

3D Repo Adds Instant Clash Detection to Online BIM Platform



Digital Construction technology provider 3D Repo has announced software that identifies clashes in construction plans by analysing 3D models submitted by project partners and contractors. The new Clash Detection functionality has been added to 3D Repo's 3D Diff solution. Launched earlier this year, 3D Diff is the first web-based, real-time change detection software for 3D models used in Building Information Modelling (BIM).

Another first for the sector, the enhanced 3D Diff solution with Clash Detection automatically identifies and highlights intersections, and therefore potential conflicts, between different types of models. From the starting point of the architect's plans, a range of disciplines, including structural; environmental; mechanical, electrical and plumbing, and potentially many others, will each produce their own models. Each such model can consist

of a range of 3D files with underlying metadata. Since, in many cases, each discipline works in their own silos before design review on a federation happens, clashes such as pipework cutting through a solid steel structure can easily occur.

The cloud-based 3D Clash Detection is a fast and reliable way to compare and contrast 3D models, from different disciplines, regardless of the file format or the software used to create them. A patent pending industry first, the 3D Diff with Clash Detection operates on models of any type, in real-time via an encrypted web browser. The 3D Repo solution also allows users to share visualisations, highlighting clashes, with project partners and stakeholders irrespective of location or time-zone. These can then be exported as BCF (Building Collaboration Format) files that can be shared with authoring tools. Unlike existing solutions in the marketplace that highlight whole objects that clash, the 3D Repo solution detects and visualises exact intersection points wherever they appear.

"Clashes are often the cause of serious delays in construction projects as the BIM process consists of data originating from different project contributors," said Dr Jozef Dobos, CEO of 3D Repo. "Spotting clashes in real-time and at any stage can make an enormous difference in the ease, speed and therefore cost of the rectification process."

"Using online 3D Clash Detection together with 3D Diff Change Detection technology could be the difference in a project being on track or not," he continued. "Models of any type and from any source can be compared with the original designs, and with each other, ensuring clashes are detected at the earliest opportunity to minimise impact."

In addition to this, the 3D Repo platform requires no installation or desktop software. Data is fully encrypted and project permissions, such as view only or comment, can be assigned to individual project partners.

You can use 3D Diff for free at www.3drepo.io