

GENERAL PALLET RACKING INSTALLATION AND MAINTENANCE GUIDELINES

PROPER INSTALLATION OF RACKING

Note: If a layout drawing is provided by Space Aid Mfg., notes on the drawing take precedence over these notes.

1. All racking systems are to be installed level and plumb. The maximum tolerance from the vertical is 1/2" per 10' of height. Frames must be shimmed with steel shims where required to provide firm contact between the post and slab. (Shims are not supplied with rack and must be ordered if required.)
2. All SD, MD, HD1 and HD2 frames are to be anchored to the finished concrete floor with a minimum of two 1/2" dia. X 4-1/2" Hilti Kwik-bolt 3 (or equivalent capacity) wedge anchors (1 front/1rear) - 3" minimum embedment.
3. All beam levels with a capacity of less than 10,000 lbs. U.D.L. must have beams secured to the frames with two safety clips/pins. All levels with a capacity of 10,000 lbs. U.D.L. or more must have beams fastened to the frame with four (4) 3/8" x 1-1/4" Grade 5 bolt sets.
4. If front-to-rear supports such as safety bars or fork spacers are to be used, consideration should be given as to whether they need to be fastened in place. If normal operation causes the support to shift in position, or if the potential exists for them to present a safety hazard by falling from the rack, then they should be fastened in place.
5. All back-to-back frames are to be joined with row spacers. Use a minimum of 2 row spacers per pair of joining frames for frames up to 12' high and a minimum of 3 row spacers for higher frames. Vertical spacing of the row spacers should be a maximum of 8 to 12 feet apart and it is recommended that they be located as near to a horizontal brace of the frame as possible. "2BC" row spacers are to be fastened with two 3/8" x 1-1/4" Grade 5 bolt sets. "4BC" row spacers are to be fastened with four 3/8" x 1-1/4" Grade 5 bolt sets.
6. All floor mount horseshoe post protectors are to be anchored to the finished concrete floor with four 1/2" dia x 4-1/2" wedge anchors - 3" minimum embedment.

PLAQUES

The Owner is required per regulations to display appropriate signage (plaques or labels) indicating maximum permissible design loads in a prominent viewing position.

ALTERATIONS

A Rack frame's allowable load capacity is based on beam locations and beam loading as shown. Reconfiguration or rearrangement of the rack structure is not allowed without prior approval from Space Aid Mfg.

CUSTOM INSTALLATIONS

Space Aid Manufacturing employs a full staff of trained and certified installation team members with experience in a wide range of projects for all types of material storage system installations of any scale.

MAINTENANCE - OWNER'S RESPONSIBILITY

The owner shall maintain the structural integrity of the installed rack system by assuring proper operational, housekeeping and maintenance procedures including, but not limited to, the following:

- a) Prohibit any overloading of pallet positions and of the overall rack system.
- b) Regularly inspect for damage. If damage is found, immediately unload the affected area and replace or repair any damaged columns, beams or other structural components. Any repairs must be completed by a certified technician with engineer supported documentation.
- c) Require that all pallets be maintained in good, safe, operating condition.
- d) Ensure that pallets are placed onto load beams in a properly stacked and stable position.
- e) Prohibit double stacking of any pallet position, unless the rack system is specifically designed for such loading.
- f) PALLETS MUST SPAN BOTH BEAMS. Do not place undersized loads directly on safety bars unless said components have been specifically designed for such loading.
- g) Customer to ensure that storage at the ground level does not prohibit access to any exits or main aisle as required by applicable Fire and Building codes.
- h) All material handling equipment operators should be trained in accordance with CSA B355.
- i) Material handling practices should be designed to minimize impact loads on the pallet rack system.

PREVENTATIVE MAINTENANCE PROGRAM

Space Aid Manufacturing is proud to introduce the launch of our new "Preventative Maintenance Program" involving quarterly, semi-annual or annual Damage Inspections performed by a qualified Space Aid Mfg technical representative. Damage Inspections, including their subsequent reports, provide detailed information of the condition of any existing pallet racking or material storage system. These reports can be used to identify areas that require repairs or replacement of damaged components. The report issued by Space Aid Mfg includes a damage inspection checklist along with a reference layout, a summary report, images to support the checklist, a disclaimer and a quotation for any replacement components or required labour. These inspections are completed by qualified technical staff and are an excellent tool in work place accident prevention.

SERVICE AND REPAIR

Space Aid Manufacturing is now proud to offer on-site service and repair to all of its customers. Our recently created Service Department can now provide ongoing service for any brand or configuration of material storage system. The service division is available 7 days a week and can react quickly to address service and repair requirements.

call now, or visit www.spaceaidmfg.com for more information

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