### Issue Date:
September 6, 2011; Revised August 2013, Revised April 2014

### Code/Section:
2012 Phoenix Building Construction Code (PBCC) Section 105.2.13; 2012 IBC Sections 413, 907.2.15, 910.2.2 RMI Specifications for the Design, Testing and Utilization of Industrial Steel Storage Racks; 2012 IFC Sections 3208, 5104.4.3,5704.3.3.6

### Approved by:
Technical Review Team

### Revised by:
Mike Ornoski, Bob Winters

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**Issue**

This interpretation is to help guide staff on what racking systems require permits and what the applicant must submit for plan review. The multitude of racking systems is divided into three categories below and clearly states what is required for plan review and inspections. Although there is a multitude of racking systems, this interpretation should serve to categorize most of those systems into one of the three listed. P&D staff can use this as a guide to instruct applicants as well as staff on the required documentation and reviews.

**Interpretation**

Racking systems vary in height, width and storage capacities. While the PBCC is specific on what is exempt from a permit, it does not specify the critical items to be submitted, reviewed and inspected upon permit issuance. This interpretation is a guide to staff on what is required to be submitted and reviewed for racking permits.

### HEIGHT

<table>
<thead>
<tr>
<th>HEIGHT</th>
<th>REQUIRED DOCUMENTATION</th>
<th>PERMIT</th>
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<tbody>
<tr>
<td>Up to 5'-9&quot;</td>
<td>None required.</td>
<td>Exempt per 105.2.1, #4</td>
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| 5'-9" to 12'-0" | • Provide floor plan identifying location of storage rack(s), exiting system and aisle widths.  
• Provide design drawings and details for overturning anchorage to the floor or walls.  
• Special structural inspection for anchors is required.  
• Manufacturer's max load label is required. | Yes – P&D Can be PBI |
| Over 12'-0"     | • Provide floor plan identifying location of storage rack(s), exiting system and aisle widths. Consider impact to emergency lighting system.  
• Provide design drawings and details for overturning anchorage to the floor or walls.  
• Provide sealed structural engineering calculations and drawings for the racks, overturning and anchors, including evaluation of slab thickness.  
• Special structural inspection for anchors is required.  
• Manufacturer's max load label is required.  
• Racking systems are required to meet high-pile storage requirements.  
• Provide sprinkler design and density information.  
• Provide information on commodities to be stored to include storage heights and configuration of storage.  
• Provide information on building heat and smoke vents. | Yes – Both P&D AND PFD permits are required. Include Fire Department Permit requirement on the P&D permit |

**Note:** Unless substantiated by a geotechnical report, soil bearing pressure is not to exceed 750 psf for a slab less than 7-1/2" thick, or 1000 psf for a slab 7-1/2" thick or greater.