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ПРОГРЕССИВНЫЕ РЕШЕНИЯ ПО КАПИТАЛЬНОМУ РЕМОНТУ
СОВМЕЩЕННЫХ МЯГКИХ РУЛОННЫХ КРОВЕЛЬ

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БЕЛОРУССКО-РОССИЙСКИЙ УНИВЕРСИТЕТ

Protecting designs of buildings and structures, constructed according to the requirements of СНиП II-3-79 "Norms of designing. Construction heat engineering" constructed prior to 1994 do not meet actual requirements of ТКП 45-2.04-43-2006 "Construction heat engineering. Building norms of designing".

According to the new standard requirements of the thermal resistance of protective designs are increased at major repairs of the available old housing, and also public and industrial buildings (for the walls - $R=3,2 \text{ м}^2 \cdot \text{°C/Wt}$, for the combined coverings - $R=6 \text{ м}^2 \cdot \text{°C/Wt}$). Thus, it means that the requirements have increased almost twice.

Therefore these designs demand performing the work on thermal resistance increase (thermal resuscitation). For external walls this problem is solved by means of addition of a thermal insulation layer that provides their demanded heat conductivity.

But such method of addition of hard layers is not applicable for the designs of the combined soft rolled roofs because of a possible overload of carrying designs of a roof can occur. Also there is no corresponding standard base and rational technical decisions tested under production conditions in our country.

Now in Mogilev major repairs of soft rolled roofs are carried out, as a rule, with removal of all its old layers including heater and their replacement with new ones. One of the solutions of this problem (of increasing thermal resistance and roof repair) is application of a sprayed polyurethane foam "in situ".

At this method the layer of poliurethane foam (approximately for about 6-8cm thickness) sprayed on the repaired waterproofing layer is sufficient to achieve the demanded heat conductivity.

The research carried out by us shows that the efficiency of such technical decision is reached by means of elimination of works on dismantling of the bases under a soft rolled roof and existing warming layers consisting of inefficient heaters.

The cost of such works is 35–40 % lower in comparison with the ones accepted in Mogilev building practice during major repairs of the combined soft rolled roofs.