RACK SAFETY

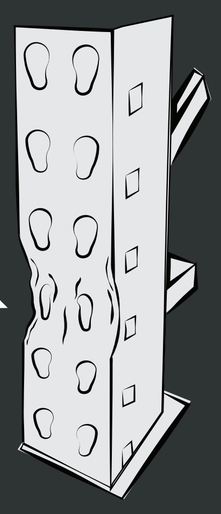
THE 1-2-3 RULE

Use the 1-2-3 rule to determine the priority for upright damage repair:

1 *COLUMN FRONTAL DAMAGE*

Over 1/8" of frontal local deformation within a span of 40"

Local deformation > **1/8"**

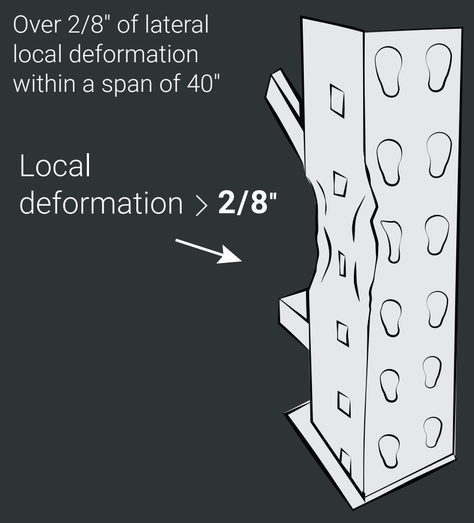


Look for other types of damage such as dents, cracks, bulges, pinched columns and signs of corrosion.

2 *COLUMN LATERAL DAMAGE*

Over 2/8" of lateral local deformation within a span of 40"

Local deformation > **2/8"**

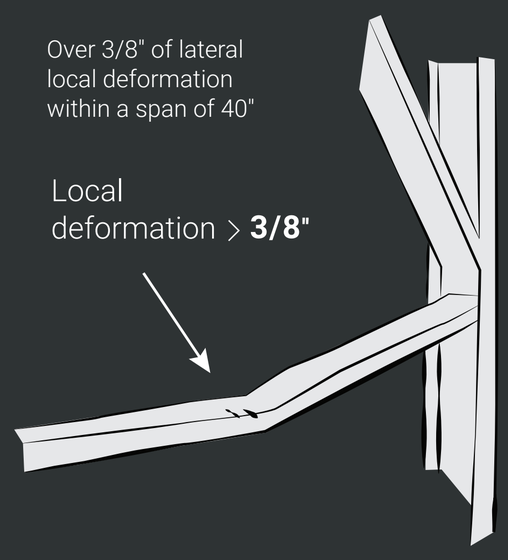


Look for damage occasionally hidden behind the beam connectors.

3 *BRACE DAMAGE*

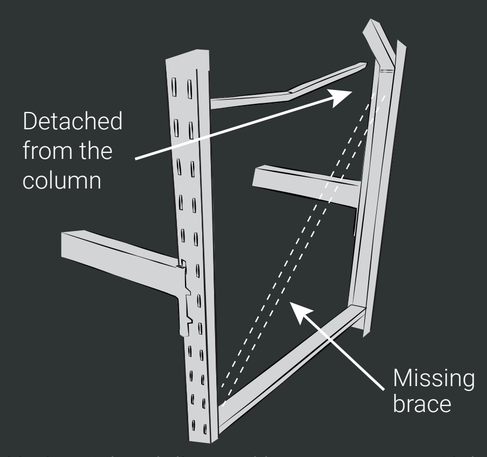
Over 3/8" of lateral local deformation within a span of 40"

Local deformation > **3/8"**



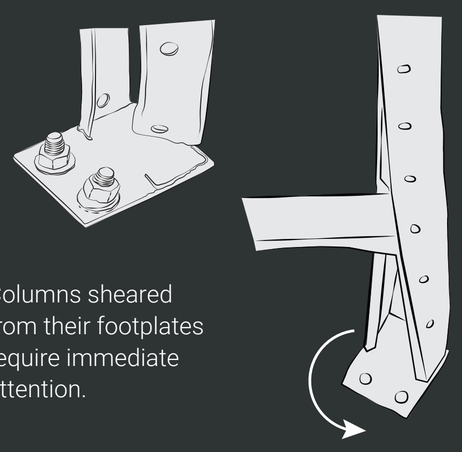
Look for cracked or broken welds between the column and the brace.

BRACES



Horizontal and diagonal braces are essential to the capacity and stability of the racking system.

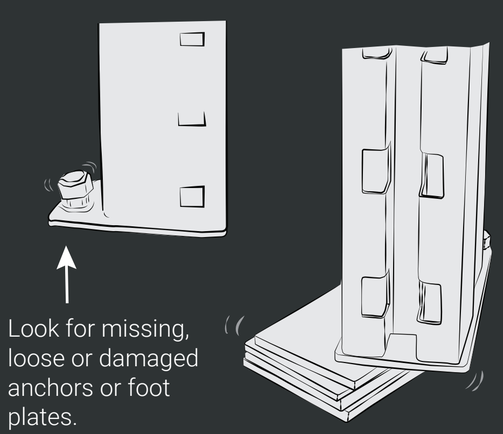
TWISTED COLUMNS



Columns sheared from their footplates require immediate attention.

Twisted columns impede the load capacity of the rack. We recommend calling an expert.

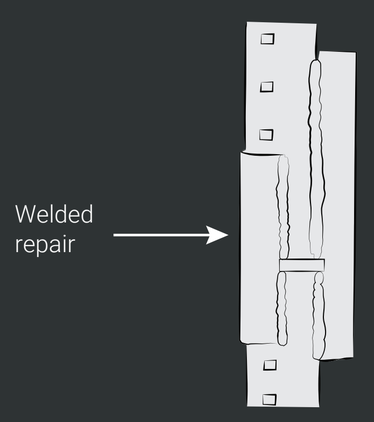
ANCHORING



Look for missing, loose or damaged anchors or foot plates.

Shims should be well seated, secured and of equal size to the footplate.

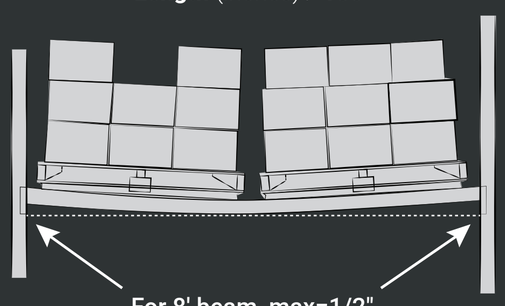
HOMEMADE REPAIRS



Any homemade or welded repair should be replaced by an engineered repair solution.

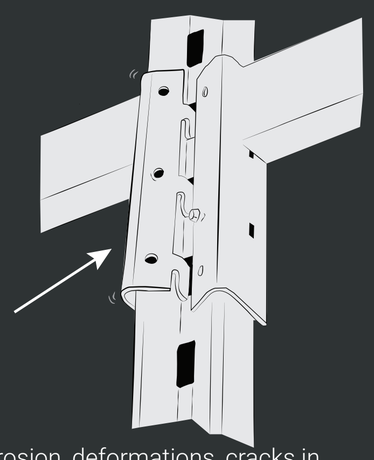
BEAMS

Maximum allowable beam deflection:
Length (inches) / **180**



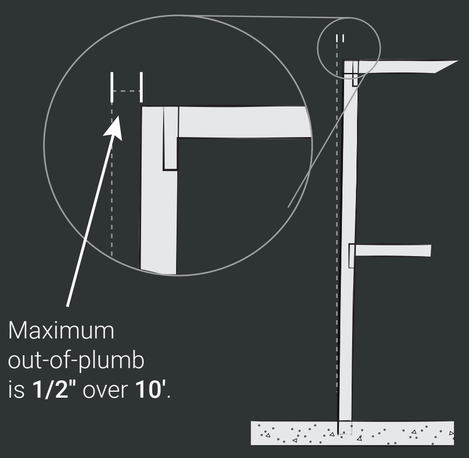
Look for deflected, damaged, unclipped, or overloaded beams, missing safety bars, badly positioned or damaged pallets.

BEAM CONNECTORS



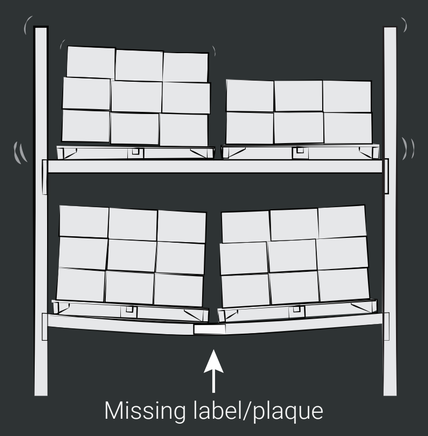
Look for corrosion, deformations, cracks in the welds, broken connectors or missing safety pins.

OUT-OF-PLUMB



An out-of-plumb upright means that it is not exactly vertical. Always look in the cross-aisle and down-aisle directions.

LOAD CAPACITY



Labels/plaques informing of maximum load capacity should be visible. Unknown load capacities need to be calculated by an **engineer**.