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Introduction

In the 2011 Tohoku earthquake, many buildings stopped operation due to damage such as cracks and spalling of concrete although they didn't collapse. The 2010 AIJ standard states that stress level of reinforcement and concrete for reparability limit implicitly comes from crack width of 0.3mm so that RC members meet requirements on functions and durability. Since SD685 shear reinforcement is out of scope of the 2010 AIJ standard due to its high strength, crack performance of eight beams with SD685 shear reinforcement were experimentally evaluated.



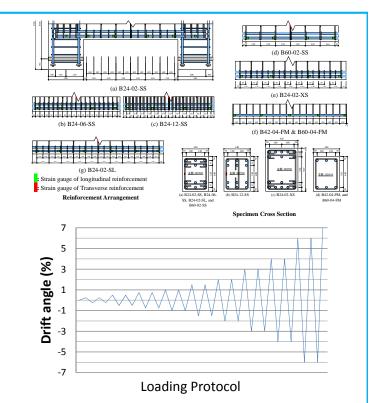




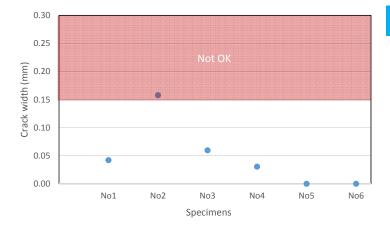
Specimen







Results



Crack Width of Specimens at reparability limit

Conclusion

5 of 6 Specimens have crack width less than 0.15 mm and are within standards scope.

