



*“Verity is a powerful new tool to help us understand what’s really going on out in the field. DPR is excited to use this technology on our future projects.” - Tim Malys, Project Manager, DPR Construction*

## Construction Verification Software

### Find Mistakes Before They Become Expensive Problems

**\$450 Billion.** That's how much the construction industry spends each year fixing poorly constructed, out-of-tolerance work. Experts estimate that mistakes and rework can consume anywhere from 5% to 12% of a typical construction budget. That's why ClearEdge3D (the developers of EdgeWise™), created Verity™ software. This new technology dramatically reduces the financial impact of burdensome on-site rework, which reduces risk to budgets and schedules, improves the accuracy of as-builts, and increases project profitability.

Verity compares point clouds against design and fabrication models, allowing 100% verification of work in the time it currently takes to spot check 5%. Verity software finds construction mistakes before they become expensive problems.

#### Understand the Work That's Been Installed

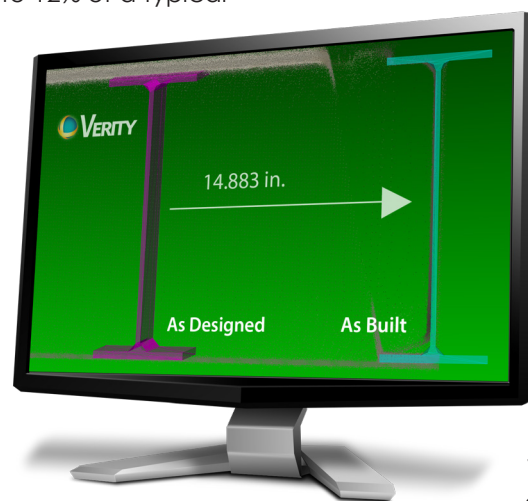
Verity provides unprecedented insight into construction projects by analyzing and comparing scans of what has actually been built against

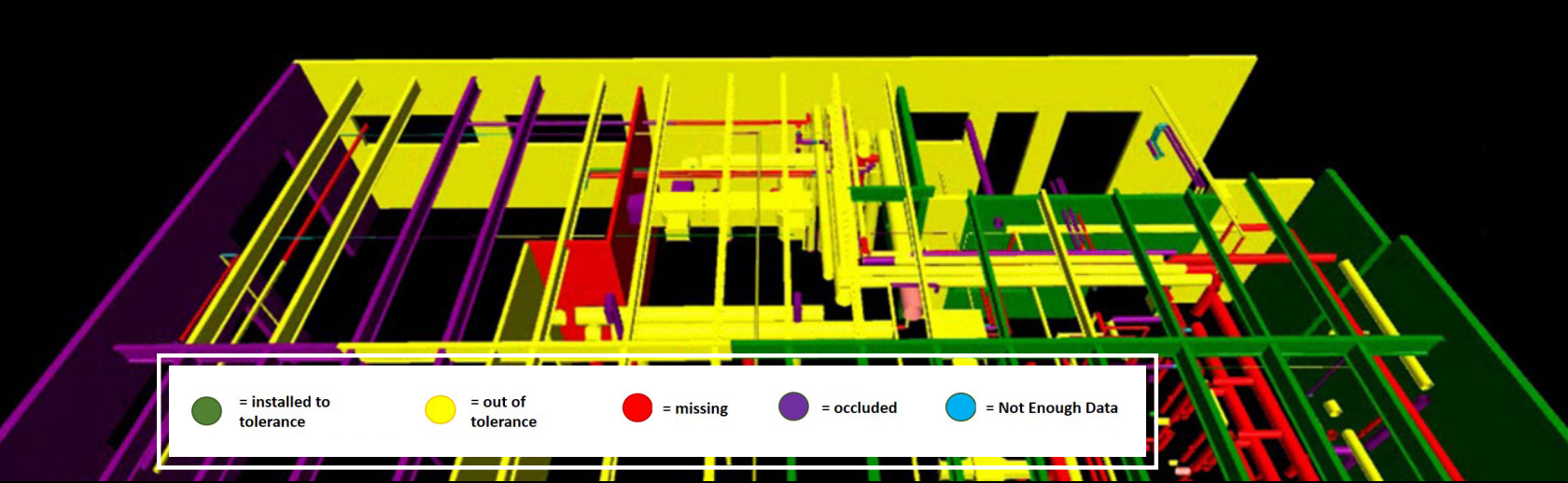
design/fabrication models. This comparison can determine which elements have been installed to date, which items are missing, and even which items couldn't be seen by the laser scanner and require further verification.






Comparing this information to your schedule or 4D simulation can help identify where you are falling behind.

#### Verify 100% of Your Work In the Time It Takes to Spot-Check 5%

If you're like most GCs, your field engineers use a total station to spot check anywhere from 5% to 10% of your subcontractor's work. This is a wholly inadequate workflow for today's complex projects. Mistakes are invariably missed, which leads to clashes, schedule delays, and cost overruns. With Verity and a laser scanner, you can check 100% of your work in the same time it currently takes just to spot check. Verity provides a complete record of subcontractor work and complete validation that it was installed to specifications. If work flaws are discovered, Verity provides detailed information on where deviations are located and exactly how far the work is out of tolerance.





	= installed to tolerance		= out of tolerance		= missing		= occluded		= Not Enough Data
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Verity's "stop light" variance classification gives you a quick overview of construction quality.

### Reduce Costly Rework from As-Built Variances

Armed with Verity data, you will have full knowledge of what is installed, what is out of tolerance, and what the downstream impact of any mistakes could be. Your decisions will be fully-informed—you can make better choices about fixing errors in the field or updating models and re-coordinating shop drawings. Verity gives you the confidence that unverified work will be caught long before it can cause expensive problems.

### Clash Detect Autodesk Navisworks As-Built Using Verity

Because Verity knows the as-built location of your coordinated objects, the software can push those locations back to Autodesk® Navisworks® and perform clash detection on the as-built position of any element. If an installation mistake may cause conflicts with other work yet to be installed, you'll know before it becomes a problem. With Verity, Navisworks files can be sent to your subcontractors, along with the elements' associated points and critical variance data for comparison.

### Communicate Findings to All Stakeholders

Verity has a robust report generator that clearly communicates out-of-tolerance data along with screen shots, annotations, heat maps, and much more. Reports can be produced in HTML

and distributed to all stakeholders. The software is fully integrated with Navisworks, so variance data identified in Verity can be automatically pushed to Navisworks for additional analysis and documentation. Verity will allow all project stakeholders to easily understand the variance data using its enhanced visualization interface.

### Deliver Accurate As-Built Models and Drawings

Many owners and operators are requiring final, accurate as-built BIMs at commissioning. Verity helps subcontractors and GCs meet this requirement with far less effort that it currently requires. Point cloud data from any out-of-tolerance element can be exported to the proper design platform, allowing the design/fab model to be updated natively by the responsible subcontractor. Alternatively, if an as-built Navisworks model is an acceptable deliverable, the as-built model that incorporates Verity adjustments can be saved and submitted as documentation.

**Verity is a powerful new tool that gives you unprecedented control over your construction projects, ensuring work is completed on time, on spec, and on budget.**

*"Verity is an essential new tool in the construction workflow. It bridges the gap of bringing the BIM to the field by verifying that the built environment actually fits the design/fab model."*

- Danielle Dy Buncio, CEO, VIA Technik LLC



For more information contact Synergy Positioning Systems or visit the Synergy Positioning Systems website at [www.synergypositioning.co.nz](http://www.synergypositioning.co.nz)  
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