

Title of the measure:	<i>LT1–Thermal techniques of building enclosures during 1992–1999</i>
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General description

The standard regulates the thermal technical designing of building enclosures (thermal insulation) in the buildings where the temperature inside during the heating season is kept higher than outside. The requirements of the above-mentioned standard are applied to new constructed buildings or renovated ones.

The envelopes of building have to be designed insomuch that the average value of U coefficient would be equal or less than the required ones.

Table 1. U – values of exterior building elements

Building element	Indoor temperature (T) and heat transfer coefficient (W/m ² * K)		
	T ≥ 18° C	T = 10–17° C	T = 5–9° C
External walls	0,30	0,42	0,50
Windows	1,90	2,80	–
External doors	2,00	3,30	–
Roofs	0,25	0,31	–
Floor on ground	0,30	–	–
Floor above unheated cellar	0,75	–	–

Impact evaluation

Implementation of new standard allowed decreasing energy consumption in the new constructed buildings by 40–45% in average compared to consumptions of buildings constructed according to the former Soviet Union’s Norms.

Interaction of measures

This measure does not overlap with other measures.

Historical data

The standard “Thermal Techniques of Building Enclosures” (RSN 143-92) came into force on 1 September 1992 and was valid up to 1 June 1999. The following table shows the changes of heat transmission coefficient (U) from the ones used in the former Soviet Union. The dynamics of U – values are shown in the table below.

Table 2. Comparison U – values of some exterior building elements in dwellings and public houses

	External wall	Window	Roof	Floor on the ground
Standards in the former USSR	0,9	2,6-3,0	0,8-1,0	–
RSN 143-92	0,3	1,9	0,31	0,3

References

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