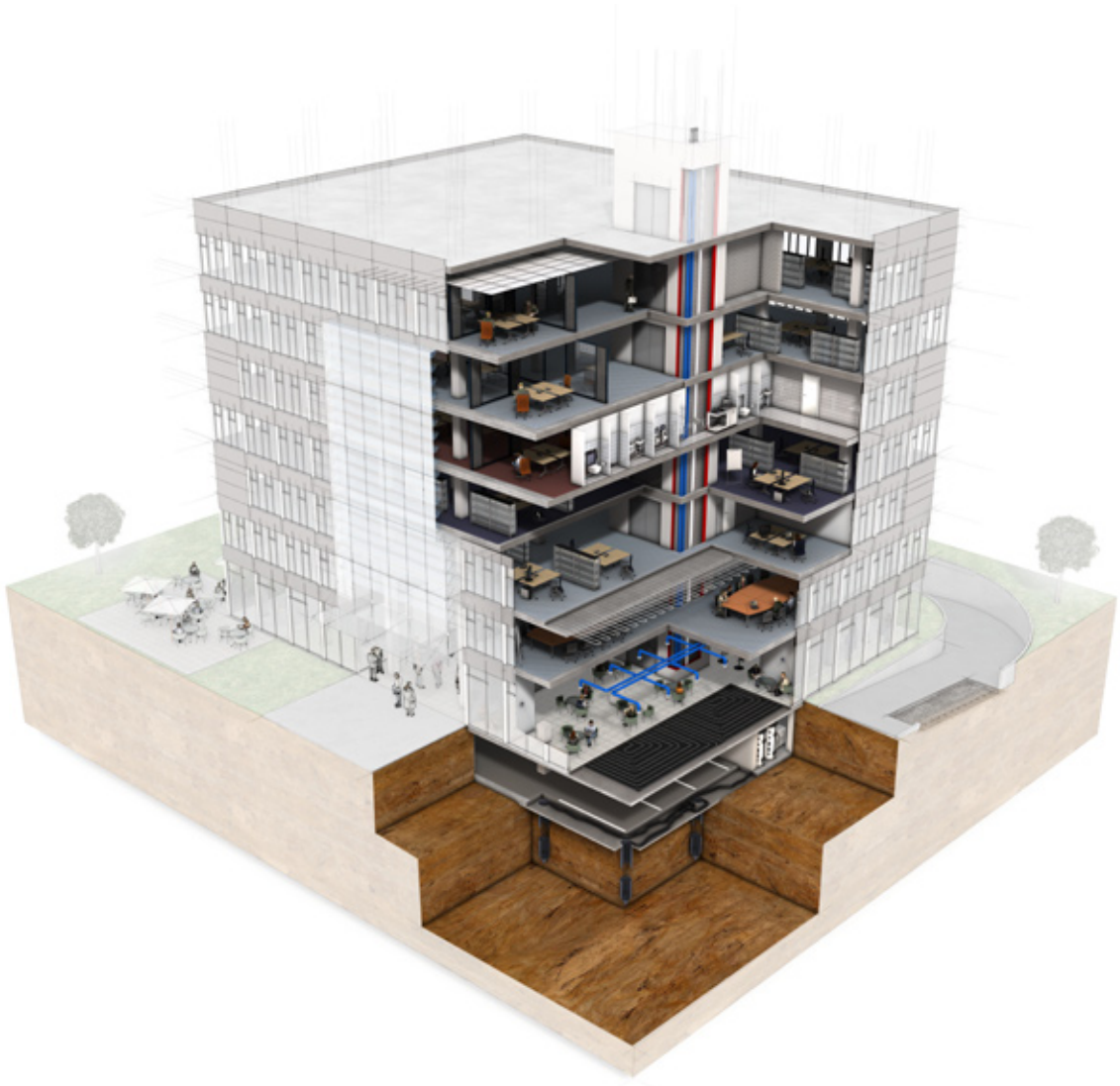
Uponor animation design

Guidelines for building animations & illustrations



Content

Content

General information

- This guide provides not rules but gives recommendations instead which are needed to ensure a common development of illustration and animations within Uponor and in the different business groups and sales units.
- As general instruction, there is not one lighting applied for all products. Depending on the surface of the product adjustments must be made to achieve the best possible result.
- It must be ensured that the future animated products are delivered in excellent condition as photos, with technical details or as CAD drawings ideally.
- Where necessary special product samples modelling by a professio-model-maker shall be used, in scale 1:1.
- One picture per building type will be created. One item serves as exsample for a premium system and and shall include the systems description.
- The product shall be shown in full scale, not only as detail or section al drawing (except when displayed for detailed view).
- No labeling or logos shall be shown, except the uponor brand label.

General view for buildings

Illustrating different building types

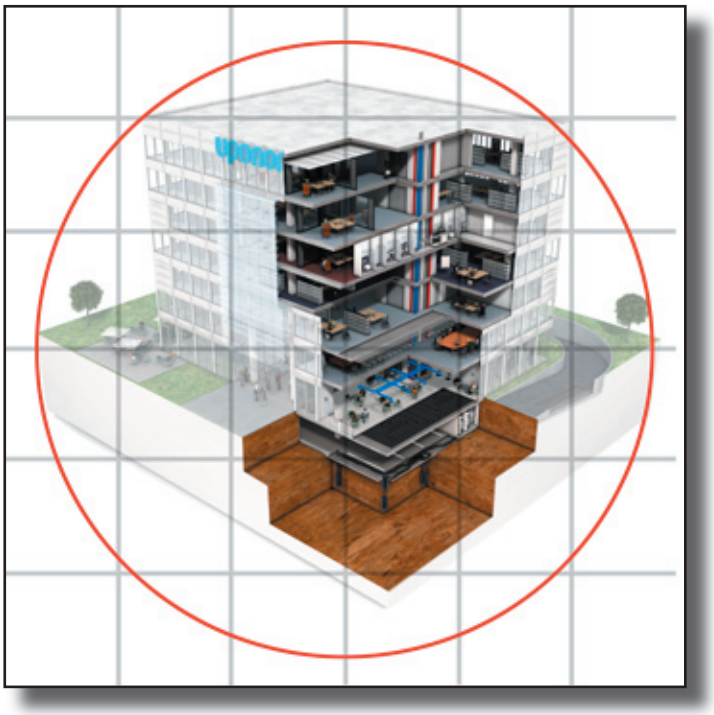
Arrangement

- All uponor building pictures shall be shown in a standardized look.
- Without background.
- Unique angle.
- Illustrated in defined positions.
- Defined camera and light positions.
- Unique render settings.
- All uponor building pictures shall be shown in closed and in cross sectional view.

Arrangement

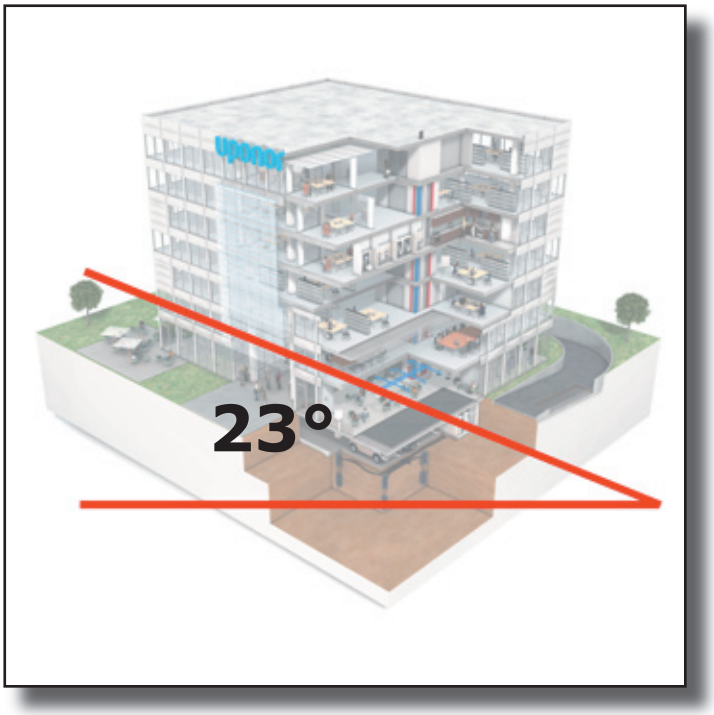
Picture composition

The overall structure will be provided as comprehensive unit which is located on a grid and in a circle. Please use 3 vanishing point perspective.



Angular dimensions

The central axis of the overall structure needs to be produced with an angle of exactly 23 degrees.



Arrangement

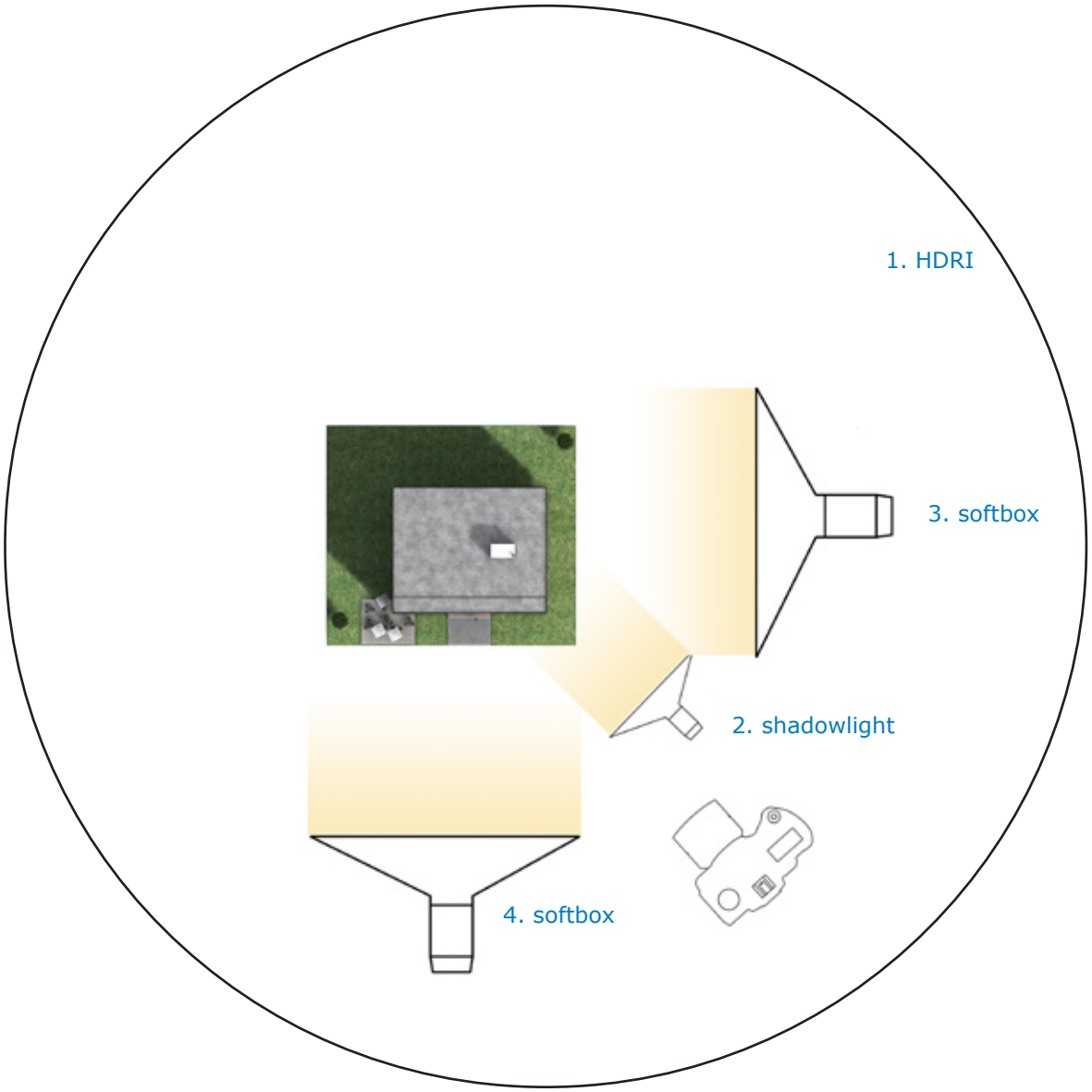
General background for all views

- The CAD studio construction applies for all types.
  - General view for buildings.
  - Detailed view for buildings.
  - Studio view for uponor systems.
  - Detailed studio view for system elements.
- White heaven over the entire surface.
- White floor.
- Only the studio view has a white reflecting floor.

Light settings

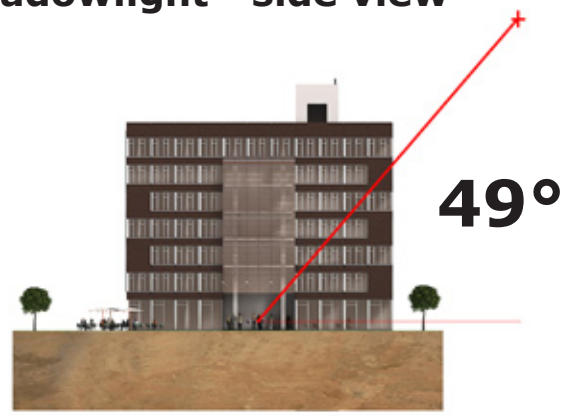
General light concept for all views

1.	HDRI	100%
2.	Shadowlight directional	75%
	Shadow - Maps soft	1750px / 1750px
	Sample radius	6
	Bias	1 mm
	Parallel	30000 mm
3.	Softbox cgi	22%
4.	Softbox cgi	11%

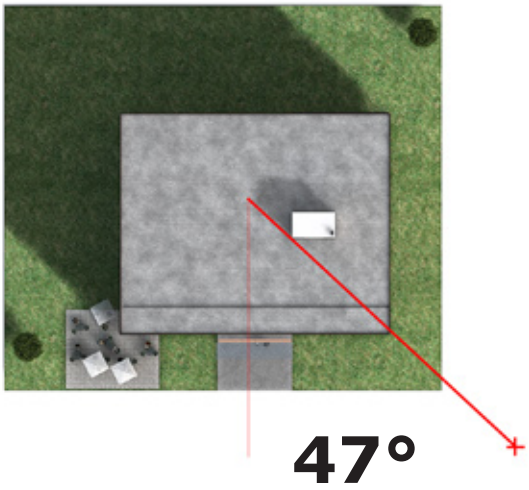


Light settings

Shadowlight - side view



Shadowlight - top view



Camera settings

Aperture

Aperture	f/8.0
Projection	central
Sensor	50
Focal length	75

Exposure

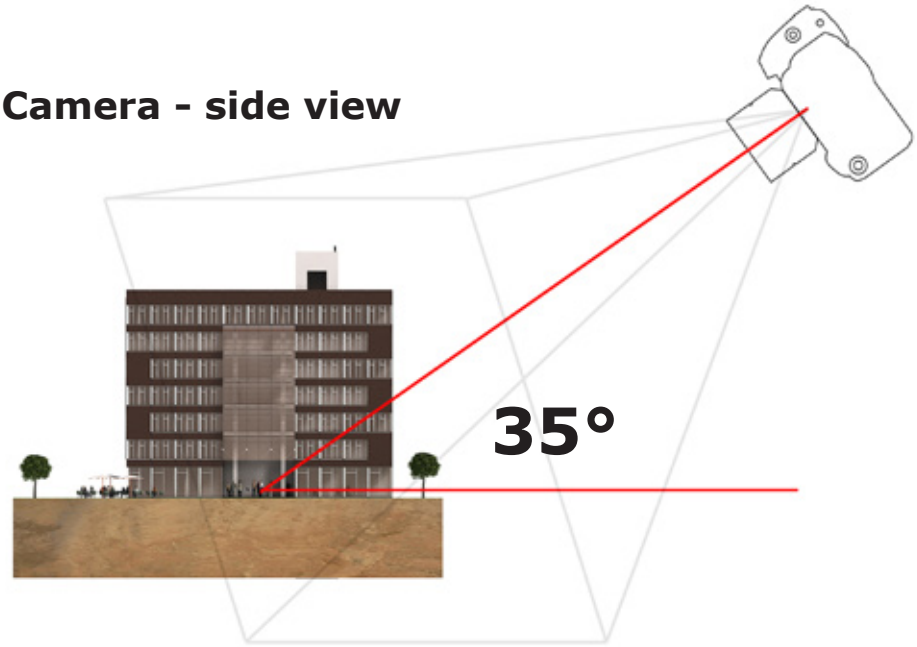
ICO	200
Gain (db)	0

Shutter

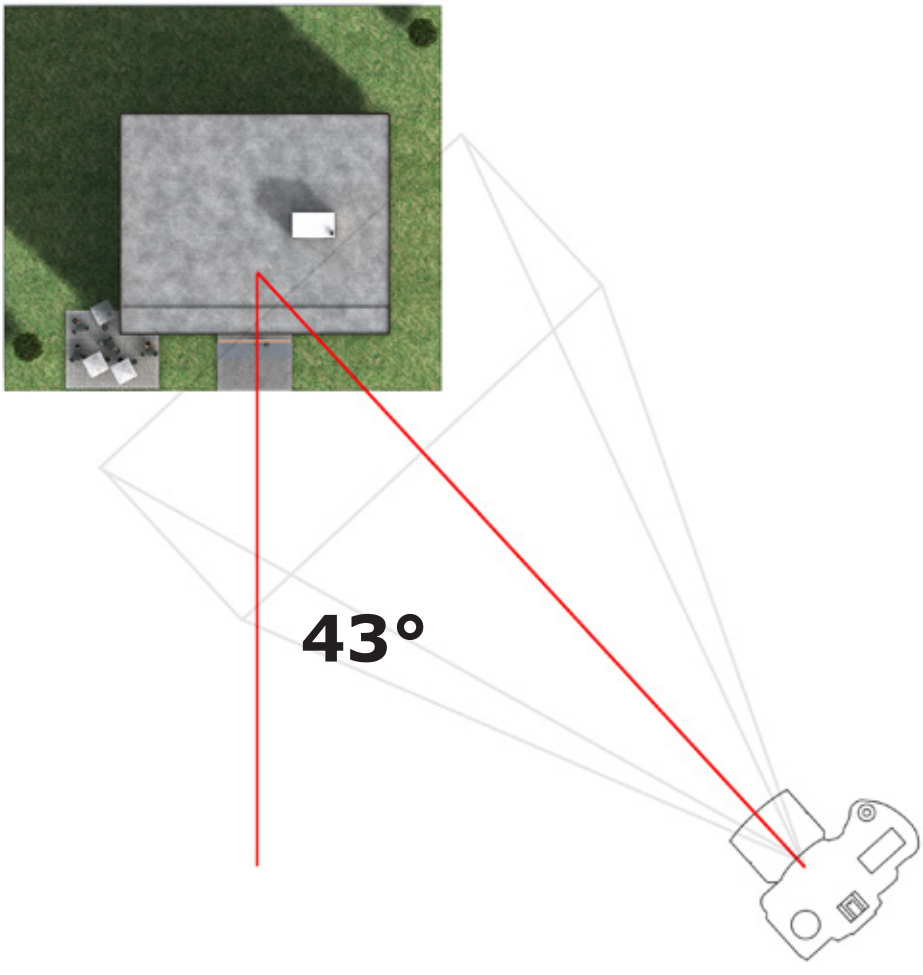
Shutter speed	0.033
Shutter angle	180 °
Shutter efficiency	70%
Closure offset	0%

Camera settings

Camera - side view



Camera - top view

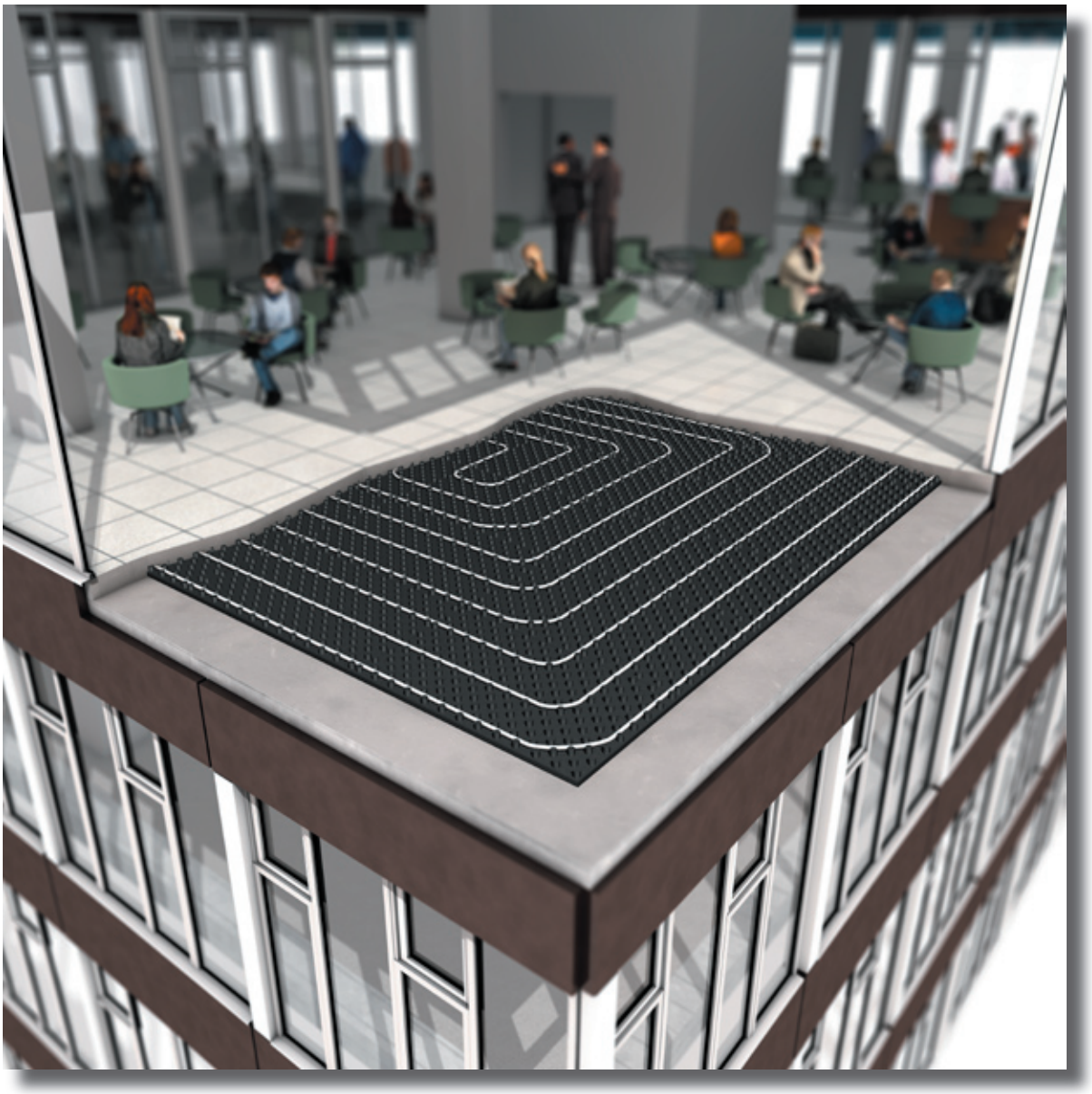


Detailed picture view based on general view

Illustrate Uponor System elements

Detailed view settings

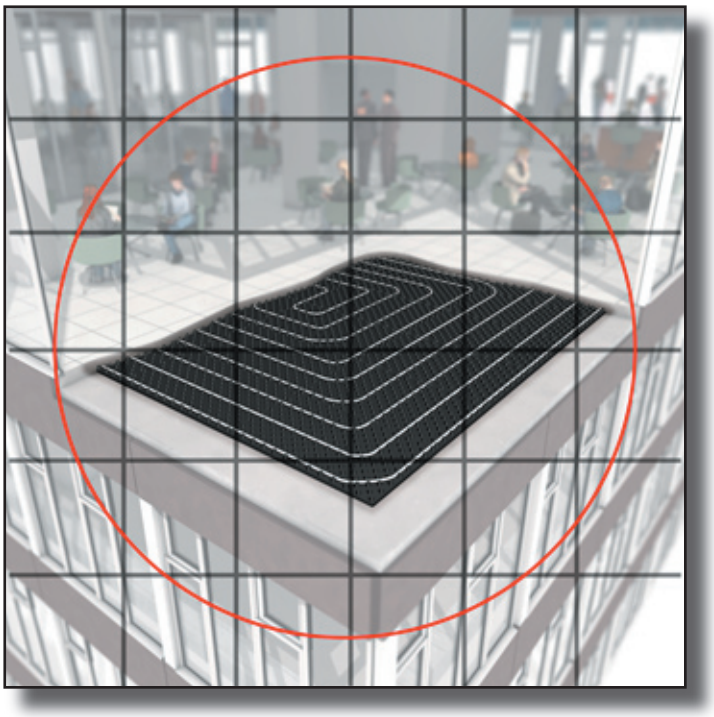
- The detailed view illustrations are developed as zoom in from the overall building view. This view allows to show the system as close-up view.
- The lighting concept is taken from the main view.
- If needed additional computer generated lighting imageries can be set to the scenery.
- The camera is repositioned. All camera and lighting settings remain as in the general overview.
- Only one of the system elements will be set in focus. The other system elements in the background can be also shown. The preferred version is shown with a used camera blur. This lack of definition in the background highlights the view on the system details.
- The focus is always on the overall elements of the system. The blur starts behind the viewer focussed elements.



Arrangement

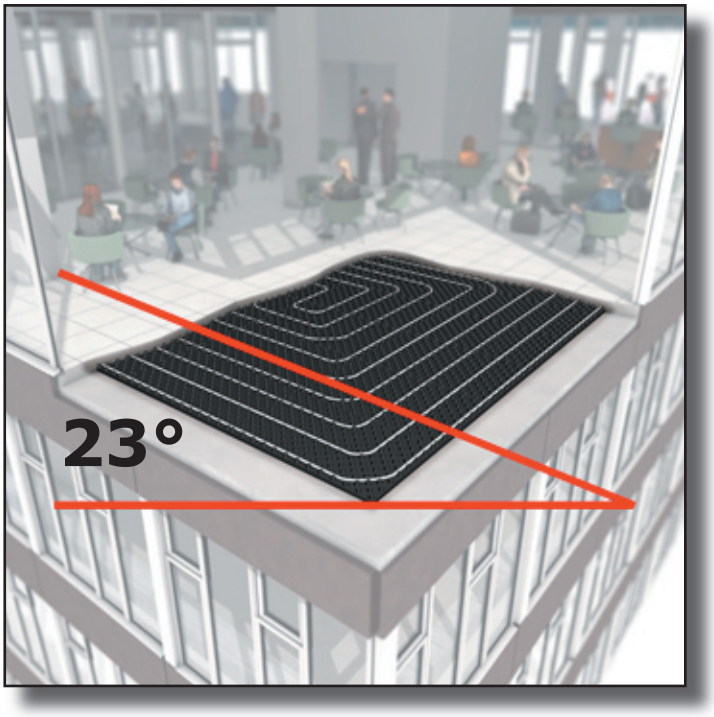
Picture composition

The system is represented in a circle as 3 vanishing point perspective.



Angular dimensions

The central axis of the overall structure is to be produced in an angle of 23 degrees.

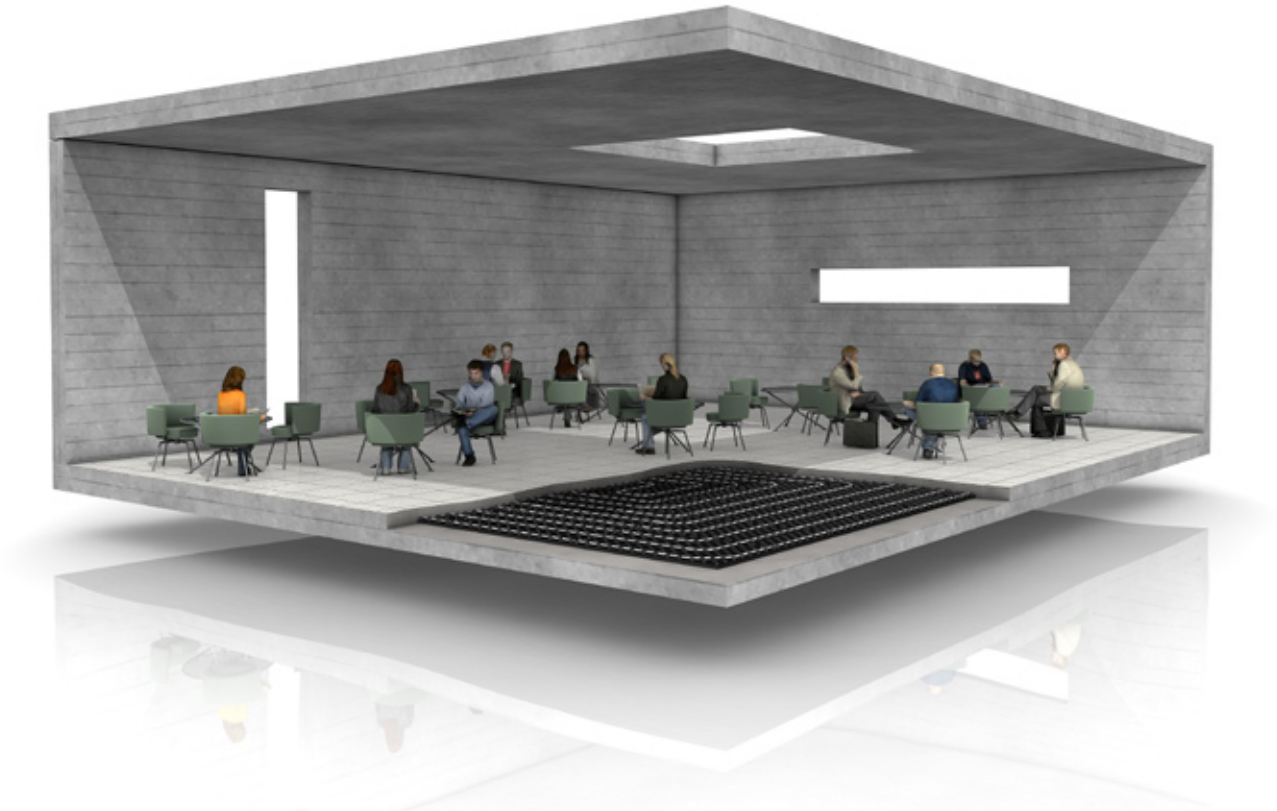


Studio view for system elements

Illustrate Uponor System elements

Studio view settings

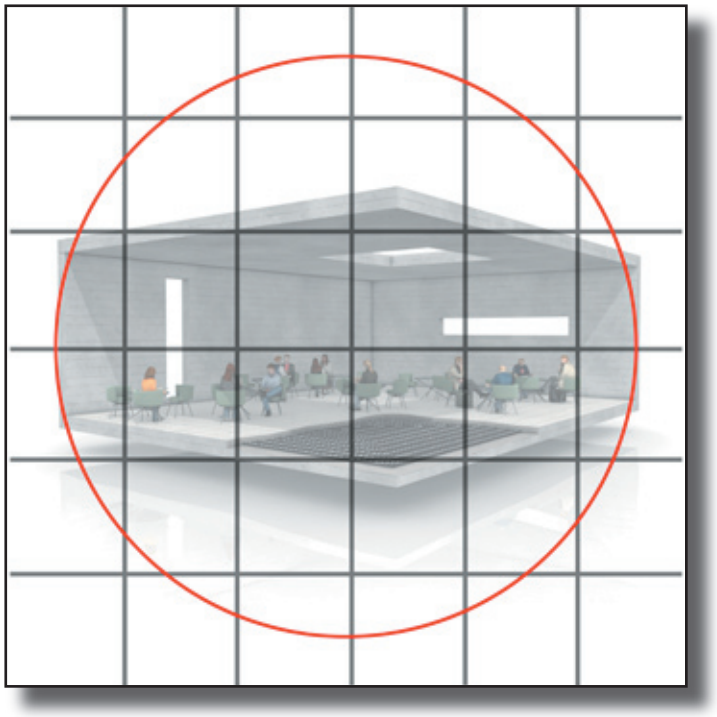
- The studio view allows to show different systems in one room to support cross selling and solution oriented approach.
- The open studio space consists of ceiling, floor and 2 walls.
- The studio space is arranged approximately 400 mm above the ground surface.
- For the room construction different materials/surrounding details can be used, also for systems to be placed outdoor.
- Per one studio view only lines for one system will be shown (Example: Floor construction + manifold + DEM room control).
- The system is shown as sectional cut of the wall, floor or ceiling.
- It always represents the entire system or combination of systems in the studio view.
- The studio floor surface next to the room is wavy and reflective.
- Included persons and interior can be installed to show the living environment in which the installation takes place.
- The room is show in a modern abstract architecture. Windows and doors are only shown when they need to be included to demonstrate the system in a separate room with other details. The installation situation will be shown as well as parts of the final room equipments/ interior as realistic as possible.



Arrangement

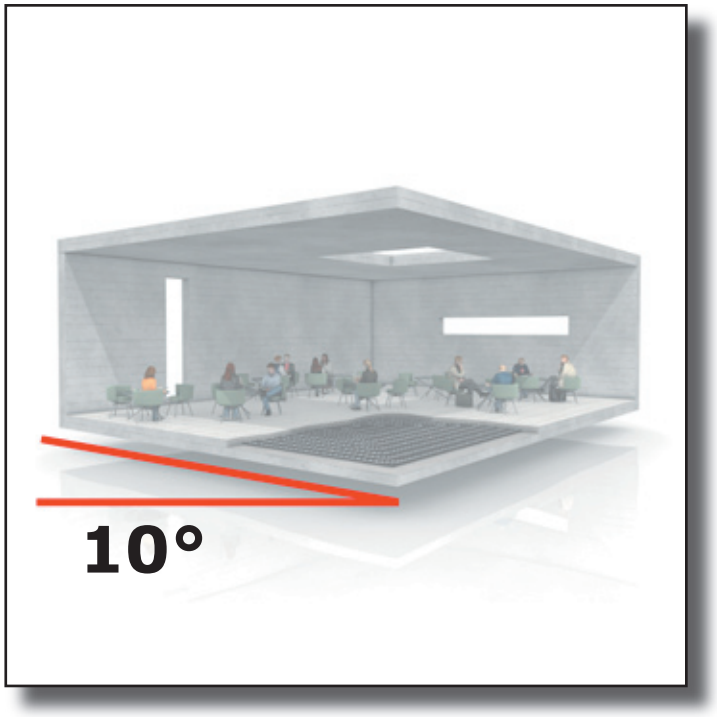
Picture composition

The studio room is located in a pre-builded grids. The corners should be on the circle as two vanishing point perspective. Camera and Focus Point are at the same height.



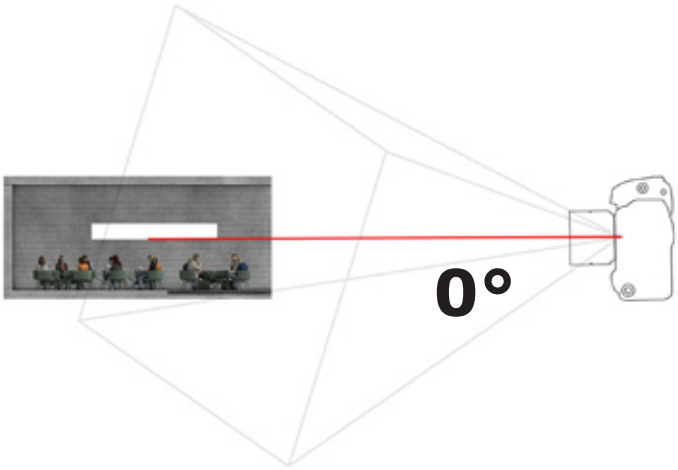
Angular dimensions

The central axis of the overall structure produces an angle of 10 degrees.

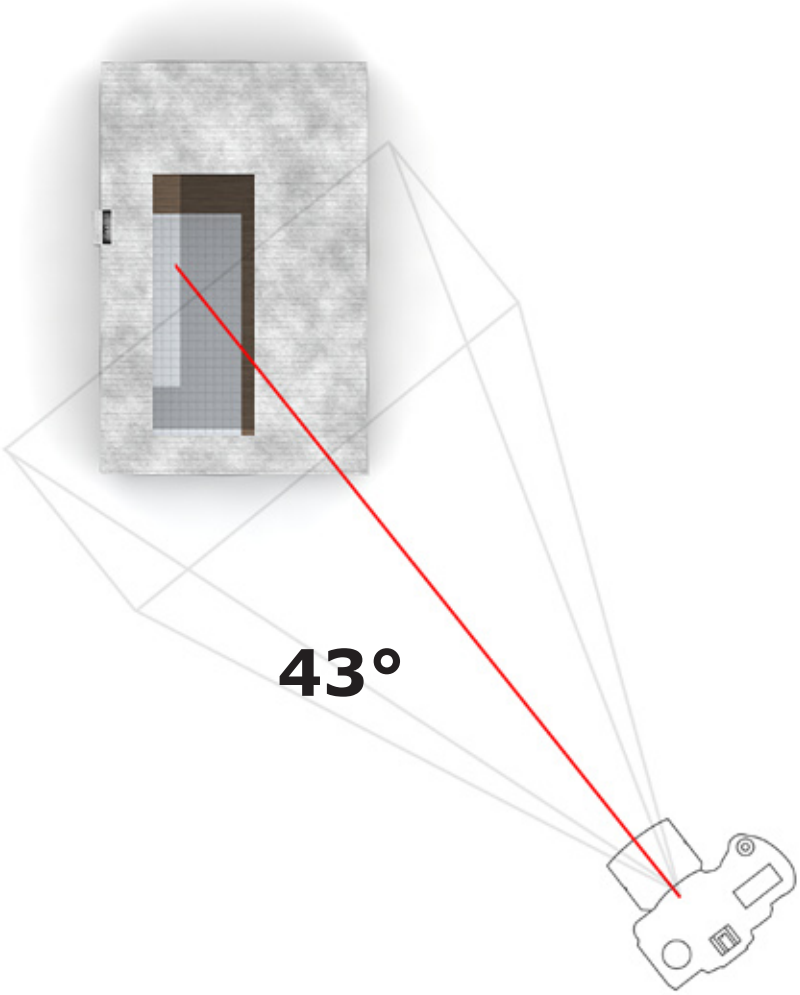


Camera settings

Camera - side view



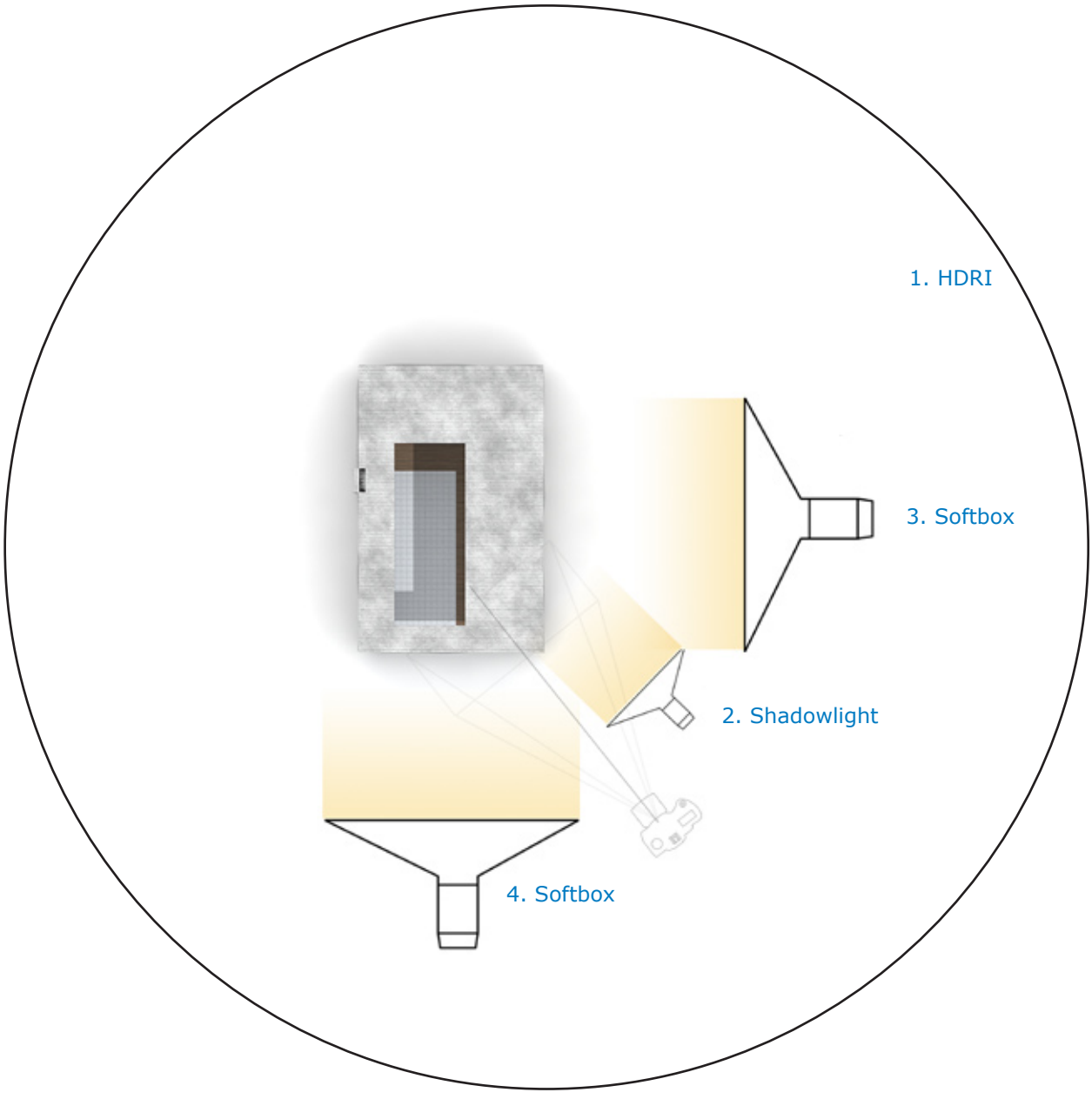
Camera - top view



Studio Light settings

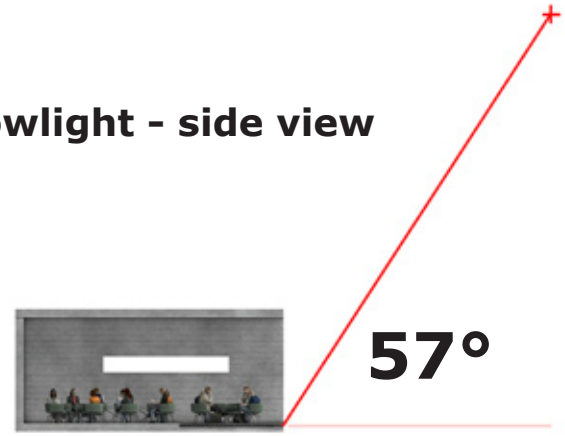
General light concept

1.	HDRI	100%
2.	Shadowlight directional	40%
	Shadow - maps soft	1750px / 1750px
	Sample radius	6
	Bias	1 mm
	Parallel	30000 mm
3.	Softbox cgi	30%
4.	Softbox cgi	20%

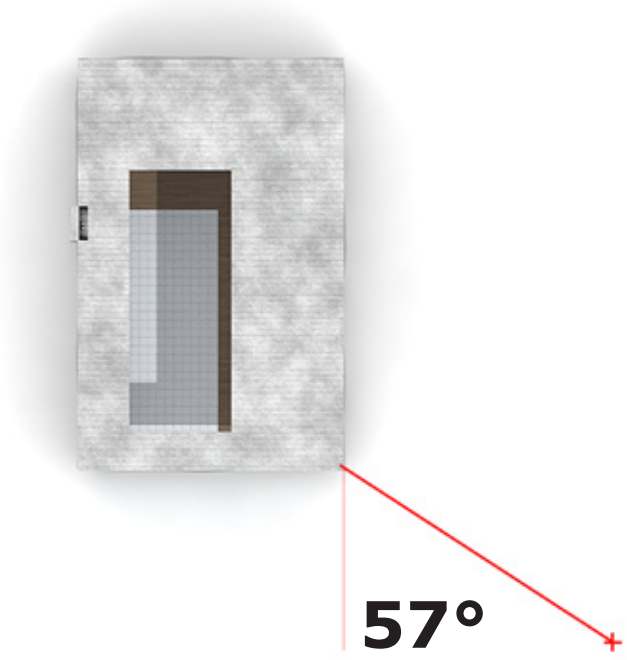


Studio Light settings

Shadowlight - side view



Shadowlight - top view



Example

Focussed studio view for system elements

Illustrate Uponor system elements

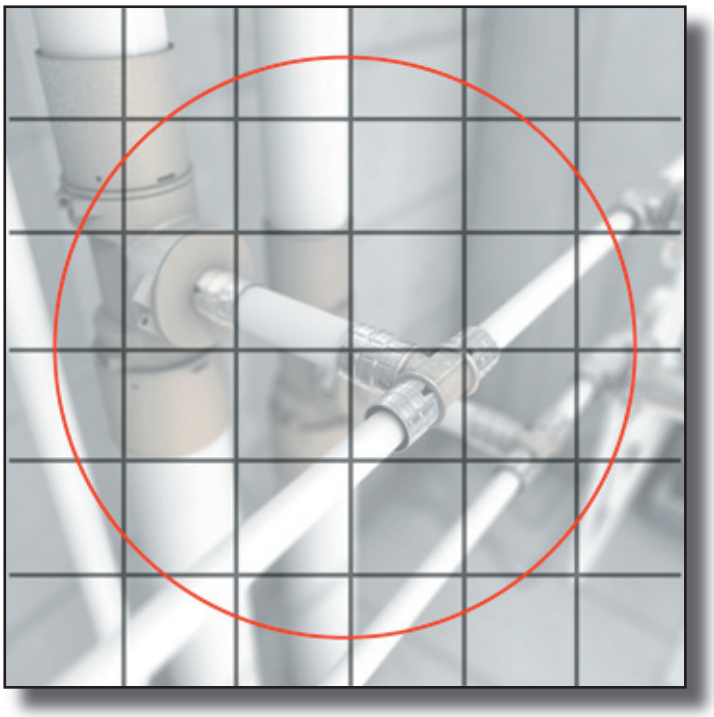
Detailed and focussed view settings

- This view can be used to highlight a combination of components which are part of a system to illustrate more details. It could be the basis for animations on line level.
- The lighting concept is taken from the main view.
- If needed additional computer generated lighting imageries can be set to the scenery.
- The camera is repositioned. The same adjustments as from the general view can be used.
- Only one of the system elements will be set in focus. The other system elements in the background can also be shown. The preferred version is shown with a used camera blur. This lack of definition in the background highlights the view on the system details.
- The focus is always on the overall elements of the system. The blur starts behind the viewer focussed elements.

Arrangement

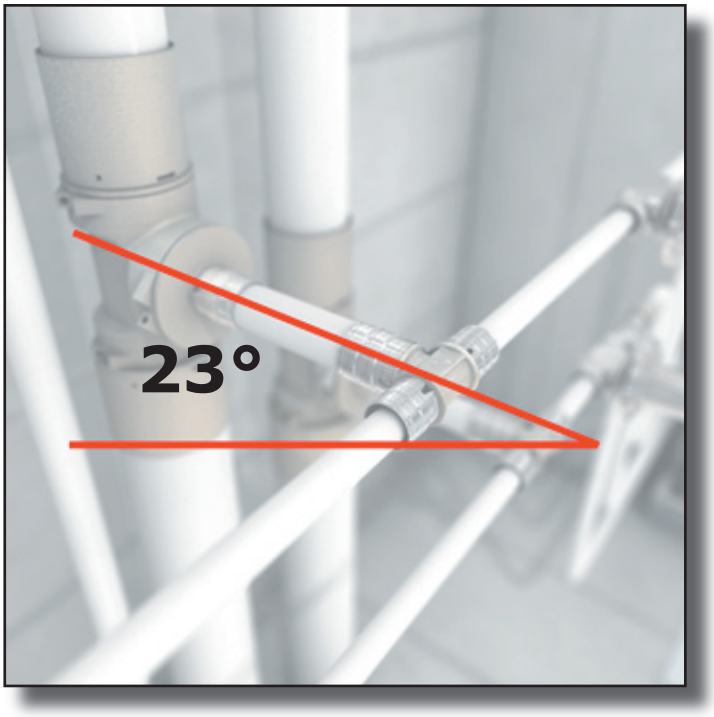
Picture composition

The system is shown in a circle as three vanishing point perspective.



Angular dimensions

The central axis of the overall structure is shown with an angle of 23 degrees.

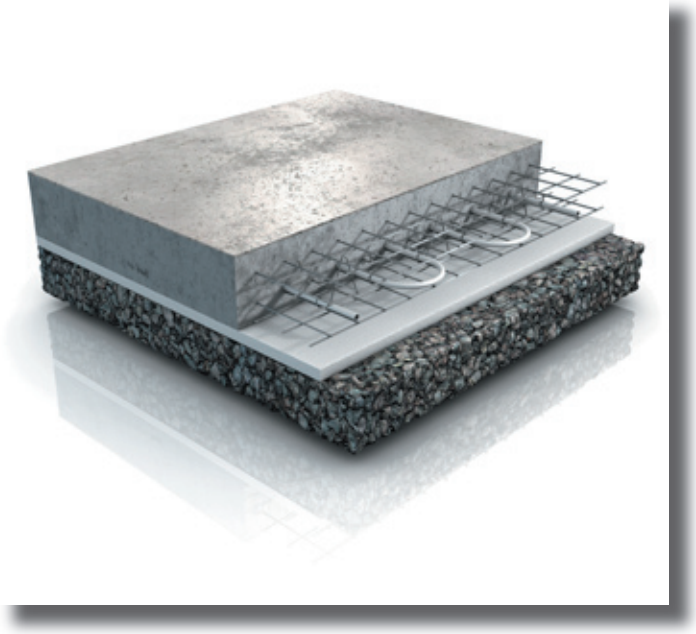


Single view for line elements

Illustrate Uponor line elements

Single view settings

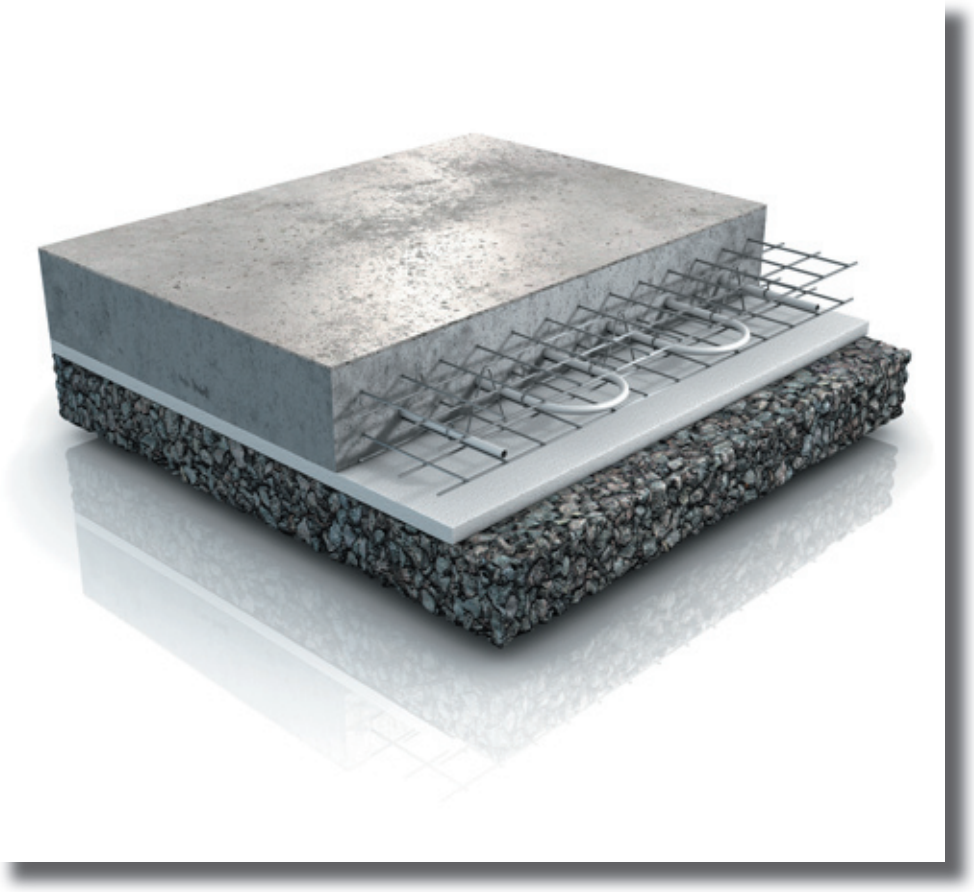
- This view allows to show the line details as close-up view. There is no reference to a room or to a building. Only direct components are being shown.
- The object is arranged approximately 50 mm above the ground surface.
- The studio floor surface next to the room is wavy and reflective.
- There are 2 light concepts. The object oriented to the left side or to the right side.
- The camera is repositioned. The same adjustments as from the general view can be used, in an angle of 23 degrees.
- Only one of the system elements will be set in focus.
- The camera blur starts in 2 directions. From the camera to the "viewer focussed elements" and behind the viewer focussed elements to the back-ground. The focus is always on the overall elements of the system.



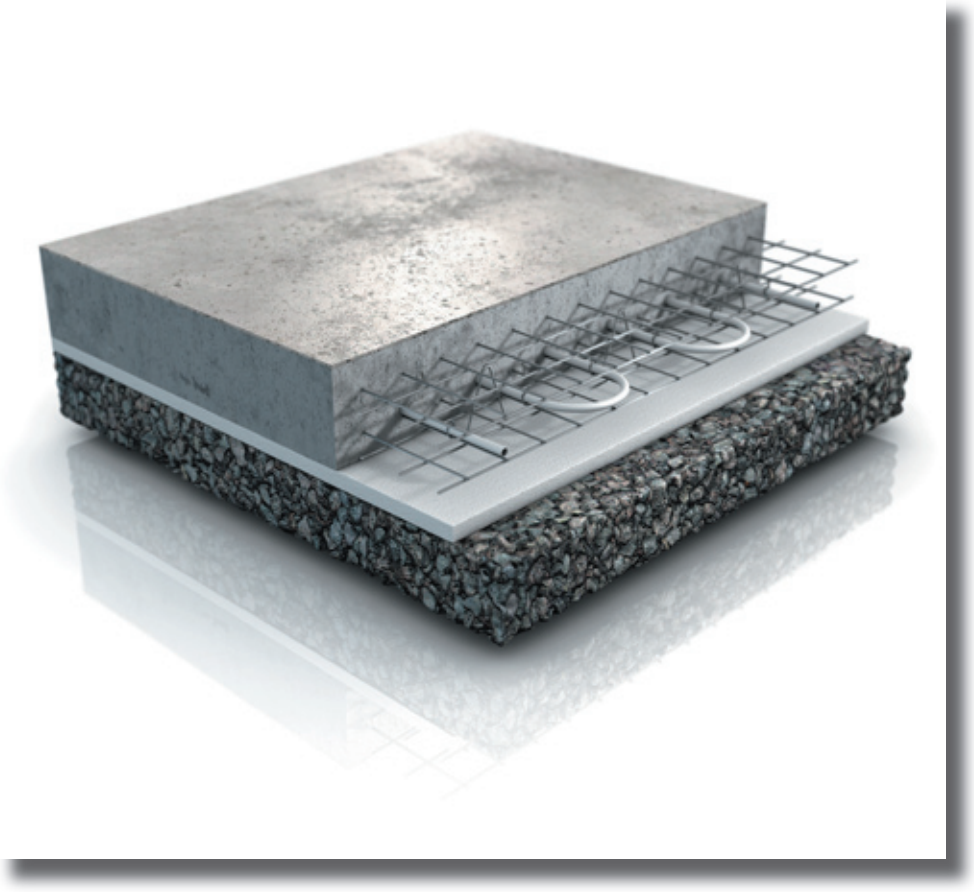
oriented to the right side

oriented to the left side

Example - oriented to the right side



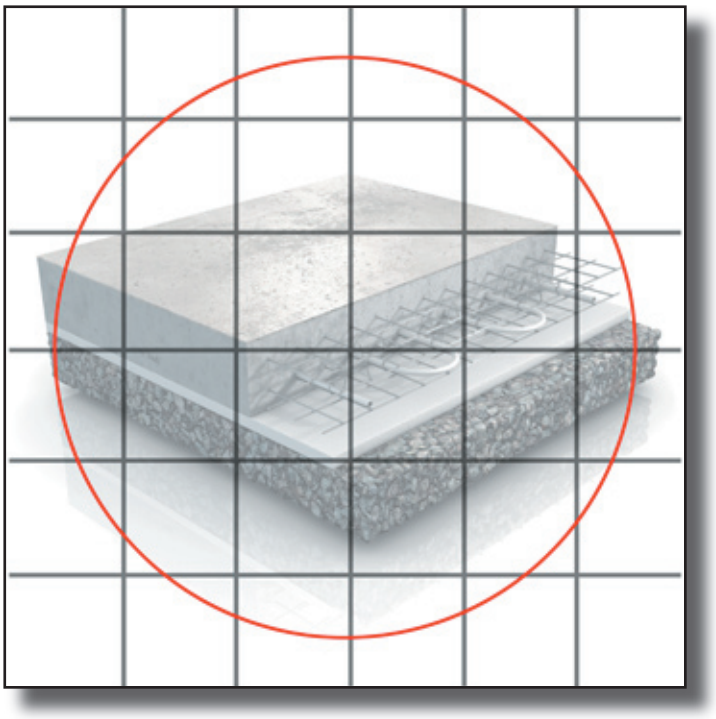
- The camera blur starts in 2 directions. From the camera to the “viewer focussed elements”. And behind the viewer focussed elements to the background. The focus is always on the overall elements of the line.



Arrangement

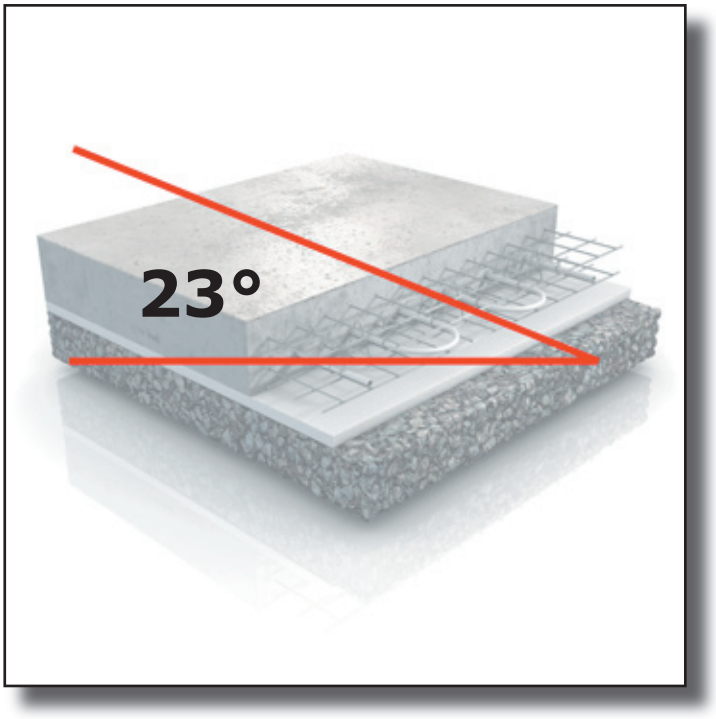
Picture composition

The system is shown in a circle as three vanishing point perspective.



Angular dimensions

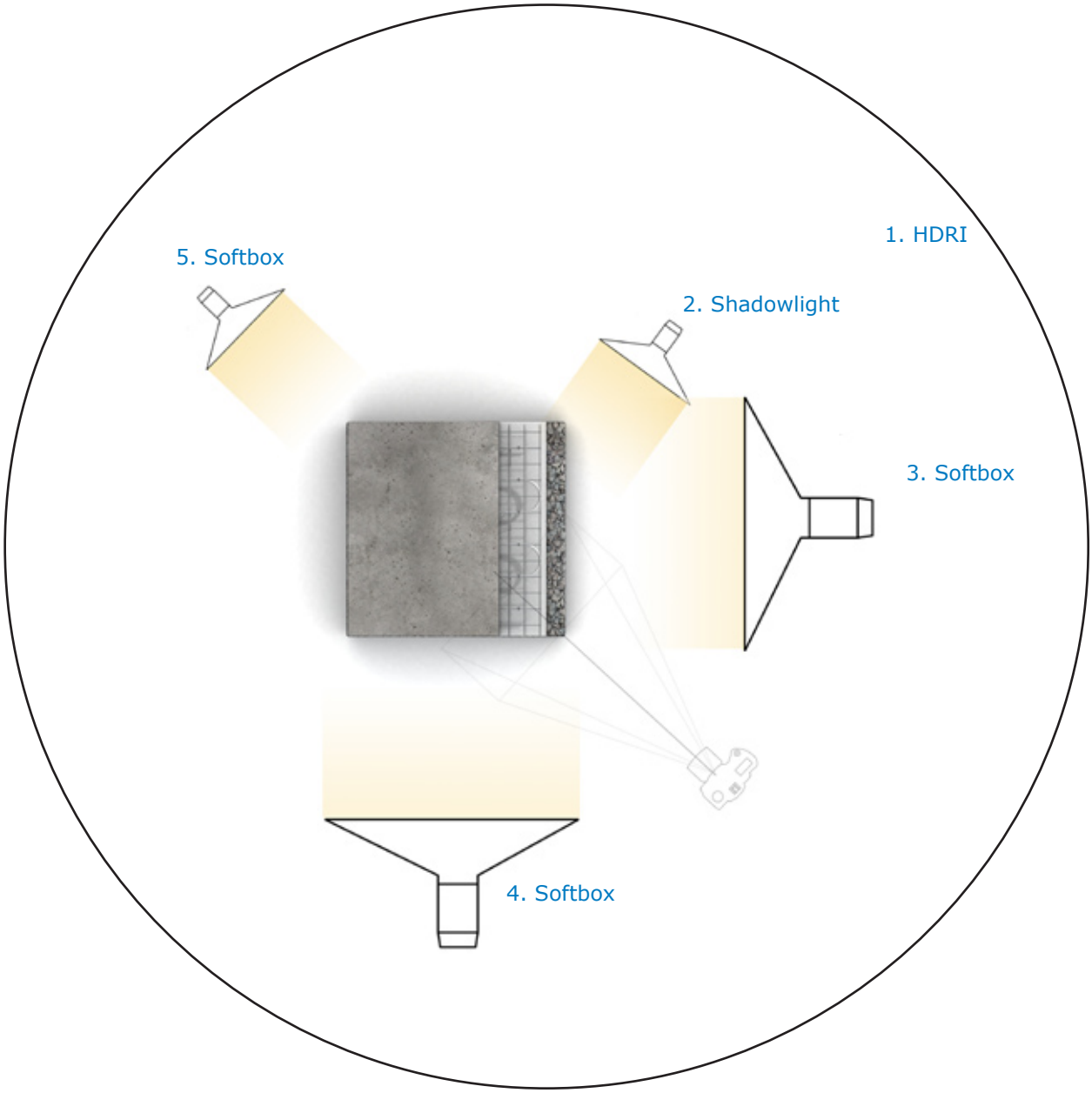
The central axis of the overall structure is shown with an angle of 23 degrees.



Single view Light settings

Light concept. Object-oriented to th right side

1.	HDRI	90%
2.	Shadowlight directional	60%
	Shadow - maps soft	1750px / 1750px
	Sample radius	6
	Bias	1 mm
	Parallel	30000 mm
3.	Softbox cgi	30%
4.	Softbox cgi	33%
5.	Softbox cgi	100%



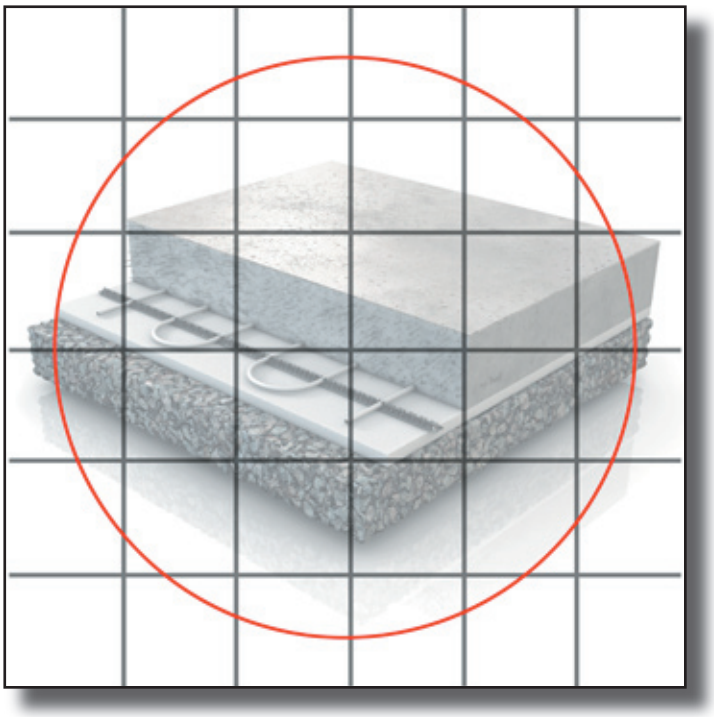
Example - oriented to the left side

- The camera blur starts in 2 directions. From the camera to the “viewer focussed elements”. And behind the viewer focussed elements to the background. The focus is always on the overall elements of the line.

Arrangement

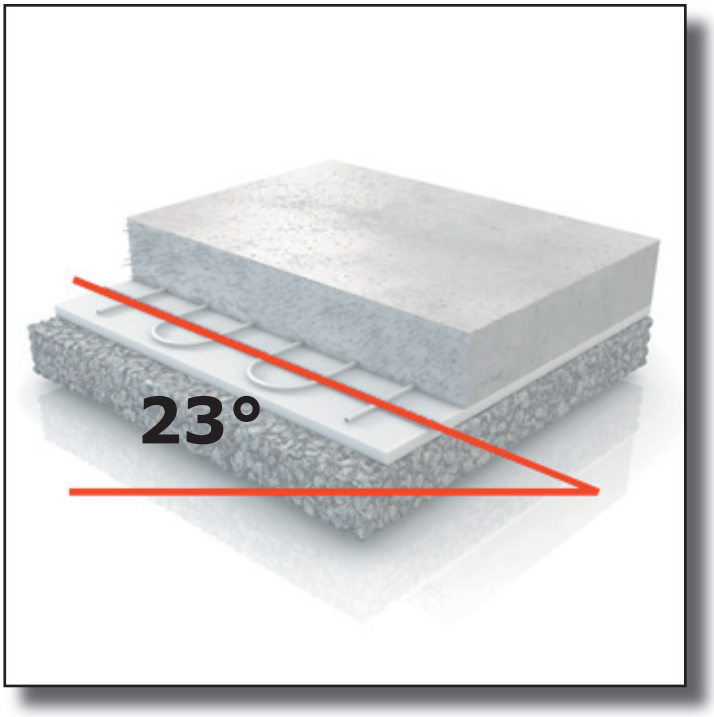
Picture composition

The system is shown in a circle as three vanishing point perspective.



Angular dimensions

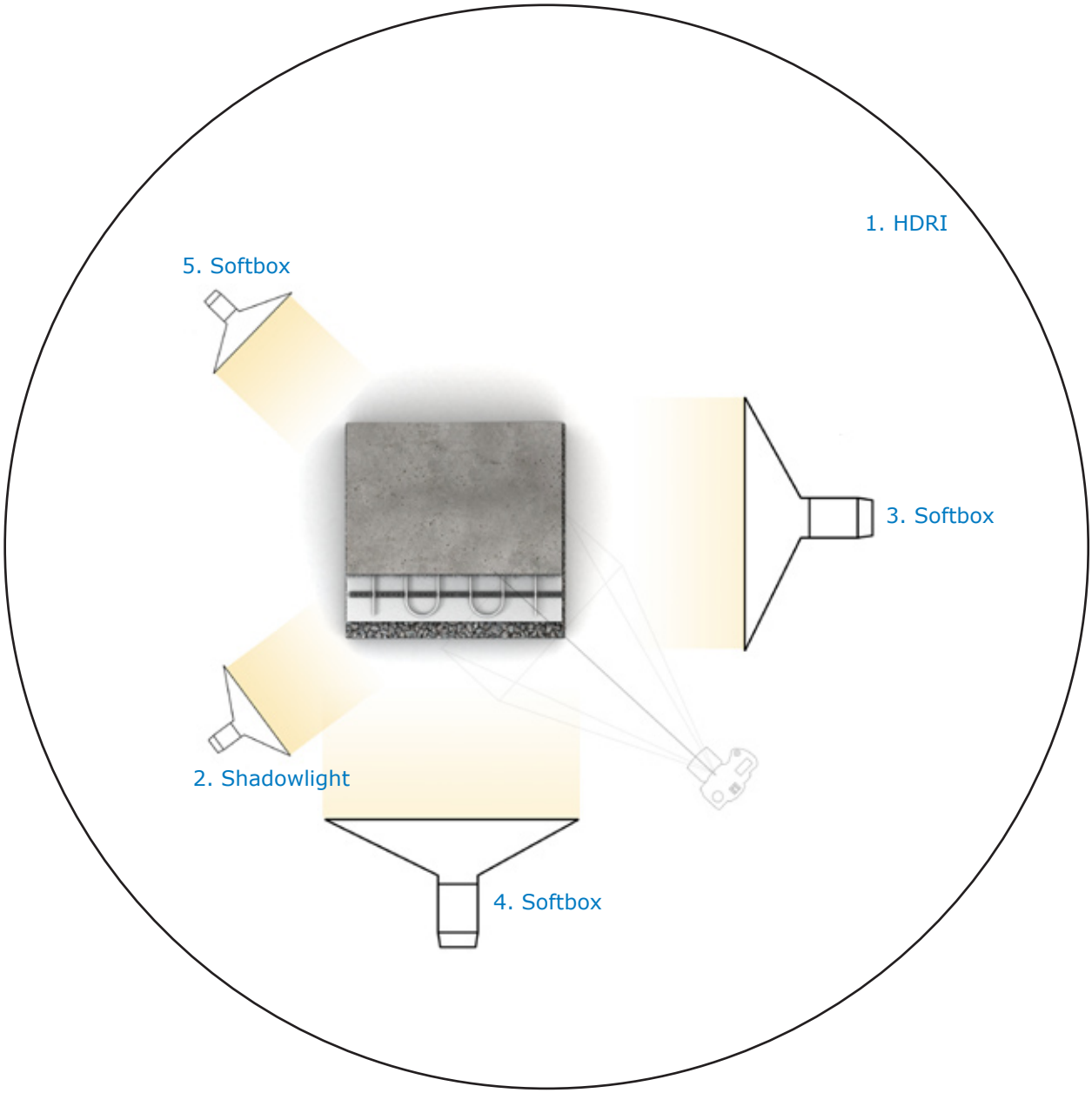
The central axis of the overall structure is shown with an angle of 23 degrees.



Single view Light settings

Light concept. Object-oriented to the left side

1.	HDRI	90%
2.	Shadowlight directional	60%
	Shadow - maps soft	1750px / 1750px
	Sample radius	6
	Bias	1 mm
	Parallel	30000 mm
3.	Softbox cgi	30%
4.	Softbox cgi	33%
5.	Softbox cgi	100%



Basic settings

Texture and shader

- For the use on Uponor websites, the texture and shader will be created and programmed in CMS Sitecore directly.
- In case of shown product logos: They appear in original position and size.
- It’s suggested to embed original pictures in creating a texture with mapings.
- The integration of different languages is easily possible.

Render settings

Renderformat	8000 pixel 8000pixel
Antialiasing	2x2 / 8x8
Samplimg 6	
Sampler Adaptiv / hight	
Shading 1%	
Ambient Oclusion Max	6
Global Illumination	Ci-Modus IC Stochastische Samples - Modus Quads
Intensity	100%
Gama 1	

Naming

- Name of the picture is the english system name with the name of the building/location.
  - Officebuilding-GeEn_1.tif , _2.tif ...
  - Officebuilding-GeEn-detail-1047800_1.tif , _2.tif ...
  - Studio-TABS_1.tif , _2.tif ...
  - Studio-TABS-detail-1047800_1.tif , _2.tif ...

Caption settings

Linies and text

- Lines, text and additional images can be edited directly in Sitecore.
- The following design patterns of Sitecore apply. Information to follow from Netzkern.

Additional images

- Additional images can be edited directly in Sitecore.
- The following design patterns of Sitecore apply. Information to follow from Netzkern.