

Unofficial translation.

Legally binding only in Finnish and Swedish

2/17

Decree of the Ministry of the Environment

on Amending the Decree of the Ministry of the Environment on Improving the Energy Performance of Buildings Undergoing Renovation or Alteration

By decision of the Ministry of the Environment, section 1, subsection 2 of the Decree of the Ministry of the Environment on Improving the Energy Performance of Buildings Undergoing Renovation or Alteration (regulations of the Ministry of the Environment 4/13) is *repealed*, section 2(1) and (3) and section 5 are *amended* and a new section 1a is *added* as follows:

Section 1a

Technical, economic and functional feasibility

A technically feasible solution improving the energy performance of a building undergoing renovation or alteration is a solution that is designed and implemented so that characteristics in accordance with sections 117a–117g of the Land Use and Building Act or in accordance with requirements laid down under those sections are not impaired compared with the existing design solution. A functionally feasible solution is one that does not result in the use of the building for its intended use being prevented. An economically feasible solution is a solution that on the basis of examination can be implemented cost-effectively.

For economic feasibility, the examination period shall be 30 years for residential buildings and 20 years for other buildings if the normal lifecycle of the building element or system or its part is not less than this.

Section 2

Planning for energy performance improvements

The Decree of the Ministry of the Environment on the Energy Performance of Buildings (National Building Code of Finland 2/11) shall apply to energy calculations, choice of calculation tool and presentation of results in renovation or alteration work on or change of intended use of a building.

In conjunction with the planning required for a permit relating to a renovation or alteration project, the party engaging in the project must submit the measures intended to be taken to improve the building's energy performance specifically to building elements, systems or to the entire building in accordance with the size of the project and the method decided by the party. A renovation is major where the total cost, based on the cost of reconstruction, of the renovation relating to the building envelope or the technical building systems is higher than 25% of the value of the building, excluding the value of the land upon which the building is situated. For major renovations, the party engaging in the project shall demonstrate that the selected measures are at a cost-optimal level.

Section 5

Requirements for technical systems

When renovating, renewing or replacing technical building systems, the following requirements shall be complied with:

1) The quantity of heat that shall be recovered from extract air in the ventilation system is a quantity of heat corresponding to at least 45% of the quantity of heat required for the heating of ventilation, that is, the annual efficiency of heat recovery shall be at least 45%.

2) The specific fan power of a mechanical supply and extract ventilation system may be a maximum of 2.0 kW/(m³/s).

3) The specific fan power of a mechanical extract ventilation system may be a maximum of 1.0 kW/(m³/s).

4) The specific fan power of a ventilation system may be a maximum of 2.5 kW/(m³/s).

5) The efficiency of heating systems shall be improved insofar as any equipment and systems are renewed. Following renewal, the ratio of the efficiency of the building's primary heat generation system to the efficiency of the primary space heating distribution system shall be at least 0.8. The ratio shall be calculated as the quotient of the annual efficiencies of the primary heat generation system and the primary space heating distribution system. The annual efficiency of the primary heat generation system or the primary space heating distribution system shall be at least 0.73. Where a building's renewed primary heat generation system is a heat pump, the ratio of the heat pump's Seasonal Performance Factor (SPF) to the annual efficiency of the primary space heating distribution system shall be at least 2.4. The ratio shall be calculated as the quotient of the heat pump's SPF and the annual efficiency of the primary space heating distribution system. The specific electrical energy consumption of auxiliary units of a renewed primary space heating distribution system may be a maximum of 2.5 kWh/net m² (per net heated area).

6) The provisions laid down concerning new buildings apply to the renewal of water and/or sewage systems.

This Decree enters into force on 1 June 2017.

Helsinki, 12 May 2017

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