## Rigging

The purpose of these instructions is to provide methods and rules for the installation and handling of bricks.

It is required that the project materials have been prepared in a way that the methods described in these instructions can be followed.

The methods and rules etc. listed in these instructions specifically apply to bricks and cannot be transferred to other industries.

Intermediate storage on the construction site In case of intermediate storage on a construction site, the elements must be placed on joists made of softwood on a flat and even base. Elements delivered on pallets must stay on those to the extent possible. In addition, it must be secured that any protruding ends are supported in order to avoid unwanted deformations.

When reloading elements from the pallet, it must be secured that the elements are properly positioned and supported as at the delivery.

Elements that are intermediately stored on a construction site must be covered by tarpaulins - or in a heated tent - in order to protect them from bad weather conditions.

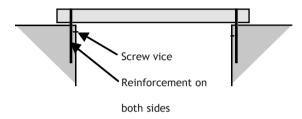
#### Handling

The elements must be handled with great care and caution as dents etc. may cause spalling of bricks in the element. Elements that are provided with embedded lifting devices at the delivery should be handled by rigging into those. Elements without embedded lifting devices must be handled by hand alternatively by means of wide slings under the element.

#### Installation

It must be secured that the elements are laid, incorporated, and reinforced/supported according to the project. Temporary reinforcements may not be removed until sufficient strength has been obtained for the structures.

At the incorporation of elements where there may be a risk of tipping, these elements must be secured from tipping. For e.g. tall masonry beams with a height/width of >2, this can be done as shown below:



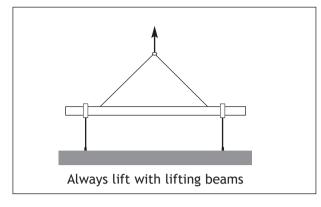
## Lifting elements

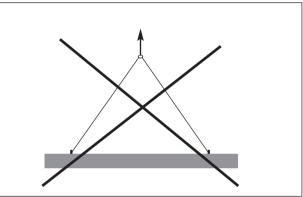
Lifting elements with lifting brackets must always be done vertically by means of lifting beams. The rigging is made into the embedded lifting brackets by means of hooks or shackles.

**NB:** Do not use lifting brackets that are deformed or damaged.

Other lifting devices than embedded lifting brackets may be rigged in another way. In such cases, the instructions from the supplier of such equipment must be followed.

Elements without lifting brackets are lifted by hand or by means of a crane and wide slings. The slings are taken under the element in L/5-part points from each end - or according to the project. Lifting by means of slings must be made vertically as well as the slings otherwise are at risk of slipping on the element which may thus be at risk of falling/collapsing.





As a general rule, lifts must be made with care and circumspection. When lifting with a crane, the slings or chains etc. must be tightened carefully, and the lifting must be commenced and executed at an easy and even pace.

The supplier can provide information on weight and appropriate lifting points.

It is required that all lifting equipment is kept in a statutory and secure condition, as the responsibility for this lies with the installation contractor only.

NB: When lifting by hand, the general guidelines on lifting issued by the Danish Working Environment Authority must be observed.

## Protective equipment

Always wear safety shoes and gloves in connection with handling and installation by hand.

When handling and installation is performed by crane, an approved safety helmet must be worn as well.

It is STRICTLY FORBIDDEN to stand etc. under a lifted element.

#### For further information, please contact

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These instructions were prepared by brick industry representatives in collaboration with MURO - Murerfagets Oplysningsråd (the Information Council of the Bricklayer Profession).

The Danish Working Environment Authority has consulted the instructions and found that they comply with the Danish Working Environment Act.

# MURO

# **Instructions**

Handling and installation of brick elements