STORAGE EQUIPMENT
Selection, Application, and Use

Presented by:

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Specialty Wood Products
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Sponsored by:

STORAGE EQUIPMENT MANUFACTURERS ASSOCIATION

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About SMA

- Non-profit Industry Group of MHI
- Formed in 1974 by visionary industry leaders
- Mission: To advance standards, quality, safety and general fitness for intended use of industrial storage equipment
- Membership requirements:
  - Manufacture & control structural design of storage equipment for sale in USA
  - Pay dues
  - Attend meetings
  - Participate in monthly statistical program
  - Voluntarily support design and manufacture of products in accordance with appropriate American National Standards
- Members are leading manufacturers from throughout the world
Retail Back Rooms
Automotive Parts Rooms
Warehouse Applications
Manufacturing
Conveyor Sortation Support
Paint Line Platform
Food Application
Modular Office Application
Manufacturing Space Electronics
Cold Storage Application
Decking/Flooring
Components of an Elevated Platform

Footings – How Much Load?
Components of an Elevated Platform

Column & Joist Steel – What is Allow Deflection?
Components of an Elevated Platform

Corrugated Decking
Components of an Elevated Platform

Decking Surface, Stairs & Handrail
Types of Flooring Surfaces Available

Concrete
Types of Flooring Surfaces Available

Bar Grating
Types of Flooring Surfaces Available

MR Engineered Wood Composites
Advantages - Concrete

- Strong
- Fire Resistant
- Poured in Place
- Paintable Surface
Disadvantages - Concrete

Flexural Damage Caused by Pallet Jack Loads
Disadvantages - Concrete

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Bar Grating – Advantages & Disadvantages

1" x 1/8" 19W4
Bar Grating – Advantages & Disadvantages

PressLock
Laminated Panels - Advantages
Laminated Panels
Wood Fiber Separation
Other MR Engineered Wood Products - Advantages
Other MR Engineered Wood Products – Disadvantages
Using the proper Flooring System will result in Good Versatility & Long Term Performance
Work Platforms, Equipment Platforms and Mezzanines

Systems, Designs and Accessories
► Optimize existing overhead space
► In-plant offices, storage, manufacturing
► Cost less than new construction
► Easier to expand up — not out.
Single-Level Mezzanine
Mezzanines optimize existing overhead space to gain valuable office, storage, or manufacturing area at costs lower than new construction.

Hybrid Mezz/Crane Multi-Level Mezzanine
Mezzanines optimize existing overhead space to gain valuable office, storage, or manufacturing area at costs lower than new construction.

### BOLTED C-SECTION DESIGN

- Most economical on smaller mezzanines
- Uniform live loads of up to 200 lbs. per square foot
- Short lead time
Mezzanine - Framing

BEAM & C-SECTION DESIGN

► Small to medium size mezzanines

► Uniform live loads of up to 200 lbs. per square foot

► Features large spans
Mezzanine - Framing

BEAM & BEAM DESIGN

► Small to medium size mezzanines
► Load capacity is unlimited
► Span size is unlimited
Mezzanine - Framing

BEAM & BAR JOIST DESIGN

► Medium to large size mezzanines
► Uniform live loads of up to 300 lbs. per square foot
► Span size is unlimited
TRUSS GIRDER & BAR JOIST

- Large size mezzanines
- Uniform live loads of up to 300 lbs. per square foot
- Span size is unlimited
Custom Stairways
”Any gate that provides an access opening through the guards for the purpose of loading and unloading material onto a work platform shall be designed such that the elevated surface is protected by guards at all times.”
Pivot Safety Gate

► Unique Cut-to-Width design (10 ft to 3 ft)
► Side rails can easily connect to mezzanine railings for a seamless barrier
► Complies with new ANSI Standard
► Meets OSHA and IBC code requirements
Overhead Safety Gate

- When one side opens, the other is closed
- Spring assist slows descent of gate
- Integral kick-plate keeps objects from falling off mezzanine
- Complies with new ANSI standard
Double-Drop Safety Gate

- Simultaneous loading and unloading
- Ideal for high-cycle forklift access
- Complies with new ANSI standard
- Meets OSHA, IBC, and UBC
Mezzanine Lifts - VRCs
Guard Rail
Specifications

- ANSI MH26.1 – Specification for the Design and Testing of Industrial Steel Shelving
- ANSI MH26.2 – Specification for the Design and Testing of Metal/Wood Shelving
- ANSI MH 26.3 – Specification for the Design Manufacture and Installation of Industrial Work Platforms
Bluff Manufacturing
Cornerstone Specialty Wood Products, Inc.
Heartland Engineered Products, LLC
Lyon Workspace Products
Ohio Gratings Inc.
Penco Products, Inc.
Steel King Industries, Inc.
Steele Solutions, Inc.
Tri-Boro Shelving & Partition Corp.
Western Pacific Storage Solutions
Wildeck, Inc.
Q & A
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