

3.8 Influence of height above sea level on dwellings energy consumption

Influence of dwellings height above sea level on level of their specific energy consumption was tested in a simple study. Two populations of dwellings with different altitudes (above sea level heights) were chosen. These populations were created in order to contain approximately same number of dwellings and difference between lowest and highest dwellings above sea level height was at least 200 meters. Dwellings altitude in a given district was in a simplified way considered identical with height above sea level of the district town. For thus created populations there were calculated average values of total specific energy consumptions to eliminate influence of various heated area sizes. Heating makes about 80% of total energy consumption and so it influences it decisively. Relation of calculated values are evident from figure 3.8.3 and it is possible to conclude a supported conclusion from them that altitude in Czech republic conditions influences significantly total specific energy consumption of dwellings in rural localities. Influence of above sea level height on specific energy consumption in dwellings situated in urban localities was not proved. Both conclusions are of course valid for mentioned interval of altitudes, i.e. from 200 to 500 m.

Figure. 3.8.3 - Influence of height above sea level on dwelling total specific energy consumption.

