internal network of Virve and/or Virve 2 has been built, the coverage survey must be repeated. A report is prepared from the coverage survey, which shows that the coverage of Virve and/or Virve 2 in the building is at an acceptable level. The rescue authority of the area signs the needs assessment form when the coverage of Virve 2 in the building is at an acceptable level.

In connection with the commissioning of Virve in the building, a final inspection protocol from Suomen Erillisverkot Oy must be presented about Virve's functionality, confirming that the installation work has been carried out in accordance with the needs assessment and Suomen Erillisverkot Oy accepts the repeater for connection to the public authority network.

3.5 Verification of power supply to Virve and Virve 2

The supply of power to Virve and Virve 2 must be verified for at least three hours or at least six hours in extensive underground facilities.

3.6 Maintaining the operability of indoor coverage

The owner of the building is responsible for maintaining the operability of indoor coverage and the redundancy of electricity supply. The indoor coverage of Virve and Virve 2 must be ensured by means of a frequency survey conducted regularly every five years. Batteries securing power supply must be tested, serviced and maintained in accordance with the manufacturer's instructions, but at least once a year.



Sources

Rescue Act 379/2011

Decree of the Ministry of the Environment on the Fire Safety of Buildings
848/2017

Decree of the Ministry of the Environment on amending the Decree of the
Ministry of the Environment on the Fire Safety of Buildings 927/2020

Additional information

[Erillisverkot Oy's instructions for the construction of the internal network and the needs assessment form](#)

[Erillisverkot Oy](#)