

LIGHTSTONE SCREENS

Introduction and specifications

Introduction

At **Dupont Lightstone** we've combined **light** and **concrete** to create a new intelligent building material that comes alive as it transports light through itself. It can transfer **daylight** into dark windowless rooms and can transform entire buildings into bright shape shifting sculptures. Perhaps most revolutionary, it even has the ability to produce a **live image** on its surface. We call it **Lightstone**.

Our technology is based on **concrete** and **fiber optics** and is a ground-breaking new type of **digital signage** that puts a live image directly on building surfaces like **floors, sidewalks, interior walls** or **facades**. It works by carefully positioned fiber optics embedded into the concrete which allows a live image or natural daylight to be transmitted through the material appearing directly on the concrete surface.



Lightstone is

- **Vandalism** and **weather proof** digital signage and lighting.
- **Aesthetic** signage and lighting that becomes a seamless, natural part of the building's architecture.
- Able to be used as a **floor** that you can walk across.
- Able to **surprise** because the viewer doesn't know that it's a screen until a live image appears out of nowhere.
- **Easy to maintain**
- **Competitively** priced.

The **Lightstone** can be used to build **brands**, show internal or external **information, advertising**, or **graphic light effects** both indoors and outdoors. **Lightstone** concrete screens in floors, facades and even pavements make live signage in places like hotels, airports, night clubs, shopping malls, corporations, science parks and conference centers a lot more interesting and applicable.

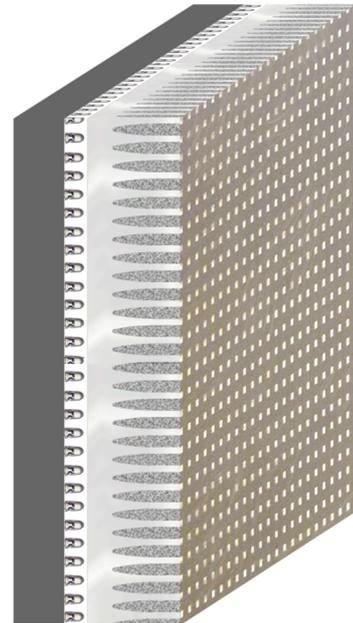
Lightstone Screens

Technology

Lightstone Screens work by embedded specially developed **optic light guides** into the concrete. This makes us able to transmit a live image through the concrete thus appearing on its surface. You might say that the screen is half concrete wall and half high tech digital signage. On the picture to the right a cross section of a **Lightstone Screen** can be seen.

Lightstone Screens are **LED** powered and consume very **little energy** while having a clear and bright image. The LEDs have a long life span and require only **little maintenance**.

The **pixel pitch** (distance between pixels) can be varied for different applications. In other words the resolution needed for a screen seen at close hand is different from a screen seen from far away.

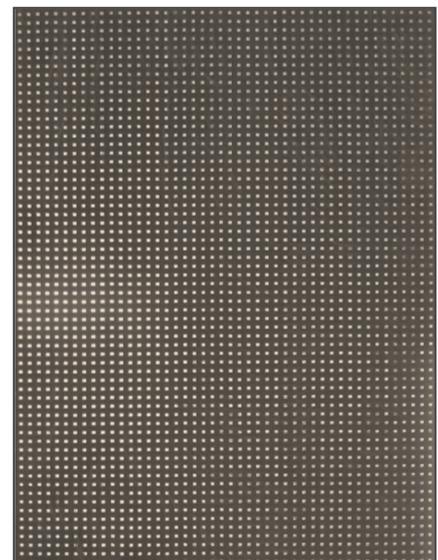


Surface

All products can be specially designed to suit **color** and **surface texture** of surround building material.

The surface can be **primed** so that graffiti is easily removable and rejects dirt.

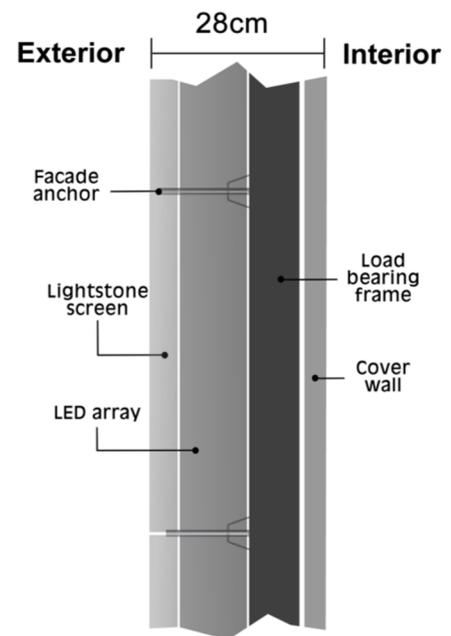
To the right is an example of a dark grey **Lightstone Screen**.



Installation examples

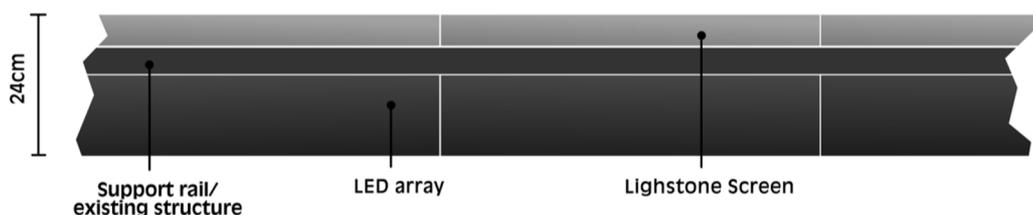
Digital signage façade

The **Lightstone** is on the exterior side of the wall, the so-called rain screen. The **Lightstone** takes no load but is fixed to the load bearing structure of the building. The space between the **Lightstone** and the load bearing wall is used for insulation. All electronics are installed on the interior side of the wall and finished with a cover wall which has lids for easy access to the projection units. The media façade can in most cases be constructed with a thickness of just **28cm**.



Digital signage floor

The **Lightstone** can also be dimensioned and designed specifically to suit a floor application according to load, surface finish and color. The **Lightstones** are fitted into an existing structure or into a support frame according to the building and the application. All electronics are installed underneath the floor and is accessible through the ceiling of the floor or basement beneath. The thickness of the floor deck can be made as thin as **24cm**.



Specifications

Format

Height x width: from 50x50cm to infinite

Thickness: from 2,5 to 5cm

Mechanical

Compressive strength: Class 1 (>35MPa)

Weight: Approx. $2100\text{kg/m}^3 = 120\text{kg/m}^2$

Montage

With facade anchors, e.g. Halfen-Deha's body anchors on load bearing concrete wall or steel frame.

See it live

You are more than welcome to contact us to arrange a demonstration of our screens.

You can also see more about Dupont Lightstone's **Lightstone Screens** on www.dupontlightstone.com

Conditions of delivery

Time of delivery is normally 90 days from order confirmation and payment of a deposit of 50% of the project price.

If a bank guarantee for the total project price is presented this may replace the deposit.

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Enter the digital stone age at
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