Tallest Rc Tower Building In Japan - Structural Performance-Based Design AndThe Post-Earthquake Building Damage Estimation System

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Residence tower building, currently under construction in the Tokyo Metropolitan Area, will be the tallest RC building in Japan after completed in 2023. In the first part, structural performance-based design is presented focusing on damage and habitability control against large earthquake and strong wind by applying of following advanced technologies; Load effect and stability assessment through the wind tunnel testing, RC frame with Core walls, Energy absorbing dampers, Active-mass damping system. In the second part, e-Daps (Monitoring & Earthquake Damage Presumption System), which will be adopted in the building, is introduced. The system can make preliminary assessments of damage to buildings immediately following an earthquake. The ability to perform measurement-based safety checking immediately following a large earthquake contributes to tenants' BCP and to the safety and security of residents, and is an effective aid when sheltering stranded persons.