

Research And Application Of Intelligent Detection And Monitoring Of Building Curtain Wall

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With the rapid development of engineering information technology such as building information model (BIM), geographic information system (GIS), Internet of things, big data and cloud computing, the intelligent monitoring and detection of building curtain wall is becoming a trend. Based on digitization techniques and integrated construction and maintenance of infrastructure, this study proposes a theoretical system and implementation method of intelligent operation and maintenance of building curtain wall. First, based on a large number of numerical simulation, test and measured data, this study reveals the relationship between various elements of building curtain wall healthy and intelligent perception, then design the intelligent service model of building curtain wall healthy service. Then, combined with WebGIS, BIM, virtual reality and 3D augmented reality technology, image recognition technology, UAV patrol technology and wireless sensor technology, a digital platform for intelligent monitoring and detection of building curtain wall is formed and applied to the operation and maintenance management of a large building curtain wall project. By realizing the intelligent analysis and decision-making of the service performance of building curtain wall and the visual management of building curtain wall information, the effectiveness of intelligent monitoring and detection of building curtain wall is preliminarily verified.