Lee Young-nam, right, chief technology officer of GS Engineering & Construction, shakes hands with Eric Lamb, executive vice president of DPR Construction of the United States, after signing an agreement Wednesday on bilateral collaboration on Building Information Modeling, a high-tech building information process, in Seoul. / Courtesy of GS E&C

By Jung Sung-ki

GS Engineering & Construction (E&C), a top-tier builder in Korea, plans to adopt an up-to-date technology of creating a digital, three-dimensional model of the physical and functional elements of a building project, the firm said Thursday.

The company signed a memorandum of understanding (MoU) with DPR Construction of the United States on bilateral cooperation regarding the Building Information Modeling (BIM), it said in a news release. Lee Young-nam, chief technology officer of GS E&C, and Eric Lamb, executive vice president of DPR Construction, represented at the signing ceremony at the GS headquarters in Seoul Wednesday.

DPR is a leading company worldwide in terms of the BIM process of generating and managing building data during its life cycle. Typically the process uses 3-D, real-time, dynamic building modeling software to increase productivity in building design and construction.

The model can include a vast amount and variety of information useful in planning and building a project. Examples of data include building elements, dimensions, quantities, light analysis, volumes, area, shapes, functions, spatial relationships, schedules, geographic information, costs and energy.

"Though Korean builders are doing very good overseas, the level of construction technology and labor productivity still remains lower than those of other advanced nations," a GS spokesman said. "By adding the high-tech IT technology to construction projects, we’ll try to become one of the top-tier builders in the world."

He said both companies have already used the BIM process in building an R&D center of NCsoft, a top online video game company in Korea, in Pangyo, Gyeonggi.
Construction industry officials say BIM is rapidly finding its way into the design and construction of buildings, as it is a natural outgrowth of the information society, due in large measure to the geometric rise of tech advances founded on computers. The process is also useful in building environmental-friendly, energy efficient buildings.

Against that backdrop, more and more governments around the world require contractors use the BIM process in their major construction projects.

The Korean government has also established regulations that construction projects, including Turn-key programs, worth 50 billion won or more must use BIM.

province, and they will further expand bilateral BIM collaboration in the years to come.