



SAFETY IN THE WAREHOUSE



Built to last.®

At EAB, safety is integrated from the start of the project, ensuring you build the safest and most sustainable workplace possible.

Safety in the warehouse | EAB

Handling pallets and other heavy goods within warehousing and logistics is an area where compliance with safety regulations is crucial.

At EAB, safety is considered from the beginning so that you create a secure and sustainable work environment. We know that your staff is your greatest and most important asset, and since warehouse racking is regarded as part of the employees' workplace, there are many rules and safety regulations that must be met.

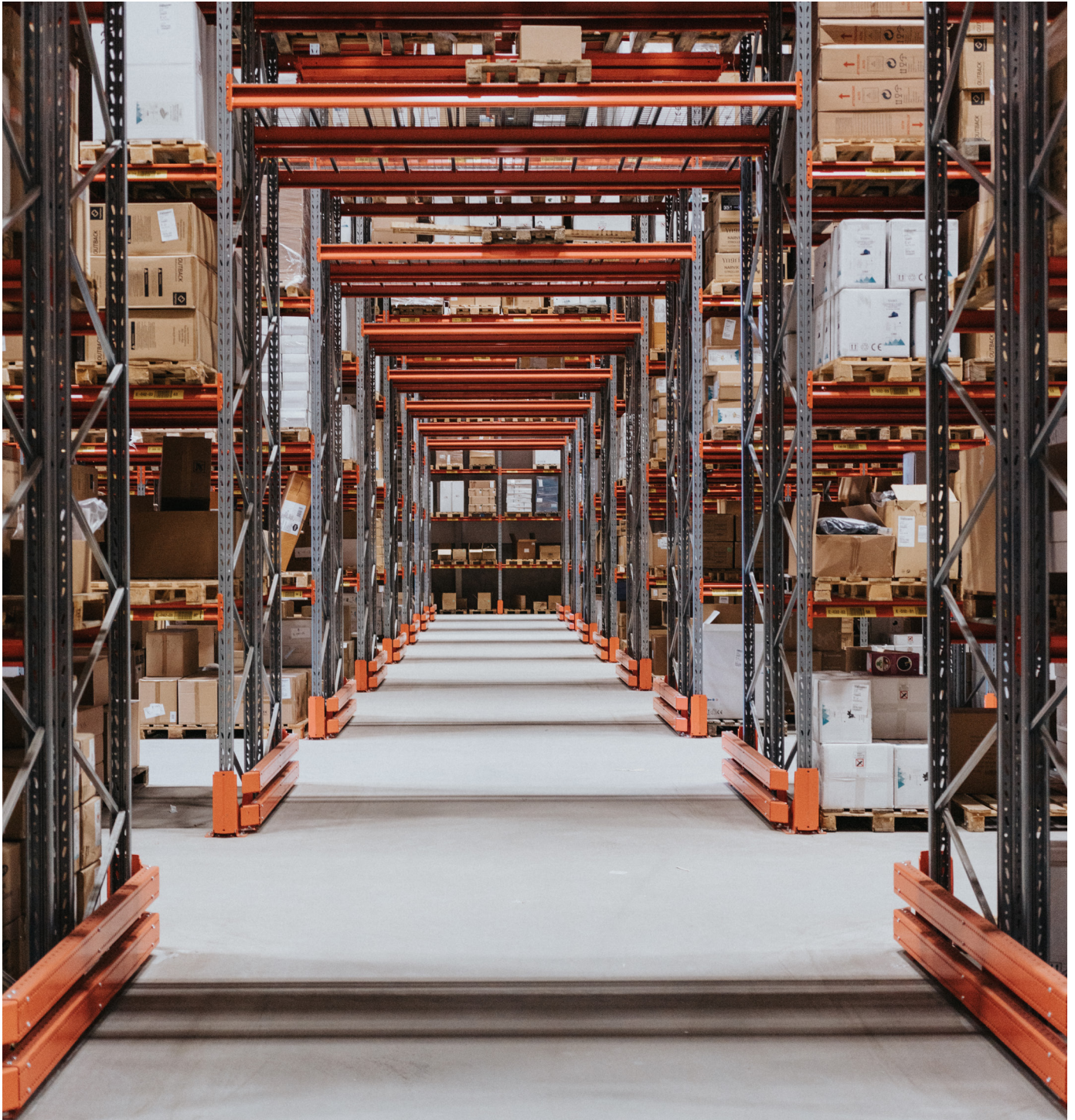
Some of these are governed by EN standards, others come from the Swedish Work Environment Authority, and some are included in the Work Environment Act. In this brochure, you can read more about how we design our protective measures and take all these aspects into account.

Scan the QR code and read more about safety on our website.



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APPLICABLE EUROPEAN STANDARDS

SS-EN-15635:2008	Installation, operation and maintenance
SS-EN 15620:2021	Tolerances, deformations and safety clearances
SS-EN-15629:2008	Specification of storage equipment
SS-EN-15512:2020+A1:2022	Design principles

EN-standards can be ordered from www.sis.se/en/

REQUIREMENTS FROM THE WORK ENVIRONMENT ACT

Chapter 2. 5§

Machines, tools and other technical devices shall be designed, positioned and used in such a way that adequate safety is provided against ill health and accidents.

Chapter 3. 1a§

Employers and employees shall cooperate to achieve a good work environment.

Chapter 3. 2§

The employer shall take all necessary measures to prevent the employee from being exposed to ill health or accidents. Premises as well as machines, tools, protective equipment and other technical devices shall be properly maintained.

Chapter 3. 2a§

The employer shall systematically plan, lead and monitor operations in a way that ensures the work environment meets the requirements of this Act. To the extent required by the nature of the operations, the work environment and related activities shall be documented. Action plans shall be established accordingly.

REQUIREMENTS FROM THE SWEDISH WORK ENVIRONMENT AUTHORITY

AFS 2023:12, 3 Chapter 29§

A rack intended for varying loads must be permanently marked with the maximum load per section and the maximum load per beam level. The marking must be placed in a clearly visible location.

AFS 2023:12, 3 Chapter 30§

A rack must be anchored if there is a risk of instability. Where there is a risk of collision with the rack, impact protection must be installed.

AFS 2023:12, 3 Chapter 31§

Passages for pedestrians and forklift traffic under racks must be protected against falling objects. A pallet rack must be equipped with protection that prevents pallets from being pushed through the rack, unless it is clearly unnecessary.

AFS 2023:12, 6 Chapter 8§

Workplaces must be designed so that objects cannot fall and injure workers.

AFS 2023:1, 11§

The employer must regularly examine work environment conditions to assess risks of ill health and accidents at work.

When changes in operations are planned, the employer must investigate whether the changes entail risks of ill health or accidents and assess these.

Risk assessments must always be documented in writing. The documentation must state what the risks are and whether they are serious.



ARBETSMILJÖ
VERKET



REQUIREMENTS FROM THE SUPPLIER

Assembly and Operating Instructions

- Must always be read before assembly begins.
- Must always be read before the rack is put into operation.

Installation Plate

- Must be mounted in a clearly visible location.

Reconstruction

- In case of reconstruction, the assembly and operating instructions must always be reviewed again.
- Check that conditions have not changed in a way that affects the structural design.
- The installation plate must be updated and mounted again.

IMPORTANT ACCESSORIES

According to European Standard SS-EN 15635 and AFS 2023:12



End Frame Impact Protection | Must be installed on the outer frame facing the forklift aisle. Height: 400 mm.



Back Mesh | Installed on single racks adjacent to floor areas used as work-stations or for pedestrian traffic.



Mesh Decking | Prevents goods from falling and is ideal as fall protection in forklift and pedestrian traffic.



Push-Through Protection | Must be installed on all racks to prevent pallets from being pushed through, except on racks placed against a wall.



Upright Protection | Must be installed on corner uprights where forklift aisles intersect. Height: 400 mm and mounted to the floor.



Half-Pallet Insert / Beam Insert | Extra load beam for safe pallet handling.

INSPECTION OF STORAGE EQUIPMENT

According to European Standard SS-EN 15635:2008 - Installation, Operation and Maintenance

Assembly check

Before the storage equipment is put into use, the assembly must be inspected according to the instructions in the assembly and operating manual.

Ongoing Inspection

The storage equipment must be continuously checked for bracing, collision damage, and other factors that may affect the structural integrity of the rack.

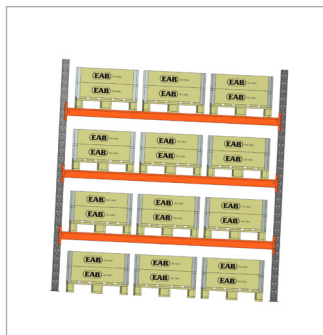
Periodic Inspection

At least every 12 months, the storage equipment must be inspected to ensure it still complies with the assembly and operating manual. Periodic inspections must be carried out by a technically competent person.

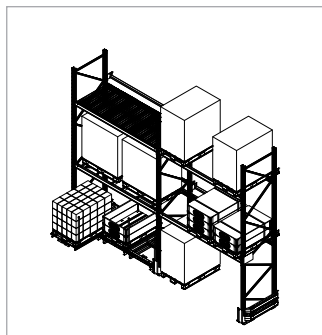
Report

A written report must be submitted to the person responsible for the safety of the storage equipment, including observations and suggestions for any necessary actions.

IMPORTANT CONTROL POINTS



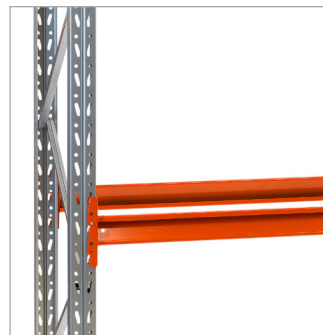
Inclination | A loaded pallet rack must not tilt more than 5 mm per meter in any direction.



Assembly Instructions | Is the rack correctly assembled?



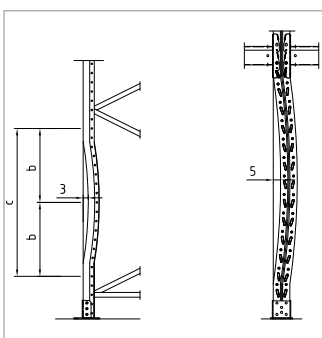
Installation Plate | Is the installation plate mounted in a visible location?



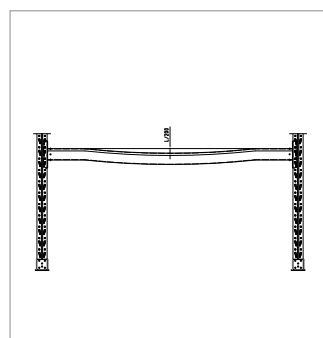
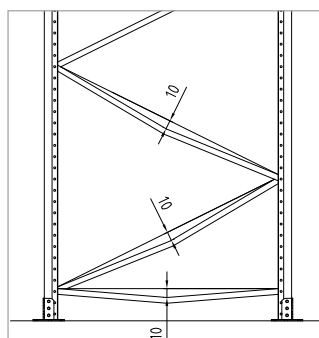
Beam Safety Lock | Prevents accidental dislodging of beams.



Floor Anchoring | Is the rack properly anchored to the floor?



Deformed Uprights and Braces | This always poses a risk and should therefore be repaired or replaced. Using a straightedge/spirit level of 1 meter, maximum deviations can be measured according to the diagram.



Deformed Load Beams | A load beam may have a maximum deflection of $L/200$ when fully loaded, i.e., a beam with a length of 2750 mm may deflect a maximum of 13 mm. A load beam must not have any residual deflection when unloaded.

CLASSIFICATION OF OBSERVATIONS DURING INSPECTION

Summary of European Standard SS-EN 15635:2008

GREEN LEVEL

REQUIRES MONITORING ONLY

This category applies when the limits shown in the figures on the previous page are not exceeded.

At the green level, the rack components are considered safe and usable. Damaged components should be identified so they can be re-examined during future inspections, but otherwise documented as suitable for continued use.

YELLOW RISK

DAMAGE OR DEFICIENCY THAT REQUIRES ACTION AS SOON AS POSSIBLE

This category applies when the damage levels shown in the figures on the previous page have not been exceeded by a factor of less than two. Yellow level indicates damage serious enough to justify repair work but not so severe that immediate unloading of the rack is required. Once the load has been removed from a damaged component, it must not be reloaded until repairs have been carried out. Yellow risk must be reclassified as Red risk if not addressed within four weeks.

RED RISK

VERY SERIOUS DAMAGE OR DEFICIENCY REQUIRING IMMEDIATE ACTION

This category applies when the damage levels shown in the figures on the previous page have been exceeded by a factor equal to or greater than two.

Red level indicates a situation where a critical damage level has been identified, requiring the rack area to be unloaded and isolated from further use until repairs have been completed. Such repairs usually involve replacing the damaged component.

MADE IN SWEDEN

EAB's storage systems and accessories are manufactured in our own factory in Smålandsstenar, which enables us to offer punctual deliveries.

After many years in the industry, we have built up a high level of knowledge and experience in warehousing and logistics, which we are happy to share. Our wide product range makes it easy to adapt and optimize a safe warehouse to suit your specific conditions.



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