SE BaltEnergoComfort

Report on applying Isollat heat insulation coating in the heating unit and the adjacent wall in the apartment house in Kaliningrad, 6 Kronshtadskaya St.

In flat No. 2 in the apartment house in Kaliningrad, 6 Kronshtadskaya St., the wall has been destroyed due to unfavourable climate condition during several years. It was discovered that during heating season the wall was overheated by the heating unit, and during offseason, it was covered with condensation and moisture penetrated into the apartment.

To solve the problem, we decided to make hydro and thermal insulation of the dividing wall to eliminate condensation and to insulate it, as well as to cover pipes of the heating unit with "Isollat" coating.

The coating was applied with a brush on the separating wall from the heating unit side and to pipelines in two layers. The liquid heat insulation was reinforced with glass cloth on the pipes. Butt elements, valves were covered with Isollat coating on the cleaned metal. Heat insulation was applied to the hot pipes with temperature of 61.4° C. Temperature in the heating unit before applying Isollat was 36° C (see photo).





Photo and thermogram. Appearance and thermogram of the heating unit before applying Isollat coating.



Photo and thermogram. Pipes treated with Isollat liquid insulation



Photo and thermogram. Pipes treated with Isollat liquid insulation

After treatment, the pipes' temperature on the insulation made 26°C. Room temperature in the heating unit made 24°C. Average thickness of Isollat liquid insulation of

1.8 mm allowed isolating almost all emitting surface, including shut-off valves.

Temperature of the wall in the apartment made 24° C, which is the same as temperature of all the walls in the room. Previously the wall was heated up to 40° C.