



Guiding Technical Material – Norms and Instructions

Guidelines and norms for fuel and heat energy consumption for heating residential and public buildings, as well as household needs in Ukraine

MAIN PROVISIONS OF KTM 204 UKRAINE 244-94

GUIDELINES AND NORMS ARE INTENDED FOR:

- Planning the needs for heat and fuel for heating, ventilation, and hot water supply of residential and public buildings, as well as for household needs.
- Formation of applications for fuel by heat supply organizations and determination of the required amount of fuel for sale to the population.
- Determining the amount of heat energy supplied by heat supply organizations to consumers who temporarily lack metering devices for commercial and other calculations.

!!! *The guidelines and norms are developed according to: "Main Provisions for Standardizing Fuel, Heat and Electric Energy Consumption in the National Economy", approved by the resolution of the State Planning Committee of the USSR dated December 17, 1979, No. 199 "Methodological Recommendations for Standardizing the Consumption of Boiler and Furnace Fuel for the Release of Heat Energy by Boilers", NII PNiN at the State Planning Committee of the USSR, 1981 "Methodological Guidelines for Determining Fuel, Electricity and Water Consumption for Heat Production by Heating Boilers of Municipal Heat and Power Enterprises", AKH named after K.D. Pamfilova RSFSR, 1987 "Instructions for Standardizing the Consumption of Boiler and Furnace Fuel for the Release of Heat Energy by Boiler Systems of the Ministry of Housing and Communal Services of the RSFSR", AKH named after K.D. Pamfilova, 1984 "Methodological Recommendations for Standardizing Heat Energy Consumption for Building Heating", NII PNiN at the State Planning Committee of the USSR, 1984 "Methodological Recommendations for Standardizing Heat Energy and Fuel Consumption in Housing and Communal Services", VNIITEP at the State Planning Committee of the USSR, 1987 "Methodological Guidelines for Standardizing Fuel Consumption for the Production and Release of Heat by Boilers of the Heat Economy of the Ministry of Housing and Communal Services of the Ukrainian SSR", RDMT 204 Ukrainian SSR 050-85, UkrNII Engineering Project, 1986 Using SNiP 2.04.07-86 "Heat Networks", SNiP 2.01.01-82 "Construction Climatology and Geophysics", SNiP 2.04.08-87 "Gas Supply", SNiP 2.04.01-85 "Internal Water Supply and Sewerage of Buildings", etc.*

CONTENTS OF KTM 204-44:

1. General Provisions.
 2. Standardization of Heat Consumption for Heating, Ventilation, and Hot Water Supply of Residential and Public Buildings.
 - 2.1. Heat Balance of Boilers.
 - 2.2. Standardization of Heat Consumption for Heating Residential and Public Buildings.
 - 2.3. Standardization of Heat Consumption for Ventilation of Public Buildings.
 - 2.4. Standardization of Heat Consumption for Hot Water Supply of Residential and Public Buildings.
 3. Calculation of Heat Losses.
 - 3.1. Determination of Heat Losses in Heat Networks.
 - 3.2. Determination of Heat Losses in Internal Pipelines of Boilers.
 4. Determination of Heat Consumption for Own Needs of Boilers.
 5. Determination of the Amount of Fuel Spent on Heat Production.
 6. Norms of Heat and Fuel Consumption for Household Needs.
 7. Determination of Heat and Fuel Consumption for Heating, Hot Water Supply of Residential and Public Buildings, as well as for Household and Communal Needs Using Consumption Norms of This Type of Resources
- APPENDICES:** Basic Climatic Data and Coefficients for Calculating Heat Consumption for Heating, Ventilation, and Hot Water Supply of Residential and Public Buildings, etc.

REASONS FOR THE OBSOLESCENCE OF KTM 204-44

1. Energy Efficiency and Technologies:

- New materials and methods of construction;
- Increasing thermal insulation standards.

2. Changes in Climate Conditions:

- Adaptation to new climatic challenges;
- The need for more accurate use of resources.

3. International Standards (including EU Directives):

- Non-compliance with modern international requirements;
- The need for integration with European norms.

4. Changes in Ukrainian Legislation:

- Requirements of new legislative acts
- Updating standards to meet modern requirements



NEED FOR NEW DEVELOPMENT OF KTM 204-44

Adaptations to modern technologies:

- Implementation of the latest methods and materials.
- Increasing the energy efficiency of buildings.

Compliance with modern requirements of Ukraine:

- Compliance with standards.
- Harmonization with national building codes.

Compliance with international standards:

- Integration with European norms.
- Harmonization with European technical standards.

Environmental protection:

- Reduction of greenhouse gas emissions.
- Rational use of energy resources.

