

## **BUILDING BIOLOGY AND ONE BIOCLIMATIC - DIAGNOSTIC EXAMINATION**



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### **ABSTRACT**

The "Bioclimatic - diagnostic examination" in this work, is a comparison investigation between two nursery school's, belonging to the Technical University of Istanbul in Maslak. The main point which makes this comparison investigation important and interesting, are the building materials of each nursery school. One of them is built with mud-brick, called "Loam" nursery school and the other one is built with iron-concrete and cement-brick's, called "New" nursery school. The investigation is basically a comparison between a biological building, Loam nursery school and a conventional building, New nursery school. The investigation consists of two steps. The first are the bioclimatic measurements of the two nursery school's and the second are the investigations between the two playing groups. The aim of this bioclimatic-diagnostic examination is to find out the parallelities and differences between the biological quality of these nursery school's and the parallelities and differences between the healthy conditions of the two playing groups. All measurements and investigations are done in March 1993. The results were definitely more positive for the Loam nursery school. The air temperature in the Loam nursery school was 28% better than the New nursery school. The relative air humidity was in the Loam nursery school 19% better. The radioactivity in the New nursery school was 23% less than the Loam one. The highest differences were measured in the electricity. The electrical and magnetical alternating fields, caused by the interior electric installation, were in the New nursery school 16-23 times higher than the Loam one. Similar to this situation, the healthy conditions of the playing group in the Loam nursery school were much better than the healthy conditions of the playing group in the New nursery school. Body resistance measurements in the New nursery school were 9 times worse than the Loam nursery school. The result of this bioclimatic-diagnostic examination was, that the Loam nursery school has the better bioclimatical conditions and the playing group in this mud-brick building has the better healthy conditions.

### **KEY WORDS :**

Human – Building – Nature  
Building Biology  
Building Ecology