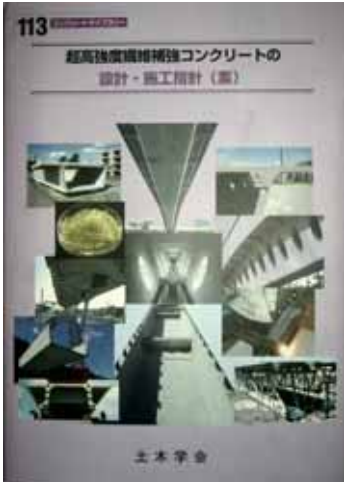


# Recommendations for Design and Construction of Ultra High Strength Fiber Reinforced Concrete Structures – Draft

The Concrete Committee of Japan Society of Civil Engineers has published the research report as “Recommendations for Design and Construction of Ultra High Strength Fiber Reinforced Concrete Structures, -Draft”. Ultra high strength fiber reinforced concrete (hereafter called “UFC”) has far greater compressive and tensile strengths ( $f_c > 150\text{N/mm}^2$ ,  $f_t > 5\text{N/mm}^2$ ) than ordinary concrete. The recommendations prescribe a procedure for examining safety and serviceability performance, which differs from conventional reinforced concrete, in consideration of the resistance to tensile stress of UFC without applying any reinforcing bars. Since UFC has a very dense microstructure, structures using UFC are expected to have high durability. The recommendations determined that the standard lifespan is 100 years under normal environmental conditions and that examinations of many items regarding durability is not necessary. The use of UFC in design and construction following the recommendations enables the structures to have innovative features.



Concrete Library 113, JSEC



Sakata Mirai Bridge (Span:50m)



Akakura Onsen Yukemuri Bridge (Span: 35m)



Ramp way of 16 meters long for East Kyushu Expressway