## Installation Instructions

### Akalla System with flat or angled pergola roof

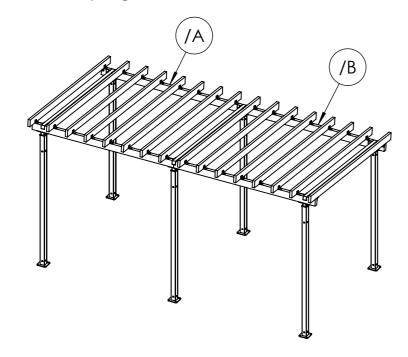
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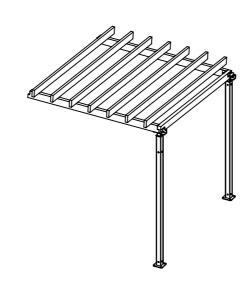


### Akalla Pergolasystem Product overview

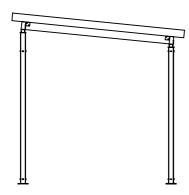
Ö80-10 Akalla Starter section with flat pergola roof



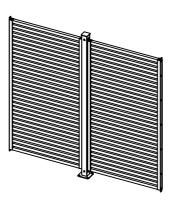
Ö80-11 Akalla Extension Unit with tilted pergola roof



Akalla Pergola Roof with Slope Side View



Ö80-13 Akalla trellis



#### Akalla Pergola System

Akalla **Ö80-10** and **Ö80-11** have a sloping pergola roof. **Ö80-10** is a start section and **Ö80-11** is an add-on section.

**RT** after article number means that it is a flat pergola roof.

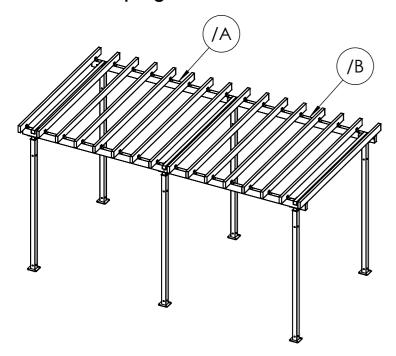
Akalla Ö80-10, Ö80-10RT and Ö80-14RT will be illustrated in the assembly instructions as divided into parts /A and /B for a simplified description of the system and superstructure.

Ö80-13 Akalla Trellis with wooden slats is suitable for both sloping and flat pergola roofs. It can only be installed in straight starting and add-on sections of the Akalla Pergola.

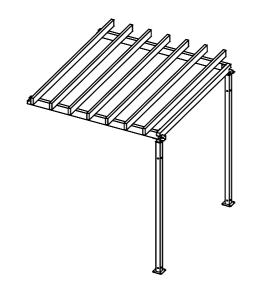


### Akalla Pregolasystem Product overview

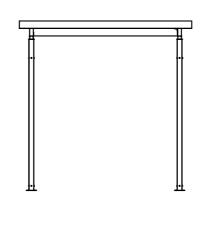
Ö80-10RT Akalla Start section with flat pergola roof



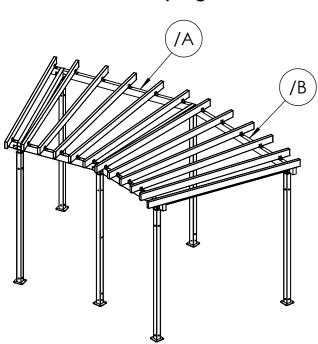
Ö80-11RT Akalla Extension section with flat pergola roof



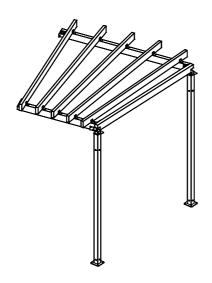
Akalla Flat Pergola Roof Side View



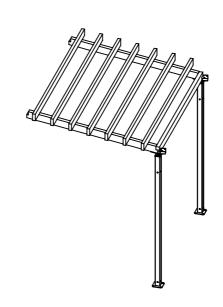
Ö80-14RT Akalla Angled Start section with flat pergola roof



Ö80-15RT Akalla Angled Extension Unit with Flat Pergola Roof



Ö80-12RT Akalla Rhomb-shaped Extension Unit with Flat Pergola Roof



#### Akalla Pergola System

Akalla with a flat pergola roof is available as both straight and angled starting and extension sections. This provides the opportunity to build more curved pergola systems.

There is also a Rome-shaped add-on section that can be used to build S-shaped systems or, for example, when two turns from different directions meet. For more information about this, see the system description.

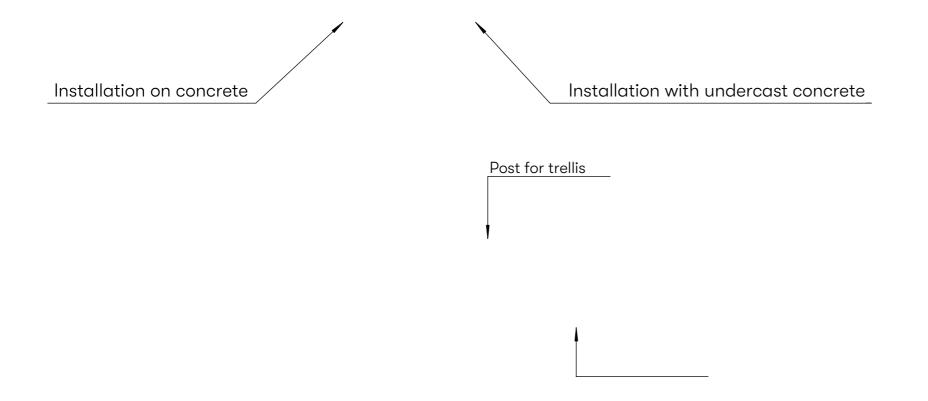
These sections are only accessible with a flat pergola roof.

**RT** after article number means that it is a flat pergola roof.

All starter sections will be named in the installation instructions with /A for the starting section and /B for the end section, when add-on sections are installed between the starting section.



# Akalla Pergolasystem Installation - Straight sections



#### Installation

It makes it easier to be two or more when installing Akalla Pergola systems. Pay attention when building many different sections, as it can contain several different types of parts, such as posts that only fit with a specific section.

#### Attachment order

- **1.** Start by placing the posts in the right place and be careful that the right post is in the right place.
- **2.** Measure the posts so that they are correctly positioned for anchoring to the ground.
- **3.** Then anchor the posts in the ground.

#### Installation on paving stones

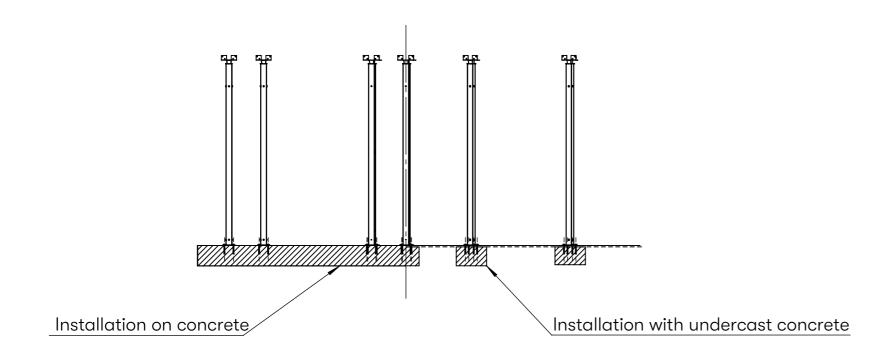
**Undercast** the slabs with concrete. Assemble with a chemical anchor or expander.

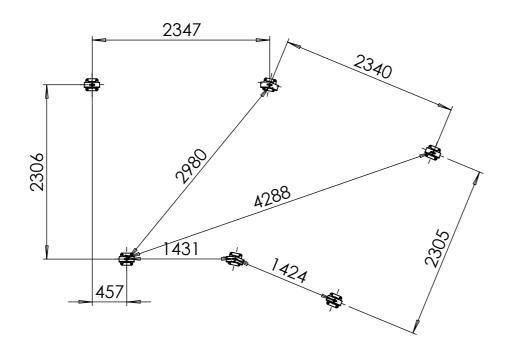
#### Mounting on concrete, etc.

Assemble with a chemical anchor or expander.



# Akalla Pergolasystem Installation - Angled sections





#### Installation

It makes it easier to be two or more when installing Akalla Pergola systems. Pay attention when installing many different sections, as it can contain several different parts, such as posts with post tops that only fit with a specific section.

#### Attachment order

- **1.** Start by placing the posts in the right place and be careful that the right post is in the right place.
- **2.** Measure the posts so that they are correctly positioned for anchoring to the ground.
- 3. Then anchor the posts in the ground.

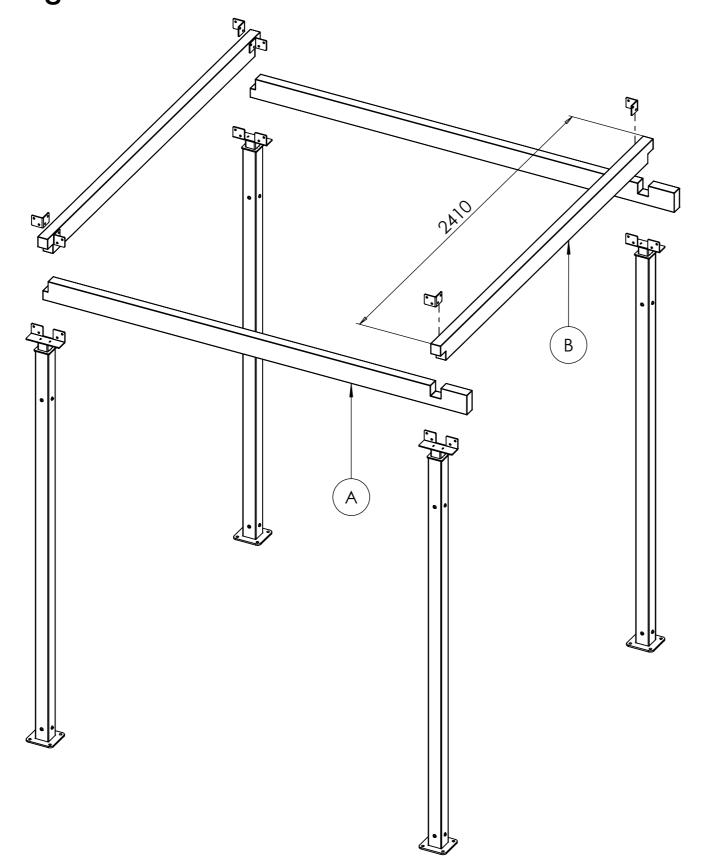
Installation on paving stones or street slabs
Undercast the slabs with concrete. Assemble with
a chemical anchor or expander.

#### Mounting on concrete, etc.

Assemble with a chemical anchor or expander.



### Akalla Pergolasystem Installation - Pergola beams



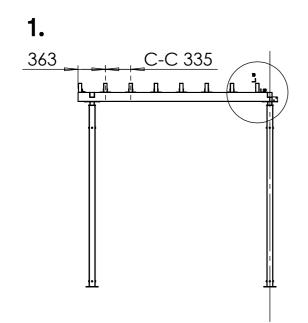
#### Installation Pergola Beams

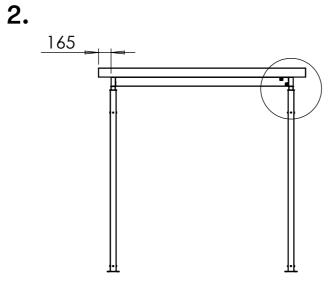
After you have measured the posts in each place and they are anchored in the ground, you proceed to install the pergola's beams

- **1.** Installation of beams is done as shown, first you attach the lower bemas A to the posts with the included wood screws.
- **2.** Then beam B is placed and then beams A and B are attached to each other in each inner corner of the pergola with the included angle fittings and wood screws.
- **3.** Finally, two angle brackets were attached on the outside to and together with the next section's beam A.

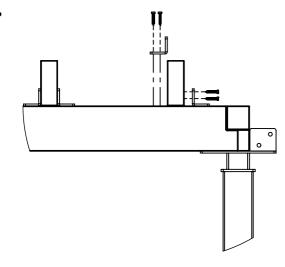


## Akalla Pergolasystem Installation pergola roof

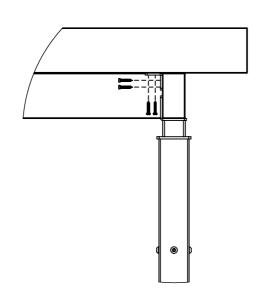




3.



4.



#### Installation pergola roof

- **1.** The outer pergola roof beam aligns with with the beam. Measure out the pergola roof beams according to the specified C-C dimensions (335 mm).
- **2.** Make sure that there is 165 mm protrusion at both the front and rear edges (on pergolas with a flat roof).

On Akalla Pergola with a sloping roof, there is 160 mm protrusion at both the front and rear edges.

For angled start and extension sections, the beams have individual dimensions of protrusion, see dimension specification, page 14.

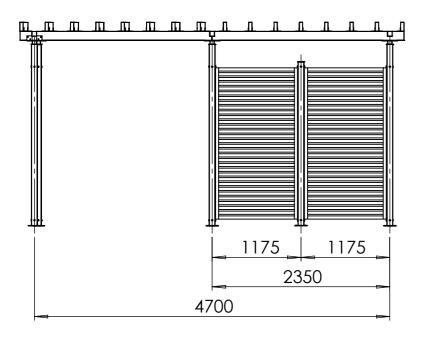
**3.** Attach each pergola roof beam with 4 angle brackets. Two on each side at each end with the included wood screws, as instructed.

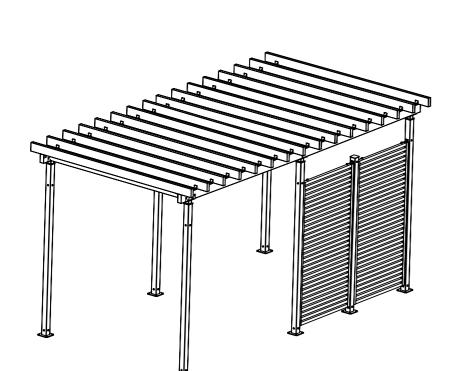
On the start sections there are outer roof beams.

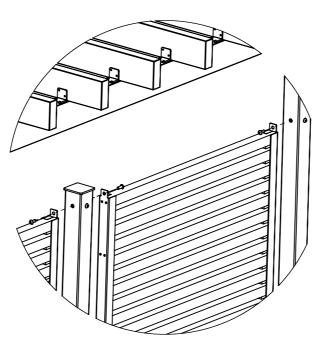
**4.** The outer roof beam is attached with 2 angle brackets on the underside as the outer pergola roof beam in line with the beam, see pictures.



### Akalla Pergolasystem Installation - Trellis







#### Installation Trellis

Trellis **Ö80-13** for Akalla Pergola can only be mounted on straight start and extension sections, where the C-C measurement is 2350 mm between the posts.

Each trellis that is mounted between a pergola's posts consists of two trellises that are assembled together with a central post. This is placed and mounted between the pergola's posts with C-C dimensions of 1175 mm.

- 1. Install one trellis at a time, in the middle post and the pergola's post with the included M10 screw. One screw at the top and one at the bottom of each post.
- 2. Then the second trellis is mounted on the other side of the center post in the same way.

#### **Specification**

Per trellis 2 trellis sections

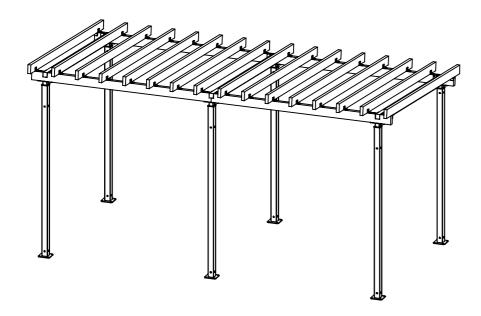
1 center post

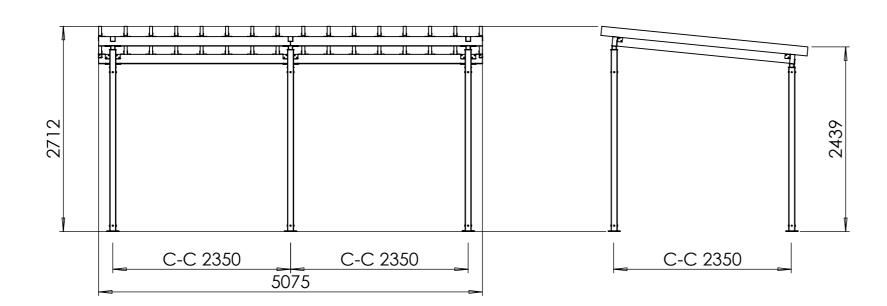
8 screws

8 trays



## Akalla Pergolasystem Start section





#### Ö80-10 Akalla Pergola Start section

The illustration shows 1 piece of the Akalla pergola starting section. Below is a list of included parts for the product.

#### **Components - Start section**

#### Wood components

16 pergola beams 120 x 45 mm

3 beams W 120 x 60 mm

4 beams A 120 x 60 mm

#### Steel components

3 Front Posts 3 Rear Posts

12 pcs angle brackets for timber fastening (wood screw) 64 pcs angle brackets 45 x 45 mm (wood screw)

#### **Screw Specification Start Section**

#### **Wood Components**

48 pcs wood screws  $\emptyset$  8 x 45 mm hot-dip galvanized 48 pcs washers  $\emptyset$  8.8 mm hot-dip galvanized 256 pcs spax  $\emptyset$  4 x 20 mm stainless A2

#### **Steel Components**

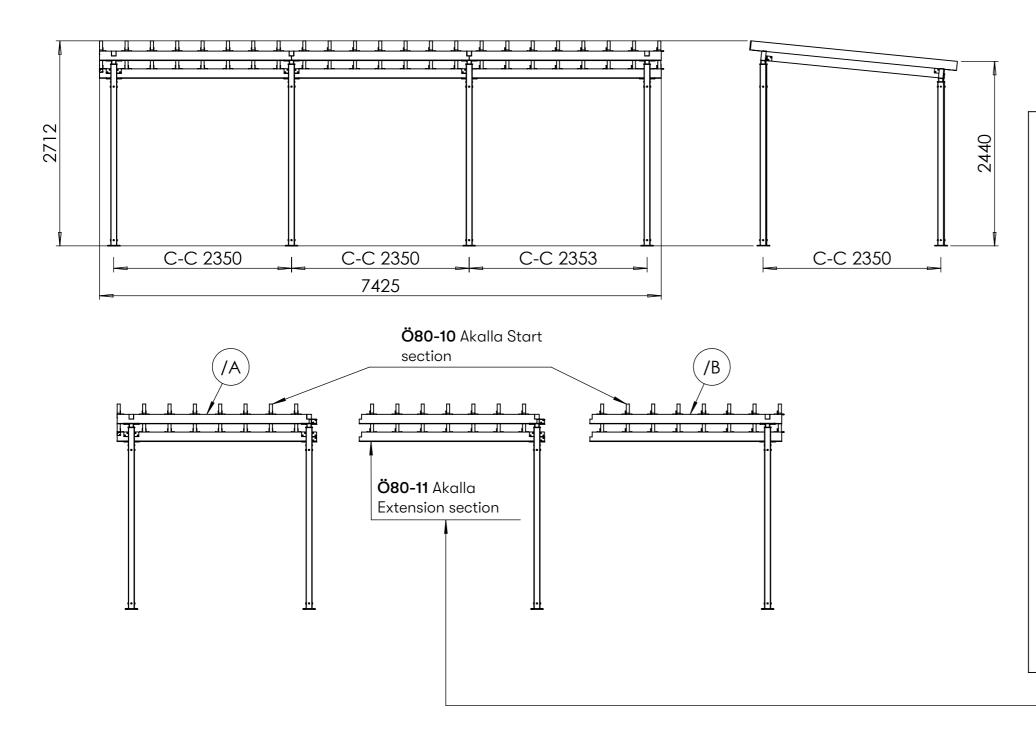
48 pcs screws K6S M10 x 25 mm stainless

A2 (8 pcs per post)

48 washers M10 stainless

A2 (8 pcs per post)

## Akalla Pergolasystem Extension section



#### Ö80-11 Akalla Pergola Extension section

The illustration shows how, 1 piece of Akalla pergola aexternsion section and 1 piece of Akalla pergola start section, are mounted with the extension section placed between the start section /A and /B. Below is a list of included parts for the product.

#### **Extension section components**

#### Wood components

7 pergola beams 120 x 45 mm

1 beam W 120 x 60 mm

2 beams A a (superstructure) 120 x 60 mm

#### Steel components

1 front post 1 rear post

4 pcs angle brackets for timber fastening (wood screws)

28 pcs angle brackets 45 x 45 mm (wood screws)

#### Screw specification - Extension section

#### Wood components

16 pcs wood screws  $\emptyset$  8 x 45 mm hot-dip galvanized 16 pcs washers  $\emptyset$  8.8 mm hot-dip galvanized

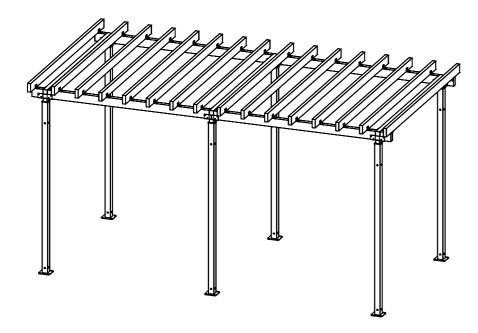
112 pcs spax  $\emptyset$  4 x 20 mm stainless A2

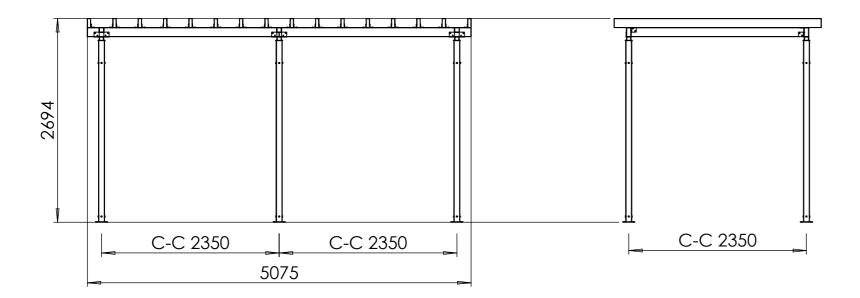
#### Steel components

16 pcs screw K6S M10 x 25 mm stainless A2 16 pcs BRB M10 stainless A2



## Akalla Pergolasystem Start section





## Ö80-10RT Akalla Pergola Start section with flat roof

The illustration shows 1 piece of Akalla pergola start section with a flat roof. Below is a list of included parts for the product.

#### Start section components

#### Wood components

16 pcs pergola beams 3 beams B-R special length for flat roof 4 beams A

#### Steel components

6 front posts Ö80-10-10RT
12 pcs angle brackets for timber attachment
Ö80-10SVBO-121
64 pcs angle brackets 45 x 45 mm
Ö80-10SVBO-120

#### **Screw Specification Start Section**

#### Wood components

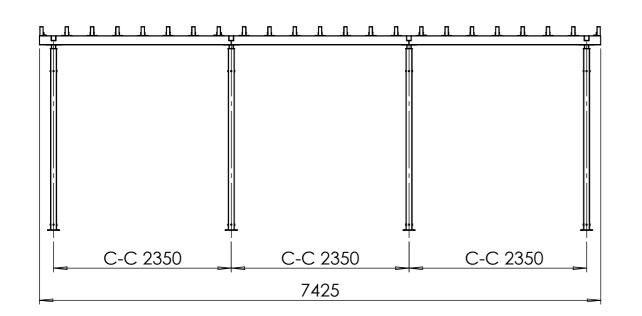
48 pcs wood screws  $\emptyset$  8 x 45 mm hot-dip galvanized 48 pcs washers  $\emptyset$  8.8 mm hot-dip galvanized 256 pcs spax  $\emptyset$  4 x 20 mm stainless A2

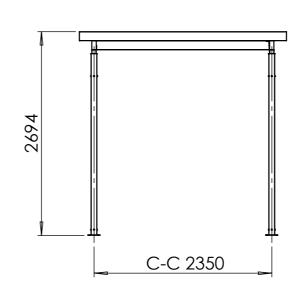
#### Steel components

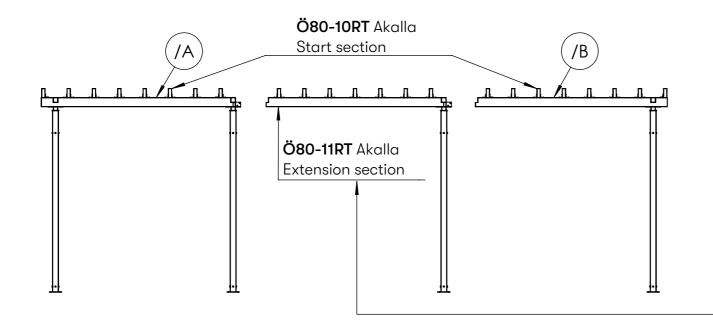
48 pcs screws K6S M10 x 25 mm stainlessA2 (8 pcs per post)48 pcs BRB M10 stainlessA2 (8 pcs per post)



## Akalla Pergolasystem Extension section - flat roof







## Ö80-11RT Akalla Straight Extension section with flat pergola roof

The illustration shows how, 1 piece of Akalla pergola extension section with flat roof and 1 piece of Akalla pergola starter section with flat roof, are mounted with the extension section placed between the start section /A and /B. Below is a list of included parts for the product.

#### **Extension section components**

#### Wood components

7 pergola beams 120 x 45 mm 1 beams BR special length for flat roof 2 beams A\_a (superstructure) 120 x 60 mm

#### Steel components

2 front post Ö80-10-10RT 4 pcs angle brackets for timber attachment Ö80-10SVBO-121 28 pcs angle brackets 45 x 45 mm Ö80-10SVBO-120

#### Screw specification for extension section

#### Wood components

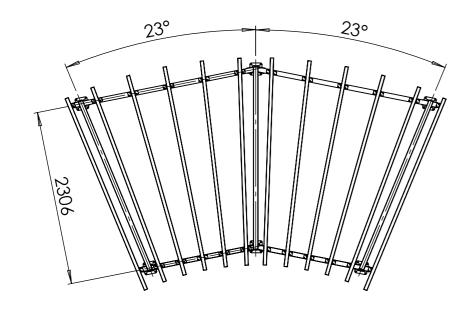
16 pcs wood screws  $\emptyset$  8 x 45 mm hot-dip galvanized 16 pcs washers  $\emptyset$  8.8 mm hot-dip galvanized 112 pcs spax  $\emptyset$  4 x 20 mm stainless A2

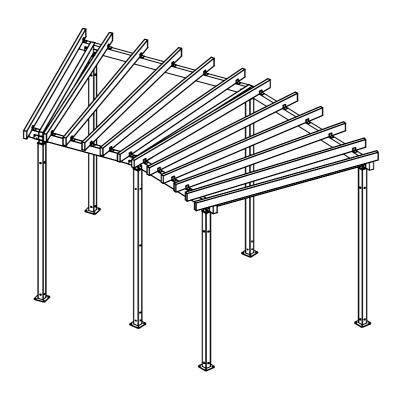
#### Steel components

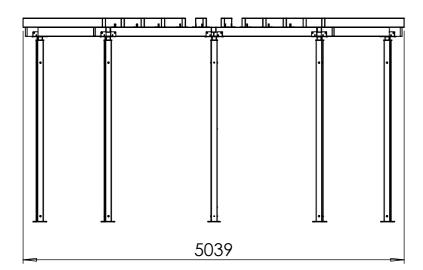
16 pcs screw K6S M10 x 25 mm stainless

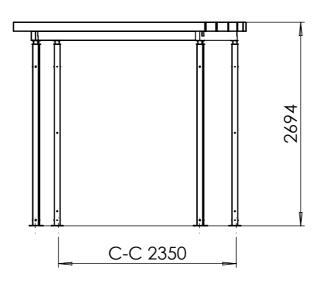


# Akalla Pergolasystem Angled Start section with flat pergola roof









The illustration shows 1 Ö80-14RT Akalla Angled Start section with flat pergola roof. Below is a list of included parts for the product.

#### Start section components

#### Wood components

12 pcs pergola beams 120 x 45 mm

3 beams A 120 x 60 mm

2 front beams 120 x 60 mm

2 rear beams 120 x 60 mm

#### Steel components

2 pcs posts with angled post top 4 pcs posts with straight post top

12 pcs angle brackets for timber fastening (wood screw)

48 pcs angle brackets for booms (wood screw)

**Screw Specification Starter Section** 

#### Wood components

48 pcs wood screws  $\emptyset$  8 x 45 mm hot-dip galvanized 48 washers  $\emptyset$  8.8 mm hot-dip galvanized 192 pcs spax  $\emptyset$  4 x 20 mm stainless A2

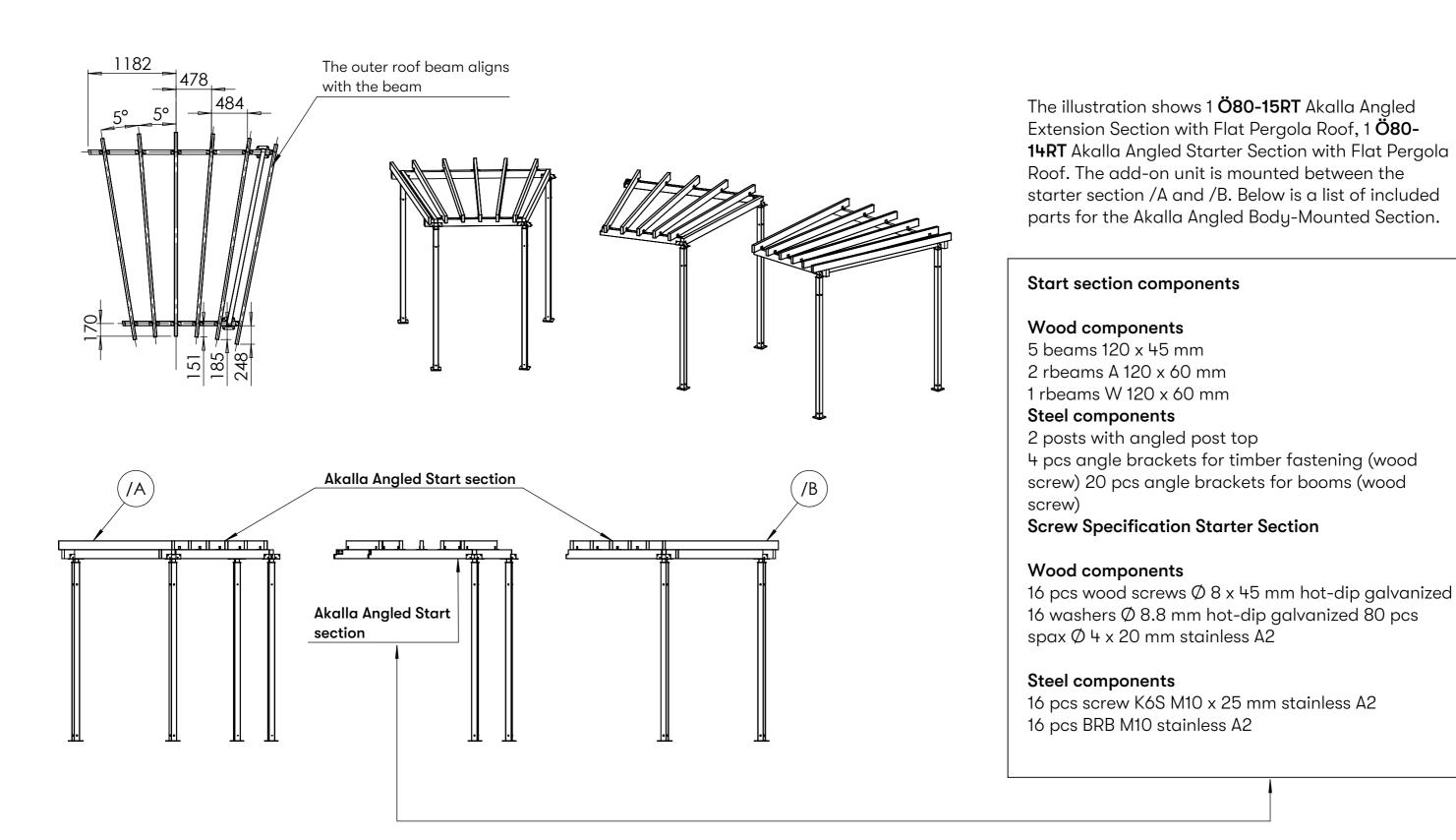
#### Steel components

48 pcs screws K6S M10 x 25 mm stainless A2 (8 pcs per post)

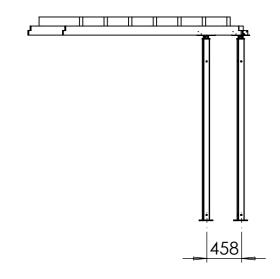
48 pcs BRB M10 stainless

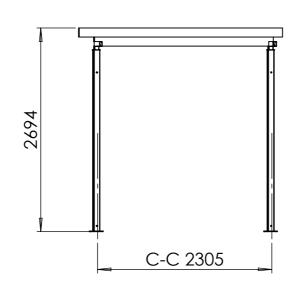


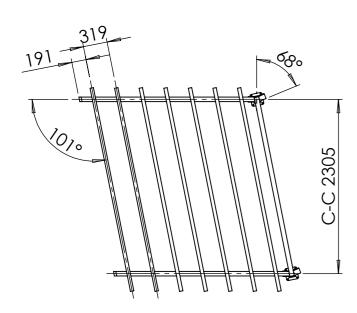
# Akalla Pergolasystem Angled Extension section with flat pergola roof

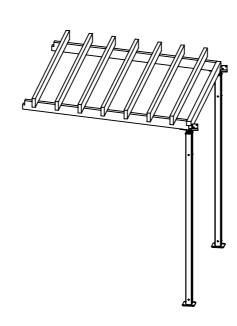


### Akalla Pergolasystem Rhombus-shaped extension section with flat pergola roof









The illustration shows 1 Ö80-12RT Akalla Rhombusshaped Extension Section with a flat pergola roof. Below is a list of included parts for the Ö80-12RT Akalla Rhombus-shaped Extension Section.

#### Start section components

#### Wood components

7 pergola beams 120 x 45 mm 2 beams A 120 x 60 mm 1 beams W 120 x 60 mm

#### Steel components

2 posts with angled post top 4 pcs angle brackets for timber fastening (wood screw) 28 pcs angle brackets for booms (wood screw)

#### **Screw Specification Starter Section**

#### Wood components

16 pcs wood screws  $\emptyset$  8 x 45 mm hot-dip galvanized 16 washers  $\emptyset$  8.8 mm hot-dip galvanized 112 pcs spax  $\emptyset$  4 x 20 mm stainless steel A2

#### Steel components

16 pcs screw K6S M10 x 25 mm stainless A2 16 pcs BRB M10 stainless A2

## Akalla Pergolasystem Care and Maintenance

#### Oiled oak

Products made of oiled oak should be oiled 2 times a year for best protection. Good maintenance can never completely prevent stains from occurring, but oak that is not maintained becomes blacker and greys faster, but it still has a very long life. When oiling products, a finely boiled oil that penetrates the wood should be chosen over a film-forming oil. For example, sofa Budget. In oak, so-called fibre rise can occur during the first seasons of the material. The oak fibres release and settle as a fine fluff on the surface and are easily sanded away with a fine sandpaper. Fiber stasis only occurs once and does not recur.

#### SIOO:X-treated oak

Sioo:x is a wood preservative with environmentally friendly silicon technology. Water-based and biocide-free. Sioo:x treatment of oak, outside and inside and gives a light, wooden surface without pigment. The surface is UV-safe, water-repellent and scratch-free. Active and preventive action against algae, mold and insect pests. Also anti-rot, wood-reinforcing and fire-retardant. This wood preservative provides long durability and easy maintenance. No "annual oiling" is required. Can be overpainted.

Nola's Sioo:x treated products are treated 2 times upon delivery. once with a wood protection (Premium Wood Protection Terrace) and once with a surface protection (Premium Surface Protection Terrace). 10-14 months after a product has been exhibited, it should be treated a second time with Sioo:x Premium Surface Protection Terrace for best durability. The lifespan after that is estimated to be about 10 years before it needs to be treated again with Premium Surface Protection Patio. The surface protection forms a wear surface, which means that products that are exposed to severe mechanical wear may need to be treated more often than every ten years. The coating has a tested effect according to standards EN 46 and EN 113.

For information about the Sioo treatment, see the website

www.sioox.se.

#### **Electroplated and Powder-coated steel**

Electro-galvanizing (also called electrogalvanizing) provides corrosion protection by releasing a zinc ion. It is created via a zinc coating on the steel by means of an electric current.

Powder coating is a coating that is applied as a free-flowing, dry powder. Unlike conventional liquid paint, powder coating is usually applied electrostatically and then cured under heat or with ultraviolet light. The result is an even, durable coloured surface in the desired gloss number.

Products that are powder-coated can be touch-up painted with alkyd paint.



# Akalla Pergolasystem Renovation, dismantling and recycling

#### Renovation

Damaged or neglected parts can be ordered as spare parts if needed. Then contact NoIa for advice and guidance.

#### Removal

Disassembly takes place in the reverse order of assembly.

Start by unscrewing the angle brackets attached to the pergola beams and then remove the pergola beams. Next, the wood screws are unscrewed and the angle brackets (with which the beams are attached) are removed. Unscrew the screws attached to the beams and post tops. Then take down the beams. If your pergola has trellises, these are dismantled now. Finally, the posts are removed by detaching them from the chosen attachment method.

Sort the parts into metal separately and wood separately.

#### Recycling

The posts are made of electro-galvanised and powder-coated steel. Angle fittings and screws are made of steel. All parts are sorted as metal at the recycling center. The beams, pergola beams and wooden slats in the trellis are made of oak and are sorted as wood at the recycling center.

Waste code: 17 02 01 for wood and 17 04 05 for iron and steel.

