

Abstract

Nowadays, the durability of concrete is thought to be a burning question for most of building structures. This quality is often assessed, from the point of view of frost resistance, in the form of testing the resistance to chemical defrosting substances CHRL. In the Czech Republic, we meet with test standard CSN 73 1326, anywhere in Europe (also in Czech Republic) besides local standards the all European valid test standard EN 12 390-9 can be used. Occasionally, the building practise echoes how it is possible that a laboratory specimen meets the limit given by test standards for the resistance to chemical defrosting substances CHRL but the building structure made of the same concrete disintegrates in the construction. The thesis concentrates on studying differences in the placement of concrete, its final treatment of the surface to the parameter of resistance to chemical defrosting substances CHRL, made by a laboratory worker and a member of working team in the construction. The thesis also notices further impacts on this parameter obtained in the testing procedure from making the specimen to interpreting the test. In the conclusion of this thesis appropriate solution and recommendation are suggested for eliminating the human factor that plays a distinctive part here in securing the resistance to chemical defrosting substances CHRL as a parameter of concrete durability.