

# DriveWorks Case Study

- SKYLIGHT MANUFACTURER

Drive  
Works

DriveWorks—Online Sales Configurator & Design Automation



## Wasco Skylight Company is saving 10 hours of labour per week with DriveWorks

Wasco Skylight Company used SolidWorks and DriveWorks to create a model for the double-pitched Pinnacle 350 Series skylights, a class design that resembles a low cupola topped with glass or plastic instead of roofing material.

### **The Challenge:**

Wasco Skylight Company designs and manufactures a range of consumer and commercial skylights. Many of the consumer skylights are standard sizes but products within the commercial lines are often custom-designed based on a large number of component designs and configurations or they include custom-designed elements. Some elements like mullions might be requested by the consumer or architect while other component types are dependent on the skylight's size or layout. Length, width, and thickness of glazing also lead to a multiple number of configurations. Wasco used a series of Microsoft Excel spreadsheets along with manual calculations and methods to create various product configurations, capturing the final design in AutoCAD 2D drawings. But the design team needed a solution that would allow them to quickly customize designs to meet local building code, site restrictions, and specifications from architects.

### **The Solutions:**

The company evaluated several packages but chose SolidWorks Professional 3D CAD software and DriveWorks engineering automation software for the ability to customize existing designs and thereby reduce delivery times. The design team's understanding of engineering rules made it easy to see the capabilities at the outset. They decided to shorten a select set of processes for one of their best-selling custom products, because that would have a significant impact on operations. Working from sales inputs, the DriveWorks model was able to create the SolidWorks 3D design, customer quote, drawings, purchase schedule, cost of materials, and bill of materials

(BOM). Before using DriveWorks, Wasco had to assemble each skylight just as the product reached its final stages. While this ensured everything had been drawn, documented, and cut correctly, this final check consumed two to three hours of labour. Using the DriveWorks model, the design team is now able to capture engineering and manufacturing rules based on sales order inputs including size, glazing type, colour, and vertical end types. The model automatically applies the rules to design projects to create the design details, and then outputs drawings and documents.

### **Time saving metrics**

**DriveWorks = Shortened engineering and drafting time by 75%.**

**DriveWorks = Saved 10 labour hours per week across engineering and manufacturing.**

**DriveWorks = Freed up engineering time to devote to other projects.**

*"The DriveWorks output provides the shop floor as much time as possible for manufacturing – and everything is 100 percent accurate, with every detail documented. It's icing on the cake that we can go direct to truck without having to do the assembly check." says Matt Wyatt, Engineer at Wasco Skylight Company.*

