In construction materials, strength properties and the amount of the load property is affected as much as environmental conditions. Especially, corresponding plastic-based materials are not affected by moisture and humidity but can be sensitive to temperature. Sequences of atoms in covalent bonds, and the continuity of the main causes. In this study, changes in the ambient temperature of the concrete compressive strength of marble aggregate the effects of the polymer was investigated experimentally. In this study, two different polyester (heat-resistant and fill type polyester) and seven different particle size classes produced polymer concrete is used as aggregate in marble, which is reserved. For experimental studies of polymer concrete samples prepared at room temperature, 28 days at 25 ± 2 °C. Curing temperature is a temperature-controlled room. According to the results obtained from the experiment, changes in temperature of the polymer material, a significant influence of the concrete compressive strength, as well as the negative temperature up to 50 °C in an increase in compressive strength with increasing temperature, it was determined that a decrease in after temperature.