

Now applicable: EN 15512:2020

**Explanation of the most
important changes**

This document explains the main changes of the new EN 15512:2020. In addition, by displaying a FAQ we hope to provide some (practical) tips and guidance that will help to better understand the standard.

A summary of technical differences between the 2009 and 2020 version of the EN 15512 can be found in the following document:

https://www.nedcon.com/uploads/files/EN_15512_extended_modification_document_EN.pdf

The main changes of the new EN 15512:2020

The safety level of the new EN 15512:2020 is almost the same as the DIN-EN 15512:2009 with German national annex. The main changes are:

- **Material factor**

The material factor is a safety factor on the material.

2009 version:

All countries except Germany	material factor = 1,0
Germany	material factor = 1,1

2020/2021 version:

All countries	material factor = 1,1
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NOTE!

→ A material factor of 1.0 means no additional safety on the material. A material factor of 1.1 means an additional safety on the material of 10%.

→ For Germany this change has no effect because a material factor of 1.1 was part of the German National Annex in the 2009 version.

- **Strength of the beam-end-connector**

In the 2009 version, it was allowed to increase the strength of the beam-end-connector up to 15%, if the beam was strong enough to take this additional part. This distribution of strength is no longer allowed in the 2020 version. This increases the safety of the beam-end-connector and makes the racking more robust.

- **Deformations of the concrete floor**

The safety philosophy of the 2009 version was based on a concrete floor that was very rigid and thus did not deform much, if at all, under the load of racking and equipment. The safety philosophy of the 2020 version takes into account a more realistic situation, where the concrete floor will deform under load. The deformation of the concrete floor can cause additional stresses in the racking. This makes the racking more robust.

Frequently Asked Questions (FAQ)

1. Where can I find independent information?

The European FEM R&S Association has published Information Bulletin 12 on the new version of EN 15512, which is shown below. The information can also be found at: <https://www.fem-rands.org/> under the tab "Publications/information Bulletins".

2. Is the EN 15512 a mandatory standard?

In case of calamity and/or conflict, the "State of the Art" as laid down in the latest version will be used as reference. Creating a safe working environment is our top priority. NEDCON therefore always works according to the applicable standard. We therefore also expect and require this from you, our partner.

NOTE 1 → Bulletin 12 (see item 1) also provides information on the status of the EN 15512.

NOTE 2 → The website of the national standardization body gives you information what the latest version of the standard is. You can find the national standardization body at: <https://www.iso.org/members.html>

3. When can I deviate from the standard (extensions – relocations – second hand market)?

In case of: Extensions

Bulletin 12, taken from the full modification document, states:

Modification and expansion of existing racking

1. Where a rack is designed to EN 15512:2009 and the modification comprises:

- Reconfiguration of the number or heights of beam levels.
- Adding or removing bays to the run of the rack, using existing or new components

The designer may check the new configuration to either EN 15512:2020 or EN 15512:2009, unless national legislation requires the check to be in accordance with EN 15512:2020.

2. Where a rack has not been designed to EN 15512:2009 and the modification comprises:

- Reconfiguration of the number or heights of beam levels.
- Adding or removing bays to the run of a rack, using existing or new components
- Relocating a rack not designed to EN 15512:2009 and EN 16681 inside the same building or in another building, even if usage and site conditions are the same.

The modification and the extension of existing racks should be designed according to EN 15512:2020.

The consequence may be a change in the capacity of the racking and modifying the load notices may be necessary.

In case of: Relocation

This depends on the national legislation. In the Netherlands, it is allowed to relocate a rack and use the relevant standard from the moment it was built. It must be rebuilt in the original configuration. National and local regulations should be checked with the local authorities.

In case of: Second hand market

The rules are the same as when building a rack with new components; there is no distinction between already used or unused components.

4. What to do if a competitor offers according to a different standard, such as the 2009 version?

- Bulletin 12 (see item 1) advises supplying and purchasing racking that conforms to the "State of the Art".
- When a building permit is required, local authorities may require that the "State of the Art" standard will be used. The use of an outdated standard may result in the racking not being allowed to be used.

5. What is the relation between certifications and EN 15512?

Various certifications can be obtained based on the EN 15512. NEDCON is in the possession of the following certificates based on the EN 15512:

- abZ: Allgemeine Bauaufsichtliche Zulassung.
Certified component characteristics for Germany.
- ABg: Allgemeine Bauartgenehmigung
Certified design procedure for Germany. Without the ABg, the DIN-EN 15512 may not be used: compliance NEDCON.
- ETA: European Technical Assessment
Certified component characteristics for Europe.
- GS: Geprüfte Sicherheit
A voluntary German certificate (to be considered a quality mark) for primarily technical equipment.

Do you need help or do you have any other questions?

The transition to a new standard is always difficult. At NEDCON we try to keep this period as short as possible. The reality is that a transition requires a lot of effort from all people and companies involved: information to stakeholders, new tax tables, adapting software tools, etc.

NEDCON is at your service and we will do everything we can to answer your questions!