

# P90 VERTICAL STORAGE

User Manual

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English

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## Introduction:

This manual contains:

1. Assembly and installation information.
2. Maintenance information.

Correct assembly, installation, use and maintenance are very important for safe operation of your storage rack system.

All the users of this storage rack system should read this manual carefully!

Keep this manual in a visible place, for future reference, retraining and orientation of new users of this product.

Guide for the symbols used in this manual:



**DANGER** indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



**CAUTION** indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

**Thank you** for choosing a Constructor product.



**Read these instructions before assembling or using your storage rack system.** To obtain the maximum benefit from any storage rack system, and for the safety of those around the rack, the rack must be properly assembled and maintained. The information in this manual will assist you in fulfilling your responsibility to provide a safe, properly maintained storage rack assembly.

## 1 Assembly Information



**Storage racks should be assembled only by trained personnel, experienced with proper rack assembly procedures.**



Improper rack assembly can not only cause poor performance of your system, but can also pose a safety hazard in your facility.

If you are unfamiliar with rack assembly, you should contact Constructor / Dexion or any authorized Distributor for professional rack assembly services. Constructor or Dexion cannot provide guarantee or warranty coverage for any system assembled by anyone other than a Constructor / Dexion approved Installation Contractor.



**It is very important that the rack structure be installed in a square condition.** Please read the Installation Manual for the P90 Vertical Storage for more details!



**The rack structure should be assembled and used only as shown on Constructor / Dexion assembly drawing.**



Changing the configuration can affect the load carrying capacity and reduce the structural integrity of the rack system. Before adjusting the rack configuration, contact Constructor / Dexion or the authorized Distributor, to verify the safety and the structural suitability of the new configuration.



**„Bolt and Nut” connections needs to be tightened to a snug and secure condition.**



**Safety locks must be fully engaged through the beam end connector and upright face slots.** These safety pins help prevent accidental dislodgment of the beams. **Beams must not be used with damaged or missing safety pins!**



**Every frame base must be anchored to an adequate concrete floor.** For position and number of anchors please see the Installation manual.

The normal anchor used by Constructor / Dexion is M8x75 Expander Bolt. This are normally included in the material list.



Since anchor bolts vary in strength, if you are purchasing your own anchor bolts, contact Constructor / Dexion or the authorized Distributor for minimum anchor specifications for your installation.



Since concrete floors vary in design and load carrying capacity, Constructor / Dexion cannot guarantee that a particular concrete slab is adequate to support a particular rack installation. The characteristics of the slab should be obtained from the building architect before the racks are specified, so that the rack supplier can design the rack to suit the slab.



**Do not install racks outdoors**, unless specifically designed by Constructor / Dexion for this purpose. Outdoor usage requires consideration of wind loads, snow loads, etc., which are not normally considered in an indoor rack design.



**Do not expose your storage rack to corrosive or abrasive substances or abnormal dampness.** This may cause deterioration of the surface paint and result in premature corrosion. **Do not store rack products outdoors unprotected!**



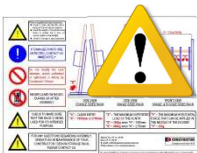
**Be caution when mixing new and existing parts.** Even components produced by the same manufacturer can vary in design.



**Do not mix parts from different manufacturers with Constructor / Dexion components without review by a qualified engineer.** Mixing parts may result in a less rigid structure that can decrease rack capacity. Use of Constructor / Dexion parts with parts from different manufacturers will also void any warranty from our part.



**Do not cut, weld or modify rack components.** Do not allow any welding or cutting of rack components without Constructor's / Dexion's written authorization. Such modifications may decrease the load capability of the component and damage your rack structure, thereby creating a safety hazard. Any modification of any component, unless performed or authorized in writing by Constructor / Dexion, will void any warranty from our part.



**Installation of loading boards is strongly recommended.** These boards should identify the characteristics for which the rack was designed, such as load size, load weight, and rack configuration. These boards are very useful for showing safe loading information to both present and future users. Several signs should be noticeable located for easy visibility, and to be permanently applied to the rack structure.



**Never climb on racks, during or after assembly.** Storage racks are not designed to be stepped on or climbed on. A slip or fall may result in serious injury. It is your responsibility to pass this important warning to all who come into the proximity of your storage rack. This can be done by training and appropriate signage. If your rack is used in a retail environment, high visibility warning signs are especially helpful in preventing this misuse of a storage rack structure.



**Allow adequate aisle spacing.** Aisles which are too narrow, or are reduced in size by obstructions (such as temporary floor stacking at rack row ends) can cause serious injury.

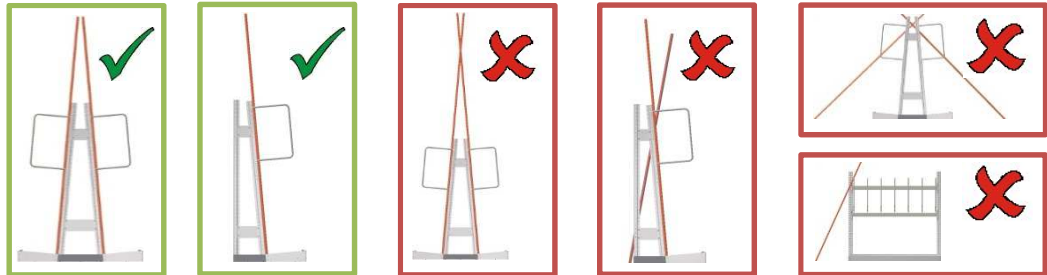


**Install good lighting in every rack aisle.** Good lighting improves handling efficiency, prevents accidents, and reduces accidental damage to the rack structure.

## 2 Operational & Maintenance Information



**Position correctly the load on the storage rack structure to prevent serious injury for the users, and damages to the rack structure!** Below, in green border is the correct way, for storing goods on this type of racking system. In red borders are represented some examples of wrong ways of placing the goods on the racking structure.



**Perform regularly scheduled inspections (at least annually) and maintenance of the rack system.**

- ✓ Check for missing or damaged hardware including bolts, nuts, and beam locking devices. Replace any missing or damaged items. Check that all bolts and fasteners are snug and tight.
- ✓ Check for damage to any components, including beams and columns. Damaged items should be repaired or replaced.
- ✓ Check to ensure that all racks are level and square.
- ✓ Check to make sure that the rack is being used for its intended purpose. Maintain a set of installation drawings on site for review. Check the weight of the product being stored to ensure that it does not exceed original design weights.
- ✓ Maintain capacity signs in place.
- ✓ Maintain good housekeeping. Clear, clean aisles are essential to the safety of your facility.



**Replace damaged or missing beam safety pins immediately!** Do not use beams without safety locks.

Unload damaged racks immediately, and contact Constructor / Dexion or the authorized Distributor for replacement parts (damage reduces capacity, creating the potential for collapse and injury).

Check finish, scratches to prevent corrosion.



**Do not overload any rack component, bay or system.** Your storage rack is designed to support a specific load weight, in a specific configuration. If you need to store different goods with changed weight or size, contact Constructor / Dexion before starting to store the new items. Using your rack in any manner other than originally designed could lead to rack collapse and injury.



**Establish good housekeeping practices.** Keep aisles clear of rubbish or obstructions, do not use aisles for storing goods. Keep aisle surface clean and free of ice and condensation.



**For any questions regarding assembly, operation or maintenance of your Constructor / Dexion storage rack we are at your disposal. Please contact Constructor / Dexion or the authorized Distributor to receive all the needed assistance.**

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