

## 〈 SUMMARY 〉

<p><b>Purpose &amp; Contents</b></p>	<p>(1) Goals</p> <p>The cutting edge 3D BIM design technology BIM aims to increase the productivity of the building industry with the following goals:</p> <ul style="list-style-type: none"> <li>- Shorten the building permission required drawings creation process by 50%</li> <li>- Reduce the processing and reservation time for licensing and obtaining building permission by more than 30%</li> <li>- Reduce the reviewing time required for building energy assessment by more than 50%</li> </ul> <p>(2) Contents</p> <ul style="list-style-type: none"> <li>- Automated Building code checking based Design Quality Assessment System Development</li> <li>- Open BIM based construction document optimization standard and applied technology developmen</li> <li>- Developmetn of integrated cooperation work system during public administrative process</li> </ul>
<p><b>Results</b></p>	<p>(1) Automated Building code checking based Design Quality Assessment System Development</p> <ul style="list-style-type: none"> <li>- The rationale for automated design quality verification development is to automatically check design compliance with all various sets of Korean building codes and regulations.</li> <li>- This development aims to serve the quality assessment verification process for building designers. Quality assessment of digital models are needed for digital models and relevant modelling guide created. Verification is therefore processed through the (KBim Veri) program for previewing model validity and quality verification.</li> </ul> <p>(2) Open BIM based construction document optimization standard and applied technology development</p> <ul style="list-style-type: none"> <li>- BIM standardized-document automated output linkage program is developed to facilitate automatic extraction of relevant design and engineering data into exportable and regulated template drawings and building documents.</li> </ul> <p>(3) Development of integrated cooperation work system during public administrative process</p> <ul style="list-style-type: none"> <li>- This system development aims to improve work efficiency by establishing a collaborative environment. In this system, project stakeholders from different sectors could exchange information and comment in the BIM-model throughout the project phases.</li> <li>- The licensing requirement input and review system (KBim Submission) automatically checks for data omission and specifications with building standards, prevent redundant works and manual input error.</li> </ul>
<p><b>Expected Contribution</b></p>	<ul style="list-style-type: none"> <li>- By utilizing the openBIM-based Automated Design Quality Verification in reviewing errors and making improvements to design appraisals and BIM-models, it is expected that these active improvements, made possible from the automated design quality verification system, would bring about economic benefits of construction costs reduction.</li> </ul>