

## **Test research about high quality and lightweight concrete structure**

### **[ Point ]**

Salt damage durability assessment method of high quality and lightweight concrete that was produced by using materials such as lightweight aggregate and blast furnace slag fine powder, and calculation method of shear intensity in the case of using such concrete as PC member, were studied. Regarding salt permeability, easily practicable new test method was suggested, in which diffusion coefficient of chloride ion could be assessed in a short period of time. In addition, regarding shear intensity of the member that used such concrete, it was revealed that there was almost no practical issue by adopting prestress even though shear force that was bore by concrete rapidly lowered with the occurrence of shear crack.

Keywords: lightweight aggregate, blast furnace slag, salt permeability, shear, accelerating test method