The effective atomic numbers ($Z_{\text{eff}}$) and effective electron density ($N_e$) of different type concrete have been measured and the results were compared with the calculation obtained using the mass attenuation coefficients ($\mu/\rho$) obtained via XCOM in the photon energy range of 1 keV–100 GeV. Six different concrete in where marble has been used in the rate of 0%, 5%, 10%, 15%, 20%, 25%, has been used in the study.