



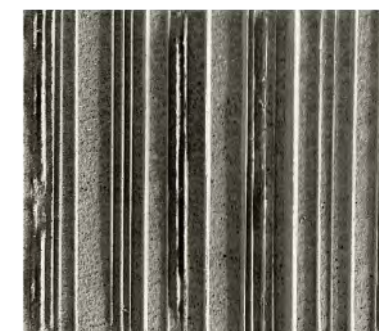
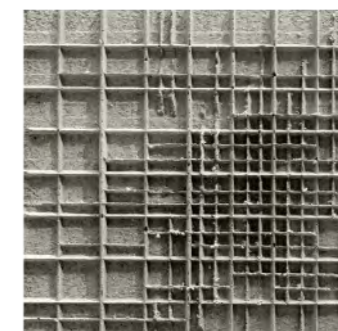
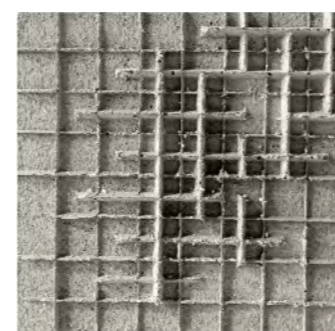
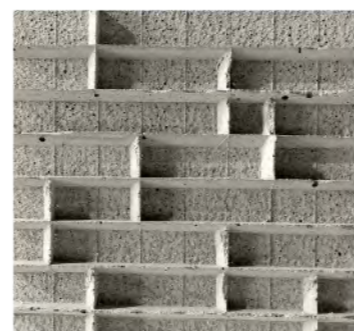
MATERIALIZING ENERGY

In the century that we live in, we are obliged to think about energy. It therefore is subject to discussion in many different domains. Concrete, as a construction material, has proved its abilities to **store energy** and transfer it back through radiation. But who will notice? In most of people's eyes, concrete remains a **passive** material that doesn't interact with its environment. The unemotional feeling and coldness it represents makes the concrete an **unattractive** material for many people. When exposed, concrete can evoke a very hostile and harsh environment within the public sphere. The question could then be; how can we introduce a new way of perceiving the concrete and make its energy properties be understandable for the public?

By materializing the energy transfer and making its **interaction** with its environment visible we try to introduce the concept of concrete-energy to the public. The idea of "interactive concrete" shows its ability to be an **active** and responsive material and introduces a complete different perception of the material. By being a **source of light** the concrete shows its ability to store and transfer energy.

Energy-conscious-concrete can be used in public space to **illuminate** the streetscape while softening the urban condition. By adding a **phosphorescent** powder as an additive in the concrete mixture, the concrete becomes a source of illumination for public spaces during the night. The advantages are multiple: no need for external energy supply, smooth distributed lighting and long life cycle for the lightings are some of these.

Experimenting with the surfaces and textures are interesting for its perception changing. The **textured** concrete surface is highly **tactile** during the day, making the concrete playfully interesting. At night, as the texture partially flattens through the internal lightning, the gradient in texture will intensify the light pattern, making the concrete surface even more appealing.



texture experimentations; densifying the light pattern

fading texture with internal lighting



1 2

