

The Right Technology Solution for Generative Design

Follow our quick software and hardware checklists to help ensure your generative design solution package is up to the task.

1 Select Software

Most leading AEC software vendors offer generative design (GD) in some form. Some are integrated, but most are an add-on module that you will need to invest in or access. Those packages that offer GD technologies include, but are not limited to:

- Autodesk Revit with Generative Design (for subscribers of AEC Collection with Revit 2022)
- Autodesk Dynamo for Revit (for single-product subscribers of Revit 2022)
- Bentley Systems MicroStation OpenBuildings with GenerativeComponents
- McNeel & Associates Rhino with Grasshopper
- Nemetschek Vectorworks with Marionette
- Nemetschek Graphisoft

If your software is not listed above, contact the company to see if there is a GD add-on from your vendor before investing in a separate product.

Note: The output of a GD module is CAD data that can be read by your CAD application; therefore, not every person in the organization will need the add-on — only those who are actively engaged in generative design.

2 Determine Hardware Requirements

Generative design software places intense performance demands on computers, similar to BIM and 3D design needs. How fast it runs depends on computer capabilities. Recommended specifications include:

- 64-bit, 6- to 12-core processor running a minimum of 2.6GHz
- 32- or 64GB of RAM (larger for more complex projects)
- 512GB–2TB NVMe storage
- Mid- to high-end graphics card certified by your hardware vendor.

For best performance, make sure you check what your package requires and make sure you purchase independent software vendor (ISV) certified hardware. ISV certification guarantees that the hardware you use has been optimized to work with your software and is only available from workstation-class computers.

3 Plan for Deployment

Timing is everything. Be sure to schedule and budget for training to coincide with technology deployment.

Software training

- Staff using GD need between a half of a day and 2 days of training, depending on their current knowledge of the programs.

Hardware upgrades

- Have you secured funding? (Read [How to Ask for Tech Funding.](#))
 - Will you upgrade all staff at once or plan a phased installation?
 - Is the budget assigned for a specific point in time, or allocated over months or quarters?
 - Is IT ready to support any required hardware upgrade with adequate server and bandwidth resources?
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Why Choose Z by HP?

[Z by HP](#) offers high-performance desktops and laptops designed for the work you do. We have a team of engineers and technical experts dedicated to customizing our products for what you do.

ISV Certification

We work with major AEC software vendors to test and certify our Z devices for a seamless software experience, right out of the box.

Customized Configurations

We run our devices through actual AEC workflows, and then adjust the component mix until we find the configurations that deliver outstanding performance. For detailed spec recommendations, check out our [Product Finder Tool](#).

Optimized System Performance

Every Z desktop and laptop come with our proprietary tool—[HP Performance Advisor](#)—that fine-tunes your PC settings with an intuitive software wizard.

Optimized Graphics Performance

We work closely with graphics card vendors to certify and deliver a wide range of the latest professional GPU-based solutions — giving our customers outstanding performance on graphics-heavy workloads. ♦



Recommended Rig for Generative Design

Demanding generative design workflows require high-performance technology optimized for software applications like Revit® and Grasshopper. With high frequency processing power, professional graphics and large memory configurations, Z by HP laptop and desktop workstations are designed and tested to accelerate AI workflows:

Z4 Desktop with

- Intel® Core™ i9 processor with 12 cores
- NVIDIA® RTX™ A5000 graphics
- 1TB NVMe storage
- up to 64GB of memory

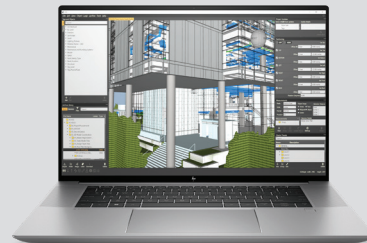
[Click here](#) for more on Z4 Desktop.

— or —

ZBook Studio with

- Intel® Core™ i7 processor with 6 cores
- NVIDIA® RTX™ A5000 laptop graphics
- 1TB NVMe storage
- up to 32GB of memory

[Click here](#) for more on ZBook Studio.



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