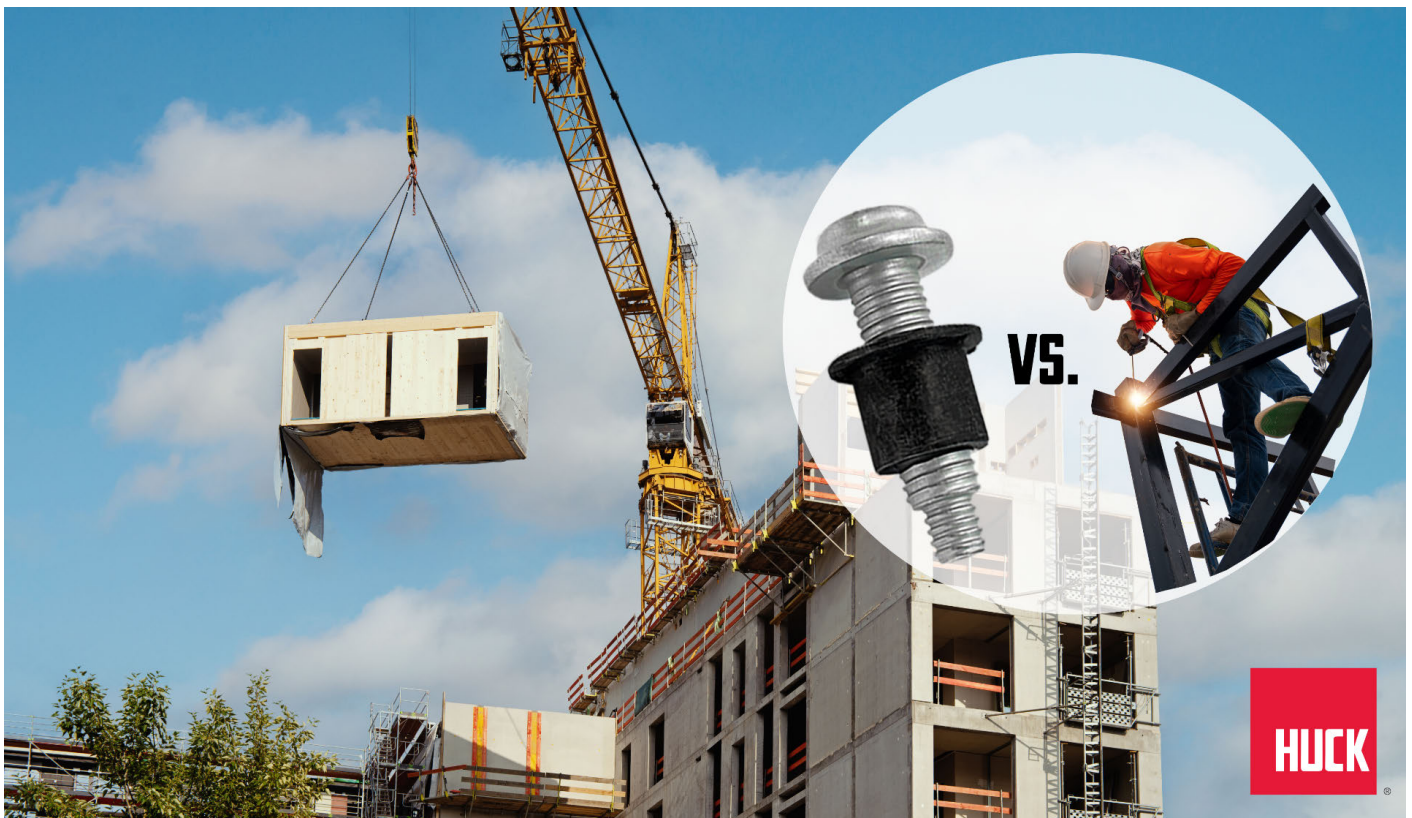


HUCK BOBTAIL LOCKBOLTS VS. WELDING IN MODULAR CONSTRUCTION

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Introduction:

Modular construction has witnessed a surge in popularity due to its efficiency, cost-effectiveness, and sustainability. The choice of fastening methods plays a pivotal role in determining the success of modular construction projects. This article will explore the differences between Huck BobTail Lockbolts and welding, focusing on their impact on speed, labour requirements, structural integrity, versatility, and corrosion resistance in modular construction.



1. Speed and Efficiency:

Speed and efficiency play a pivotal role in the success of modular construction. The accelerated construction timeline in modular projects stems from the off-site fabrication of standardised modules, reducing the overall construction period significantly.

The swift completion of modular projects not only enables faster returns on investment but also offers increased flexibility for adapting to evolving needs. Ultimately, the emphasis on speed and efficiency in modular construction aligns with the demands of contemporary construction practices, driving innovation and setting the stage for a more streamlined and sustainable future in the industry.

Huck BobTail Lockbolts:

- **Rapid Installation:** Lockbolts offer a faster assembly process, reducing overall construction project timelines.
- **Quick Deployment:** Installation is efficient, requiring less time and effort compared to welding.

Welding:

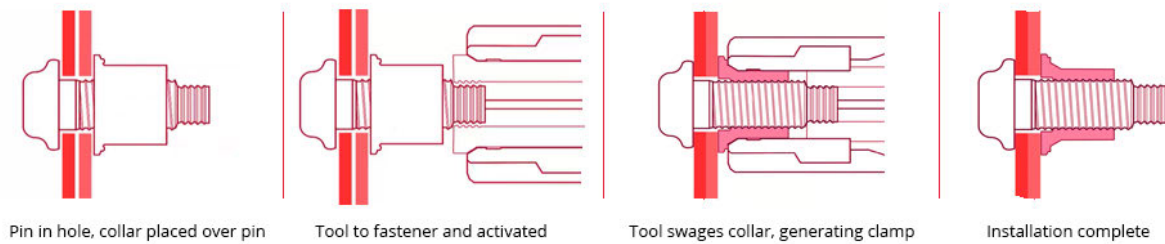
- **Time-Consuming:** Welding involves a more intricate process, demanding additional time for preparation, execution, and cooling.
- **Slower Project Timelines:** The overall construction process might be prolonged due to the time-intensive nature of welding.

2. Labour Requirements:

Less complex installation procedures that require just basic training reduces the labour costs associated with installation and assembly. The simplified labour tasks contribute to faster project completion, lower labour costs, and improved overall productivity. Additionally, it facilitates a more adaptable workforce, enabling workers to focus on specialised tasks within the modular assembly process, ultimately optimising the construction workflow.

Huck BobTail Lockbolts:

- **Less Skilled Labour:** Lockbolt installation is less complex, allowing for the use of technicians with minimal basic training. See installation process diagram below.
- **Cost Savings:** Reduced need for highly skilled welders results in lower labour costs.



Huck BobTail Installation sequence

Welding:

- **Skilled Workforce:** Welding demands certified professionals with specific expertise, potentially increasing labour costs.
- **Limited Workforce Options:** A shortage of skilled welders can pose challenges in recruiting a competent workforce.

3. Structural Integrity:

Structural integrity is of highest importance in modular construction, ensuring the durability and safety of the built environment. In modular construction, buildings are composed of prefabricated modules that must seamlessly integrate to form a cohesive and stable structure, and therefore the joining technique must also guarantee a sound and stable structure.

A focus on structural integrity in modular construction ensures that buildings not only meet regulatory requirements but also stand the test of time, providing a secure and reliable built environment.

Huck BobTail Lockbolts:

- **Mechanical Connection:** Lockbolts create a robust mechanical link, enhancing structural integrity.
- **Vibration Resistance:** The two-piece design of Huck BobTail Lockbolts provides resistance to vibrations, crucial in maintaining structural stability.

Welding:

- **Fusion Method:** Welding relies on melting and fusing materials, potentially leading to weakened structural integrity.
- **Vulnerability to Vibrations:** Welded joints may be more susceptible to vibrational stresses, impacting long-term structural stability.

4. Versatility:

The versatility of fasteners plays a pivotal role in the success of modular construction, offering flexibility and efficiency in connecting prefabricated modules. Whether it's bolting steel frames or securing wall panels, the versatility of fasteners ensures a robust and customisable construction process, facilitating the creation of diverse architectural designs and meeting the specific needs of different projects in the modular construction landscape.

Huck BobTail Lockbolts:

- **Diverse Applications:** Lockbolts can be utilized across various materials, including steel, aluminium, and composite panels.
- **Design Flexibility:** The versatility of Lockbolts makes them suitable for diverse modular construction designs.

Welding:

- **Material Specificity:** Welding may be limited to specific materials, potentially restricting design options.
- **Rigidity:** Welding joints may not adapt as seamlessly to diverse material combinations.

5. Corrosion Resistance:

The corrosion resistance of fasteners is a critical aspect in modular construction, where durability and longevity are paramount. Ensuring the corrosion resistance of fasteners not only preserves the structural integrity of the modular components but also extends the lifespan of the entire construction.

Huck BobTail Lockbolts:

- **Corrosion Mitigation:** The design of Lockbolts minimizes the risk of corrosion, ensuring long-term durability.
- **Sustainability:** Corrosion-resistant properties contribute to the sustainability of modular constructions.

Welding:

- **Vulnerable Seams:** Welded joints can leave seams susceptible to corrosion, necessitating additional protective measures.
- **Maintenance Requirements:** Increased vulnerability to corrosion may lead to higher maintenance needs over time.

Conclusion:

In the context of modular construction, the choice between Huck BobTail Lockbolts and welding should consider factors such as speed, labour requirements, structural integrity, versatility, and corrosion resistance. While both methods have their merits, the advantages offered by Huck BobTail Lockbolts, including faster installation, reduced labour costs, enhanced structural integrity, versatility, and corrosion resistance, position them as a compelling choice for the evolving needs of the modular construction industry.

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