5.8 | Choosing a Zeroing Method

Selecting the correct zeroing method depends on how the current project was created and whether a suitable Benchmark is available.

The table below summarises the recommended workflow for the most common situations.

If your project is...	Recommended zeroing method
A newly created Plane Project	No additional zeroing is normally required. Defining the Plane Origin using **Use GPS** establishes the Plane reference.
An existing Plane Project being reopened	Zero to the Plane Origin Benchmark if the alignment requires verification or the GNSS reference has changed.
An imported design containing Benchmarks	Zero to the supplied Benchmark Marker. This is the preferred method whenever surveyed Benchmarks are available.
An imported design without Benchmarks	Create a Benchmark Marker, then perform a Benchmark Zero using the newly created Benchmark.
An existing finished surface requiring a small alignment adjustment	Use **Set Z to Current** to shift the design vertically to the existing surface. This is an advanced workflow and should only be used when appropriate.

Frequently Asked Questions

Do I need to zero a new Plane Project?

Usually not. When the Plane Origin is created using **Use GPS**, the Plane is aligned to the current implement position and elevation. The Origin is automatically stored as a Benchmark Marker and can be used later if the Plane needs to be re-zeroed.

Should I create another Benchmark for a Plane Project?

Not normally. The Plane Origin already serves as the primary Benchmark for the Plane.

Additional Benchmarks may be useful on very large sites where returning to the Origin is inconvenient, but they are not generally required.

Should I always use a surveyed Benchmark if one is available?

Yes. Surveyed Benchmarks provide the most repeatable project alignment and should always be preferred over creating a new Benchmark.

When should I create a new Benchmark?

Create a new Benchmark when importing a project that does not already contain one, or when establishing a permanent reference point for future verification and re-zeroing.

When should I use Set Z to Current?

Use **Set Z to Current** only when aligning a design to an existing finished surface or making a small vertical alignment adjustment.

It should not replace normal Benchmark Zeroing where a suitable Benchmark is available.

How often should I re-zero?

Re-zeroing is normally only required when:

- Returning to a project after a significant period of time.
- Changing or relocating the GNSS base station.
- Alignment is suspected to have changed.
- Project verification indicates the design no longer matches the ground.

Repeatedly zeroing during normal grading is generally unnecessary and may introduce unwanted alignment changes if performed on an unsuitable location.

> **Operator Tip:** Choose one reliable Benchmark and continue using it throughout the project whenever possible. Consistently using the same reference point makes verification easier and helps maintain repeatable project alignment over time.

What's next?

The workflows in this chapter explain how to create projects, collect survey data, place markers and prepare a machine for grading.

The next chapter explains how **Level COMMAND** interprets this information to control the implement automatically, including surface layers, target generation, predictive control and blade behaviour.