



PERFORMANCE LIGHTING

4Seasons

PRISMA[®]

ARCHITECTURAL

4seasons



Conception of the 4Seasons system: **Francesco Iannone, Serena Tellini** - Consuline (Milan) - www.consuline.com

3D Rendering: Consuline (Milan) - www.consuline.com

Photographs were taken at the Parco Giardino Sigurtà in Valeggio sul Mincio (VR) - www.sigurta.it



2010



4Seasons is an integrated system of information, technical specifications and luminaires designed specifically for parks, gardens and greenspaces.

4Seasons was created with the idea of suggesting different options for lighting engineering projects that make it possible to control and utilize shadows, in addition to respecting the natural areas.

4Seasons is not only a technical solution for lighting, it needs an emotional understanding and appreciation of the natural surrounding.



Artificially illuminating a natural object in the best way is to highlight its shape and unique characteristics, by evaluating its dimensions and possible growth and visualize its change through the seasons

Successful lighting can be achieved if the equilibrium between light and shadow is re-created.



The wrong lighting eliminates natural contrast and diminishes the beauty of nature.



Light and shadows are complementary elements in the natural environment, only when they are combined in the natural or artificially lit environment can we appreciate the full richness of nature.





Colour adds to the combination of light and dark to interpret a season or emphasize a particular element: nature becomes the scenography that surrounds life.

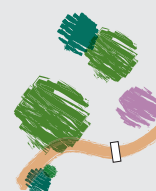


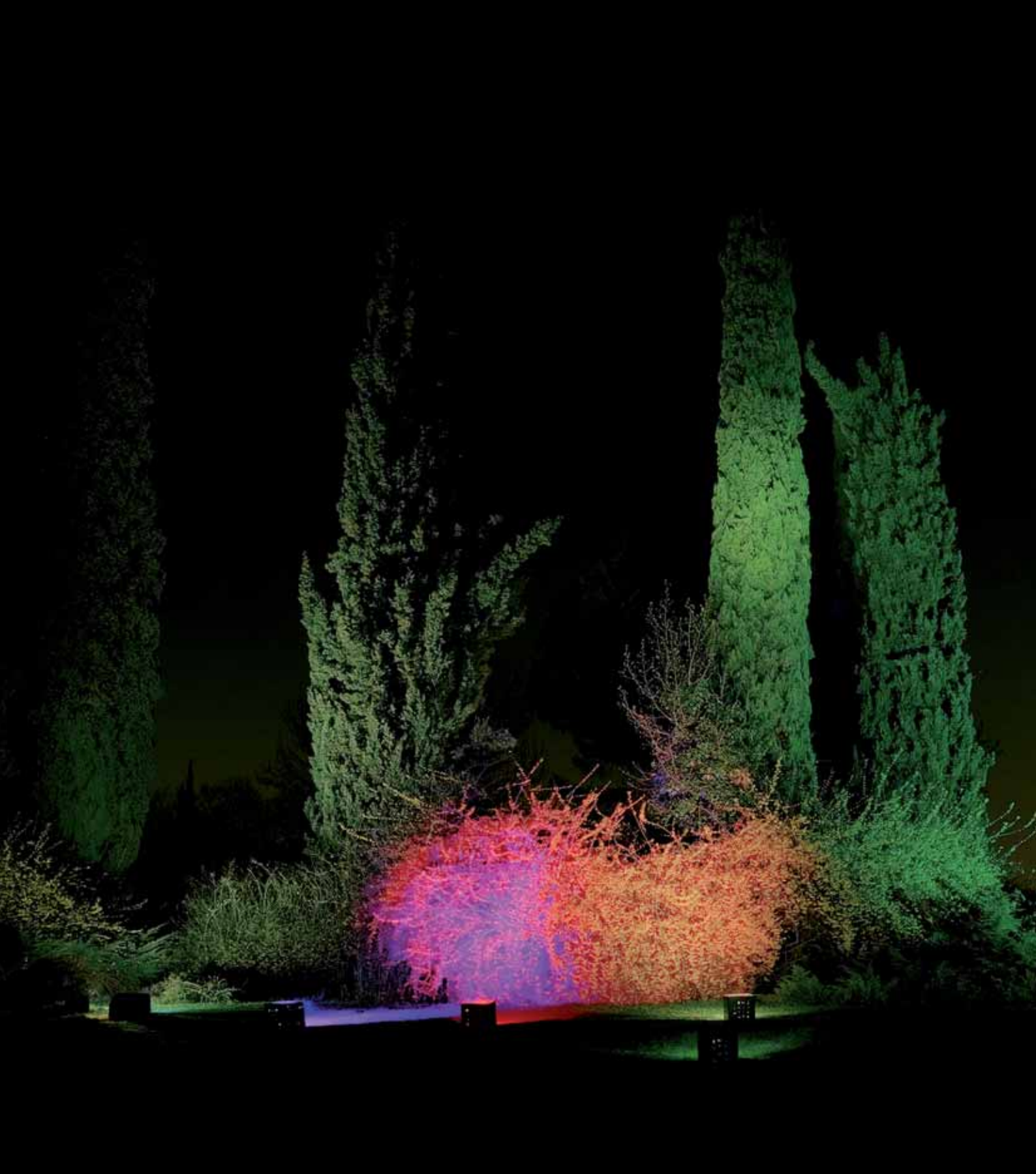
The range of **4Seasons** luminaires includes several light emission alternatives, with infinite possibilities for changing colours and beam intensity.

Natural elements and coloured lighting can produce surprising, changing scenes. The change can follow and emphasize the modifications in seasonal conditions, or create a quick, continuous visual effect, like one that could be used for a festive evening.

Seasonal variations influence the appearance of parks and gardens. Each season coincides with a specific phase of the life cycle of the different trees, bushes and lawns that change colours and shapes all year long.

In this way, scenographic content becomes an integral part of the lighting engineering project.

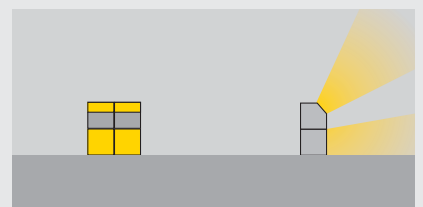
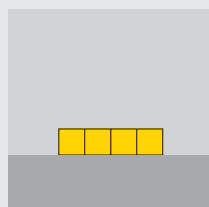




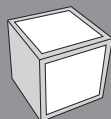
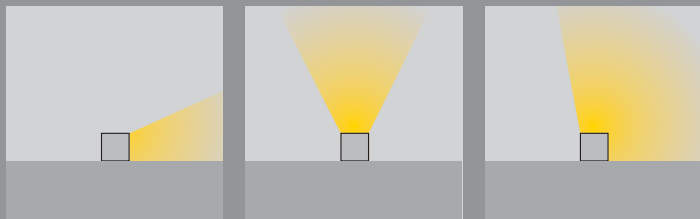
Thanks to the 4Seasons luminaires, nocturnal lighting can be planned to change the dominant colour scheme and adapt to the different seasons.



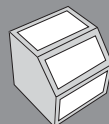
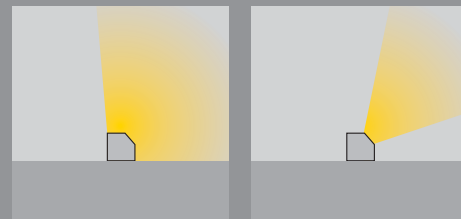
Luminaires from the 4Seasons system can be mounted together or stacked as desired. Contact the Technical Service for customization requests.



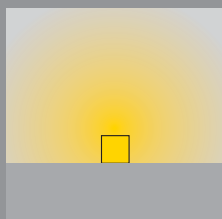
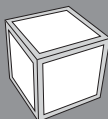
4SEASONS SYSTEM LUMINAIRES



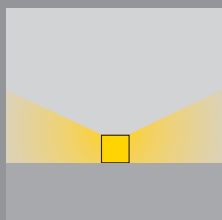
BOX is suitable to light trees and bushes with different heights and dimensions and is offered with a wide range of light sources. The light aperture is 90° from two open sides and has the option to blank one of the openings.



CUT is also suitable to light trees and bushes with different heights and dimensions, but has a greater flexibility in application, which is distinguished by its inclined cut. The light aperture is 90° from three open sides and has the option to blank one or two of the openings.



DECO is designed for the lighting of paths, patios and grazing light on ground surfaces providing decorative illumination. The light distribution can be altered by closing one or more of the five open sides.



NEW ANTI-GLARE VERSIONS

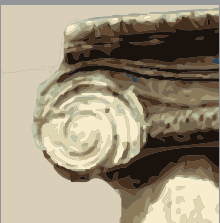
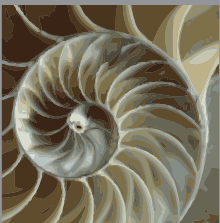
All **4Seasons** fittings are designed to use specific screens for an application to alter the light distribution and create shadows. They have a wide variety of light sources with options for LED colour changing.

Technical descriptions, specifics on light sources, drawings of the screens and all the codes can be found from page 216 on.

LIGHTING TECHNIQUE

Here below, you'll find a few simple guidelines that are useful for those that want to learn more about lighting natural elements, even if you have very little experience.

- 1 Define the type of shape of the natural element you want to spotlight
- 2 Define the position of the points of light necessary for good quality lighting
- 3 Define the graphic personality of the natural element and choose the most suitable screens

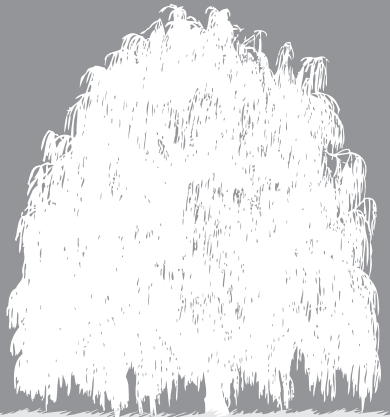


1 - TYPES OF SHAPES

The shape and size of the natural element are determined to define the power and width of the light beam necessary for the best lighting characteristics. Each shape has different requirements, both in terms of direction and in terms of the number of luminaires necessary to illumine the whole surface of the tree.

2 - POSITION OF LIGHTS

It is well known that a tree's natural development is regulated by the golden ratio, which is followed even in the fields of art and architecture as a perfect and harmonious proportional relationship. This same pattern also determines the optimal position of the points of light with respect to

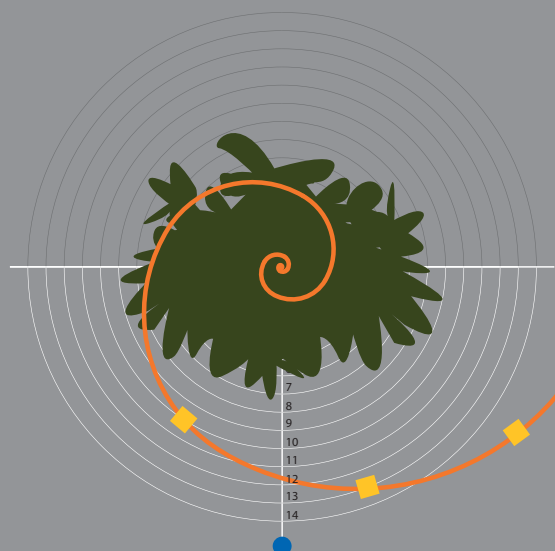
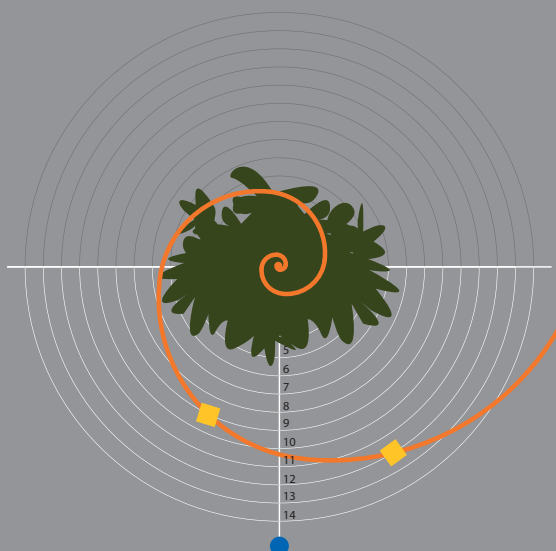


Picea Abies
Chamaecyparis Lawsoniana
Pseudotsuga Menziesii
Sequoia Sempervirens

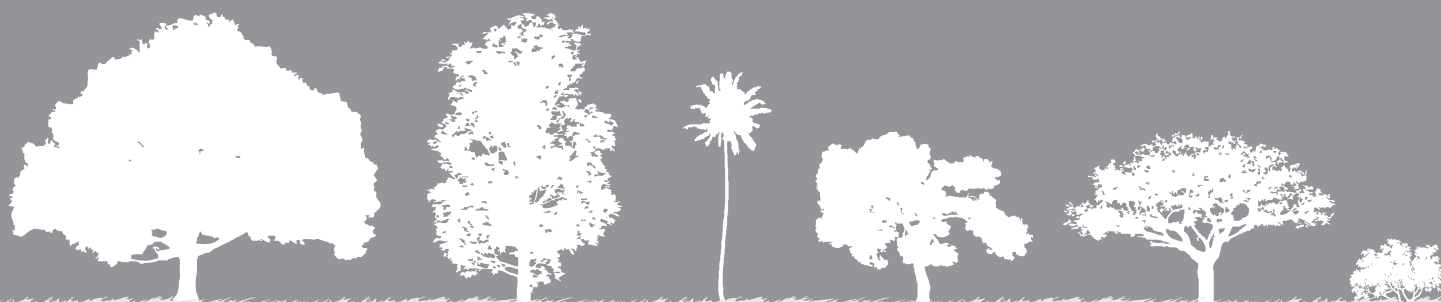
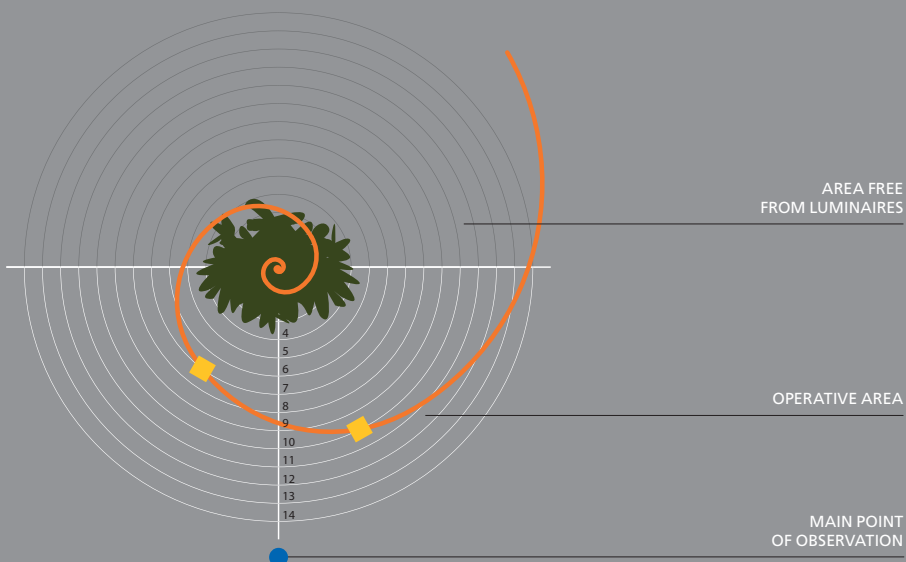
X Cupressocyparis Leylandii
Sequoiadendron Giganteum
Cryptomeria Japonica
Thuja Plicata

Acer Pseudo Platanus
Cedrus Deodara
Carpinus Betulus
Fagus Sylvatica

Salix x Chrysocoma
Alnus Pendula
Eucalyptus Camadulensis
Fagus Pendula



the size of the plant and the main point of view. In fact, the points of light should always be placed along the path in a spiral, which develops according to the golden ratio. To avoid glare, the light beam must never be pointed towards the point of observation.



Celtis Australis
 Quercus Petraea
 Broussonetia Papyrifera
 Rhizophora Mangle

Populus X Gileadensis
 Platanus Occidentalis
 Ailanthus Altissima
 Talia Cordata

Phoenix Dactilifera
 Cocos Nucifera
 Sobal Palmetto
 Jubae Spectabilis

Acer Campestre
 Olea Europaea
 Delonix Regia
 Fraxinus Excelsior

Quercus Suber
 Carya Ovata
 Albizzia Julibrissin
 Ceiba Pentandra

Sambucus Nigra
 Cornus Florida
 Arbutus Unedu
 Acacia Baileyana

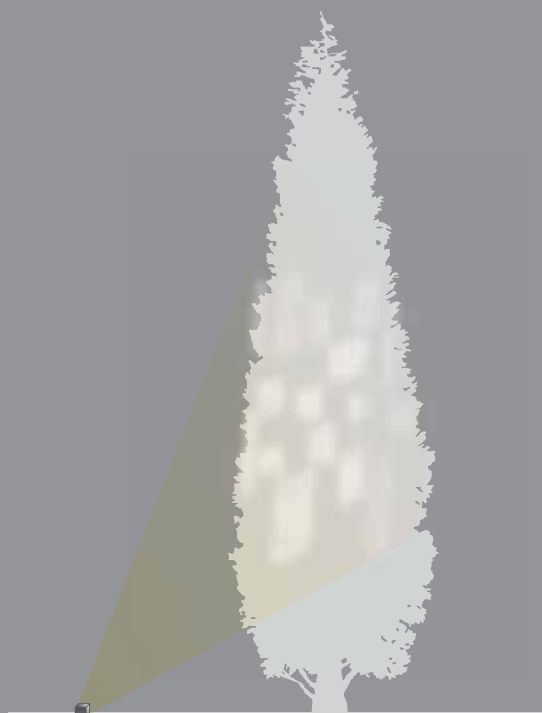
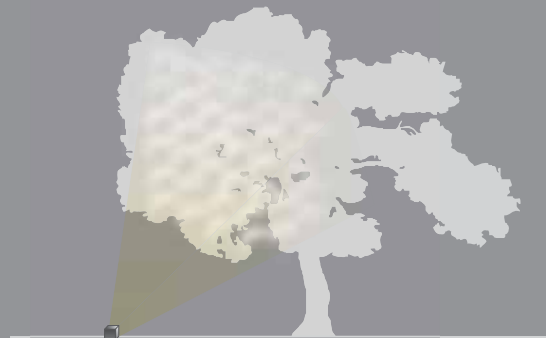
3 - THE GRAPHIC PERSONALITY AND THE USE OF SCREENS

Besides the shape and size, a natural element also has a graphic personality that can be emphasized with shadowing.

Screens of the 4Seasons luminaires create a wide range of effects by combining light and dark, which transforms the lighting layout to tailor it to the personality of the natural element.

4Seasons has several screens designed to bring out some typical personalities.

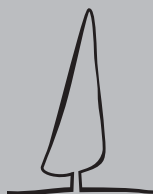
However, the screens can be used as desired, to discover creative new effects and generate new sensations.



DYNAMIC



CONSTANT



MOBILE



CALM



OUTGOING



Trees with similar shapes can have different graphic personalities: dynamic, static, mobile or other.

The screens for 4Seasons luminaires (Kit Shadow) are designed according to graphic personality to obtain the best light and shadow effects for the specific tree.

On the following sheets, there are a few parameters and typical personalities.

TECHNICAL DATA SHEETS

The technical data sheets contain solutions for optimal lighting of the main types of tree shapes, and for some natural elements found frequently in gardens.

For each natural element, the sheet suggests the best type of luminaire with the visualization of the most correct lighting arrangement and a few possible variations, in relation to the seasons or the screens.

There are obviously an infinite number of variables in the lighting project of a greenspace.

This range of basic solutions was not intended to be all inclusive. In the pages following the technical data sheets,

there are a few examples that allow us to explore personalized solutions.



CRATAEGUS MOLLIS

page 208



PODOCARPUS

page 209



HIPPOCASTANUM

page 210



COCOS NUCIFERA

page 211



CARPINUS BETULUS

page 212



PICEA PUNGENS

page 213



HEDERA HELIX

page 214



SALIX TRIANDRA

page 215

SPRING
SUMMER
AUTUMN
WINTER



Each icon has four tiny coloured circles near it that very concisely represent the variations of the natural element in every season.

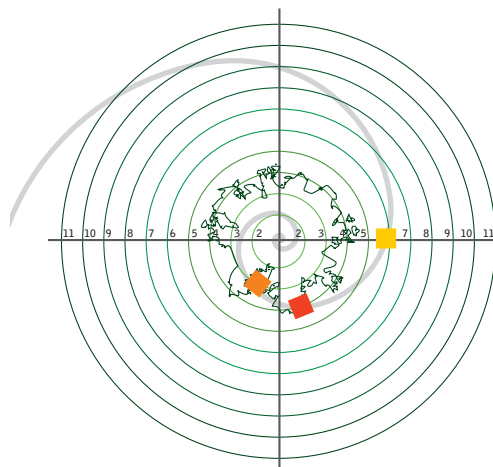
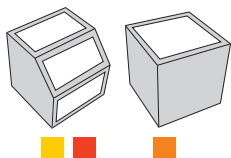
Technical data and product codes of luminaires and screens are on page 220.



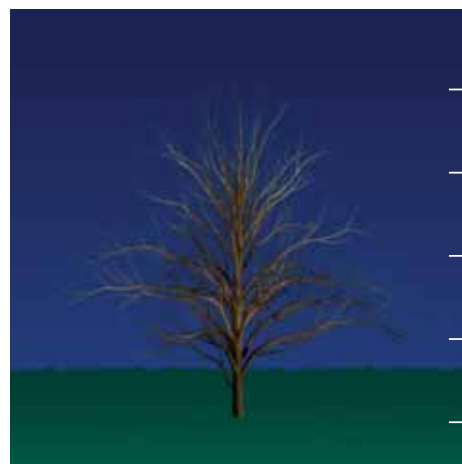
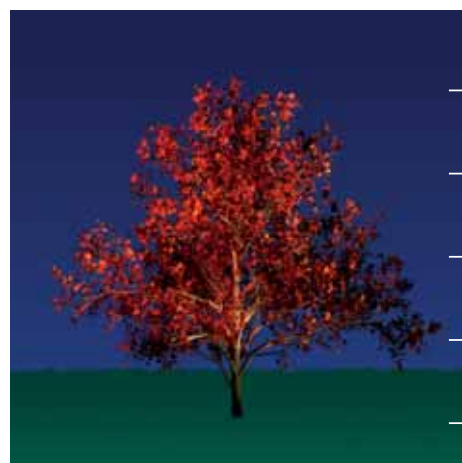
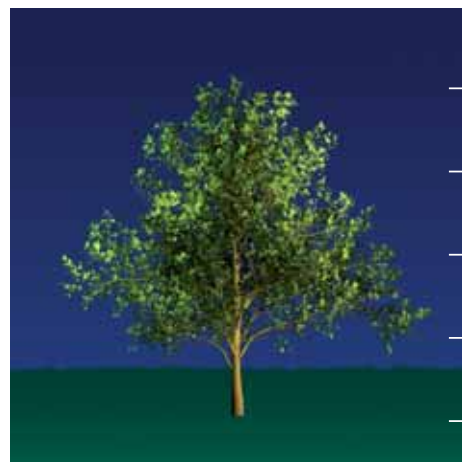
CRATAEGUS MOLLIS

Trees with similar shapes:

Quercus Pubescens
Robinia Pseudoacacia
Alnus Glutinosa



SOLID PERSONALITY



			
	CUT	+ Color 10	+ 3 Dots C
	CUT	+ Color 10	+ 3 Dots C
	BOX	+ Color 30	+ 1 Stones + 1 Blind



Consumes
max. 90W

Infinite lighting scenes are possible by projecting chromatic variations timed with the changing seasons. Every night brings a different scene in same sophisticated atmosphere.

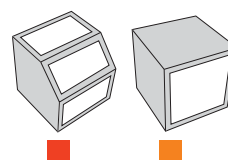
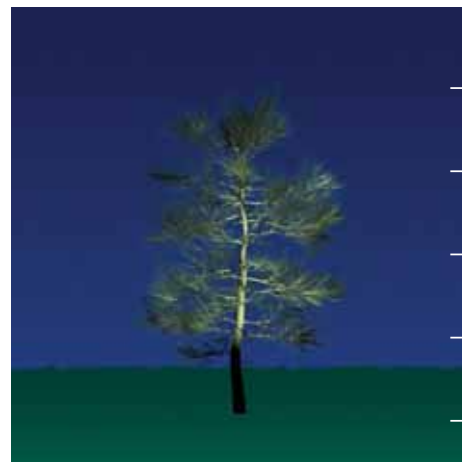
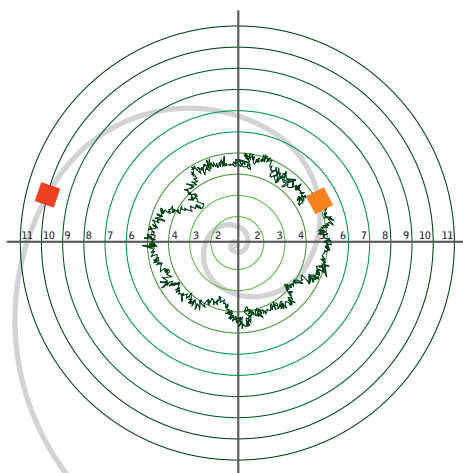
PODOCARPUS

Trees with similar shapes:

Platanus Occidentalis

Ailanthus Altissima

Talia Cordata



ORIENTAL PERSONALITY



Consumes
max. 12W

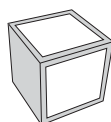
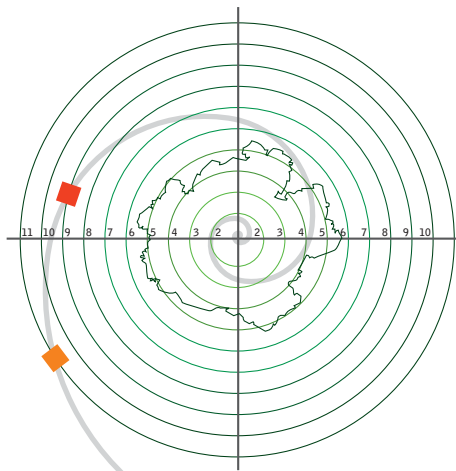
CUT	+	Mini W30	+	3 Stones C
BOX	+	Mini DL30	+	1 Dots + 1 Blind

When talking about leaves, non-deciduous is certainly not monotonous. The scenes change with the wind and the glinting light on the leaves, if two different colour temperatures are chosen for the illumination. A dance of white light.

HIPPOCASTANUM

Trees with similar shapes:

Cedrus Deodara
Carpinus Betulus
Fagus Sylvatica

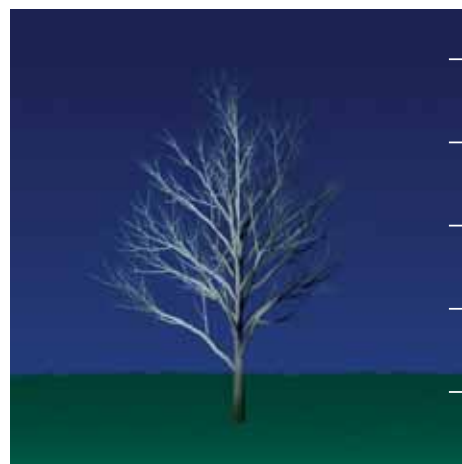
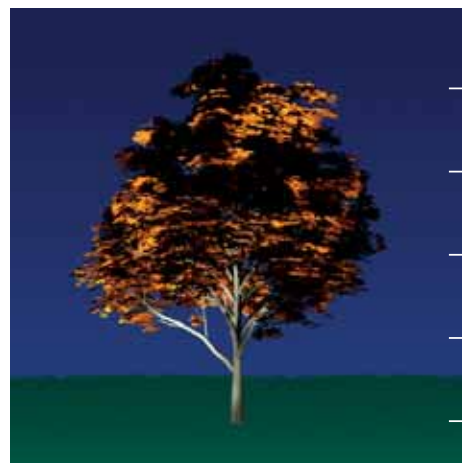
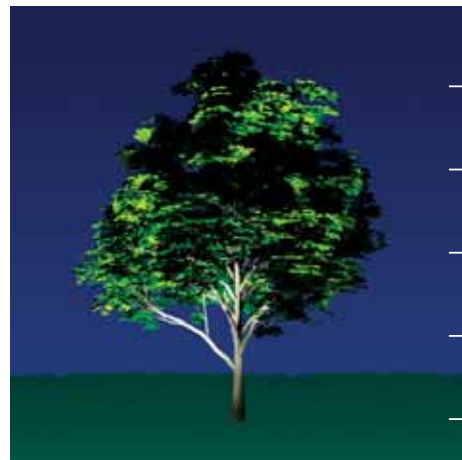


Stones

Dots



SOLID PERSONALITY



Consumes
max. 65W

BOX	+	Park 40	+	2 Stones
BOX	+	Color 30	+	2 Dots

Huge shapes are an advantage only when the light adds a delicate touch. Subtle lighting accents should always be preferred for large forms.



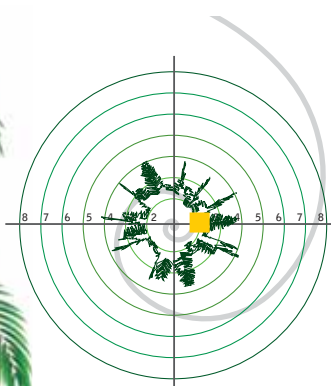
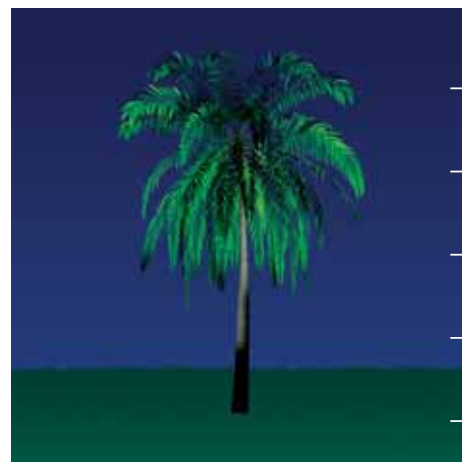
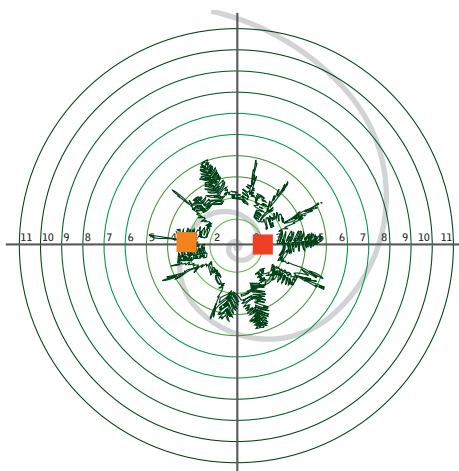
COCOS NUCIFERA

Trees with similar shapes:

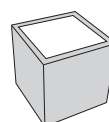
Phoenix Dactilifera

Sabal Palmetto

Jubae Spectabilis



ORIENTAL PERSONALITY



Dots



Stones



Blind



Consumes
max. 40W

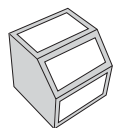
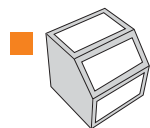
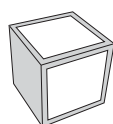
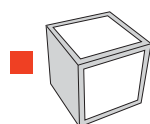
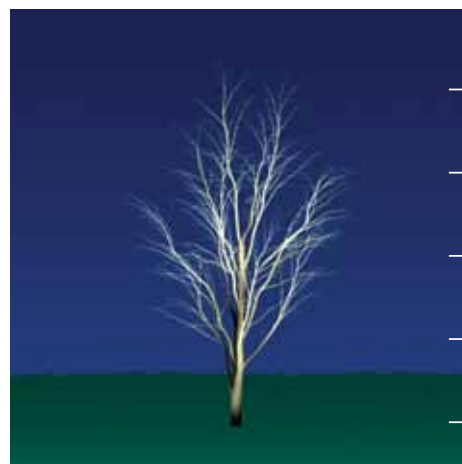
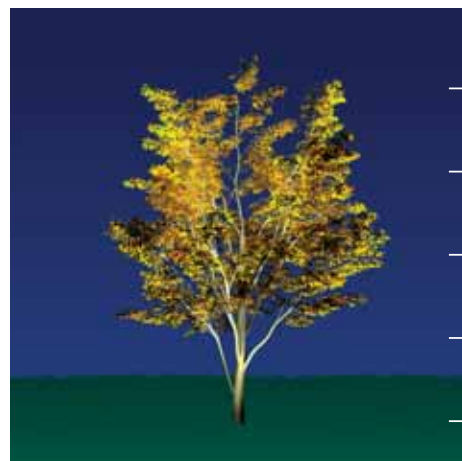
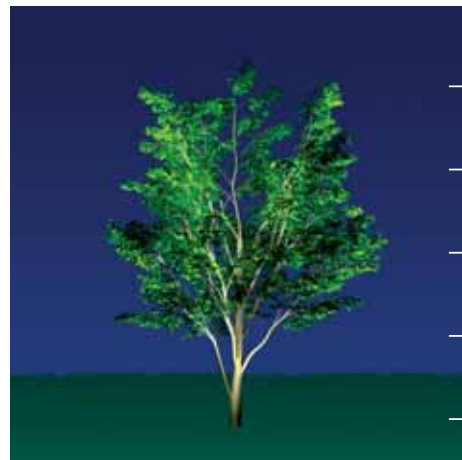
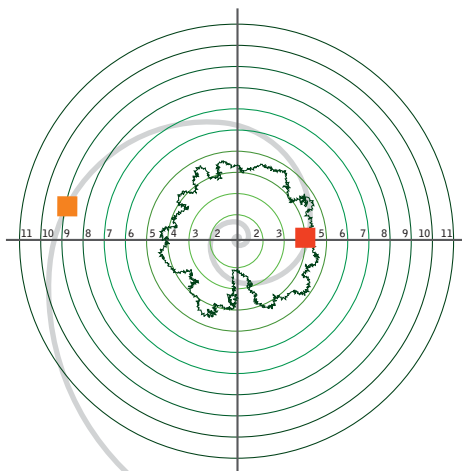
BOX	+	Garden 12	+	1 Dots + 1 Blind
BOX	+	Garden 12	+	1 Stones + 1 Blind
BOX	+	Garden 40	+	1 Stones + 1 Blind

When the tree's personality is very strong, lighting becomes a real challenge. Interpretation through lighting is a vital choice in developing nocturnal settings.

CARPINUS BETULUS

Trees with similar shapes:

Fraxinus Excelsior
Ulmus Minor
Pinus Nigra



Crack



Scratch



MOBILE PERSONALITY



BOX + Garden 10 + 2 Scratch

CUT + Double W30 + 3 Crack C



Consumes
max. 32W

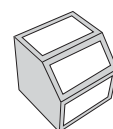
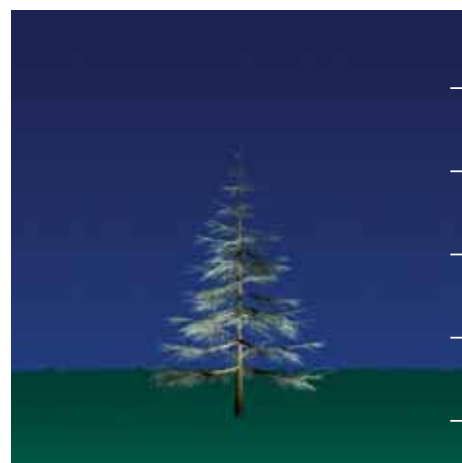
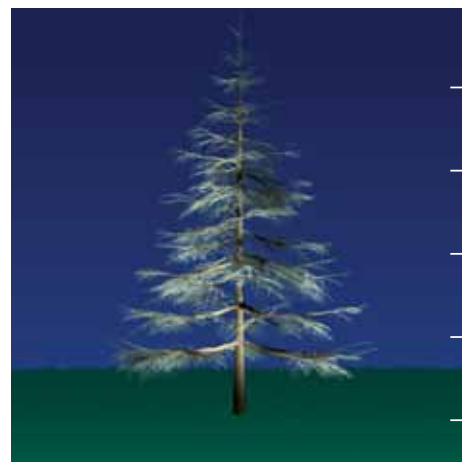
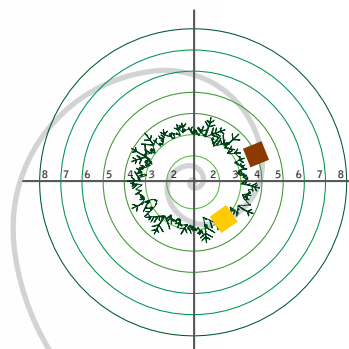
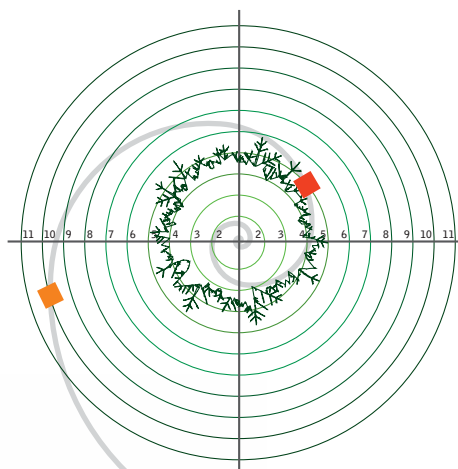
Light is able to capture the elegance of this majestic tree. Warm lighting plays up the colours of the leaves during the fall.



PICEA PUNGENS

Trees with similar shapes:

Chamaecyparis Lawsoniana
Pseudotsuga Menziesii
Sequoia Sempervirens



Flames



Waves



DYNAMIC PERSONALITY



Consumes
max. 70W

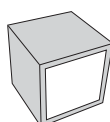
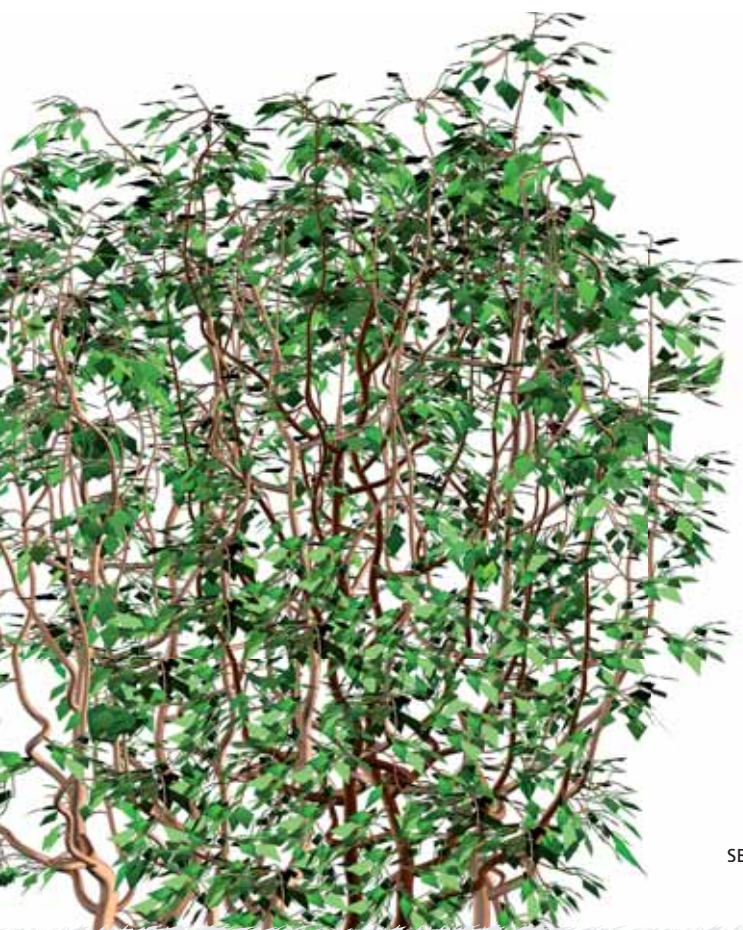
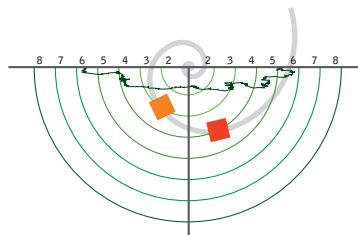
	CUT	+	Park 10	+	3 Flames C
	CUT	+	Park 40	+	3 Flames C
	CUT	+	Garden 10	+	3 Flames C
	CUT	+	Garden 10	+	3 Waves C

Composure can be emphasized by illumination only if the light finds a way to play on the branches in flickering, silvery effects.

HEDERA HELIX

Trees with similar shapes:

Lonicera Rampicante
Jasminum Nudiflorum
Hydrangea Petiolaris



More Lines



Blind



SERPENTINE PERSONALITY



Consumes
max. 15W

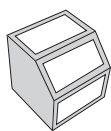
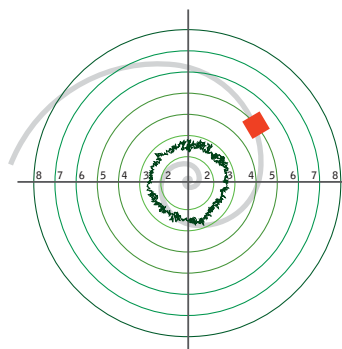
	BOX	+	Mini C30	+	1 More Lines + 1 Blind
	BOX	+	Mini C30	+	1 More Lines + 1 Blind

The border, the edge, the perimeter:
if highlighted with colour, any climbing plant
is no longer just a boundary. It becomes
a poetic statement surrounding the garden.

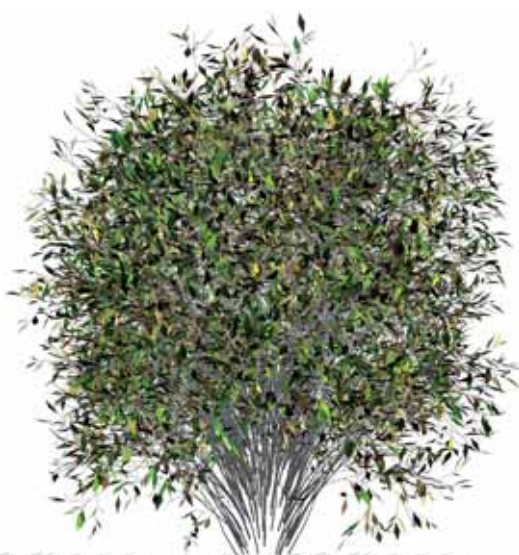
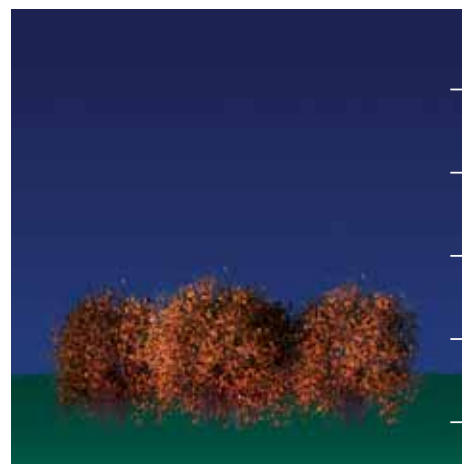
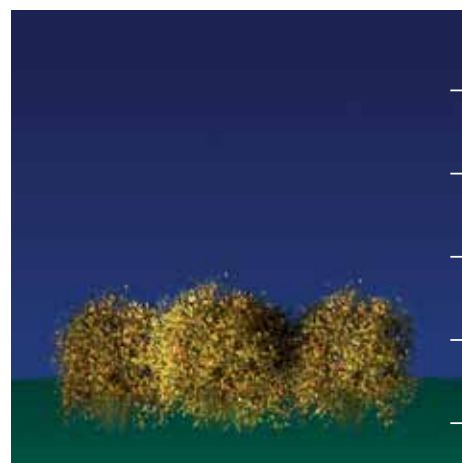
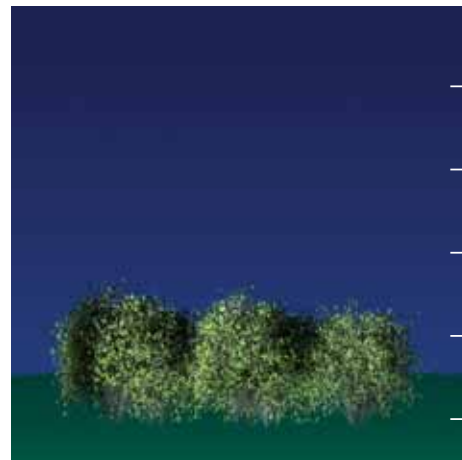
SALIX TRIANDRA

Trees with similar shapes:

Osmanthus Fragens
Laburnum Anagyroides
Sorbus Hybrida



Crack



CALM PERSONALITY



Consumes
max. 30W

CUT + Color 30 + 3 Crack C

The attractiveness of this tree arises from its upward direction: if enhanced with lively colours, it transforms the garden into a magical place.

THE LIGHT SOURCES



Mark 61

MARK

Designed for illuminating pedestrian walkways, bushes and hedges.

Non adjustable light source.



Park 10



Park 40

PARK

Suitable for situations in which the distance from the light source to the spotlighted element is greater than 5 metres.

Controlled light diffusion, with beam of 10° or 40°. **Adjustable rotating** light source.



Garden 10

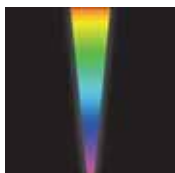


Garden 40

GARDEN

Suitable for situations in which the distance from the light source to the spotlighted element is **less than 5 metres**.

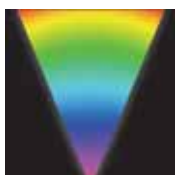
Controlled light diffusion, with beam of 10° or 40°. **Adjustable rotating** light source.



Color 10



Color 30



Color 45

COLOR

Suitable for situations in which the distance from the light source to the spotlighted element is **greater than 5 metres**.

Light colour can be programmed and modified. Controlled light diffusion, with beam of 10°, 30° or 45°.

Adjustable rotating light source.



Double W180



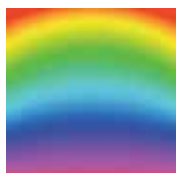
Double W30



Double DL180



Double DL30



Double C180



Double C30

DOUBLE

Suitable for situations in which the distance from the light source to the spotlighted element is **less than 3 metres**.

White light that can be either cool (DL) or warm (W). Light colour can be programmed and modified (C). Controlled light diffusion, with beam of 30°.

Two independently adjustable rotating light sources.



Mini W180



Mini W30



Mini DL180



Mini DL30



Mini C180



Mini C30

MINI

Suitable for situations in which the distance from the light source to the spotlighted element is **less than 3 metres**.

White light that can be either cool (DL) or warm (W).

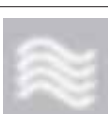
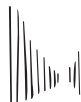
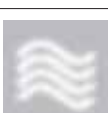
Light colour can be programmed and modified (C). Controlled light diffusion, with beam of 30°. **Adjustable rotating** light source.

The range of light sources available for the **4Seasons** luminaires makes it possible to satisfy any lighting requirement. These brief descriptions define the characteristics of each single source.





THE SCREENS

DYNAMIC PERSONALITY		 Scales	 Flames	 Waves	 Scratch
CONSTANT PERSONALITY		 Lines	 More lines		
MOBILE PERSONALITY		 Stones	 Scratch	 Crack	
CALM PERSONALITY		 Waves	 Scratch	 Crack	 More lines
OUTGOING PERSONALITY		 Crack	 Dots		
RESERVED PERSONALITY		 Scales	 Stones	 Leaves	
ORIENTAL PERSONALITY		 Dots	 Mini dots	 Stones	
SOLID PERSONALITY		 Dots	 Stones		
SERPENTINE PERSONALITY		 Dots	 Scratch	 Waves	 More lines
ARCHITECTURAL PERSONALITY		 Dots	 Mini dots	 Waves	 More lines
FUTURE PERSONALITY		 Crack	 Stones	 Waves	

This table suggests the most suitable screens to draw attention to each graphic personality.



Crack

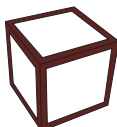
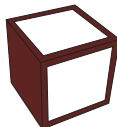
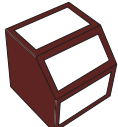


Crack Anti Glare

The Dots, Waves, Scales, Stones and Crack screens are available in **anti-glare** versions. The reduced hole surface avoids unwanted glare effects in particular conditions of use.

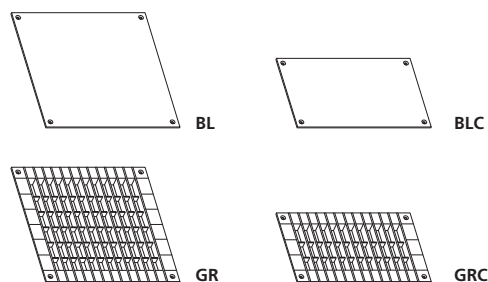
DECO, BOX, CUT

SUMMARY TABLE OF AVAILABLE LIGHT SOURCES

Light sources	Mark 61	•		
	Park 10		•	•
	Park 40		•	•
	Garden 10		•	•
	Garden 40		•	•
	Color 10		•	•
	Color 30		•	•
	Color 45		•	•
	Double W180		•	•
	Double W30		•	•
	Double DL180		•	•
	Double DL30		•	•
	Double C180		•	•
	Double C30		•	•
	Mini W180		•	•
	Mini W30		•	•
	Mini DL180		•	•
	Mini DL30		•	•
	Mini C180		•	•
	Mini C30		•	•
				
	DECO 5 open sides	BOX 2 open sides	CUT 3 open sides	
Luminaire				

Luminaires

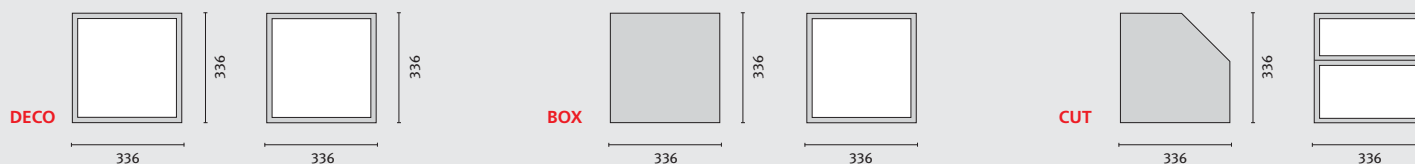
description	colour	reference	code
Deco	RB1	318001	DECO
Box	RB1	318002	BOX
Cut	RB1	318003	CUT



To order a complete product it is necessary to choose a **luminaire**, a **light source** and the **number of screens** necessary for each luminaire: 5 for Deco, 2 for Box and 3 for Cut. One or more screens can be blind. An anti-vandalism grate, Grill, can be mounted in place of the screens.

The code to order a complete product is formed by indicating the codes for each element selected in sequence. The order in which the screens are listed in the order code determines their position, using the order code method described beside.

The luminaires, screens and accessories of the 4Seasons systems are made with high quality materials with high resistance to wear and tear and to corrosion (aluminium, glass, stainless steel).





Light sources

description	class	IP	reference	code
Mark 61	Gx24q-2 18w	I	66	308021 MK6118
Mark 61	G12 35w	I	66	308024 MK6135
Mark 61	E27 60w	I	66	308025 MK6160
Park 10	GX8,5 35w	I	66	308002 PK10
Park 40	GX8,5 35w	I	66	308003 PK40
Garden 10	GX10 20w	I	66	308004 GN10
Garden 40	GX10 20w	I	66	308005 GN40
Color 10	LED RGB 30w	III	66	308006 CO10
Color 30	LED RGB 30w	III	66	308007 CO30
Color 45	LED RGB 30w	III	66	308008 CO45
Double W180	2 LED 5,3w	III	66	308015 DW180
Double W30	2 LED 5,3w	III	66	308016 DW30
Double DL180	2 LED 5,3w	III	66	308017 DDL180
Double DL30	2 LED 5,3w	III	66	308018 DDL30
Double C180	LED RGB 6,8w	III	66	308019 DC180
Double C30	LED RGB 6,8w	III	66	308020 DC30
Mini W180	LED 5,3w	III	66	308009 MW180
Mini W30	LED 5,3w	III	66	308010 MW30
Mini DL180	LED 5,3w	III	66	308011 MDL180
Mini DL30	LED 5,3w	III	66	308012 MDL30
Mini C180	LED RGB 6,8w	III	66	308013 MC180
Mini C30	LED RGB 6,8w	III	66	308014 MC30



Screens

description	colour	reference	code
Dots	RB1	318010	DT
Mini dots	RB1	318012	MDT
Waves	RB1	318014	WA
Scales	RB1	318016	SC
Lines	RB1	318018	LI
Stones	RB1	318020	ST
Scratch	RB1	318022	SCH
Leaves	RB1	318024	LE
Flames	RB1	318026	FL
Crack	RB1	318028	CR
More lines	RB1	318030	ML
Grill	RB1	318032	GR
Blind	RB1	318034	BL
Dots C	RB1	318011	DTC
Mini dots C	RB1	318013	MDTC
Waves C	RB1	318015	WAC
Scales C	RB1	318017	SCC
Lines C	RB1	318019	LIC
Stones C	RB1	318021	STC
Scratch C	RB1	318023	SCHC
Leaves C	RB1	318025	LEC
Flames C	RB1	318027	FLC
Crack C	RB1	318029	CRG
More lines C	RB1	318031	MLC
Grill C	RB1	318033	GRG
Blind C	RB1	318035	BLC
Dots Anti glare	RB1	318044	DTG
Waves Anti glare	RB1	318043	WAG
Scales Anti glare	RB1	318045	SCG
Stones Anti glare	RB1	318046	STG
Crack Anti glare	RB1	318047	CRG

Accessories

description	colour	code
Ground plate/Fixing rods		318036
USB interface for DMX card		318037
IR multi-function remote control unit		318038
IR sensor		318039
IP67 driver kit with voltage 24V DC 70W		310309

The **Grill** accessory is a protective, anti-vandalism grate that can be mounted in place of a screen to protect the underlying glass.

The **Blind** accessory is a blind screen that blocks the light beam.

The **USB interface for the DMX card** is a module that contains a software interface between the PC and the DMX communication protocol, used in the control system of the lights.

The **IR multi-function remote** makes it possible to manage and change the light emission of the light sources Color, Double C and Mini C by sending signals to an infra-red sensor.

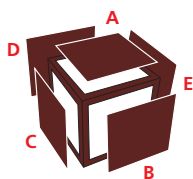
The **IR sensor** receives the commands and sends them to the light source management driver.



Screens and accessories with the C suffix are rectangular in shape and may be mounted only on the **Cut** luminaires. The screens with a G suffix can be mounted only on **Deco** luminaires with **Mark 61** light sources.

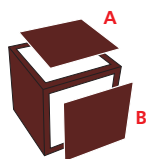
Anti glare screens: the reduced hole surface avoids unwanted glare effects in particular conditions of use.

Examples of compositions of order codes:



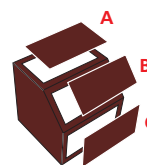
DECO - COMPLETE UNIT

Luminaire +	Light source	+ 5 screens
KIT4S DECO	MK6118	GR GR GR GR GR
KIT4S DECO	MK6135	BL GR GR GR GR
		A B C D E



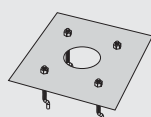
BOX - COMPLETE UNIT

Luminaire +	Light source	+ 2 screens
KIT4S BOX	DDL180	MDT BL
KIT4S BOX	GN40	GR GR
		A B



CUT - COMPLETE UNIT

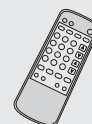
Luminaire +	Light source	+ 3 screens
KIT4S CUT	DDL30	DTC DTC DTC
KIT4S CUT	PK10	SCC SCC BLC
		A B C



318036



318037



318038



318039





For more information on the **4seasons** system, visit:

<http://www.architectural-pil.com/4seasons>.

In addition to many technical charts and animations, you will also find an interactive application that simulates a great variety of light effects that may be obtained with the screens of the **4seasons** system.