

Your download includes four bitmap files as a maximum plus this explanation. These bitmap files are meant to create a **Material** of the block or slab selected by you, using your 3D software. These instructions assume that you have sufficient knowledge of the use of 3D software for the designing of landscapes to enable you to create a true-to-life representation of our paving blocks and slabs.

If the bitmap files are not used according to these instructions, this could affect the fidelity and quality of the eventual representation. At worst, it may produce a representation of a block or slab that we are unable to supply.

## Photorealistic representation

It is important to us that our products are represented correctly. All the paving blocks and slabs available for download from our Texture Inspirator were photographed under uniform diffuse artificial light in a controlled environment and captured in high resolution. To achieve a photorealistic rendering in your 3D software, you will yourself have to add lighting that matches the representation. This can be done using lighting software which can generally be added to your 3D software as a plug-in such as: **V-ray** ([www.chaosgroup.com](http://www.chaosgroup.com)) or **Corona** ([corona-renderer.com](http://corona-renderer.com)).

## Scale ratio

These bitmaps render an area of 9m<sup>2</sup>. Every high-resolution bitmap has a resolution of 4,500 x 4,500 pixels, with the exception of the 90° herringbone bond, which has resolution of 4,200 x 4,200 pixels, resulting in a rendering of 7.84m<sup>2</sup>. 4,500 pixels render a length and width of 3 metres (3,000 x 3,000 millimetres). For the 90° herringbone bond this means that 4,200 pixels render a 2.80 metre (2,800 x 2,800 millimetres) width and length. The scale ratio will be represented as a plane or box by most types of 3D software.

## File name

The file name includes a time stamp and product name, so that you can easily tell different downloads apart, for example:

[20191209\\_11h15m29s\\_SVI\\_Perlano\\_Giallo\\_Maronne\\_085\\_basket\\_weave\\_300x300\\_9m2\\_diffuse\\_map.jpg](#)

*date (year, month, day)\_ time(hour, minutes, seconds) \_ SVI \_ product name \_ type of bond \_ dimension \_ surface \_ type of bitmap*

## 3D software

The overview below shows the most commonly used types of 3D software and their degree of compatibility with the bitmap files in your download. If you are using other 3D software, please let us know.

3D software and plugins	diffuse	bump	normal	reflection	displacement
Autodesk 3ds-Max	✓	✓	-	✓	✓
V-ray	✓	✓	-	✓	✓
Corona	✓	✓	-	✓	✓
Maxon Cinema 4D	✓	✓	-	✓	✓
V-ray	✓	✓	-	✓	✓
Corona	✓	✓	-	✓	✓
Trimble SketchUp	✓	-	-	-	-
V-ray	✓	✓	-	✓	✓
Autodesk Revit / Autocad	✓	-	-	-	-
V-ray	✓	✓	-	✓	✓
Nemetschek Vectorworks	✓	-	-	-	-
Lumion	✓	-	✓	-	✓
Adobe Photoshop *	✓	-	-	-	-

\* Although it does have some 3D functions, Adobe Photoshop is in fact photo editing software, not 3D software. A diffuse map can be used to 'colour in' planes, whereby the users themselves must add the ratio, perspective, lighting and shade. The quality of the picture will match the skills of the user, but it will be a time-consuming exercise. 3D software, on the other hand, calculates all these parameters automatically for the user, and will always be preferable for achieving realistic representations. We can well imagine, however, that the use of 3D software may be limited by cost constraints. Other products are available in addition to the above-mentioned 3D software options. We have not specified them here because they are less suitable for rendering rural or urban architecture.

## Bitmaps

The names of the bitmap files may vary to some degree within the different 3D software packages. We have added a short description for the sake of completeness.

- **diffuse map** (this bitmap is a flat representation of the **Material** in the correct colour)
- **bump map** (this bitmap renders a suggestion of the superficial texture of the **Material** in shades of grey. Although depth is suggested, the image of the **Material** in your 3D software remains flat. The darker the shade, the more depth is simulated.)
- **normal map** (this bitmap represents a suggestive superficial fineness of the **Material** in RGB values. Depth is simulated, but the **Material** in your 3D software remains flat. This preserves performance during rendering. Some software packages use the normal map instead of a bump map.)
- **reflection map** (this bitmap renders the shiny elements in the **Material** The gloss value is represented by a hue ranging from white (full gloss) to black (no gloss).
- **displacement map** (this bitmap indicates the places where the shape of the **Material** must change in your 3D software. It also renders the height adjustment, including a hue that ranges from white (highest value) to black (lowest value). You can specify the reference plane in your 3D software, in other words whether **Material** is depressed or raised. This differs from one package to another).

## Rendering in 3D software

If all the bitmap files in a 3D software package are used correctly, this will result in a very realistic representation (rendering) of the **Material**. Please refer to the example provided below.

*No bitmap was used for the first picture. Only the diffuse map was used for the second picture. For the third picture, both the diffuse map and the bump map / normal map were used. The reflection map was added in addition to the diffuse map and the bump map / normal map for the fourth picture. These paving slabs show little reflection, which is why there seems to be little difference to the previous picture. Finally, all the bitmaps were used for the last picture. A texture taken from this Texture Inspirator was used for this example.*



*If you have any questions, please call us on + 31 (0) 800 - 555 55 54*