



LIANAS TRELLIS®

Leafy spatial structures

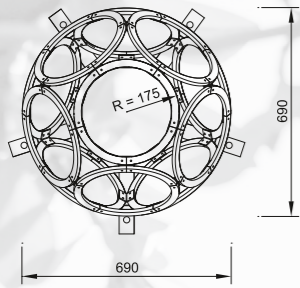
www.lianastrellis.com

PLANNING EXAMPLES

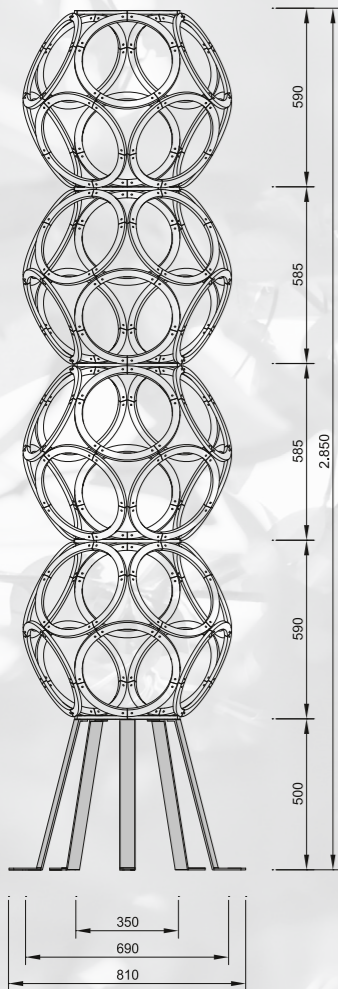
Design: Martino Pezzolla

BUSH 03: Truncated Dodecahedron

Ground plan Scale 1 : 25

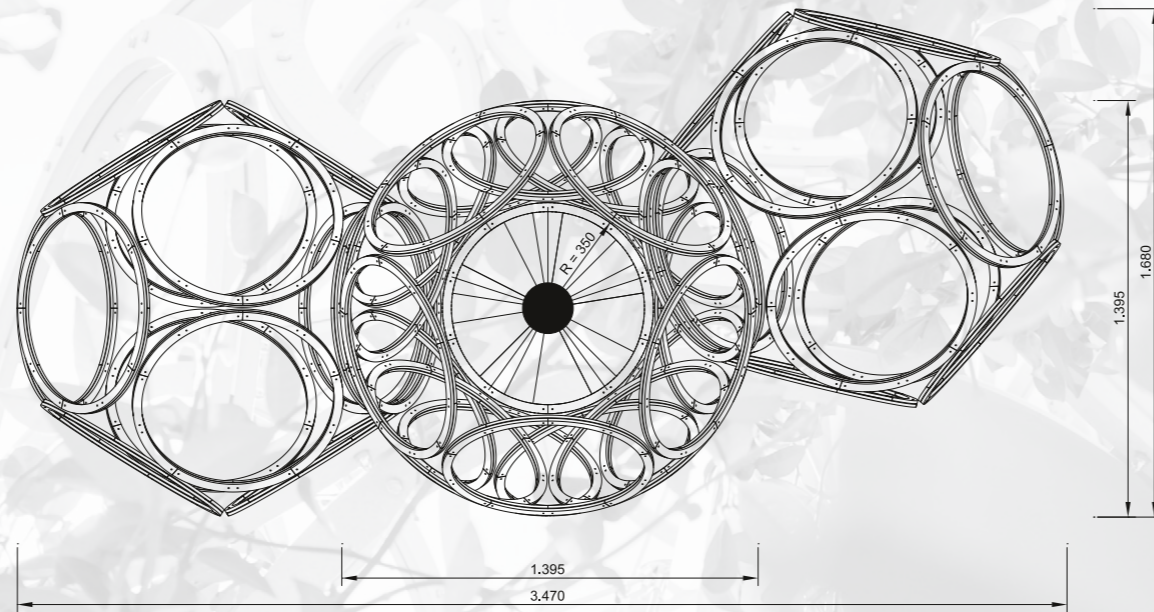


Side view Scale 1 : 25

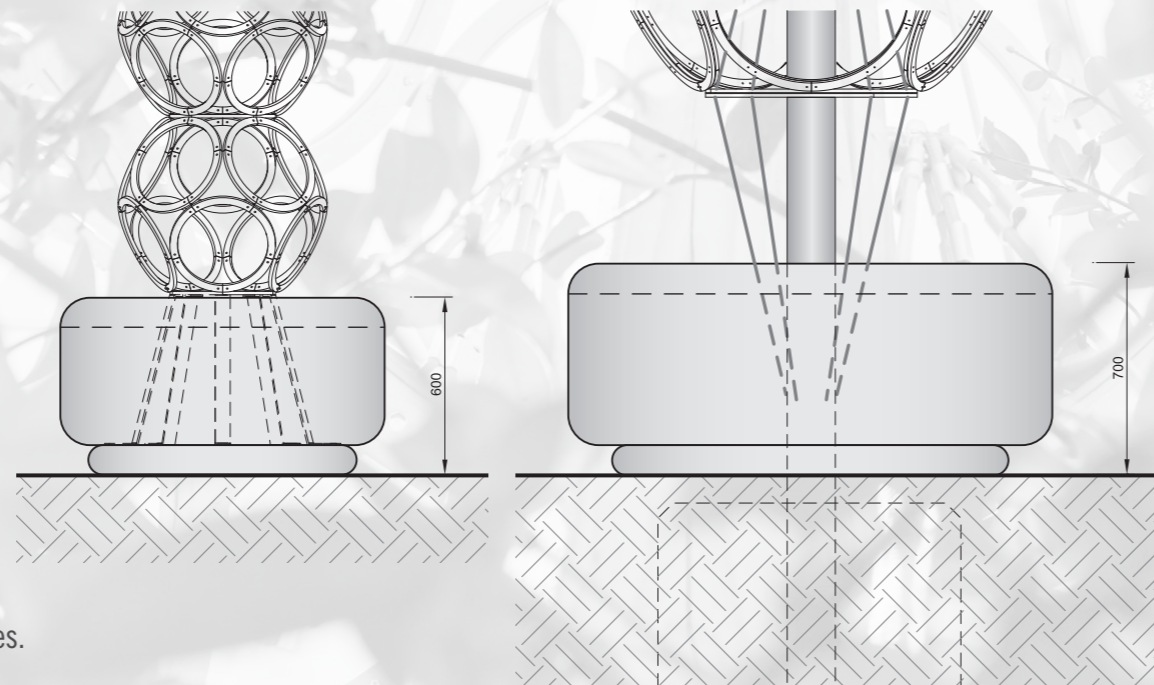


TREE 03: Truncated Dodecahedron

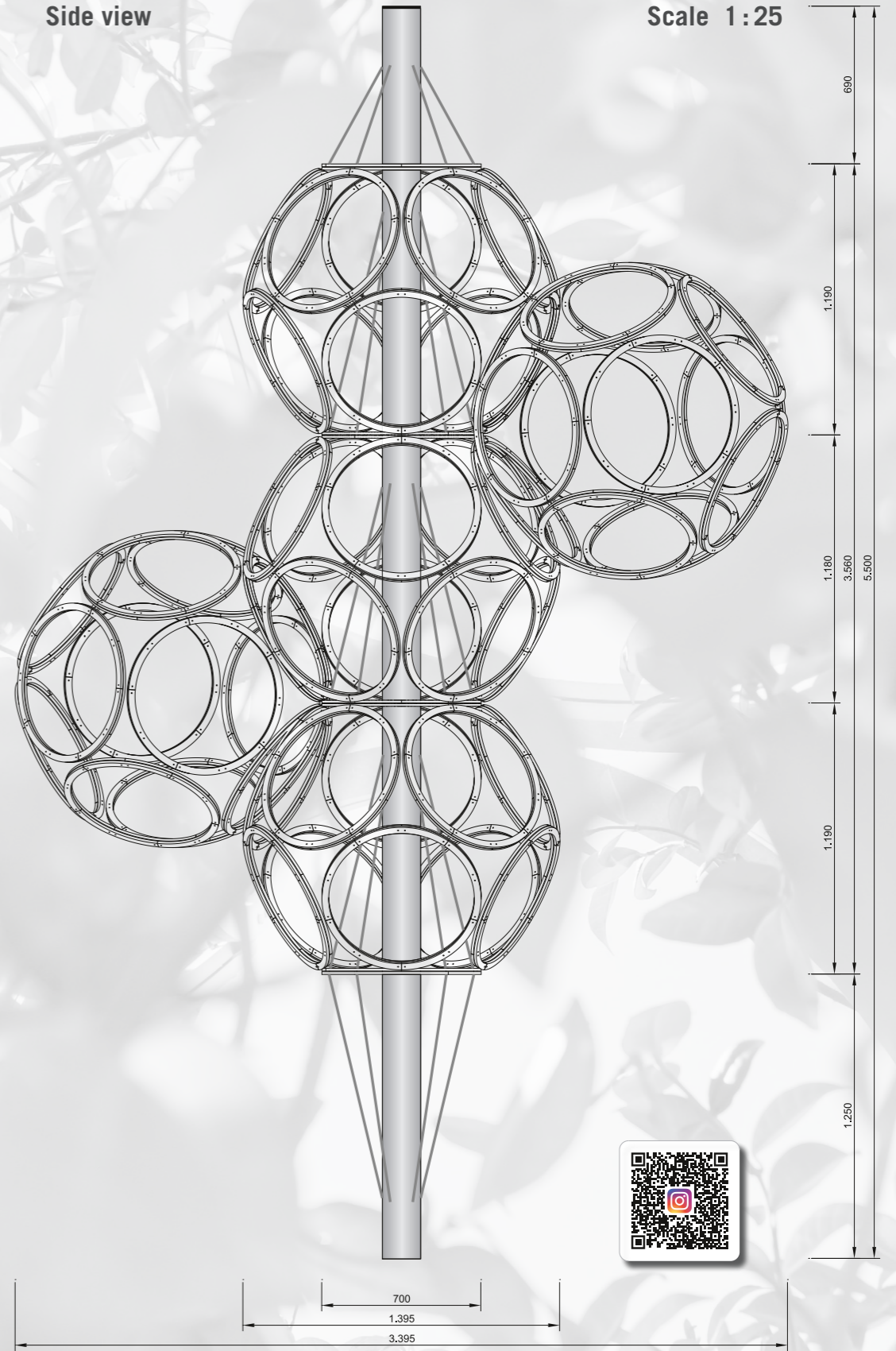
Ground plan Scale 1 : 25



Detail of ground anchoring Scale 1 : 25



Side view Scale 1 : 25



The spatial structures shown here are illustrative examples. Please refer to our price list for the full product range.



LIANAS TRELLIS – filling urban spaces with life

LIANAS TRELLIS combines the dynamism of climbing plants (*liana*‘) with the function of trellises (*trellis*‘). Lianas overcome the lack of light on the ground by growing up trees or vertical structures – trellises serve as natural support for the plants to climb..

With **LIANAS TRELLIS**, we have completely reinterpreted the classic concept of trellises. The delicate modules create innovative possibilities for integrating vibrant greenery into urban spaces – this is particularly advantageous where street trees, due to lack of space or sealed surfaces, only provide shade slowly and can contribute to improving the microclimate.

In these innovative structures, plants can grow in all directions. In nature, trees and climbing plants compete with each other, with the climbing plant eventually overgrowing the tree. Their rapid growth is a clear advantage for the plants in our **LIANAS-TRELLIS structures**: after just two to three years, a dense, lush green volume of space is created. Immediately after installation, the wooden, three-dimensional trellis plays the main role. Gradually, the climbing plants gain the upper hand, transforming the structure's appearance and filling the modules. In this way, within just a few years, they make a significant contribution to more greenery, shade, and quality of life in urban areas.

Our **LIANAS-TRELLIS structures** change throughout the year. In spring and summer, they are adorned with bright green leaves, colourful buds and flowers. Autumn lends the plants a special atmosphere with their changing colours. In winter, the structure becomes visible again – or remains largely hidden by evergreen plants. In this way, each season transforms the modules into a living, ever-changing experience.



SPACIAL STRUCTURES – inspired by geometry and nature

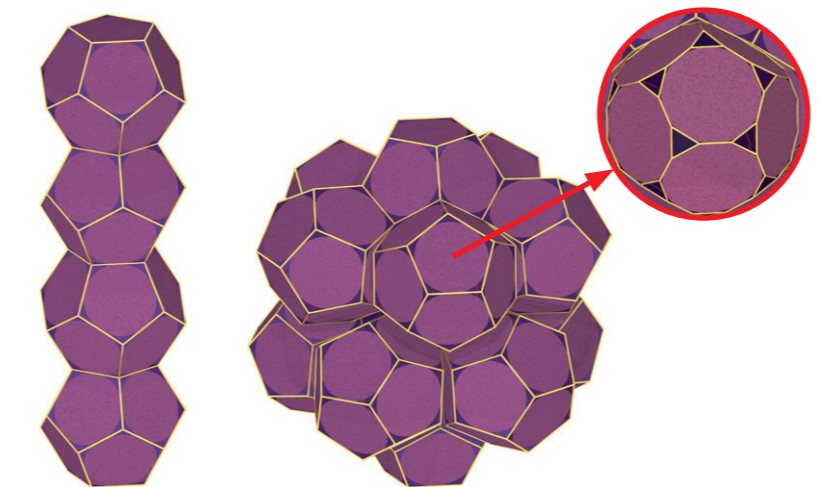
Our spatial structures are based on geometric principles that have always played a special role in nature, as well as in architecture and design. Polyhedra – regular solids with distinct faces and edges – are particularly well suited to creating spatial structures. The best known are the five Platonic solids:



At the heart of our design lies the dodecahedron. Composed of rings, it forms the basic framework of our structures. This shape can be combined in any way within a space – both stacked on top of one another and placed side by side. This creates compact, stable and, at the same time, aesthetically pleasing spatial volumes that achieve maximum impact with minimal use of materials. Thanks to the modularity of these structures, a wide range of design possibilities opens up:

- **Vertically:** by adding further central modules
- **Horizontally:** by adding lateral modules

Even a structure with just three central modules can accommodate up to ten additional extensions. This allows for the development of diverse forms that are not only practical but also reflect the beauty and variety of these spatial structures.



In the figures above, the rings have been replaced by discs. If the vertices of the polyhedra are cut off at the planes of these discs, the result is what is known as a **Truncated Dodecahedron**.

PLANT RECOMMENDATIONS – Nature Meets Structure

In principle, all twining and climbing plants are suitable for greening **LIANAS-TRELLIS structures**. If individual species require additional climbing support, extra ropes can easily be incorporated into the structure. With the **TREE modules**, the guyed ropes used to secure the modules to the central mast also serve as a natural climbing aid. For rapid establishment and lush growth, we recommend the following plants that have proven successful in our projects:

Actinidia arguta ‘Geneva’

- Insect-friendly
- Winter-hardy
- Edible fruits



Height: 2–8 m
Width: 3–4 m
Flowering period: March–May
Foliage: Deciduous
Leaf colour: Dark green
Root system: Heart-shaped root*
Soil: Slightly moist, well-draining, rich in organic matter

Jasminum officinalis

- Tolerates drier conditions
- Fragrant blooms
- Spectacular floral display



Height: 5–10 m
Width: 1–2 m
Flowering period: June–September
Foliage: Deciduous
Leaf colour: Green
Root system: Shallow rooted
Soil: Rocky to sandy

Clematis ‘Grandiflora’ Alba

- Pure white blooms
- Vigorous growth
- Requires support for climbing



Height: 5–8 m
Width: up to 4 m
Flowering period: May
Foliage: Deciduous
Leaf colour: Light green
Root system: Shallow rooted
Soil: Rich, humus-rich garden soil

Lonicera japonica ‘Halliana’

- Blooms twice a year
- Frost-hardy
- Vibrant green foliage



Height: 3–10 m
Width: 3–6 m
Flowering period: June–September
Foliage: Evergreen
Leaf colour: Medium green
Root system: Shallow rooted
Soil: Fresh to moist, sandy-loam to clay-loam

Hydrangea petiolaris

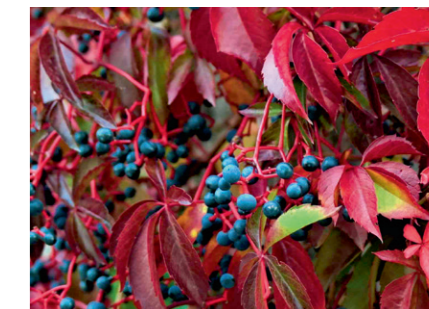
- Fragrant
- Urban-climate tolerant
- Insect-friendly shrub



Height: 6–10 m
Width: 2–4 m
Flowering period: June–July
Foliage: Deciduous
Leaf colour: Dark green
Root system: Shallow rooted
Soil: Fresh to moist, well-draining, nutrient-rich

Parthenocissus quinquefolia

- Climbs using adhesive discs
- Fast-growing
- Completely undemanding regarding soil



Height: 10–12 m
Width: 2–4 m
Flowering period: June–July
Foliage: Deciduous
Leaf colour: Green
Autumn colours: Yellow, orange, red
Root system: Deep rooted*
Soil: Any garden soil

* Not suitable for use in planters.