

Geopogo harnesses the power of augmented reality to bring architectural previsualization and design review into the real world with Magic Leap.



Geopogo is leading the next major breakthrough in architectural visualization: augmented design review (ADR). The Geopogo platform allows architecture, engineering, and construction (AEC) professionals to bring building information modeling (BIM) models and plans into real-world spaces at scale and in context – delivering high-accuracy, high-fidelity understanding to clients and builders.

Challenge: Clients and Stakeholders struggle to visualize projects.

Many clients and stakeholders have difficulty visualizing projects due to the abstract nature of construction drawings – floor plans, site plans, and elevations – and struggle to fully comprehend the final build. This difficulty often leads to significant changes during construction that disrupt the quality, budgets, and schedules of projects.

Solution: Quickly load BIM models on Magic Leap One to create virtual mock-ups that help clients, project teams, and stakeholders visualize on-site.

Visualizing building designs, designed environments, and interior space on-site in augmented reality (AR) before committing to construction has the power to streamline the construction process and ensure designs meet client expectations. Geopogo offers a multi-form-factor solution platform supporting full spatial AR with Magic Leap devices, as well as mobile AR on iOS devices.

Delivering designs as augmented mock-ups in AR significantly reduces design miscommunications, minimizing the most common issues that plague construction – expensive change orders, schedule delays, and budgeting overruns. Geopogo's no-code solution is simple thanks to tight integration with Autodesk Revit and other BIM software. Export from BIM, import to Geopogo, and place the mockup on-site for augmented viewing.

This significantly shortens the design review and feedback cycle. Designs can be reviewed on-site to help identify conflicts and modified on-site in minutes to test design concepts.

Use Cases

For many specific use cases Geopogo eliminates the needs for costly and brittle traditional mock-up methods.

On-site exterior previsualization and presentations

Using Geopogo with Magic Leap devices allows users to experience full-scale, augmented mock-ups of designs on-site, walking through and exploring as if the design was already built. This replaces traditional story poles and the use of site plans and floor plans on design tours.

Interior design visualization and presentation

Geopogo is perfect for interior design tenant improvement (TI) fitups and renovations. These projects often have complex existing conditions that need to be carefully coordinated with the proposed design. Existing conditions may not be as consistent as they appear, or accurate to original plans. Windows, columns, and walls may vary in size and placement. Electrical and plumbing lines may not be routed exactly as detailed in plans.

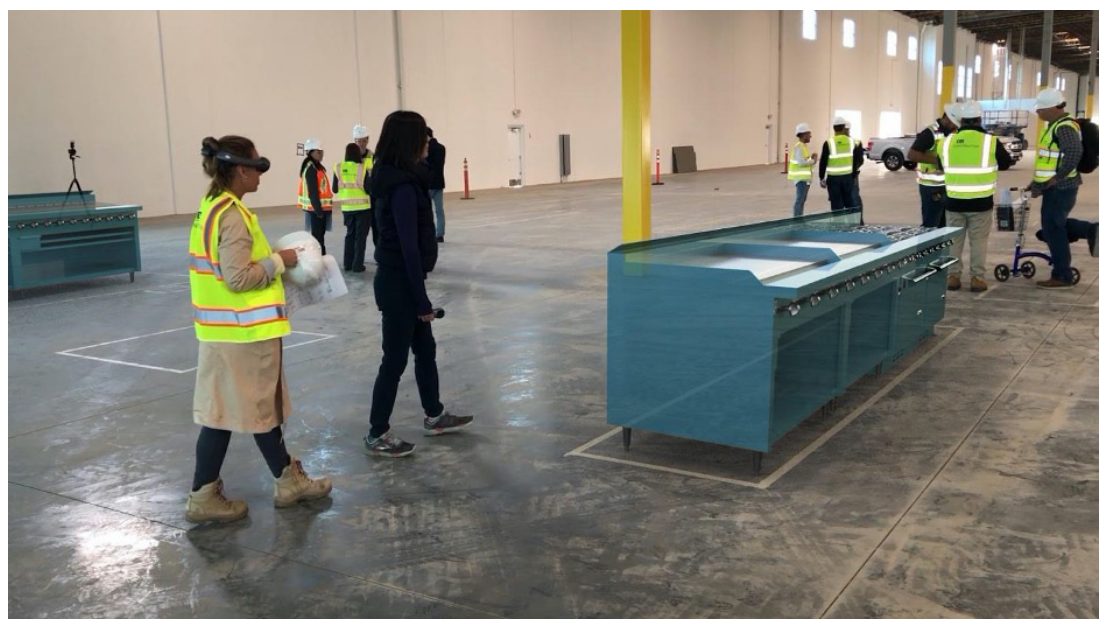
Interior finishes, furnishings, and lighting can be difficult to review in combination – often only having one or two physical samples. With Geopogo, all finishes, furnishing, and lighting can easily be reviewed holistically in full-size. These assets can be imported from BIM files, manufacturers' 3D asset databases, and built-in Geopogo library of 3D assets.

Magic Leap devices' full spatial capabilities can present proposed designs in AR to exactly overlay existing conditions and highlight conflicts before they become expensive construction problems. Accurate, real-time SLAM (simultaneous localization and mapping) eliminates the need to laboriously tape out floor markings for proposed partitions, casework, and equipment.

Factory equipment and workspace configuration

Complex projects such as hospitals, factories, warehouses, hotels, and restaurants require careful planning and testing of equipment and furniture layouts to ensure operational functionality. Geopogo's platform makes it easy to bring equipment and furniture layouts into the augmented environment for groups of end users to explore and test the virtual mock-ups of equipment in place as if it was already built. This can save clients millions of dollars and significant time compared to building full room physical mock-ups and off-site simulations. Geopogo Desktop makes it easy to bring in manufacturer's 3D assets, as well as custom equipment and furniture designs from many standard asset types.

All participants have a visceral experience – the flow, feel, and volume of the space. Clients understand what they are approving, and builders easily identify obstacles and conflicts before they arise during construction.



Key Benefits

The Geopogo desktop design editor is built on the Unity Game Engine to empower BIM imports and 3D model creation. This provides the ability to manipulate imported 3D models and stage them with materials, finishes, furniture, and 3D assets. Users without access or experience with BIM can leverage the Geopogo desktop editor to create layouts and configurations with a simple drag and drop interface.



Geopogo designs can be published and managed in secure AWS cloud storage, with the option to keep them private and confidential, or to share publicly with other Geopogo users.

With support for iPhone, iPad, and Magic Leap devices, all users can effectively participate in the design review process.

Conclusion

The combination of Magic Leap devices with Geopogo provides a turn-key, no-code path for designers and BIM managers to quickly engage their stakeholders and start realizing the value of augmented design review.

Geopogo is the first all-in-one solution for full spatial augmented design review (ADR). This is an out-of-the-box solution that designers can start using with their clients right away, with no coding or extensive training needed. Magic Leap devices unlock the full value of augmented design review – reducing risk and cost by shortening the design cycle, eliminating miscommunication, and enabling clients to experience and provide feedback on-site, in real-time, and with full environmental context.

Learn More

Visit www.Geopogo.com for more information about the new AR platform.

Visit <https://pages.magicleap.com/geopogo> for more information on Magic Leap and Geopogo solutions bundles.

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About Geopogo

3D design software company empowering architects and designers to create renderings and VR/AR experiences in minutes.

www.Geopogo.com