

Relation between kT and concrete's pore structure

Parallel measurements of kT and Mercury Intrusion Porosimetry (MIP) analysis of small samples were carried out on Swiss concretes [93-01; 95-03], Japanese concretes [13-05 J] and Korean concretes [13-05 K]. It has been proven that kT correlates well with the total porosity ε and produces values not far from the theoretical coefficient of permeability K_{th} , as shown in the charts below. As derived in [22-01], $K_{th} = \varepsilon \cdot r^2 / 8$, where r is a characteristic pore radius measured by MIP. The codes in brackets refer to the [Bibliography List](#).

