WETO AG technologies

LigniKon Small

the 3D CAD for Carpenters to build Roofs and other Timber Roofs

Cutting and installation in record time thanks to the comprehensive Roof Wizard

LigniKon Small is characterised by its well-designed graphical interface, which reflects the classic structure of wooden buildings.

Create effortless, non-trivial roofs in a very short time thanks to the comprehensive and intuitiveness of the integrated Wizards (Assistants) of Roofs, Dormers, Skylights and Chimneys.

Any Assistant automatically generates the details required for the effective construction of the elements. The WETO software are designed to be easy to use and to achieve complex results!

Relevant tools and functions

Augmented Easiness: parametric CAD for timber constructions, designed to work directly in 3D (in addition to 2D) and gain in time and easiness

Advanced roof profiles with 3D preview of the complete superstructure including rafters, purlins, battens, inner/outer soffit boarding and insulation

Fitting of ridges (for battening arrangement) in single pitches with two different ridges due to two different opposing pitches

Wizards of Roofs and Dormers

Window and Door Editors for handling different geometries and relative options

Editor of Roof Windows (Skylights) and Chimneys with Automatic Supports and Headers

Customisable catalogues of Roof Tiles and Structures

Focused placement of rafters (with automatic or fixed spacing) and overhang rafters

Smart copying of rafters from one pitch to another

Customisable pitches (for canopies, porches, verandas, etc.) by stretching or by other geometric adjustment. The framework will automatically be adjusted to the new situation.

Careful installation of rafters and automatic creation of hip and valley rafters

Hand drawing tools for panels, platforms, floors and other 3D surfaces

Parametric functions to create Battening, Insulation and Eaves & Inner Boarding

Automatic Technical Drawings already Dimensioned of Single Framing Piece and Roof Profile Elevation View to immediately run production

Joints and machining: Controlled Cut, Deburring/Trimming and Break/Merge again (e.g. for weight distribution)

Material presets

Wood and Iron lists computation for carpentry, areas, volumes, jack rafters, etc.

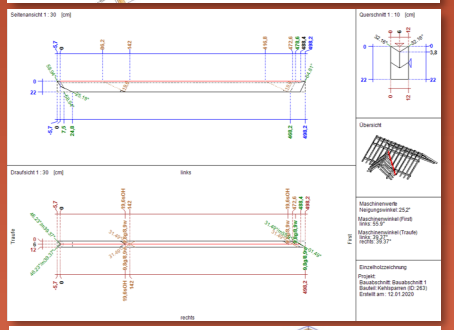
Detailed Carpentry Lists for each timber piece, pitches areas and much more...

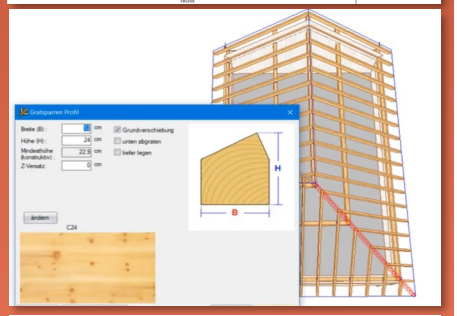
Chained and Progressive Dimensions, Automatic Measurements of Lengths and Areas

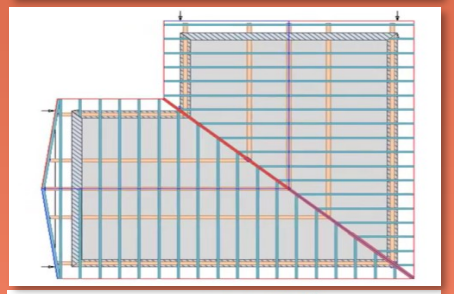
2D/3D Import/Export as AutoCAD (DXF e DWG), BIM (IFC), etc...

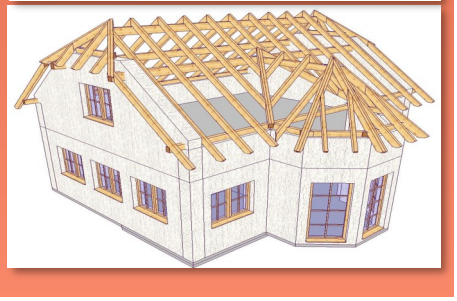
3D Export for a 3D exploration on any device as

- WebGL (for any web browser)
- and as 3D PDF (for on any PDF viewer)









WETO AG technologies

LigniKon Large

the 3D CAD for Carpenters to build Roofs and other Timber Structures

Advanced and flexible for the Construction and the Processing of Wooden Structures

LigniKon Large is perfect for producing wooden roofs, carports, various pergolas, gazebos and garden sheds!

With the **Wizards** you easily create your **roofs** complete with **dormers** and **skylights**, and if necessary you can also extend them with **eaves projections** and various **extensions** using specific tools included.

The special parametric tool 'Timber framing under top plate', allows you to configure frameworks with Studs, Knee Braces, Noggins, Plates and Wall Bracing and build **pergolas, carports, sheeds and other**, with just 3 clicks!

Overview of the most important functions

Augmented Easiness: parametric CAD for timber constructions, designed to work directly in 3D (in addition to 2D) and gain in time and easiness

Defining the properties of the roof profile is very easy thanks to a simple and clean interface with interactive schemes that automatically appear according to the context. Indeed, it will be a doddle to set the slopes of the pitches, sections and dimensions of the purlins (plates, middle and on the ridge), rafters and battening!

Geometry-specific dormer wizard with a high level of customisation of the roof timber framework and not only

Editor of Skylights and Chimneys with Automatic Supports and Headers

Customisable catalogues of Roof Tiles and Structures

Multiple placement of Beams/Joists, Posts/Studs, Rafters and Collar Beams/Ties just setting fixed (forced) or self-adaptive (dynamic) interaxle spacing

Placing of 'Slanted Fly Rafters'

Parametric modelling of Studs, Knee Braces, Noggins, Plates and Wall Bracing for easily building frameworks and pergolas

Joints and machining: Controlled Cut, Deburring/Trimming, classic Half Lap joints between two elements, Hooked and Plain Scarf Joints, Free/Multiple Birdsmouths, Break/Merge and Free Marking

Automatic Technical Drawings already Dimensioned of Single Framing Piece and Roof Profile Elevation View to immediately run production

Steel beam tool according to EN 10365 (DIN 1025 / 1026)

Free beams with different cross sections such as I-joists, Rhombus, etc.

Automatic Roof Package (interior and eaves boards, insulation, roof tiles, gutters)

Automatic Dimensioning and Labelling (e.g. single and multiple)

Automatic Labelling of components (lengths, sections, CNC numbers, etc.)

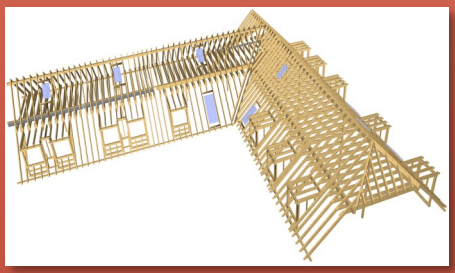
Wood and Iron Lists computation for carpentry, areas, volumes, jack rafters, etc.

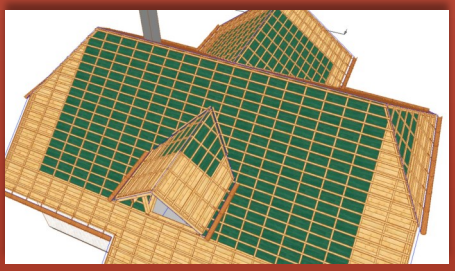
2D/3D Import/Export as AutoCAD (DXF e DWG), BIM (IFC), etc...

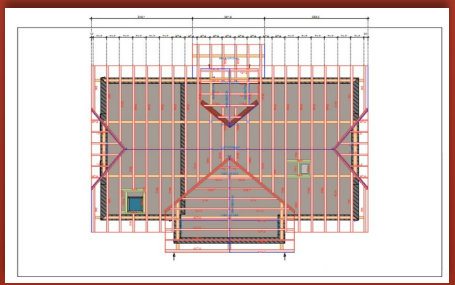
3D Export for a 3D exploration on any device as

WebGL (for any web browser)

and as 3D PDF (for on any PDF viewer)







WETO AG technologies

LigniKon XL V16

the 3D CAD for Carpenters to build Roofs, Trusses and other Timber Structures

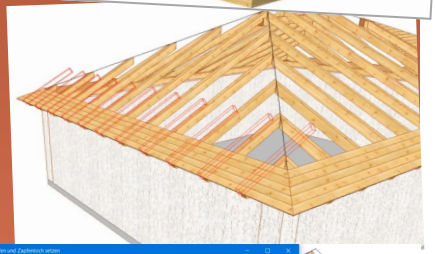
Advanced and flexible for the Construction and the Processing of Wooden Structures

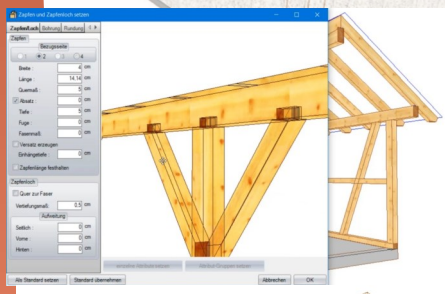
Within LigniKon XL you can design your plans completely freely, or, you can simply decide to use the Roofs Wizard

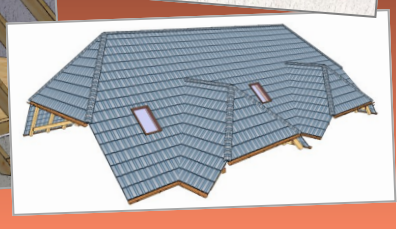
In both cases, the result will be identical, although it should be highlighted that thanks to the drawing freedom, you can create floor plan shapes that have not been considered in the wizard.

The XL version offers a large number of joints and tools for the creation of complex structures such as Multi-Roofs, Trusses, Timber Frame Constructions, Farm Structures, Stables, Winter Gardens and particular Timber-Steel buildings.

Functions and Main Features







- Augmented Easiness: parametric CAD for timber constructions, designed to work directly in 3D (in addition to 2D) and gain in time and easiness
- Extremely easy to define roof pitches and their accurate framing
- Assistant for Dormers, Skylights and Chimneys for a perfect Timber Framing
- Eaves projection editor for an easy planning of new extensions
- Rich library of downloadable roof tiles
- Merging multiple roof pitches to help you create even more complex roofs
- Help tools for copying, moving, rotating and mirroring components and groups, either with the mouse or numerically, e.g. for copying trusses or whole roofs
- Multiple placement of Beams/Joists, Posts/Studs, Rafters and Collar Beams/Ties just setting fixed (forced) or self-adaptive (dynamic) interaxle spacing
- Roof Pitches with special overhangs using the 'Slanted Fly Rafter'
- Parametric modelling of Studs, Knee Braces, Noggins, Plates and Wall Bracing for easily building frameworks and pergolas
- Joints and machining: Controlled Cut, Deburring/Trimming, Tenons-Mortises, classic Half Lap joints between two elements, Hooked and Plain Scarf Joints, Step/Heel Notch Joints, Free/Multiple Birdsmouths, Break/Merge, Beam Profiling (Moulding), Marking, Notches/Grooves, Rebates, Chamfers and Slots
- Steel beam tool according to EN 10365 (DIN 1025 / 1026)
- Automatic Technical Drawings of Single Framing Piece and Roof Profile Elevation View
- Automatic Roof Package (interior and eaves boards, insulation, roof tiles, gutters)
- 2D Dimensioning (single, multiple, chained, incremental...) in all views
- Automatic Labelling of components in any 2D view or perspective
- Timber/Iron lists computation with sections, lengths, areas, volumes etc. even for Excel
- Free beams with different cross sections such as I-joists, Rhombus, etc.
- Window and Door Editor for handling different geometries
- 2D/3D Import/Export as AutoCAD (DXF e DWG), BIM (IFC), etc...
- 3D Export as PDF and WebGL for a 3D exploration on any device
- 2D and 3D Export for modellers, renderers and other 2D and/or 3D CAD

Innovations in V16

- Modelling of ridge tiles and gutters for a more effective representation
- Level Dimensions even in the floor plan views
- Implementations in the calculation of roof tile needs
- Extended 3D PDF export including 3D CNC numbers
- New aids in the displacement window of components
- Adjustment of the separation/optimisation of the visible boarding