

RACK REPAIR SERVICES

REB Storage Systems International

REB Storage Systems International offers professional rack repair services. These include repairs to uprights, struts, and footplates for both roll formed and structural steel frames.

Our rack repair services follow all guidelines set forth by the American National Standards Institute and Rack Manufacturer's Institute. This means that your rack repair installation and final product will be safe and compliant.



Read below to understand the benefits of rack repair, REB's rack repair kit features, installation and quoting processes.

Benefits of Rack Repair Services Versus Rack Replacement

Rack repair offers several benefits over replacing damaged uprights. These include:

- Less unloading of inventory.
- Less disruption to warehouse operations.
- Faster to repair a damaged column.
- Less dismantling of accessories: wire mesh deck, crossbars, and fire baffle.
- Stronger / heavier gauge repair column installed.
- Less damaged product disposal.
- Less likely to create interference with fire protection and electrical.



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Benefits of Rack Repair Services Versus Rack Replacement- Continued

Here are further explanations of these benefits:

Less unloading of inventory

Rack repair only requires product to be removed from the lower bays of the rack system for typical upright damage. In contrast, replacing the rack will require all beam levels of that section of rack to be unloaded and uninstalled.

Less disruption to warehouse operations

Rack replacement can be very disruptive to warehouse operations. It requires a larger section of rack to be blocked off from use, unloaded, dismantled, and reinstalled. As a result, a longer period of downtime for that section of rack is required.

Faster to repair a damaged column versus replacing frame and reconnecting beams

Since rack repair only requires unloading of product from the lower levels of the bay, there's less time spent unloading and dismantling, then reinstalling and loading. This allows operations to resume faster than with rack replacement.

Less dismantling of accessories: wire mesh deck, crossbars, and fire baffle

Not having to unload all beam levels also means not having to dismantle all accessories at all levels. This lends to less time for the repair and less likelihood of damage to products and the system.

Repaired rack is stronger than standard rack

Rack repair kits are made with 10 gauge, which is the standard profile made to match the existing upright. Repair kits also have an additional backer that makes it much stronger than the original upright.

For example, a standard frame that is 3" x 3" column section would be repaired with a 10 gauge 3" x 3" with an additional backer 3" x 1-5/8", so the kit would be 3" x 4-5/8" deep.

Less damaged product disposal

During the process of replacing the rack, unloading all products from the damaged section increases the likelihood of product damage. Rack repair helps avoid this damage by not requiring movement of most of the inventory.

Less likely to create interference with fire protection and electrical

Oftentimes, highly engineered systems, especially those that are multi-level systems, have fire protection and electrical systems integrated. Because of this, these types of systems are extremely difficult to replace damaged rack throughout.

Rack Repair Kit Features and Options

REB offers rack repair kit options to address needs of different types of upright repairs.

Column Repair

Damage is often confined to a single column. For this type of damage, we offer rack repair kits to accommodate damage at various heights of column.

Our kits are available for both roll formed rack and structural rack. Read below for features of each.

Roll Formed Steel Rack Kits

- 10-gauge steel construction.
- Standard sizes range from 24" to 84" in 12" increments.
- Small size of 6" is available.
- All bolted installation with Grade 5 hardware.
- 1/4"-thick steel connection channels for rigid installation.
- 4" x 12" x 5/16"-thick footplate.
- Installs with two 3/4" diameter anchors to eliminate column twisting.
- Over 12 punch patterns available.
- High-quality powder coat finish.
- Available in custom heights and colors.
- Custom/seismic footplates available.
- Optional 1/4"-thick x 12" high V-nose deflector for increased defense against forklift damage.
- Optional heavy-gauge, flush-welded deflector available for improved aisle clearance.



Structural Steel Rack Kits

- Structural, 1/4"-thick closed-tube design.
- Our strongest single column repair kit.
- Available in 3" or 4" column widths.
- 4" x 12" x 5/16"-thick footplate.
- Custom/seismic footplates available.
- Optional 1/4"-thick x 4" high V-nose deflector provides increased defense against forklift damage.
- High-quality powder coat finish.
- Custom heights and colors available.



Rack Repair Kit Features and Options-Continued

Frame Repair

Our kits can repair a single leg with struts, or both legs with struts. Features include:

Single Leg Repair

- Fully engineered modular frame repair kit includes factory-welded bracing panel.
- Available in structural C-channel, tube, or roll-formed column designs.
- Fully customizable for specific applications.
- Shown with optional 1/4"-thick x 4" high V-nose deflector.



Double Leg Repair

- For rack repairs where both front and rear columns are damaged.
- Factory welded and engineered frame repair for bolted installation.
- Available in structural C-channel, tube, or roll-formed column designs.
- Standard 4" x 12" x 5/16"-thick footplate.
- Custom/seismic footplates available.
- Optional deflectors available.



Professional Rack Repair Kit Installation

REB has a nationwide network of highly qualified installers of rack repair kits. Because of this, you are assured that your rack is repaired safely, efficiently, and of the highest standards.

Our installers come onsite with special rack lifting equipment that they are extensively trained to operate. This rack lifting equipment safely lifts the rack in place without disruption to the upper loaded rack levels.

Once lifted, the lower damaged portion of the rack is removed. It is then replaced with a heavier, abuse-resistant upright. If you have unique repairs involving custom onsite welding or fabrication, we will plan with you and schedule the best time to do those repairs.

For a step-by-step explanation of the rack repair process, visit our article, "Pallet Rack Repair: How It Works."

Complete Rack System Repair

Leaning Frames: A minimum plumbness and straightness (both cross and down aisle) of 1/2" per 10' of height.



Overloaded Beams and Frames: Any beam that exceeds the rack manufacturer's capacity (capacity is based on evenly distributed loads).



Missing or Damaged Components: Wall ties, cross-aisle ties, crossbars, beam safety pins, wire mesh decks or pallet stops.



Beam Damage: Missing or damaged beams; loose, damaged or missing fasteners; or deficiencies in load locks and snap locks.



Damaged Decking: Exposed jagged edges, dips or missing pieces.



Process for Quoting Rack Repair Services

The first step in REB's rack repair services is to have a REB rack safety professional assess your damaged rack.

If you have extensive damage throughout your facility, we will conduct a full walkthrough to inspect the full scope of the rack to identify all damage and safety concerns.

If you only have a handful of racks damaged, we are sometimes able to assess based on photos and detailed information. This will be decided by our team based on a conversation with you.

After assessment, you'll be provided with a scope drawing that identifies the location of all damage and what type of damage it is. You can then decide which repairs you'd like to move forward with.

Rack Repair FAQs

How do I know if my rack needs to be repaired?

Regular inspections are highly recommended. MHI created Guidelines for the Assessment and Repair or Replacement of Damaged Rack, which is available on their website and provides a good inspection guide to follow. If you've done regular inspections and are beginning to see dents beyond ½" deep of the face of the upright, creases, broken welds, or torn steel, it's time for repairs to avoid failure.

Our article, "When to Conduct Warehouse Pallet Racking Safety Assessments," provides information on when and how to conduct both professional and inhouse rack safety assessments.

What should we do if we suspect we have a badly damaged upright?

Damage most often occurs over time with the constant wear and tear of daily operations, so it's not always easy to know when you're facing a potential hazard. If your visual eye suspects the rack is no longer plumb, is tilting or out of alignment, appears overloaded or misloaded, act now. REBs rack safety advice is immediately unload, tag, and call us for an inspection and repair.

Our warehouse is old and we're not certain who manufactured the rack. Will this mean that we'll need to replace damaged rack and shelving?

It's common for a business to buy a previously used warehouse already equipped with rack and shelving. It's also common for growing businesses to buy used equipment or inherit rack from another part of the company.

In such circumstances, REB is the place to turn because with more than 50 years of experience selling and installing new and used systems, we've likely seen your system before. We'll do our best to source the original manufacturer's replacement parts and/or supply repair product that closely match the original material.

Is a permit required?

Although there is no legal requirement to obtain a permit, it is good business practice to follow recommended industry standards. According to RMI (Rack Manufacturers Institute), the RMI/ANSI MH 16.1 specifications for new construction provides a working standard for repairs. If there is any doubt, it would be prudent to contact the local building department.

What if our warehouse resides in a seismic zone?

According to the RMI, the building codes design manuals and the ANSI/RMI MH 16.1 all utilize the Seismic Design Categories A-F in their seismic design. REB has completed designs and installations for projects in the strictest U.S., South American, and Euro Code 8 seismic categories.

Take the Next Step for a Safe Rack System

If you're concerned about the safety of your racking system, consider REB Storage Systems.

We have a dedicated team of rack safety professionals who conduct rack safety inspections and repair across the US. We are highly experienced in identifying rack safety concerns and stay up to date on all rack safety regulations.

We'd appreciate the opportunity to help you further, whether that be more information or a quote. Email or call us at (800) 252-5955 to get in touch with a REB representative.



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