

Comparative table of the estimated cost of installing thermal insulation on the example of the use of mineral wool boards and ultra-thin thermal insulation Bronya (economic justification).

Calculations were made for a panel house in operation. Insulated area - 100 m2.

The calculation was made for the 3rd floor of the building, i.e. estimated cost for each insulation option will proportionally increase with the increase in the height of the work performed.

The calculation was made for mineral wool in the middle price category.

The cost of work and materials was taken on the basis of the Prices for facade work of the Moscow union of roofers.

		Estim	ated cost		
	Mineral wool slabs	5	Bronya		
Name of work and costs	Quantity	General price, rub.	Name of work and costs	Quantity	General price, rub.
1. Installation mineral wool boards (100 mm)	100 m ² (10 m ³)	98 484,00	1. Surface cleaning brushes, dedusting surface	100 m ²	5 500,00
2. Installation plaster mesh	100 m ²	44 200,00	2. Primer concrete surfaces ground - "Bronya Universal"	100 m ²	9 204,00
3. Application plasters	100 m ²	43 470,00	3. Painting the facade with superfine forests thermal insulation "Bronya" (2 layers, total 2 mm thick)	100 m ²	77 030,00
Painting the walls	100 m ²	14 979,69			
incl. auxiliary materials:			incl. auxiliary materials:		
Mineral wool (0.041 W / (m * °C)	100 m ²	55 000,00	Primer "Bronya Universal "	20	2 204,00
Anchor	600 PCS	5 484,00	Super thin thermal insulation Bronya "Facade NG"	110	52 030,00
Bolars plaster Bark beetle	350 Kg	8 470,00	-	-	-

Glass mesh 5x5	108 m ²	4 200,00	-	-	-
mm Water-based	38 kg	2 479,69	-	-	-
paints					
incl. labor costs:			incl. labor costs:		
Labor resources	man-hours	149,36	Labor resources	man-hours	20,9
Construction	machine-hours	3	Construction	machine-hours	0,05
cars			machines		
Total:		201 133,69	Total:		91 734,00
VAT:	20%	40 226,74	VAT:	20%	18 346,8
TOTAL:		241 360,43	TOTAL:		110 080,0
Cost of 1 m ²		2 413,60	Cost of 1 m ²		1 100,80

Prices are for 2019

Output:

when using an ultra-thin heat insulator Bronya, we get the following savings:

- labor force by 128.46 man-hours (86% less);
- construction machines by 2.95 mash-hours (98.3% less);
- materials for 213.99 rubles / m² (28.3% cheaper);
- the total estimated cost of work by 1,312.8 rubles / m² (54.4% cheaper).

