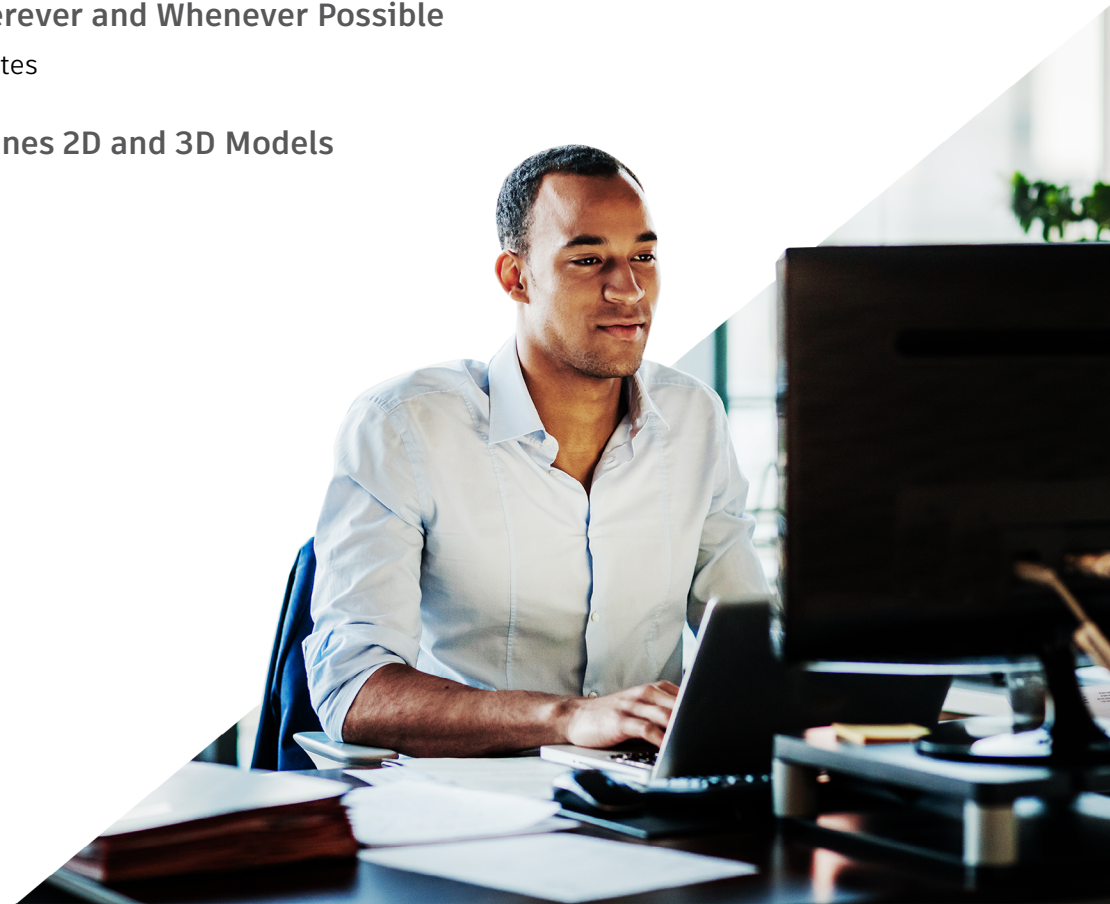


# 4 Habits of Highly-Effective Estimators



# Table of Contents

- 3 Introduction**
- 4 Habit One: Work Collaboratively**  
Powering Collaboration Through Technology
- 6 Habit Two: Stay on Top of Version Control**  
Improving Version Control with a Cloud-Based Solution
- 8 Habit Three: Streamline the Takeoff Process Wherever and Whenever Possible**  
A Strategy Focused on Automation and Real Time Updates
- 10 Habit Four: Employ Novel Technology that Combines 2D and 3D Models**  
Using a Centralised Platform for 2D and 3D models
- 12 Conclusion**





# Introduction

Construction is becoming an increasingly competitive landscape with higher demands and greater risks. Technology is key to obtaining and retaining a competitive edge – and it all begins with the estimators.

Effective estimates are critical, as they act as a project's first guard against risks, such as rework and budget overruns. Without stringent accuracy during the estimating process, businesses risk hurting their bottom line – or worse. [According to a survey conducted by QuickBooks and TSheets](#), one out of every four construction companies would go out of business if two to three inaccurate estimates were made.

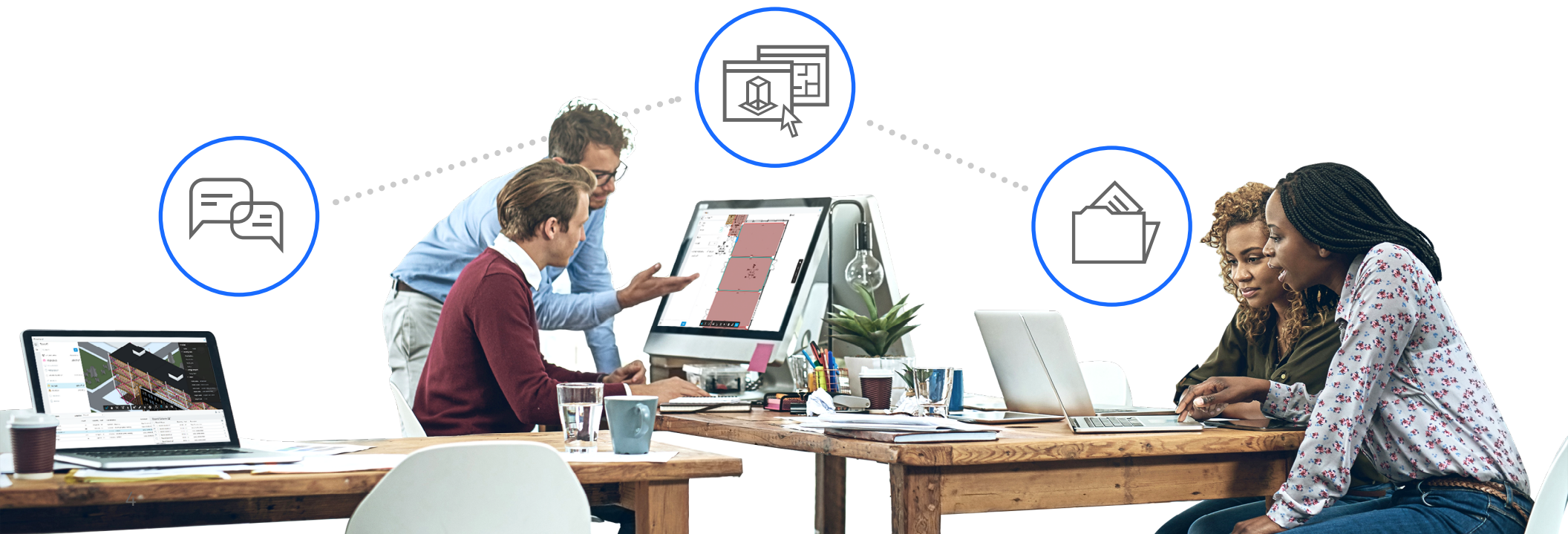
That's why reducing the risk of scope gaps and inaccurate takeoffs is critical to construction success, starting with the estimating process.

Effective estimators have a few vital traits in common: they work efficiently and collaboratively, and they are willing to adopt cutting-edge technology as it becomes available. In this piece, the habits of highly-effective estimators will be explored, with real-life examples of how to implement greater discipline in each arena.

# 1 Work Collaboratively

While each of the following four habits is critical to becoming an effective estimator, there is perhaps no trait more necessary to the estimator's success than the ability to collaborate. Collaboration is central to the estimator's job. From the earliest stages to the submission of finalised estimates, estimators work with stakeholders across the entire project.

Additionally, in many cases, more than one estimator is working on the same project. Being able to collaborate and work together quickly and accurately is vital. This is particularly true if estimators work in different offices. With the dynamics of work changing to becoming more virtual and remote-focused, it is more important now than ever before for estimators to focus on practices that will improve collaboration holistically.







### Powering Collaboration Through Technology

While collaboration is partly a learned skill set, it can also be improved through implementing the right technological solutions. Gone are the days of static spreadsheets, siloed desktop solutions, and stilted communication.

Cloud-based solutions help estimators work collaboratively in real-time.

When looking to adopt new technology into the quantification process, look for a product that will improve collaboration in all of the following ways:

- Allows estimators and other key stakeholders to access the same documents.
- Ensures updates are displayed instantaneously for everyone accessing the document.
- Offers a communication platform creating a more streamlined method for sharing information and notes.
- Gives access at any time from any location.

It is easy to see how technology can improve the collaboration process. An estimator can begin the takeoff process, sharing documents in real-time with all affected stakeholders. As any party makes changes, updates are shown in real-time. When a question arises about a quantification, estimators can log into the same platform and collaboratively work towards addressing the issue immediately.

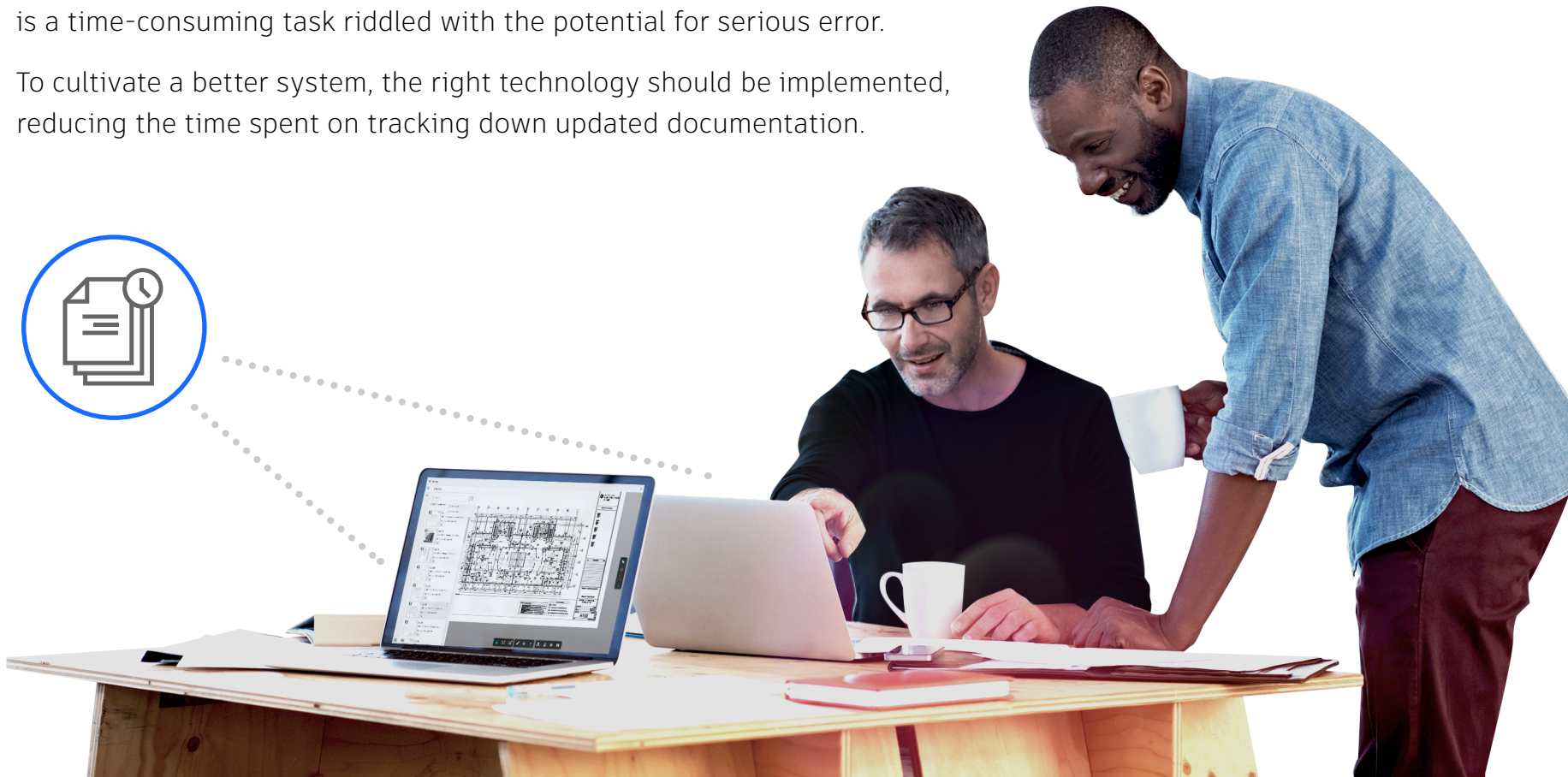
The result is more accurate takeoffs, less rework, and fewer scope gaps.

## 2 Stay on Top of Version Control

Married to the process of collaboration is proper version control. When version control is not managed well, it results in rework, miscounting, and, ultimately, lost profits. For this reason, it is critical to make sure all estimators are working off of the latest project files.

However, this can be a difficult task, particularly when numerous teams are collaborating on one project from different locations. Hunting down documents and trying to keep track of who is working on which one at any given time is a time-consuming task riddled with the potential for serious error.

To cultivate a better system, the right technology should be implemented, reducing the time spent on tracking down updated documentation.





## Improving Version Control with a Cloud-Based Solution

Once upon a time, version control was a frustrating process. In many cases, different estimators on a shared project each owned a document version living on their desktop. This led to confusion and the necessity to eventually attempt to merge these documents.

For estimators interested in improving this process, a cloud-based solution is ideal. The following should all be included in any new technology adopted:

- A common environment that allows all parties to access documents in real-time.
- The ability to enable notifications when an outdated version is being used.
- A focus on transparency and visibility with living documents.

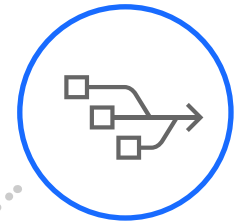
Technology has come a long way in recent years. By using a cloud-based solution, estimators can spend less time focused on tracking down the latest version of a file and more time focused on creating highly accurate estimates.

### 3 Streamline the Takeoff Process Wherever and Whenever Possible

The takeoff process can be cumbersome. Numerous parties are involved as estimators seek to create an accurate portrait of expected material needs and associated costs. Additionally, the complexity of accounting for potential changes to the scope of the project makes it extremely difficult for estimators to provide truly accurate takeoffs.

At the same time, takeoffs set the tone for the success of the project. Inaccurate takeoffs requiring copious amounts of rework will undoubtedly damage the bottom line. Estimators need to be laser-focused on improving the takeoff process. However, shifting too much time and resources to the takeoff process can lead to inefficiency and work overload.

Streamlining the takeoff process wherever and whenever possible is, therefore, a central habit to effective estimators. Achieving this is possible when the right strategy is employed.







### **A Strategy Focused on Automation and Real Time Updates**

Estimators serious about streamlining the takeoff process should shift their strategy to focus on digital solutions. The right technology should offer all of the following process improvements:

- Time savings from using a digital takeoff instead of manual paper-and-pen takeoff
- Real time updates that cut down on time spent doing rework and tracking down the latest file versions
- Technology that allows for multiple quantities, complex formulas, and improved collaboration
- A solution that offers automation for some manual processes, freeing up estimators' time from the tedious tasks

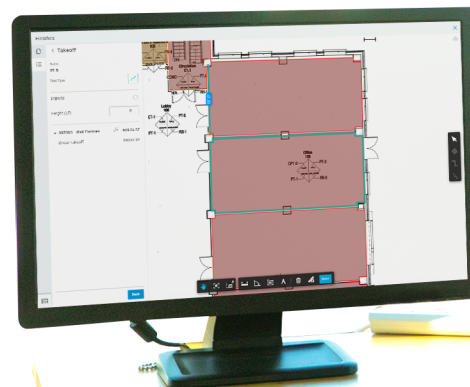
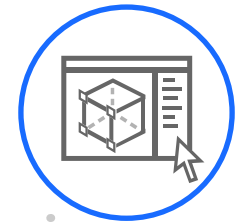
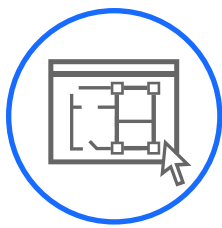
The right cloud-based solution can ensure that estimators are saving more time during the takeoff process while simultaneously improving accuracy. This affects everything downstream positively, with fewer hiccups during the project's lifecycle.

## 4 Employ Novel Technology that Combines 2D and 3D Models

Finally, an important habit for estimators interested in improving their effectiveness is to always look to employ the latest in technological advances. While 3D models are often thought to be in the realm of BIM managers, estimators also benefit greatly from being able to visualise design intent and understand scope in 3D in order to generate a more accurate takeoff. Combining 2D and 3D models on one centralised platform also fosters greater multi-disciplinary collaboration by breaking down the silos between BIM/VDC and estimators.

In the past, 2D and 3D takeoffs happened in separate applications. Data had to then be combined through a manual and tedious process. This often resulted in errors, scope gaps, and inaccuracies. Additionally, the traditional methods for combining 2D and 3D workflows cost valuable time, leading to potential deadline slippage.

By adopting the latest in technology, estimators can take the lead in their industry, offering stakeholders notable benefits.





## Using a Centralised Platform for 2D and 3D models

When looking to adopt any new platform, the chosen technology needs to truly add value. As is the case with any process change, the learning curve will require training and an investment of time. However, the right technology is worth the upfront investment due to the long-term return. A platform that centralises 2D and 3D takeoffs is one such choice.

[The following benefits](#) make it easy to see why this is a worthwhile change:

- The combination of 2D and 3D takeoffs in one centralised location will improve project collaboration. Being able to review data in one spot will reduce errors or duplication efforts during takeoffs.
- Errors can quickly be identified, freeing up more time to focus on valuable tasks rather than on fixing mistakes.
- A cloud-based solution will allow estimators to work in parallel with other key stakeholders, such as architects, in real-time. This ensures that everyone has clear visibility into the project budget, with estimators making updates to the takeoff in real time for every design iteration.

Technology that allows for a singular platform in which 2D documents and 3D models are available helps build better transparency, reduce the workload for estimators, and increase collaboration. The result is that takeoffs are more accurate and project timelines are accelerated.

# Conclusion

Highly-effective estimators implement four key habits, all of which can be achieved to a greater degree using the right technology. With the use of a centralised platform, estimators can create accurate takeoffs to generate competitive bids faster via increased collaboration and streamlined digital workflows. This results in lower risk, higher win rates, and expedited construction timelines.

Autodesk's latest product, Autodesk Takeoff, offers many features that make the takeoff process faster and more accurate, the most novel of which is the combination of 2D and 3D takeoff in a cloud-based environment. Estimators interested in leading in the industry can explore this technology as an option for improving everyday workflows.



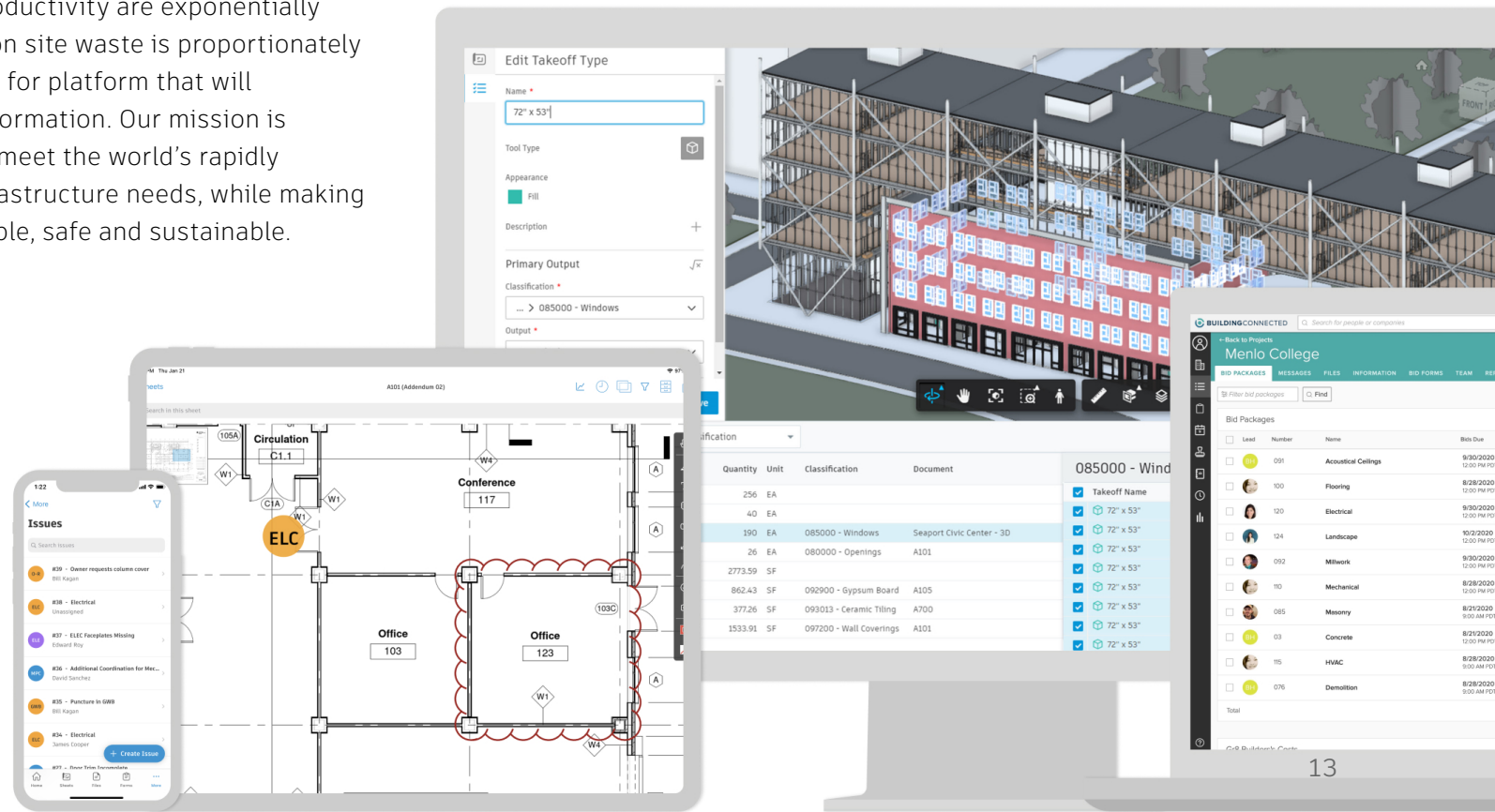


# See the Future of Connected Construction

construction.autodesk.com

In 2018, Autodesk announced that construction would be a key focus area to help our customers on their design and make journey. To capitalise on the opportunity, Construction became its own CEO-staff level organisation, Autodesk Construction Solutions. This unique structure is comprised of product development, customer success, marketing, and field operations. The organisation is designed to move at the speed of the market and serve customers on a level playing field with other solution providers. Autodesk Construction Solutions offers products that cover the entire construction lifecycle, from design through plan to build and operate, including the Autodesk Construction Cloud which brings together our cloud-based solutions Assemble, BIM 360, BuildingConnected and PlanGrid.

Our vision is to create a vibrant construction industry where predictability and productivity are exponentially increased, while construction site waste is proportionately reduced. The time has come for platform that will empower an industry transformation. Our mission is to help construction teams meet the world's rapidly expanding building and infrastructure needs, while making construction more predictable, safe and sustainable.





Autodesk is changing how the world is designed and made. Our technology spans architecture, engineering, construction, product design, manufacturing, media, and entertainment, empowering innovators everywhere to solve challenges big and small. From greener buildings to smarter products to more mesmerizing blockbusters, Autodesk software helps our customers to design and make a better world for all. For more information visit [autodesk.com/construction](https://autodesk.com/construction).

Connect with ACS



© 2021 Autodesk. All Rights Reserved.



UK & EMEA  
+44 808 1892 253  
[acs.emea@autodesk.com](mailto:acs.emea@autodesk.com)  
[construction.autodesk.com/gb](https://construction.autodesk.com/gb)

United States  
+1 (866) 475-3802  
[construction.autodesk.com](https://construction.autodesk.com)

Australia & APAC  
AUS +61 1800 314 435  
[acs.apac@autodesk.com](mailto:acs.apac@autodesk.com)  
[construction.autodesk.com/au](https://construction.autodesk.com/au)