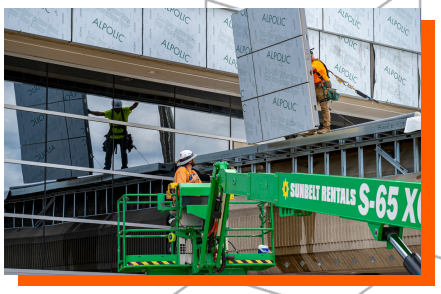
TJ Wies Prefab Case Study in Dealership Retrofit

How Prefabricated Panels Benefit Active Businesses?

Mungenast Lexus Facade Renovation

The Mungenast Lexus Facade Renovation in Ballwin, Missouri. Highlights the vital role of prefabrication in meeting the demanding schedule of active/ongoing businesses. TJ Wies Prefab demonstrates how off-site construction methods can deliver exceptional quality and efficiency, especially in the limited space of an active car dealership. Using advanced prefabrication techniques, TJ Wies integrated over 60 panels into the existing building, all the while the business was active and fully operational.



The Mungenast project involved the retrofit of an existing precast facade into finished aluminum composite material (ACM) panels. Prefabrication was chosen not only to expedite the installation but also to ensure minimal disruption to the dealership's ongoing sales and service operations. By prefabricating 90% of the project offsite, TJ Wies Prefab was able to work around the busy dealership's schedule.

When Holland approached TJ Wies Prefab in February 2023 with traditional framing plans based on rough sketches, speed and minimal interference with dealership operations were the top priorities. In April 2023, prefabrication was considered as a solution to meet these goals.

By June 2023, TJ Wies Prefab presented a prefabrication design that prioritized minimizing on-site disruption. By August 2023, budgets were finalized, and the project launched into full swing.

Given the dealership's busy schedule, collaboration was crucial. TJ Wies Prefab worked closely with Holland (the General Contractor) and HDA (the Architect) to create a plan that not only met the owner's design expectations but also allowed the dealership to continue uninterrupted operations. Inspections and QA/QC checks were conducted in real-time during fabrication to ensure everything would fit perfectly upon delivery, avoiding any surprises that could disrupt the business.

Before

After

The project's design posed several unique challenges, particularly given the need to work around the dealership's operational hours and ensure that no work impeded customer traffic.

TJ Wies Prefab used advanced technologies, including a 3D scan of the existing facade, transformed into a Revit model. This approach ensured the prefabricated panels could be manufactured with precision, allowing them to be installed swiftly.

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Panel Installation

Offsite prefabrication accounted for 90% of TJ Wies' portion of the project. Installation took only 20 working days with a smaller crew, compared to 40+ days with a crew twice the size. Additionally, the ACM panel installation, which typically takes over 20 weeks, was streamlined through this approach, avoiding lengthy disruptions.

Transportation logistics were key to maintaining the dealership's flow of business. The panels were delivered in small batches to avoid crowding the site, ensuring the dealership's lot remained clear for customers and vehicle displays. This process allowed the crew to work safely and efficiently while staying out of the dealership's way.

**Lowell M. Kircher, Senior Project Manager at Holland Construction says, "When a project requires a trusted trade partner with established prefabrication and safety qualities,
TJ Wies is that contractor."**

Challenges and Solutions

One of the key challenges was working with incomplete 2D as-builts from the existing building. TJ Wies Prefab employed tight tolerances to ensure that the panels fit seamlessly onto the existing facade. Additionally, the large sweeping radius on the north elevation required innovative segmenting of the ACM panels.

Another challenge was coordinating with the dealership to ensure minimal disruption during the roof tie-ins. Prefabrication played a critical role here, reducing exposure to the elements and allowing the roof work to be completed quickly, without leaving the dealership vulnerable to weather or compromising its daily operations.

Delays in ACM panel fabrication and delivery were managed carefully so as not to interfere with the dealership's schedule. Tight coordination between the teams ensured that any delays were absorbed without affecting business continuity.

Looking to streamline your next project? Contact us today to discover how prefabrication can save you time, and deliver exceptional quality! Let's discuss how we can make your vision a reality.

Click below to contact us today!

TJ WIES PREFAB
Safety. Efficiency. Certainty.