

± 170 -  
210mm



± 160 - 190mm



± 120 -  
150mm

± 230 - 380mm

Image shown above 16.20

Mounting	Floor mounted
Glass Colours	16: Grey 1, grey 2, white 1, white 2 73: Clear, grey 1, grey 2, grey 3
Lamp	1W LED, 2700K, 100lm (2500K and 3000K options available) XX.10 - 15W XX.15 - 22.5W XX.20 - 30W XX.25 - 37.5W XX.35 - 52.5W XX.40 - 60W
Finish	Bead blasted
Materials	Poured glass (16)/blown glass (73), steel armature, electrical components, stainless steel base
Power Supply	Remote mounted in an easily accessible and hidden location for ease of long-term maintenance. Not dimmable.
Environment	Outdoor, wet location. IP56  Based on structural analysis for moderately sheltered locations near seawater with minimal snow loads. Any other application restraints may need further engineering.  Installation requires anchoring into either an existing structural slab or a newly built foundation to meet the specifications of the design drawings, including appropriate drainage if exposed to water and remotely mounted LED drivers.
Note	Every single Bocci product is handmade. They are blown, poured, carved, polished, packed and dispatched directly by us. As such, no two products are identical; they are individual, irregular expressions of our research.
Patent #	16: CAN 16234 US D754,911 EU 002687774 - 0001 to 0012  73: US D762,323 S EU 002633230-0001 - 0003

Certifications



Weight (kg)

16.10	55	73.10	63
16.15	93	73.15	105
16.20	151	73.20	166
16.25	192	73.25	212
16.35	284	73.35	312
16.40	297	73.40	329

**A.** Ø170 x 69mm Stainless steel cover

**B.** ASTM A36, 38.1mm OD washer, 3.8mm minimum thickness or equivalent (not provided)

**C.** A563 (grade A, C or DH) heavy hex lock nuts, neoprene washer, and below base plate or equivalent (not provided)

**D.** Ø150 x 19mm 304 Stainless steel base plate

**E.** Leveling nut x 2 per anchor A563 (grade A, C or DH) heavy hex nuts or equivalent (not provided)

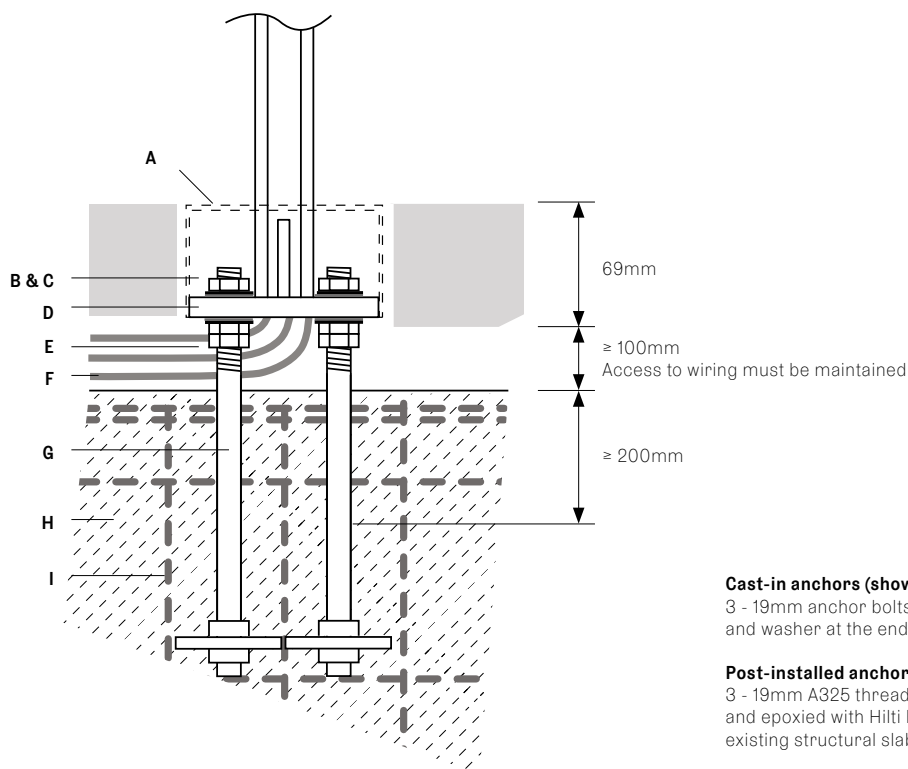
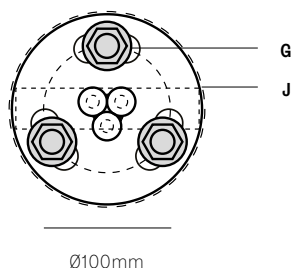
**F.** Electrical burial cable (to conduit)

**G.** Structural anchors, A325 threaded rods 19mm or equivalent (not provided)

**H.** Concrete

**I.** Rebar

**J.** Line of water drainage and wire tray below



#### Cast-in anchors (shown above)

3 - 19mm anchor bolts with nut and washer at the ends

#### Post-installed anchors

3 - 19mm A325 threaded rods Drill and epoxied with Hilti RE-500 into existing structural slab

### IMPORTANT

The foundation drawings are meant only to provide a general idea of what is involved in installation and a structural engineer must specify a suitable foundation using the load summary and design criteria provided above.

### Load Summary & Design Criteria

Installation of these trees is complex and Bocci recommends a structural consultant to assess the viability of the system in the context in which it is to be installed. Installation requires anchoring into either an existing structural slab or a newly built foundation to meet the specifications of the design drawings, including appropriate drainage if exposed to water and remotely mounted LED drivers.

Anchoring of these trees is critical and it is imperative that the assembly drawings are followed. The foundation and fixing of anchors to the foundation are the responsibility of the client. Drawings are provided only to give a general idea of what is involved in installation for early phase design development. The trees are designed for the load assumptions listed on the specification sheet and should not be installed in a location where any of those design forces will be surpassed. Neglecting the design forces may lead to failure of the structure. The design of a suitable foundation is to be provided by a structural engineer.

The modular trees will deflect under wind loading. All modular tree components should be kept at least 600mm away from any other object to allow space for the tree to deflect without causing damage to other objects.

For our purposes, and due to specific site constraints that will guide the preparation of the site, the installation instructions begin with the anchors already installed.

### MAINTENANCE

As with all outdoor fixtures, Bocci outdoor tree installations should be specified with the expectation that general maintenance will be required over the lifetime of the fixture. We recommend cleaning and maintaining the luminaries and armature regularly.

Stainless steel installed outdoors naturally mature and patina over time due to prolonged exposure to sunlight, pollutants and other environmental conditions. Bocci recommends that all armature installed in an outdoor setting be coated on site with a protective oil or paint finish to provide a barrier between the steel parts and any environmental elements that can cause surface corroding. The choice of an oil or paint finish will depend on the desired aesthetic and the severity of the environment and its effect on metal finishes. This coating will need to be maintained over the lifetime of the installation to protect against the natural corrosion of metal.

All Bocci trees are engineered for temperate climates and the level of maintenance will increase if the installation is located in a particularly extreme climate i.e. extreme temperatures, high humidity, high salinity, snow, sand storms, heavy rain, ice, etc.

Coastal environments: The environment of a sea coast can be extremely corrosive. Even with appropriate maintenance, products installed in a coastal environment will typically deteriorate faster than products installed in a more moderate environment. Some surface corrosion and/or deterioration is considered normal wear in this environment. Thus, any finish failures or corrosion due to coastal environment conditions are not covered by the product warranty.

A. Ø270 x 145mm Stainless steel cover

B. ASTM A36, 50.8mm OD washer, 3.8mm minimum thickness or equivalent (not provided)

C. A563 (grade A, C or DH) heavy hex lock nuts, neoprene washer, and below base plate or equivalent (not provided)

D. Ø250 x 19mm 304 Stainless steel base plate

E. Leveling nut x 2 per anchor A563 (grade A, C or DH) heavy hex nuts or equivalent (not provided)

F. Electrical burial cable (to conduit)

G. Structural anchors, A325 threaded rods 19mm or equivalent (not provided)

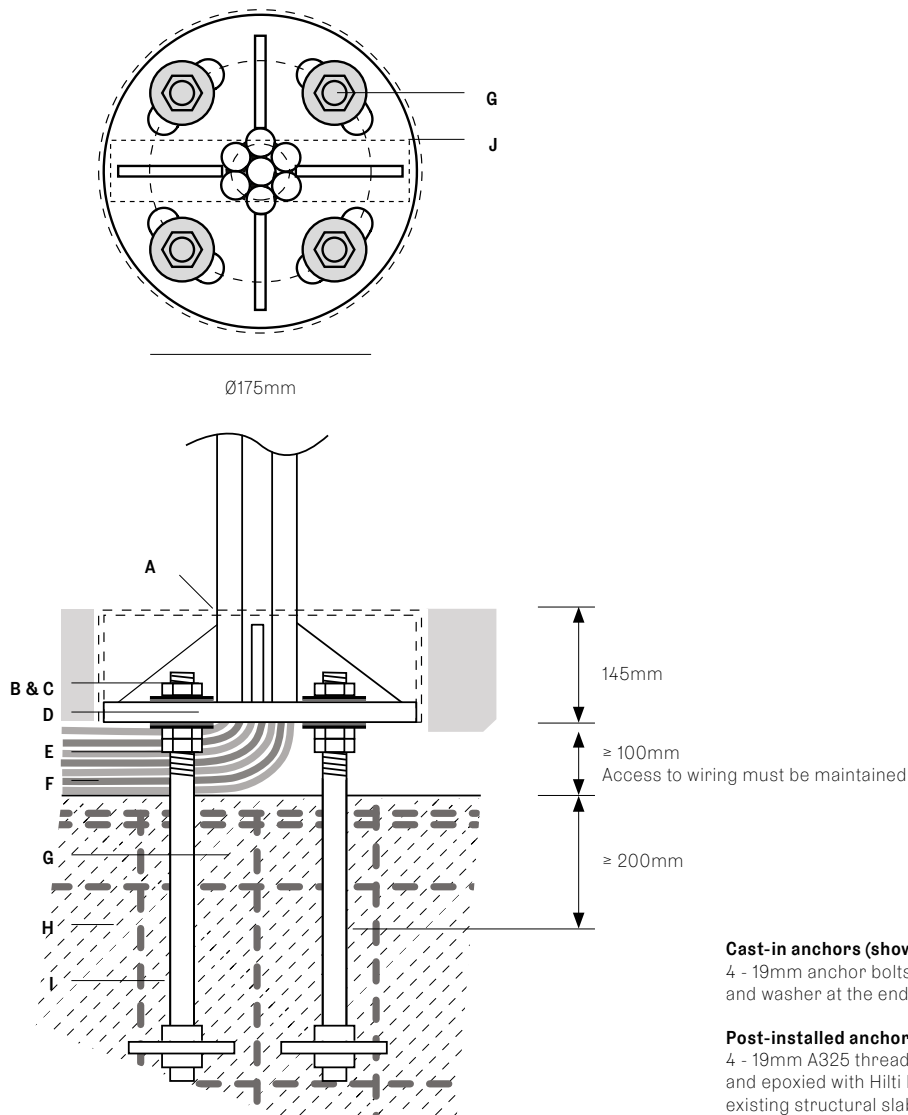
H. Concrete

I. Rebar

J. Line of water drainage and wire tray below

## IMPORTANT

The foundation drawings are meant only to provide a general idea of what is involved in installation and a structural engineer must specify a suitable foundation using the load summary and design criteria provided above.



### Cast-in anchors (shown above)

4 - 19mm anchor bolts with nut and washer at the ends

### Post-installed anchors

4 - 19mm A325 threaded rods Drill and epoxied with Hilti RE-500 into existing structural slab

## Load Summary & Design Criteria

Installation of these trees is complex and Bocci recommends a structural consultant to assess the viability of the system in the context in which it is to be installed. Installation requires anchoring into either an existing structural slab or a newly built foundation to meet the specifications of the design drawings, including appropriate drainage if exposed to water and remotely mounted LED drivers.

Anchoring of these trees is critical and it is imperative that the assembly drawings are followed. The foundation and fixing of anchors to the foundation are the responsibility of the client. Drawings are provided only to give a general idea of what is involved in installation for early phase design development. The trees are designed for the load assumptions listed on the specification sheet and should not be installed in a location where any of those design forces will be surpassed. Neglecting the design forces may lead to failure of the structure. The design of a suitable foundation is to be provided by a structural engineer.

The modular trees will deflect under wind loading. All modular tree components should be kept at least 600mm away from any other object to allow space for the tree to deflect without causing damage to other objects.

For our purposes, and due to specific site constraints that will guide the preparation of the site, the installation instructions begin with the anchors already installed.

## MAINTENANCE

As with all outdoor fixtures, Bocci outdoor tree installations should be specified with the expectation that general maintenance will be required over the lifetime of the fixture. We recommend cleaning and maintaining the luminaries and armature regularly.

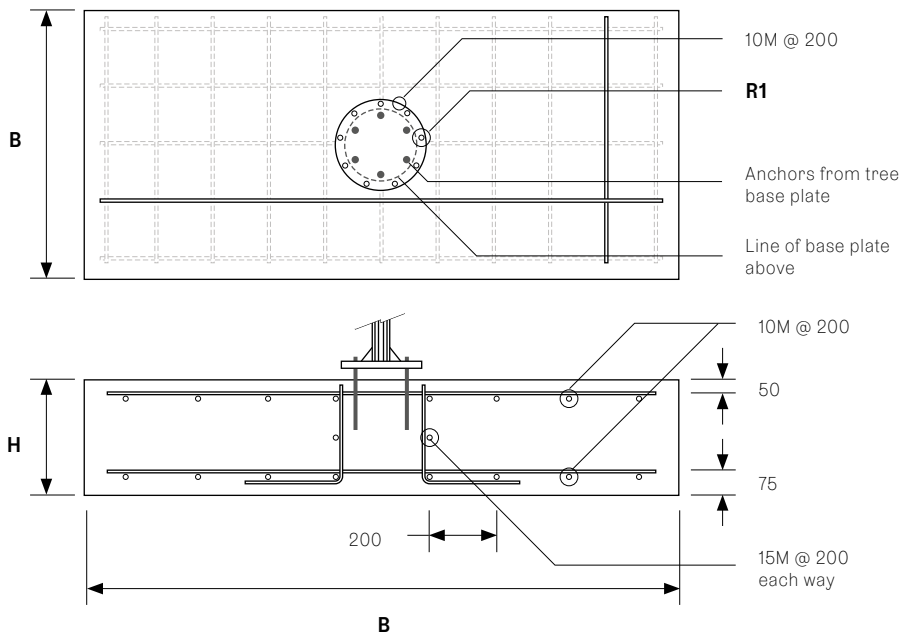
Stainless steel installed outdoors naturally mature and patina over time due to prolonged exposure to sunlight, pollutants and other environmental conditions. Bocci recommends that all armature installed in an outdoor setting be coated on site with a protective oil or paint finish to provide a barrier between the steel parts and any environmental elements that can cause surface corroding. The choice of an oil or paint finish will depend on the desired aesthetic and the severity of the environment and its effect on metal finishes. This coating will need to be maintained over the lifetime of the installation to protect against the natural corrosion of metal.

All Bocci trees are engineered for temperate climates and the level of maintenance will increase if the installation is located in a particularly extreme climate i.e. extreme temperatures, high humidity, high salinity, snow, sand storms, heavy rain, ice, etc.

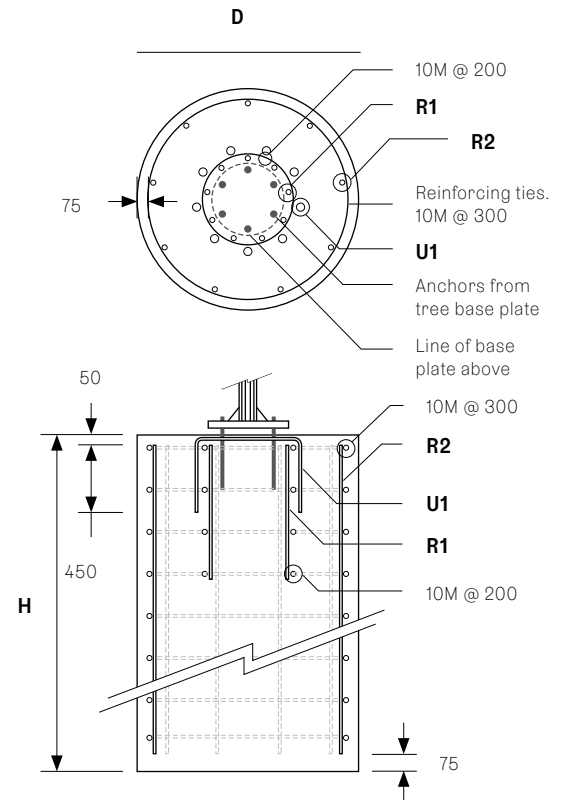
Coastal environments: The environment of a sea coast can be extremely corrosive. Even with appropriate maintenance, products installed in a coastal environment will typically deteriorate faster than products installed in a more moderate environment. Some surface corrosion and/or deterioration is considered normal wear in this environment. Thus, any finish failures or corrosion due to coastal environment conditions are not covered by the product warranty.

TREE	FOUNDATION TYPE	D Diameter	B Box	H Height	R1 Reinforcement	R2 Reinforcement	L Depth of reinforcement	U1 Reinforcement
XX.40 Birch XX.35 Aspen XX.25 Elm XX.20 Hawthorne (7 tube bases)	Deep Foundation	900	/	2000	8-20M	8-20M	500	2-15M
	Shallow Foundation	/	1400	600	8-20M	/	/	/
XX.15 Cypress XX.10 Olive (3 tube bases)	Deep Foundation	600	/	1830	6-15M	6-15M	300	2-15M
	Shallow Foundation	/	1100	600	6-15M	/	/	/

## SHALLOW FOUNDATION



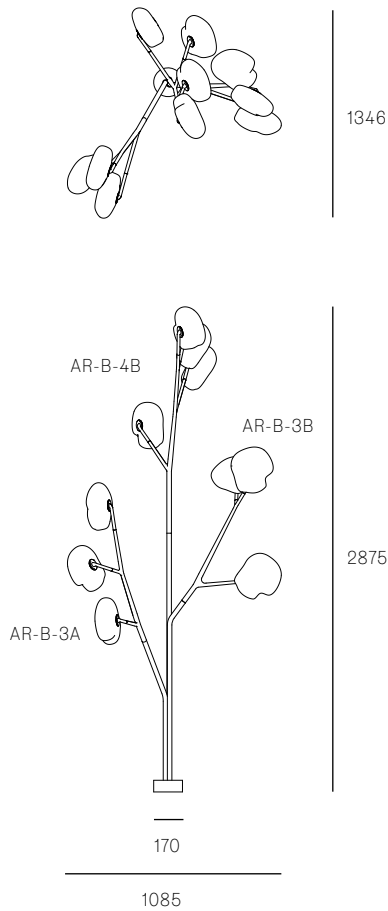
## DEEP FOUNDATION



All dimensions are in millimeters (mm) unless otherwise specified.

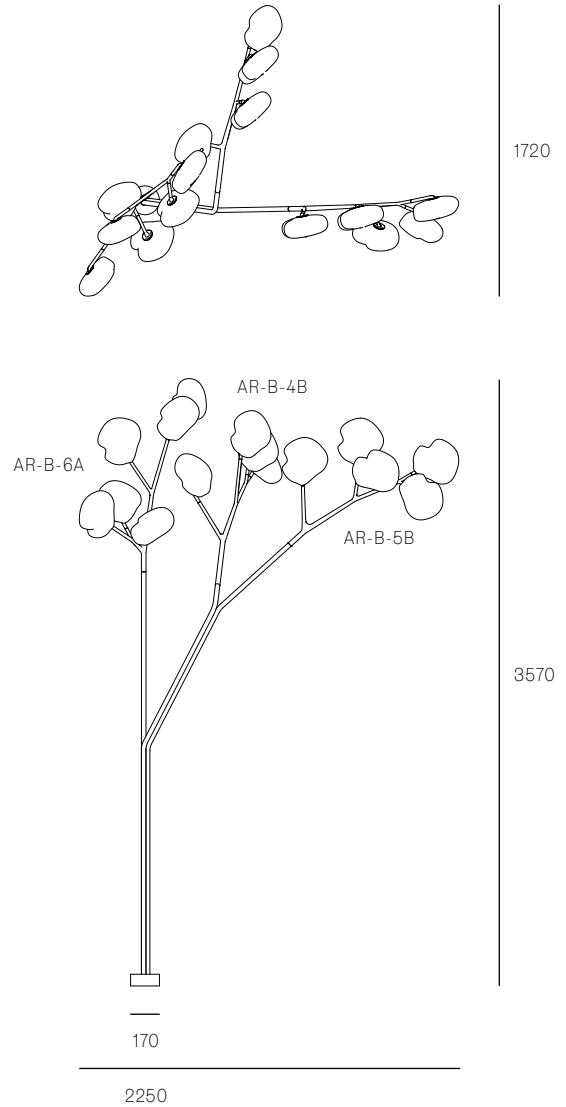
## 73.10

All dimensions are in millimeters (mm) unless otherwise specified.



<b>Pendants:</b>	DL: 23N (2.4kg)
<b>Max unfactored wind speed:</b>	21 m/s
<b>Max unfactored snow / ice load:</b>	6 N /pendant
<b>Unfactored seismic load:</b>	305N HORIZONTAL @ 1500mm ABOVE BASE CONNECTION
<b>Base connection:</b>	Mf: 2 kN*m Vf: 1 kN

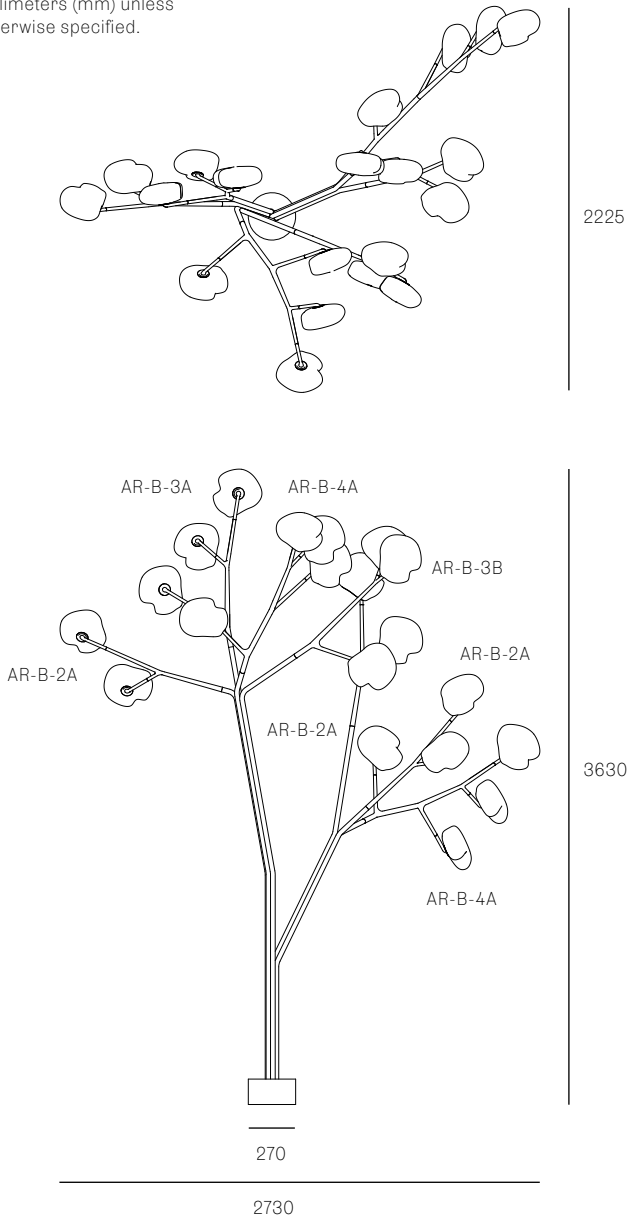
## 73.15



<b>Pendants:</b>	DL: 23N (2.4kg)
<b>Max unfactored wind speed:</b>	21 m/s
<b>Max unfactored snow / ice load:</b>	6 N /pendant
<b>Unfactored seismic load:</b>	535N HORIZONTAL @ 2500mm ABOVE BASE CONNECTION
<b>Base connection:</b>	Mf: 2 kN*m Vf: 1 kN

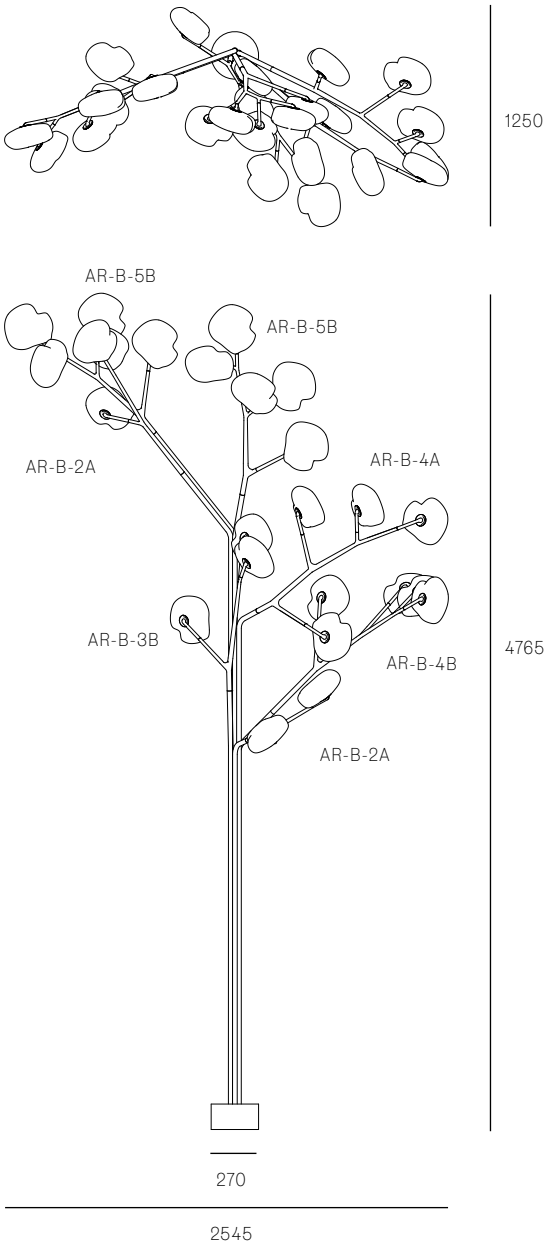
73.20

All dimensions are in millimeters (mm) unless otherwise specified.



<b>Pendants:</b>	DL: 23N (2.4kg)
<b>Max unfactored wind speed:</b>	21 m/s
<b>Max unfactored snow / ice load:</b>	6 N /pendant
<b>Unfactored seismic load:</b>	815N HORIZONTAL @ 2500mm ABOVE BASE CONNECTION
<b>Base connection:</b>	Mf: 6 kN*m Vf: 1 kN

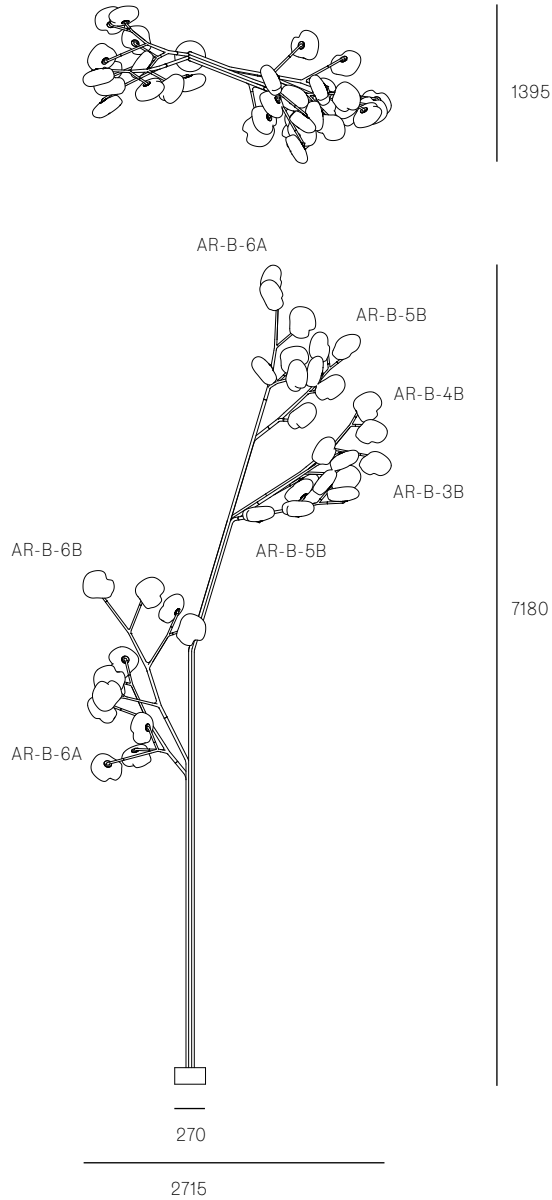
73.25



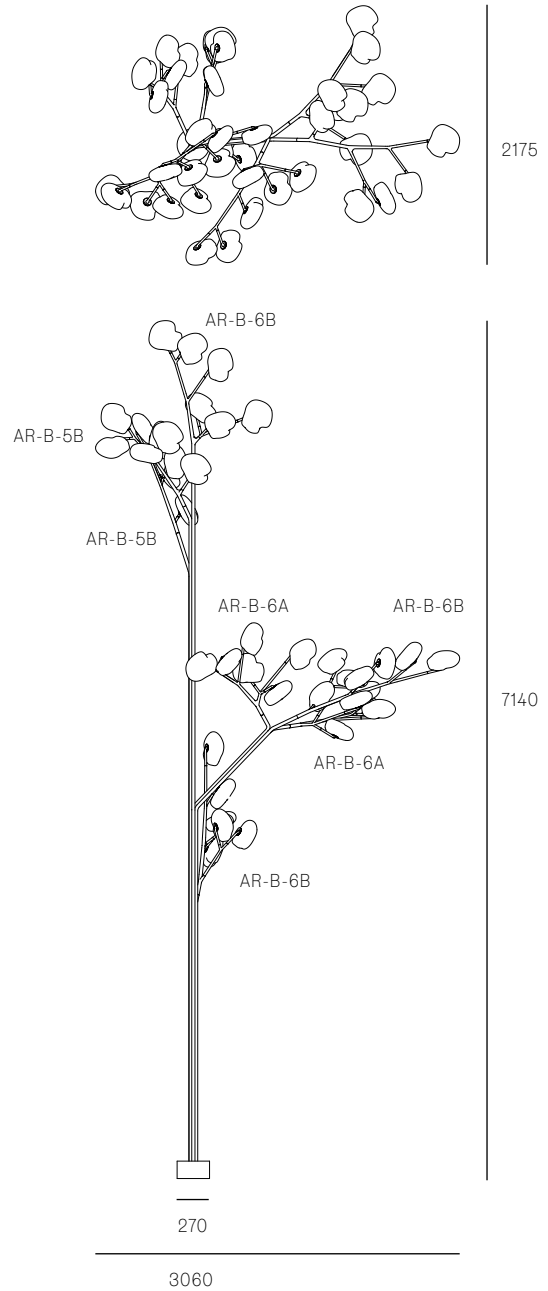
<b>Pendants:</b>	DL: 23N (2.4kg)
<b>Max unfactored wind speed:</b>	21 m/s
<b>Max unfactored snow / ice load:</b>	6 N /pendant
<b>Unfactored seismic load:</b>	1600N HORIZONTAL @ 3250mm ABOVE BASE CONNECTION
<b>Base connection:</b>	Mf: 6 kN*m Vf: 1 kN

**73.35**

All dimensions are in millimeters (mm) unless otherwise specified.



<b>Pendants:</b>	DL: 23N (2.4kg)
<b>Max unfactored wind speed:</b>	21 m/s
<b>Max unfactored snow / ice load:</b>	6 N /pendant
<b>Unfactored seismic load:</b>	1275N HORIZONTAL @ 4570mm ABOVE BASE CONNECTION
<b>Base connection:</b>	Mf: 6 kN*m Vf: 1 kN

**73.40**

<b>Pendants:</b>	DL: 23N (2.4kg)
<b>Max unfactored wind speed:</b>	21 m/s
<b>Max unfactored snow / ice load:</b>	6 N /pendant
<b>Unfactored seismic load:</b>	1215N HORIZONTAL @ 4700mm ABOVE BASE CONNECTION
<b>Base connection:</b>	Mf: 6 kN*m Vf: 1 kN