

# Frax

Boost your outdoor experience



Light up the Dark

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# Light up the Dark

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Light and ambiance are not only for indoors, by combining light and architecture in outdoor settings, the city also remains vibrant at night. With its 7 different light effects and its multiple installation options, Frax has been designed for every aspect of the urban architecture: any form, any material or any composition.



# Family Overview

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**CHOOSE YOUR COLOUR**



Dark Grey / Grey

**CHOOSE YOUR POWER**

Small: 5,9 up to 7,9W / 650 up to 870lm  
 Medium: 17,9W up to 23W / 1800 up to 2400lm

**CHOOSE YOUR OPTICS**

8° / 14° / 26° / 47°

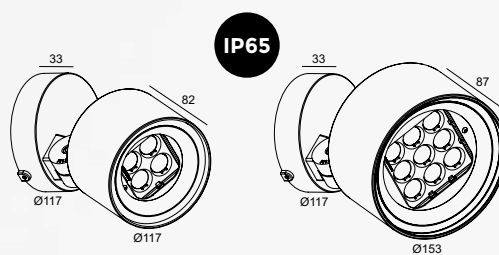
Other effects:  
 linear spread / wallwash

**CHOOSE YOUR ACCESSORY**

Honeycomb  
 Kap

**CHOOSE YOUR INSTALLATION**

Surface mounted on hard surfaces  
 On a pin in soft surfaces  
 Strapped around a tree  
 Mounted on a pole



**GLASS**

**Thermally toughened glass**  
to withstand high demands  
and loads and offer additional  
protection and safety.

**IK06**

**IK06** thanks to 5mm thick glass  
for **Frax S**

**IK08**

**IK08** thanks to 8mm thick glass  
for **Frax M**



**IP65**

**SEAL**

**Silicone** seal which  
closes off the optical  
part completely and  
creates a watertight,  
**IP65** luminaire.

Take a look  
inside

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### LED CASET® TECHNOLOGY

Frax is based on Delta Light's **LED Caset® technology**, which combines multiple LEDs with individual **collimator lenses** per LED to generate a clean-cut light distribution.

The individual lenses create a multi-layered light distribution to generate a clean 8° or 14° beam angle. Other beam angles or other light effects are being obtained by adding **microlenses** in front, sculpting the light into a 26° or 47° beam angle or into a linear or wallwash effect.



### HOUSING

The housing contains both the **light technical** and the **controlling** part, as it also houses the power supply. Frax S comes as an **on-off** luminaire, while the bigger Frax M can be supplied with an integrated **DALI** dimmable power supply. To protect the luminaire from harsh weather conditions, the **in-house developed D-lock system** avoids damage by overheating, overvoltage and water ingress.



### FIXATION

A multitude of options allows Frax to be installed in different ways:

#### Surface mounted

— on hard surfaces

#### On a pin

—

#### Strapped around a tree

—

Mounted on a pole with a **bracket**

### MOUNTING BRACKET

Anodized mounting bracket with **protective sheet** allows mounting on raw surfaces without damaging the luminaire.

# LED Caset<sup>®</sup> Technology

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## **LENSES - ENDLESS EFFECTS**

Frax is based on Delta Light's LED Caset<sup>®</sup> technology, which combines multiple LEDs with individual collimator lenses per LED to generate a clean-cut light distribution.

The individual lenses create a multi-layered light distribution to generate a clean 8° or 14° beam angle. Be it for the Small version or the high-power Medium Frax, by concentrating the lenses together, the light distribution will be the same thanks to the multi-layering process.

# Microlens

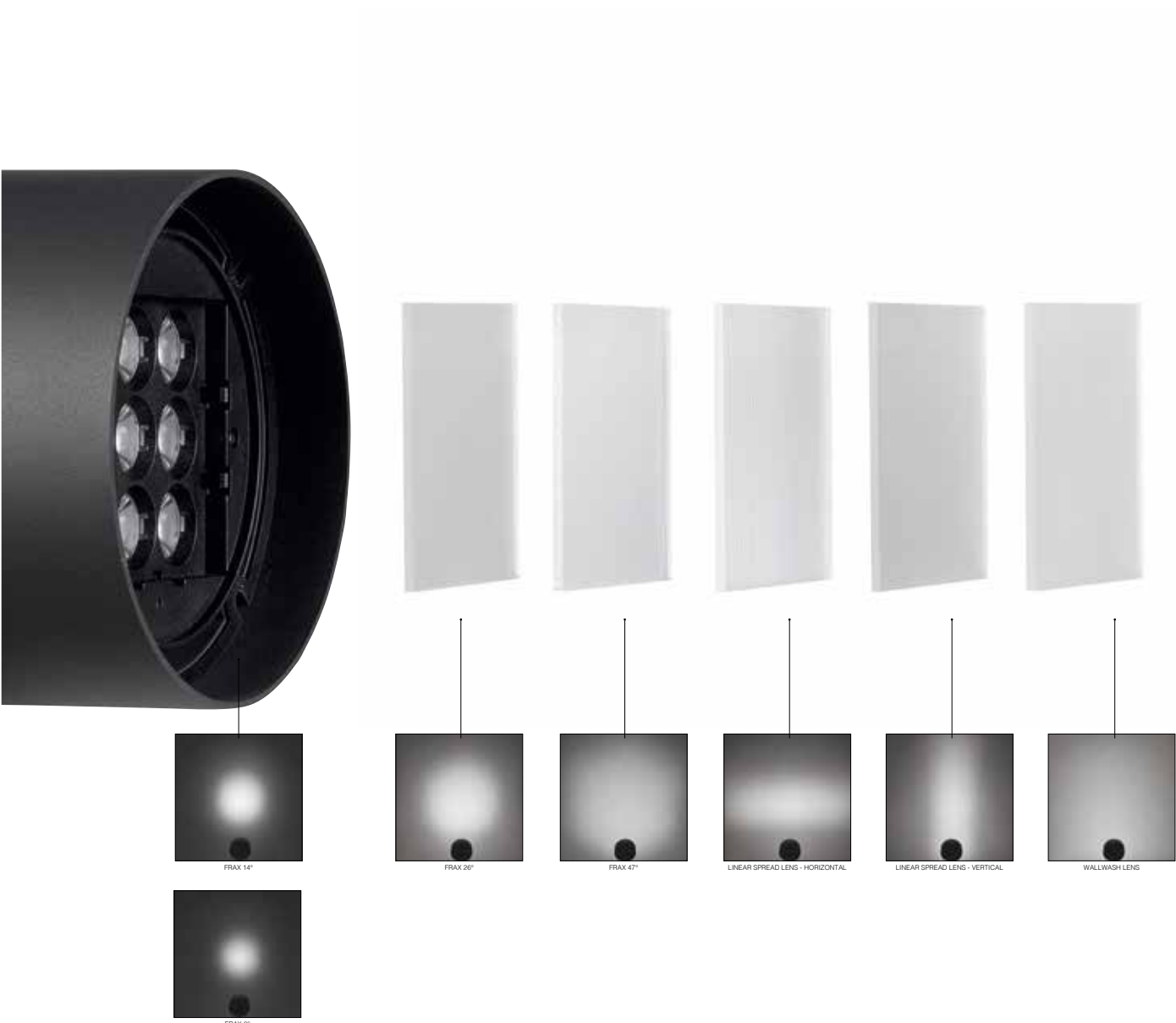
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With its 7 different light distributions, Frax is the all-round projector. The 8° and 14° versions serve as the base models of the Frax family. Adding a microlens to Frax 14° results in a 26° or 47° beam angle.

These microlenses can not only be used to generate a different beam angle, also specific lighting effects can be created by putting an additional lens into the luminaire. Specific lenses can be used to generate a wallwash effect or to create a horizontal or vertical elliptical effect.

Besides the easiness of creating different light effects, these inhouse developed microlenses are designed to have an evenly spread light distribution for all beam angles, resulting in a scallops-free light effect.

With a good Colour Over Angle uniformity, the microlenses also reduce the colour shift that occurs when comparing the center of the distributed light with the edges.





MADE FOR

# Harsh Environments

With its multitude of optical solutions and its multiple ways of installing, Frax can be applied in many different settings to fulfill various kinds of lighting needs. To ensure a hassle-free answer to the diverse application areas, Frax is designed to perfection in every detail.

**Watertight** IP65 luminaire thanks to silicone seal

**IK06** thanks to 5mm thick glass for Frax S

**IK08** thanks to 8mm thick glass for Frax M

**UV-resistant** components for extended lifespan

**D-Lock:** in-house designed safety to prevent failure due to overheating, overvoltage or humidity entering the luminaire

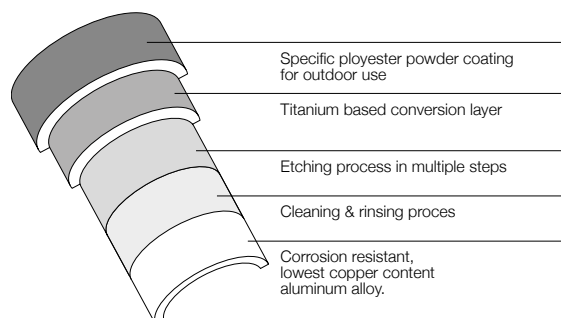
**No visible cable** coming out of the luminaire as all cabling runs through the hinge

Optimized **flexibility:**  
Tilting up to 120° & Rotating up to 360°

**Reliable** in extreme weather conditions:  
from -25° up to 45°



Delta Light® maintains the highest standards both in material choice and in the coating process, to offer superb and durable anti-corrosion protection. Which is approved and confirmed by the 1000h filiform corrosion test.

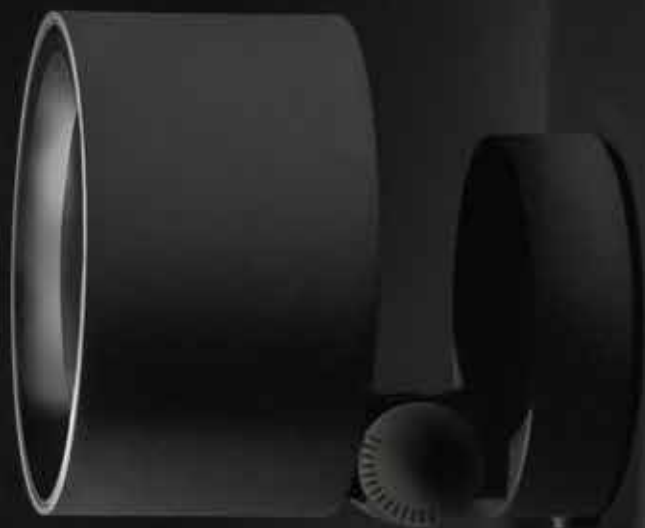


# Installation made easy

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Apart from the extensive optical possibilities, Frax also offers a range of different mounting options. Standard, the luminaire comes on a round base, but one can also opt to install the luminaire head on a pin, on a strap or on a simplified bracket. In this way, Frax can easily be transformed to install in between the green, around a tree, a pole or any other surface.





To facilitate the installation of multiple Frax luminaires, a degree scale is integrated on the hinge, perfect for precise aiming and a proper repetitive light effect.



# Visual Well-Being

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Frax not only cares about the perfect light effect, it takes care about the passer-by as well. Frax can be provided with an additional honeycomb or a kap to reduce the possibility from directly looking into the light source. Both of them reduce any undesired light effect and the glare associated with it.



## **ADD FRAX HONEYCOMB TO REDUCE GLARE**

Frax Honeycomb is used as a small grid to put in front of the optical part of the luminaire. The small frames reduce the minimum of remaining spill light in all directions and the glare associated with it. The hexagonal openings make sure a minimum of efficiency is lost when adding the honeycomb





**ADD FRAX KAP TO  
MINIMIZE SPILL LIGHT**

Frax Kap is a good way to remove an unwanted light effect in one direction. In some cases, the beam angle used is perfect to lit up for example an item on the wall, but no upwards light is wanted. By adding the Frax Kap in front of the luminaire, the undesired upwards light effect is being removed.



# Fine to Combine

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The design philosophy behind Frax has lots of touchpoints to what Polesano stands for: an instrument for the designer to use in urban and landscape settings.

Modularity, flexibility and functionality combined with aesthetics: several characteristics that fit both lighting tools, making it easy to complement each other in any urban or landscape project.



Architectural Project Dino Krizmanić, Leonid Zuban (Urbis) Lighting Design Dean Skira (Skira) / Photography Jan Stojkovic / Pula - Croatia

# How To

With a wide range of optics, meticulous precision and a multitude of installation options, Frax is a toolbox to bring buildings, monuments and cities to life.



**1**  
**FRAX SB BRACKET**  
14° + Linear Spread Lens Vertical  
Illumination of the window compartment



**2**  
**LOGIC R**  
11°  
Illumination of the window compartment on ground level



**3**  
**FRAX M**  
14° & 26°  
Illumination of the classical building facade



**4**  
**FRAX SB PIN**  
47°  
Illumination of trees & bushes



**5**  
**FRAX SB BRACKET**  
8° Superspot  
Illumination of the columns



**6**  
**FRAX M**  
Wallwash  
Illumination of the top façade



**7**  
**FRAX S**  
Wallwash  
Illumination of the top façade



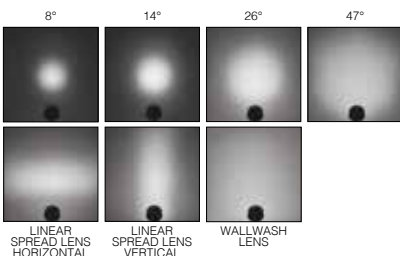
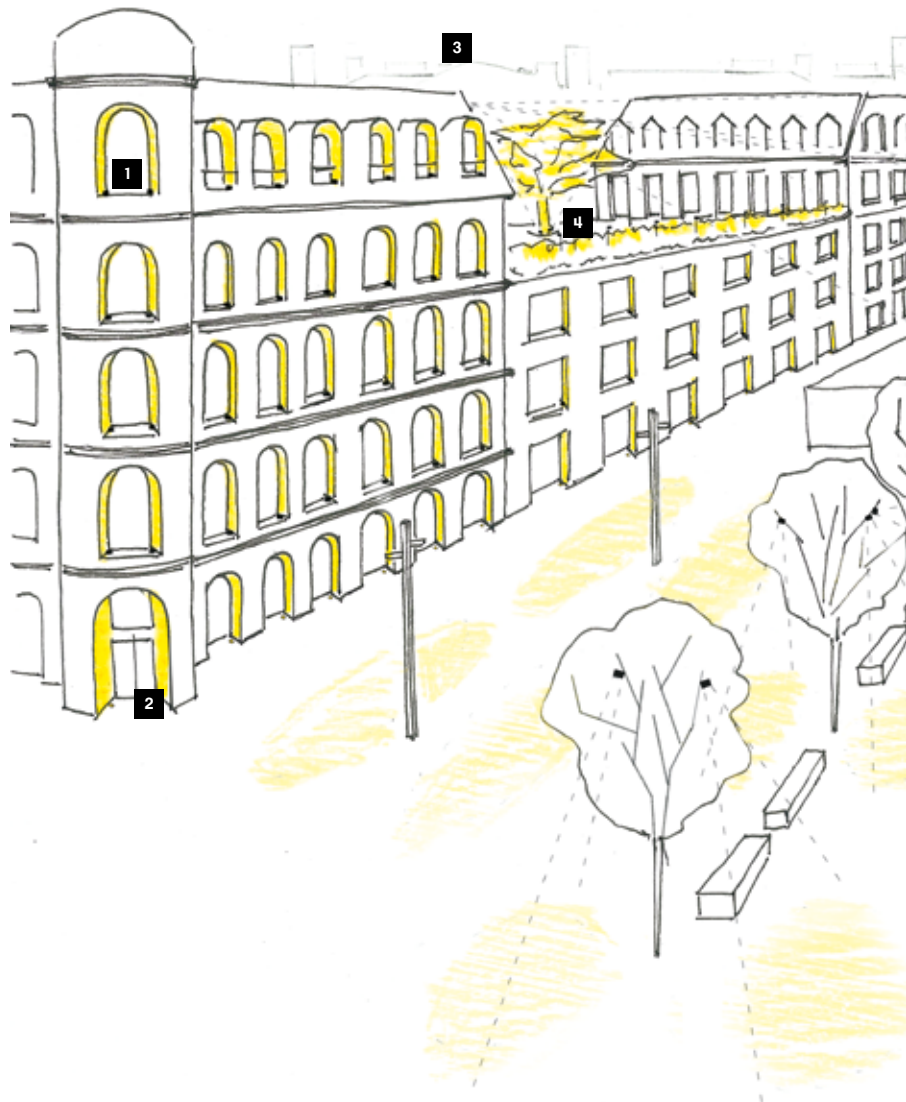
**8**  
**POLESANO**  
Street Lighting

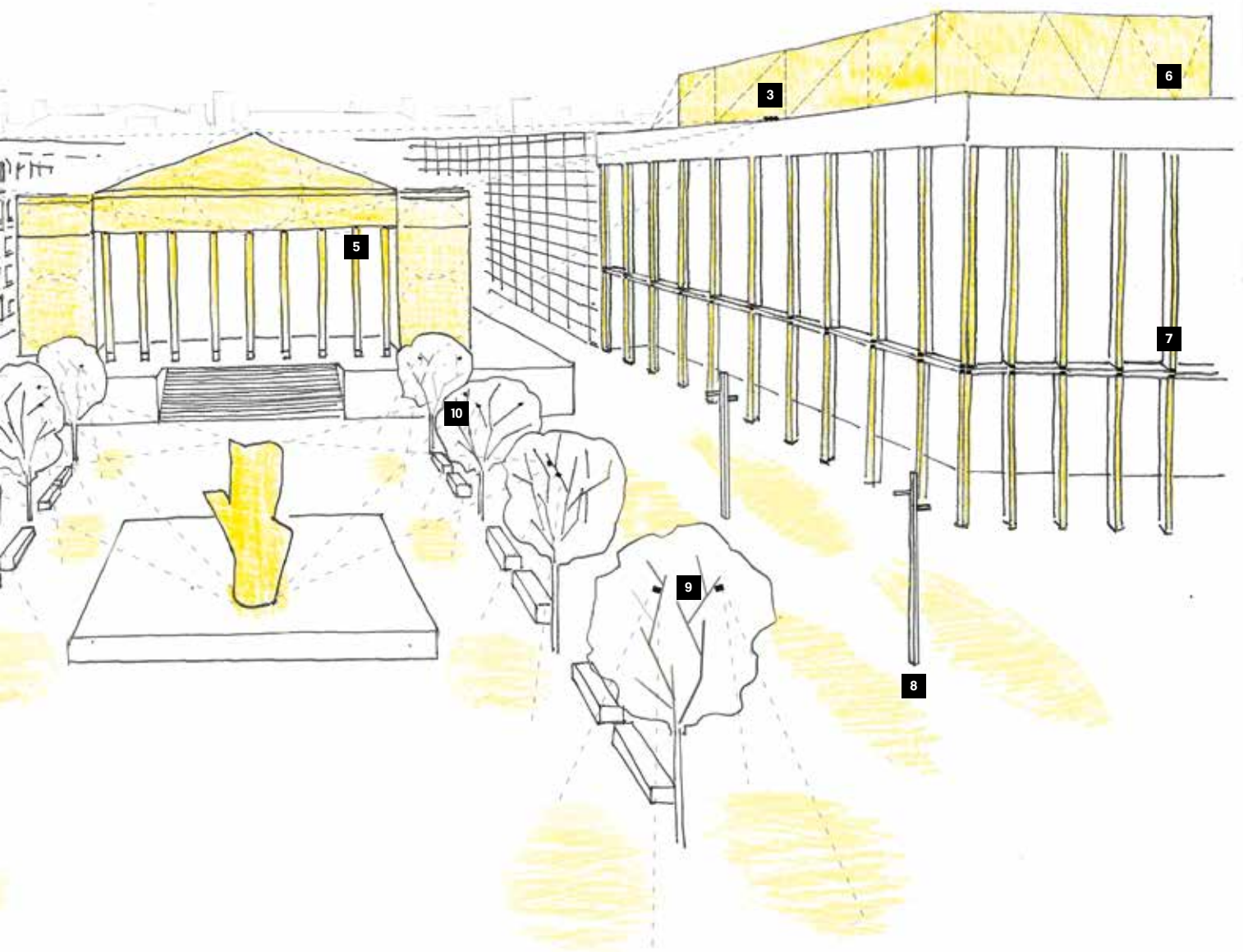


**9**  
**FRAX MB STRAP**  
26°  
General lighting of the square



**10**  
**FRAX MB STRAP**  
14° + Linear Spread Lens Vertical  
Illumination of the sculpture



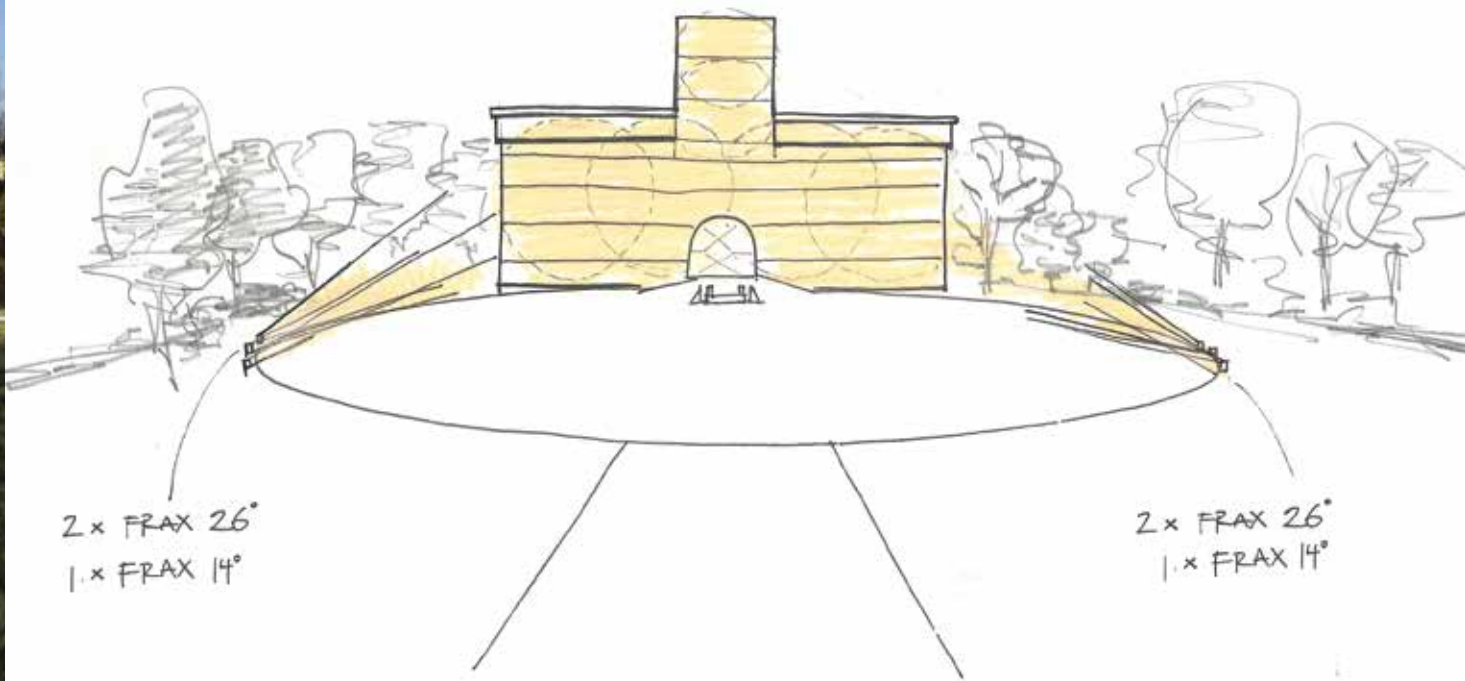




This 'contemporary abbey' is designed by Ghent-based architecture studio Dhooge & Meganck as a factory and storage facility for Camp's, a Belgian producer of traditional pickles, mustard and preserved vegetables.

Dhooge & Meganck Architecture / Camps

Frax enables to illuminate this fantastic piece of architecture, emphasizing its unique character. To limit the visual impact of the architectural facade, using a wallwash was not an option. Instead 6 Frax projectors evenly light up the building from a distance, a combination of power and optical precision.



2 x FRAX 26°  
1 x FRAX 14°

2 x FRAX 26°  
1 x FRAX 14°



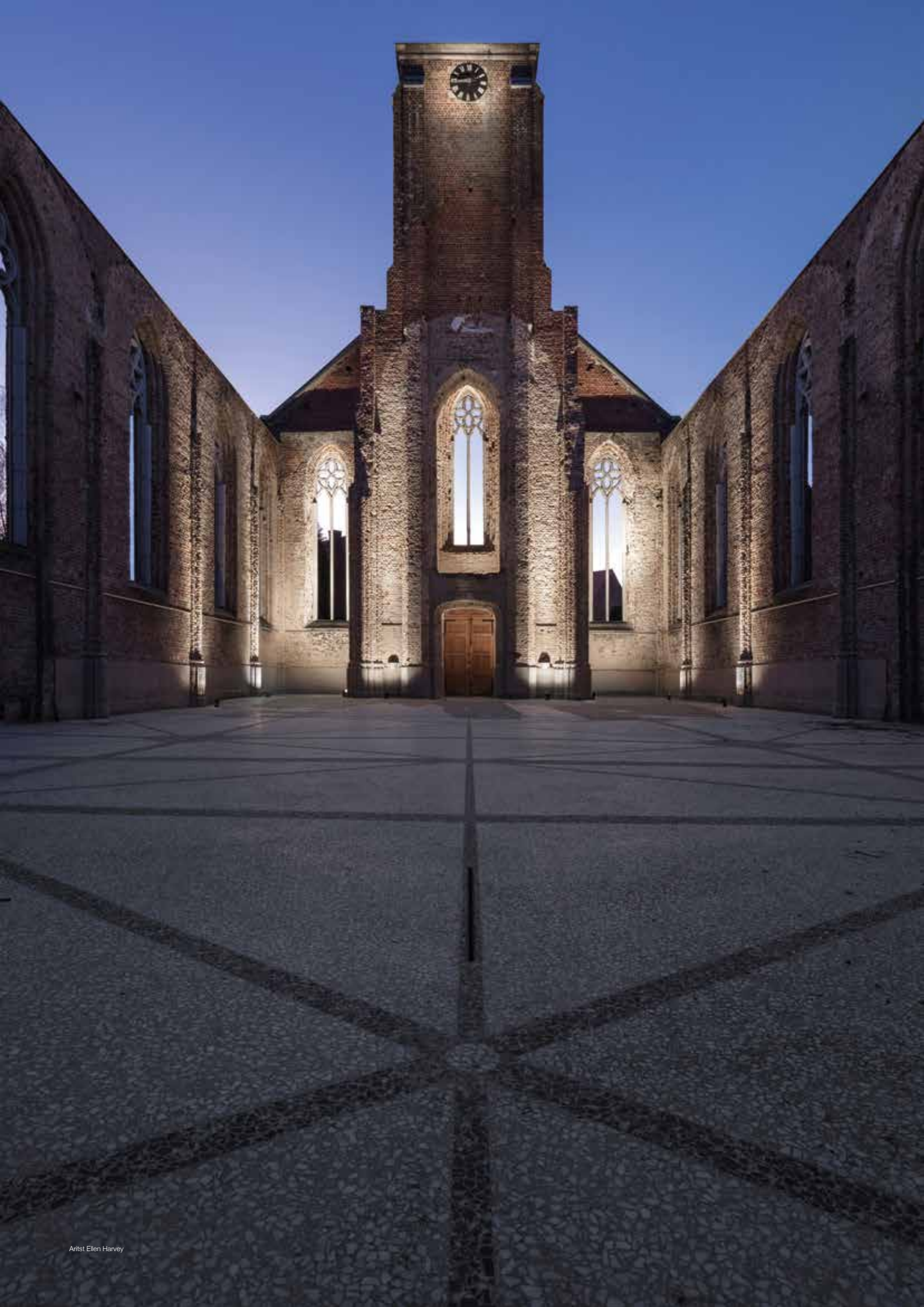
This church turned artwork is located in the village of Bossuit, near the Delta Light HQ. This former church was given a new destination and made into an artificial ruin to create an outdoor public space for the village. The new terrazzo floor includes drawings of the elements that were removed during demolition, and of the life the architecture previously lived. A masterpiece by artist Ellen Harvey.

By illuminating this fantastic public artwork at night, Frax enhances the character of the ruin through a dramatic play of light and darkness. Wider beam angles light up the bigger vertical planes, while the 8° superspot version accentuates the details.



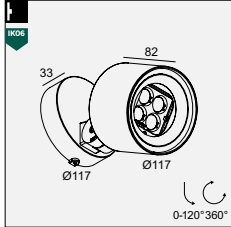






# Range

## FRAX S

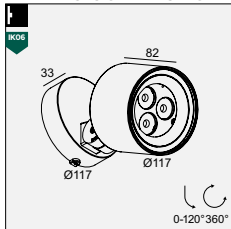


3000K / CRI>90			
LED CLUSTER 7,9W / 867lm / 700mA			
	14°	26°	47°
NO ACCESSORY	<b>26001 9310</b> ◇	<b>26001 9360</b> ◇	<b>26001 9380</b> ◇
HONEYCOMB	<b>26001 9320</b> ◇	<b>26001 9370</b> ◇	<b>26001 9390</b> ◇
LINEAR V	<b>26001 9330</b> ◇	-	-
LINEAR H	<b>26001 9340</b> ◇	-	-
WALLWASH	<b>26001 9350</b> ◇	-	-

◇ A / N  
220-240V / 50-60Hz

◇ 1,5 IP65

## FRAX S SUPERSPOT



3000K / CRI>90			
LED CLUSTER 5,9W / 650lm / 700mA			
	8°		
NO ACCESSORY	<b>26101 9310</b> ◇		
HONEYCOMB	<b>26101 9320</b> ◇		

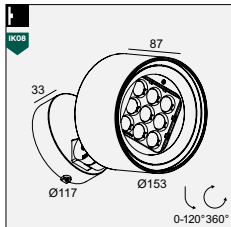
◇ A / N  
110-240V / 50-60Hz

◇ 1,5 IP65

### ACCESSORIES

FRAX ANTI VANDAL SCREWS 5 PCS ▶ **26070 0030**  
FRAX S KAP ▶ **26070 0010 N**

## FRAX M

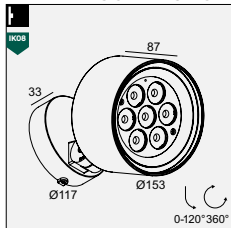


3000K / CRI>90			
LED CLUSTER 23W / 2390lm / 900mA			
	14°	26°	47°
NO ACCESSORY	<b>26011 9310</b> ◇	<b>26011 9360</b> ◇	<b>26011 9380</b> ◇
HONEYCOMB	<b>26011 9320</b> ◇	<b>26011 9360</b> ◇	<b>26011 9390</b> ◇
LINEAR V	<b>26011 9330</b> ◇	-	-
LINEAR H	<b>26011 9340</b> ◇	-	-
WALLWASH	<b>26011 9350</b> ◇	-	-

◇ A / N  
220-240V / 50-60Hz

◇ 2,4 IP65

## FRAX M SUPERSPOT



3000K / CRI>90			
LED CLUSTER 17,9W / 1859lm / 900mA			
	8°		
NO ACCESSORY	<b>26111 9310</b> ◇		
HONEYCOMB	<b>26111 9320</b> ◇		

◇ A / N  
220-240V / 50-60Hz

◇ 2,4 IP65

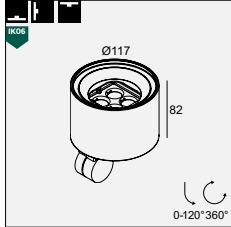
### ACCESSORIES

FRAX ANTI VANDAL SCREWS 5 PCS ▶ **26070 0030**  
FRAX M KAP ▶ **26070 0020 N**



FRAX M + FRAX M KAP

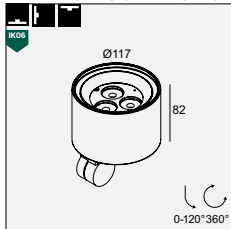
### FRAX SB



3000K / CRI>90			
LED CLUSTER 7,9W / 867lm / 700mA			
	14°	26°	47°
NO ACCESSORY	<b>26000 9310</b> ◇	<b>26000 9360</b> ◇	<b>26000 9380</b> ◇
HONEYCOMB	<b>26000 9320</b> ◇	<b>26000 9370</b> ◇	<b>26000 9390</b> ◇
LINEAR V	-	-	-
LINEAR H	<b>26000 9340</b> ◇	-	-
WALLWASH	<b>26000 9350</b> ◇	-	-

◇ N  
220-240V / 50-60Hz  
INCL.1 x CABLE H05 RN-F 3 x 1mm<sup>2</sup> 2m  
◇ 1,3 IP65

### FRAX SB SUPERSPOT



3000K / CRI>90			
LED CLUSTER 5,9W / 650lm / 700mA			
	8°		
NO ACCESSORY	<b>26100 9310</b> ◇		
HONEYCOMB	<b>26100 9320</b> ◇		

◇ N  
110-240V / 50-60Hz  
INCL.1 x CABLE H05 RN-F 3 x 1mm<sup>2</sup> 2m  
◇ 1,3 IP65

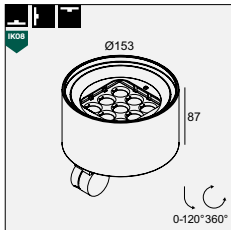
#### REQUIREMENTS

FRAX BRACKET  
or  
FRAX STRAP (max. Ø250mm)  
or  
FRAX PIN

#### ACCESSORIES

FRAX ANTI VANDAL SCREWS 5 PCS ▶ **26070 0030**  
FRAX S KAP ▶ **26070 0010 N**

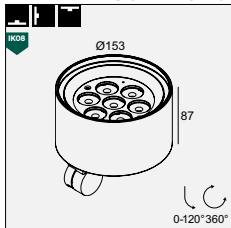
### FRAX MB



3000K / CRI>90			
LED CLUSTER 23W / 2390lm / 900mA			
	14°	26°	47°
NO ACCESSORY	<b>26010 9310</b> ◇	<b>26010 9360</b> ◇	<b>26010 9380</b> ◇
HONEYCOMB	<b>26010 9320</b> ◇	<b>26010 9370</b> ◇	<b>26010 9390</b> ◇
LINEAR V	-	-	-
LINEAR H	<b>26010 9340</b> ◇	-	-
WALLWASH	<b>26010 9350</b> ◇	-	-

◇ N  
220-240V / 50-60Hz  
INCL.1 x CABLE H05 RN-F 3 x 1mm<sup>2</sup> 2m  
◇ 2,1 IP65

### FRAX MB SUPERSPOT



3000K / CRI>90			
LED LED CLUSTER 17,9W / 1859lm / 900mA			
	8°		
NO ACCESSORY	<b>26110 9310</b> ◇		
HONEYCOMB	<b>26110 9320</b> ◇		

◇ N  
220-240V / 50-60Hz  
INCL.1 x CABLE H05 RN-F 3 x 1mm<sup>2</sup> 2m  
◇ 2,1 IP65

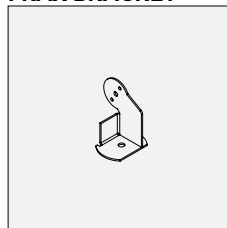
#### REQUIREMENTS

FRAX BRACKET  
or  
FRAX STRAP (max. Ø250mm)  
or  
FRAX PIN

#### ACCESSORIES

FRAX ANTI VANDAL SCREWS 5 PCS ▶ **26070 0030**  
FRAX M KAP ▶ **26070 0020 N**

#### FRAX BRACKET

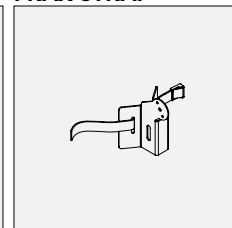


**26070 0060** ◇

◇ N

0,1

#### FRAX STRAP

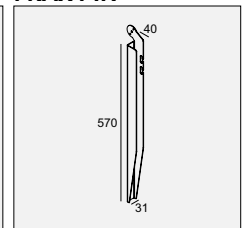


**26070 0050** ◇

◇ N

0,1

#### FRAX PIN



**26070 0040** ◇

◇ N

0,1





