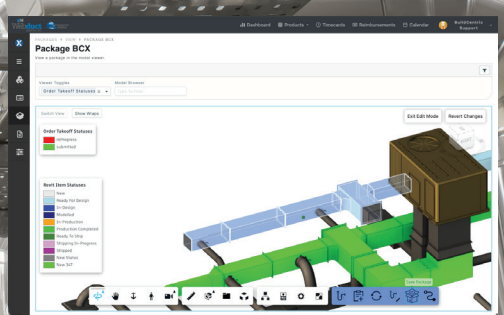
Volume 7 / Number 5

CONSTRUCTION IN THE CLOUD

Beyond Fabrication

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Feature Model Spooling v3.13



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Beyond Prefabrication

Key Takeaways from the SMACNA Annual Conference in Orlando

What the industry's conversations around productivity, prefabrication, and technology mean for sheet metal and HVAC contractors.

By Tye Beaser

The SMACNA Annual Conference in Orlando brought together contractors, industry leaders, and technology providers to share ideas and discuss the challenges the sheet metal and HVAC industry faces.

Representing BuildCentrix at this year's conference, I had the opportunity to attend several sessions that offered valuable insight into where the industry is heading. While the topics ranged from prefabrication and labor productivity to change order management and technology adoption, many of the conversations came back to the same question: How can contractors improve efficiency and profitability without adding unnecessary complexity to their operations?

Here are a few of the key takeaways that stood out.

Understanding the Real Cost of Prefabrication

One of the more interesting sessions was Mark Federle's "The Real Cost of Prefabrication," which challenged contractors to take a closer look at the actual costs and benefits of moving work from the field into the shop.

Most contractors recognize the potential advantages of prefabrication, including improved productivity, reduced field labor, and better control over production. However, making prefabrication successful requires more than simply shifting work into a controlled environment.

Shop space, transportation, staffing, project requirements, and production capacity all need to be considered.

One example discussed was what it would realistically take to move 50% of project joints into the shop. While that might sound like a reasonable target, contractors need to understand whether their existing resources can support that level of production and what adjustments would be required.

Another important takeaway was the need to measure whether prefabrication is actually delivering the expected results.

Comparing estimated labor hours against actual production time, tracking shop productivity, and understanding the impact on field labor can give contractors a much clearer picture of their return on investment.

The takeaway: Prefabrication isn't necessarily about doing as much work as possible in the shop. It's about identifying where prefabrication makes sense, understanding the costs involved, and measuring the impact on the overall project.

Using Productivity Data to Support Growth

John Marsh's session, "The Pulse of Sheet Metal Fabrication," focused on productivity measurement and the importance of understanding how a business is performing.

One point that stood out was that taking on more work doesn't always mean making more money.

As contractors grow, managing labor, production schedules, shop capacity, and communication between teams becomes increasingly challenging. Without a clear understanding of productivity, it's easy for inefficiencies to go unnoticed.

This is where having reliable operational data becomes valuable.

Understanding how long work actually takes, where production bottlenecks occur, and how resources are being used allows contractors to make better decisions about staffing, scheduling, and future projects.

> ***"Taking on more work doesn't always mean making more money"***

It also provides a way to evaluate whether changes to existing processes are making a difference.

For contractors looking to expand, these insights become especially important. Increasing project volume without understanding current production capacity can create additional challenges rather than improve profitability.

The takeaway: Growth needs to be supported by a clear understanding of operational performance. Contractors who can measure productivity and identify inefficiencies are in a better position to take on additional work while protecting their margins.

Better Change Order Management Means Better Financial Control

Another session that caught my attention was Kaity Strong Steele's "Change Order Reality Check," which explored the challenges contractors face when managing additional work throughout a project.

Change orders are a normal part of construction, but documenting them, tracking labor and materials, and getting the necessary approvals can quickly become an administrative burden.

When information is recorded on paper, stored across multiple systems, or communicated inconsistently, it becomes harder to keep track of what work has been completed and what still needs to be billed. This can lead to delayed approvals, additional administrative work, cash flow challenges, and, in some cases, missed revenue.

One of the important points from this discussion was the value of having a consistent process for documenting work as it happens. When field teams can accurately record labour, materials, and completed work, the office has better information to support change orders and follow up on approvals.

While change order management may not always receive the same attention as production efficiency, it can have a significant impact on a contractor's bottom line.

The takeaway: Improving profitability isn't only about completing work faster. It's also about making sure the work being completed is properly documented, communicated, and accounted for.

Technology Needs to Solve a Real Business Problem

Jeff Sample's session, "Owning the Outcome – Leading Technology That Drives Business," addressed something we see regularly when speaking with contractors about software and process improvements.

Implementing new technology doesn't automatically make a business more efficient. A company can successfully roll out a new software platform, train its employees, and still struggle to see a meaningful return on its investment. Often, the challenge comes down to not clearly defining what the technology is supposed to improve.

Before introducing a new system, contractors need to understand the problems they're trying to solve and what success should look like. Are they trying to reduce administrative work? Improve communication between the shop and field? Gain better visibility into labor hours? Identify production issues before they impact a project?

01 Prfebrication

Measure the full cost and impact of prefab, from shop labor and materials to field installation, to understand the real return.

02 Change orders

Improve output and margins by eliminating bottlenecks, balancing shop and field work, and giving crews the information they need to keep projects moving.

03 Productivity

Reduce surprises and protect profitability with clear, consistent documentation, faster turnaround on updates, and better visibility across the project.

04 Technology

Use connected tools to solve real business problems—like cost measurement, project tracking, and field-to-shop coordination—not just to add more software.

Having clear objectives makes it easier to select the right technology, get employees on board, and measure whether the investment is delivering results.

Another important consideration is how technology fits into existing operations. Shop and field teams have established ways of working, and introducing new software needs to make their jobs easier, not create additional steps.

The takeaway: Technology should support the way a contractor operates and address specific business challenges. The goal isn't simply to replace paper with software. It's to improve the processes behind the work.

What This Means for BuildCentrix

Attending these sessions reinforced many of the challenges we hear about in our conversations with sheet metal and mechanical contractors.

Whether it's understanding the true cost of prefabrication, improving shop productivity, tracking labor, or keeping information consistent between the field and office, contractors are looking for better ways to manage their operations.

One thing that stood out across the conference was how closely these challenges are connected.

For example, increasing prefabrication capacity can improve field productivity, but only if the shop has the resources and information needed to support that work. Similarly, collecting production data is valuable, but contractors also need a way to use that information to make better decisions.

At BuildCentrix, much of our focus is on helping contractors improve the connection between their shop and field operations. Having better visibility into production, material requirements, labor information, and day-to-day workflows can help teams stay organized and identify areas for improvement.

These are practical challenges that contractors deal with every day, and the discussions at SMACNA reinforced the importance of addressing them with solutions that fit how contractors actually work.

Looking Ahead

My biggest takeaway from this year's SMACNA Annual Conference is that contractors are becoming more focused on understanding the business impact of their operational decisions.

Prefabrication, productivity tracking, change order management, and technology adoption may seem like separate topics, but they all contribute to the same objective: running a more efficient and profitable business.

For contractors, that means taking a closer look at existing processes, identifying where time and resources are being lost, and finding practical ways to improve. It also means having the right information available to understand what's working and what needs attention.

As the sheet metal and HVAC industry continues to evolve, I expect these conversations around productivity, operational visibility, and technology to become even more important.

It was great to connect with contractors and industry professionals in Orlando, hear about the challenges they're facing, and learn how different organizations are approaching them. We're looking forward to continuing those conversations and finding new ways to help contractors improve their shop and field operations. ▪

Curious about how BuildCentrix will help your company become more productive and efficient?

Book your free demo today at buildcentrix.com

Feature Model Spooling v3.13.0

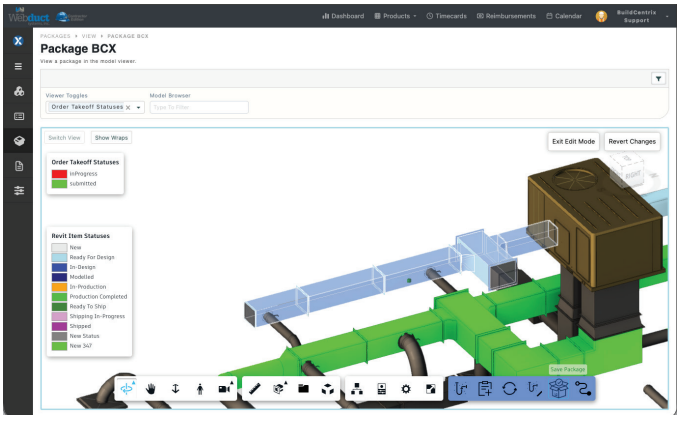
BuildCentrix is continually adding faster and easier ways for you to keep a tight connection between the building model, manufacturing, and installation. This month's release of version 3.13.0 of the Model Spooling service highlights this with the addition of several new features including:

Filter & Export: Filter model data by attributes such as Material, Insulation, and Dimension, and export the filtered results as a CSV document.

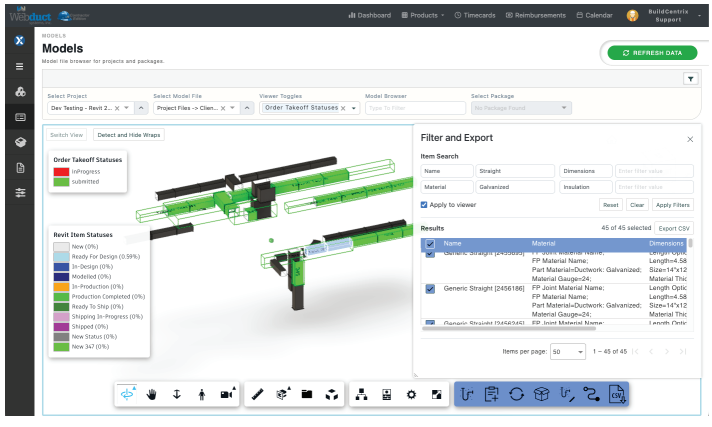
This new feature allows you to download all the products in your filter criteria from the spool, i.e., filter a list for all coil duct.

- **Wrap Visibility Toggle**: Easily hide or show wraps with a new button that automatically detects if wraps are present in the model.
  - Locating all the wraps in the model allows you to select the duct inside the wrap.
- **Revit Status Management:** Add, edit, or remove any Revit status on spooling models.
  - The easy way to keep track of materials from production to installation in real-time.
- **Package Editing**: Edit previously created packages at any time.
  - More flexibility, faster, and easier to respond to real world changes on the jobsite.
- **Run Selector Tool**: Select two elements in the model to automatically highlight the shortest connecting path for editing.
  - Allows users to select two points on a run of duct to create a work order even if they are not connected at some point in the run, i.e. there is air handler that does not show on the model.

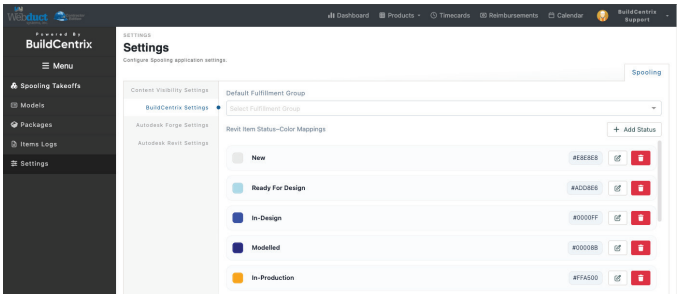
Package Editing



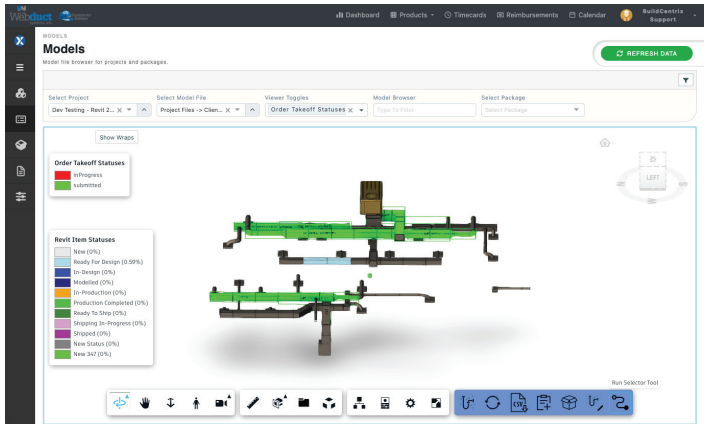
Filter and Export



Spool Status Management



Run Selector Tool



BCX is committed to building better tools to connect the building model to reality in the shop and on the jobsite. BCX spooling tools empower the people charged with getting the work done in the detailing, shop, and field to work together to improve efficiency and reduce costs on every project.

If you would like more information on the BCX Model Spooling or any Autodesk plugins please email *support@buildcentrix.com*