

# LAST – Load Compilation

The english version of the LAST+ manual still needs to be translated and will be available in a later Release. Until then please have a look on the [german version](#).

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## Basic Documentation – Overview

In addition to the individual program manuals, you will find basic explanations on the operation of the programs on our homepage [www.friilo.com](http://www.friilo.com) in the Campus-download-section.

*Tip: Go back - e.g. after a link to another chapter/document - in the PDF with the key combination "ALT" + "Left direction key"*

## Application options

LAST+ is used to compile area-related dead weights and predefined live loads of

- roofs,
- ceilings and
- walls.

The dead weights and live loads of the components are to be understood as project-related load assumptions.

### Extension in the PLUS programmes

In daily practice, the load composition enables more efficient work due to the interface to the PLUS design programmes, as components are often used in a similar form and can be quickly adapted as required without major effort.

### Layered structure

The dead weight of the components is defined by their layered structure - e.g. brick, insulation, timber construction, etc.

The component layers are either entered directly by the user or the component or load library is used.

For walls, the definition of recipe masonry or the selection of approval products is possible.

### Working loads

For roof and ceiling components, live loads can be defined as an option.

### Component library

The defined components can be saved in a component library.

By means of import/export functions, the components can be made available to other users - a LAST+ licence is required for importing a component library.

### Load library

It contains loads according to EN 1991-1-1 taking into account the current National Annexes for Germany, Austria and Great Britain.

In addition to the selection of predefined loads according to EN 1991-1-1, the load library also allows the definition and editing of user-defined loads.

### Further features

The loads can be defined in [kN/m<sup>2</sup>] or [kN/m<sup>3</sup>].


The programme sums up the loads/property weights of the layers to a total area load [kN/m<sup>2</sup>].

## Load value combination in the PLUS programmes

The PLUS design programs can access LAST+, the component library and the load library via the load value composition.

A load value can thus result from the combination of different point-, line-, area- and volume-related loads.

The load value composition is also available without a LAST+ licence in the PLUS programmes prepared for this purpose. However, access to the load and component libraries as well as to LAST+ items is only possible with a corresponding licence.

The load value compilation is called up via the small icon  or via the F5 key. If the icon has a coloured background, a load value combination has already been assigned to the load.

A load value combination is saved in the respective position of the FRILO application.

The LAST+ position and the position of the design programme must be in the same project.

The data of a load composition is saved as an independent "position" - arbitrarily nameable - within a project. The difference to other positions is that only one LAST+ position can exist in the project.