

# Building Better Together: MBCEA-MBMA Joint Collaboration

Welcome to our presentation on key collaboration opportunities between Metal Building Contractors & Erectors Association (MBCEA) and Metal Building Manufacturers Association (MBMA). This presentation highlights critical areas where improved communication and standardization can significantly enhance field operations.

Our goal is to educate manufacturers about challenges faced by assemblers and present industry-wide recommendations that would make erection processes more efficient, safer, and cost-effective. These insights come directly from discussions at recent MBMA Technical Committee meetings.





# Temporary Bracing & Modular Erection Planning



## Enhanced Drawing Notations

Prominent notes on drawings regarding temporary bracing requirements would improve safety planning and execution during erection phases.



## Builder Meeting Instructions

Provide your builders with an introduction to temp bracing and modular erection and direct them to MBCEA resources.



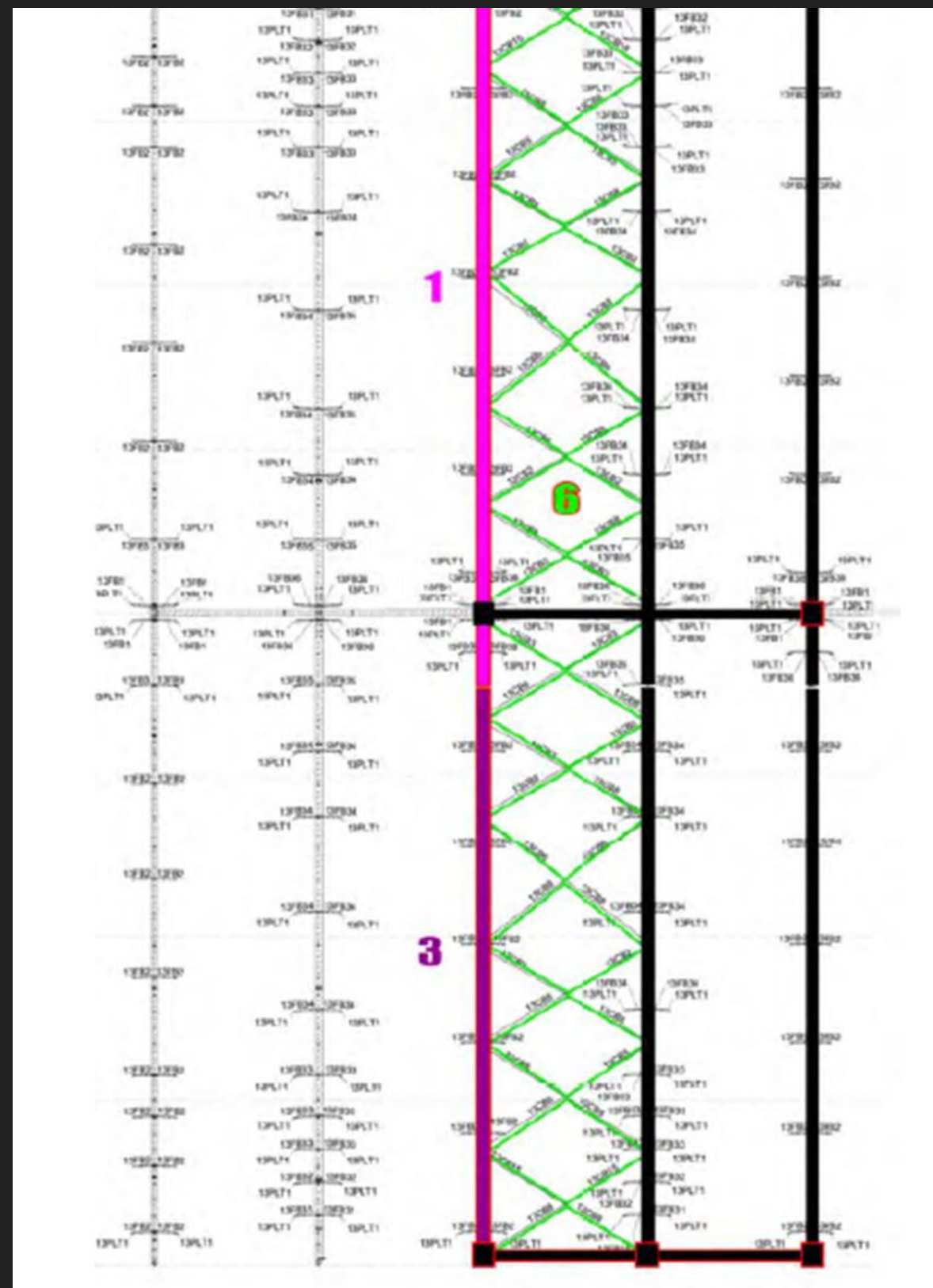
## Component Weight Documentation

Include mainframe weights on drawings at least two weeks before delivery to facilitate proper rigging and lift planning. Consider including weights on permit sets to enable early planning.

Proper planning for temporary bracing and modular erection significantly reduces field risks and increases efficiency. By providing comprehensive information earlier in the project timeline, manufacturers can help erectors develop more effective installation strategies.

<b>3. Description of Load:</b>  <b>LOAD:</b> (1)13RF65 – 3809# (1)13RFR47 – 5617# (1)13RF46 – 4877# (1)13RF64 – 5624# (Subtotal -19937# (22) 1.5 x 5” HH Assemblies – 110# (18) 1.5 x 3.75” HH Assemblies – 78# (18) 1.5 x 4.5” HH Assemblies – 85# (24) Flange Braces – 304# (24) ½ x1” HH Assemblies – 7#  <b>RIGGING:</b> 160’ TPC Slings – 120# (8) Shackles – 128# (option – girder clamps – 130#)	<b>Load Weight:</b>	<b>20521#</b>
	<b>Block Weight:</b>	<b>3000#</b>
	<b>Spreader Weight:</b>	
	<b>Rigging Weight:</b>	<b>378#</b>
	<b>Jib Weight:</b>	
	<b>Job Ball Weight:</b>	
	<b>Hoist Line Weight:</b>	<b>444#</b>
	<b>TOTAL: 24333#</b>	
	<b>3. Crane Manufacturer: Kobelco</b>	
	<b>Model No.: CK1100G-2</b>	<b>Serial Number: TBD</b>
<b>Maximum Load Radius: 38’</b>	<b>Counterweight: 69,100 and 31,800 Carbody</b>	





# Building Information Modeling (BIM) Enhancements



## Earlier Delivery Timeline

Provide BIM models with permit set or before approval drawings to allow erectors more time for planning and coordination.



## Industry-Wide Adoption

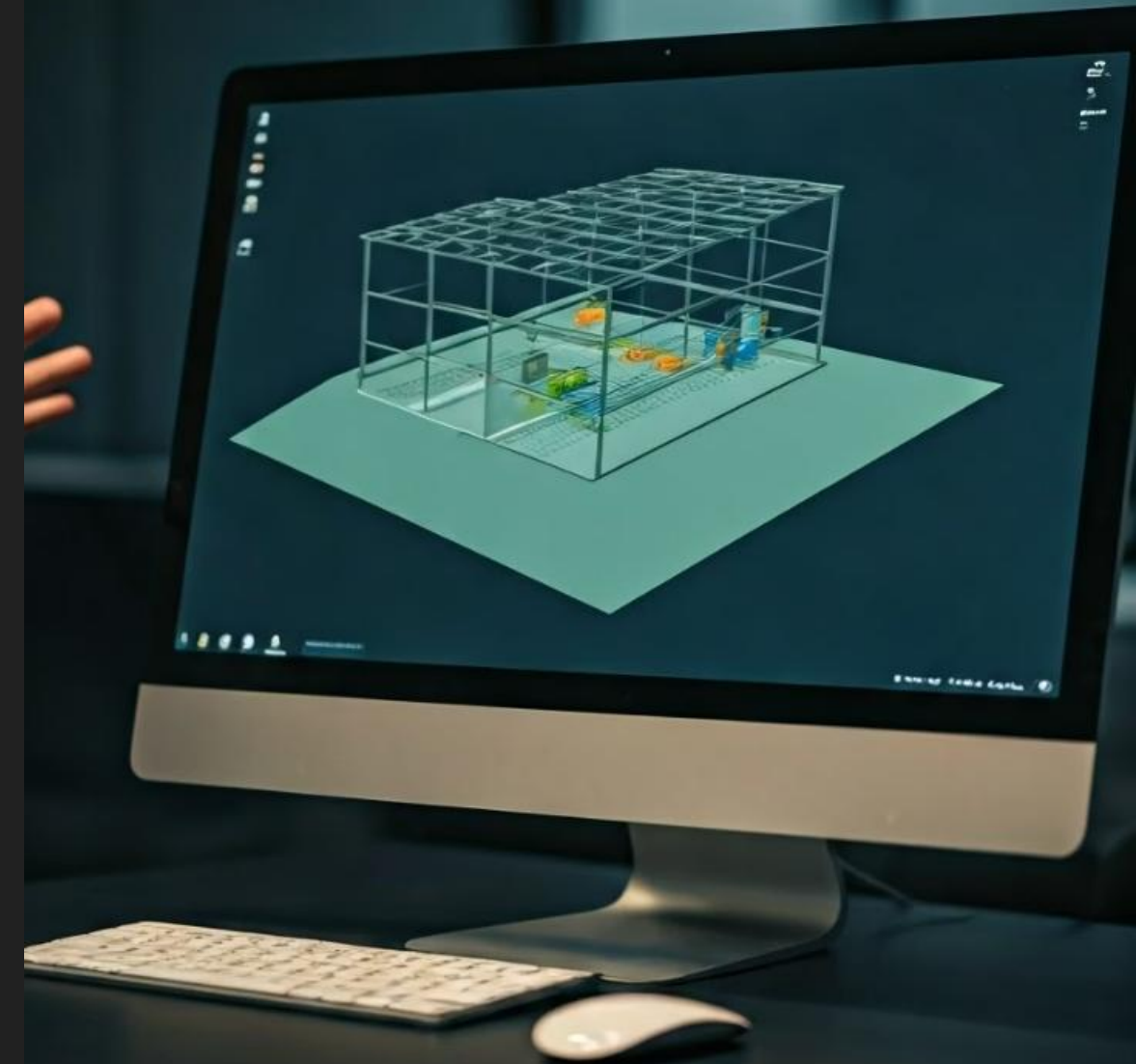
Encourage more manufacturers to develop and provide BIM capabilities as a standard offering.



## Logical Component Organization

Group model elements logically: frames, secondary members, bracing, wall and roof systems, and accessories for improved navigation and utility.

BIM technology offers tremendous advantages for planning, clash detection, and visualization. Earlier access to comprehensive, well-organized models allows erectors to identify potential issues before they become costly field problems. A standardized approach to model organization across manufacturers would further streamline the planning process.



# AC478 Accreditation Integration

## Value of AC478

The AC478 accreditation program establishes quality benchmarks for metal building assemblers, ensuring proper training, processes, and safety protocols.

When specified in project documents, AC478 helps ensure qualified erectors are selected, reducing risk and improving quality outcomes.

Manufacturer support in promoting AC478 to the architectural community would significantly advance quality standards industry-wide. By collaboratively educating AIA members and specification writers about the value of certified assemblers, we can elevate project outcomes and safety standards throughout the metal building industry.

## Implementation Challenges

Despite its benefits, many architects and engineers remain unfamiliar with AC478 and its importance in the specification process.

Coordinated industry effort is needed to educate design professionals about this critical quality assurance program.

# Anchor Bolt Reactions Clarification



## Clear Reaction Documentation

Improved explanation of wind load basis



## Load Combination Guidance

Instructions for ASCE7 compliance



## Industry Standardization

Consistent foundation design approaches

Anchor bolt reactions information often creates confusion between erectors, foundation contractors, and engineers of record. Clearer documentation explaining that reactions are based on full wind loads and need reduction per ASCE7 load combinations would prevent common misunderstandings.

An industry white paper or standardized specification language addressing proper foundation design approaches would bring consistency across projects. This standardization would reduce engineering conflicts and potentially save significant costs related to foundation corrections.





# Field-Friendly Drawing Improvements

## Multi-Language Support

Expand availability of Spanish-language drawings across all manufacturers to improve communication with diverse workforce and reduce errors due to language barriers.

## Electronic Inventory Systems

Implement standardized electronic tracking systems for components to streamline receiving, storage, and installation verification processes.

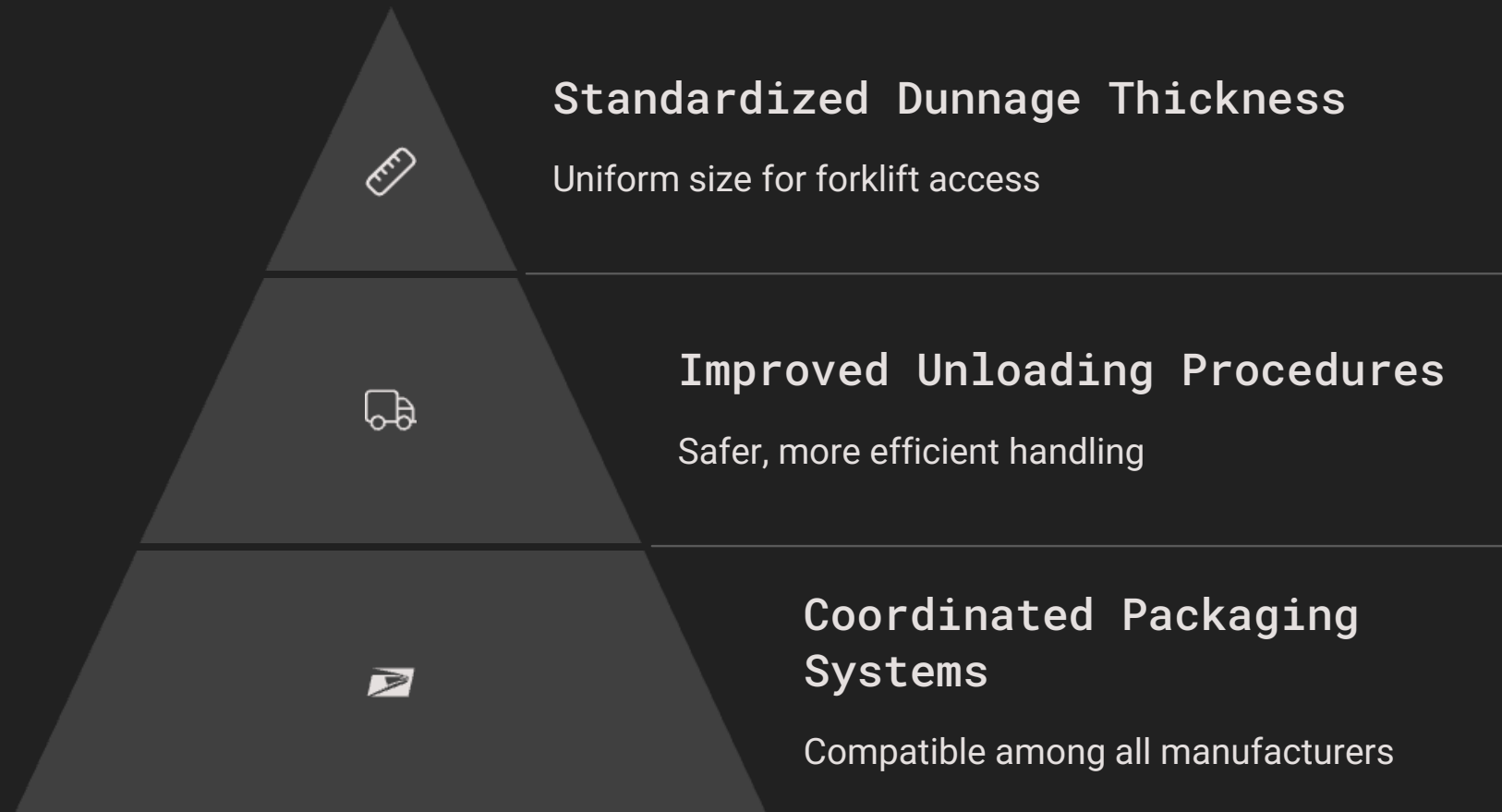
## Improved Readability

Use larger font sizes and clearer notations on 11x17 field prints to accommodate job site conditions where digital tablets may not be available or practical.

Field documentation is critical to successful erection. While the industry continues its digital transformation, many job sites still rely heavily on paper drawings. Ensuring these documents are easily readable, comprehensive, and available in multiple languages significantly reduces assembly errors and improves efficiency.



# Shipping and Dunnage Standardization



Variations in dunnage thickness and placement complicate unloading, increasing handling time, damage, and safety risks.

Standardizing dunnage specs would streamline material handling across projects, saving time and reducing injury risk during unloading.



# Component Overages and Inventory Management



Managing component overages represents a significant logistical challenge for erectors. Clear documentation of expected fastener quantities within drawing packages would improve inventory management and reduce time spent counting and sorting.

A balanced approach to panel overages is needed—shipping 1-2 extra panels per type provides necessary replacements for damaged items without creating excessive shipping and handling costs. Developing standardized procedures for verification and returns would further optimize the material management process.

# Take-Home Resource: MBCEA-MBMA Collaboration Initiative

This resource summarizes seven key areas of collaboration between MBCEA and MBMA, focusing on construction standards, digital tools, safety protocols, and inventory management to improve efficiency across metal building projects.



## 1 Temporary Bracing & Modular Erection Planning

Guidelines for proper bracing techniques and efficient modular assembly procedures for safer construction practices.

## 2 Building Information Modeling (BIM) Enhancements

Advanced BIM resources for improved project visualization, clash detection, and digital collaboration tools.

## 3 AC478 Accreditation Integration

Requirements and benefits of AC478 accreditation with implementation steps for qualification and compliance.

## 4 Anchor Bolt Reactions Clarification

Detailed specifications and proper documentation for anchor bolt placement, loading, and testing protocols.

## 5 Field-Friendly Drawing Improvements

Optimized field documentation with larger font sizes, clearer notations, and multilingual support for job site use.

## 6 Shipping and Dunnage Standardization

Uniform specifications for dunnage, packaging systems, and improved unloading procedures for safer material handling.

## 7 Component Overages and Inventory Management

Best practices for fastener documentation, quantity verification, panel planning, and efficient return procedures.



# Thank You for Your Participation

Together, MBCEA and MBMA are strengthening the metal building industry through collaborative initiatives that improve safety, efficiency, and quality.

We look forward to implementing these standards with you across future projects.

