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# green energy trees

architecture landscape art

tonkin liu, 22.08.22





**Daytime light**

**Nighttime light**

**Breathing light**

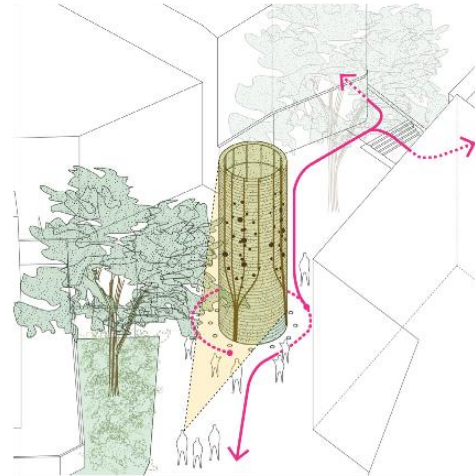
Dynamic ever-changing light on a screen with maximum perforation turns it from super transparency to opacity, with a veil of light to a sequence of programmed lighting at night. Reflecting the changing light of the sky, sunlight, movement of people, the warm glow of the inside screen colours, the new community beacon creates a new hub for learning about community and energy.

**The Green Energy Tree Thermal Store**

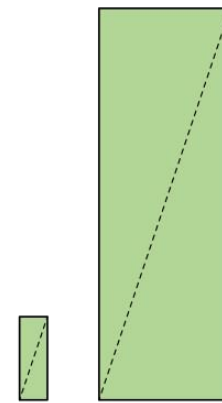
Inspired by the much loved tree at the heart of the site, our proposal, the **green energy tree**, raises the thermal store into the air, to optimise transparency, visibility, and street safety. Three columns split into twelve branching supports. Cladding the tank is mirror polished stainless steel sheets, lighting and a perforated, laser-cut, corrugated steel screen with Dichroic powder-coated paint. Fresh green on the outside, on the inside the screen is a gradient of colours to educate people on the temperature gradient in the thermal store, visible as people look through the perforations and see the mirror. To host seasonal community gatherings, a soft, meditative “breathing light” rhythm programme is developed in consultation with residents.



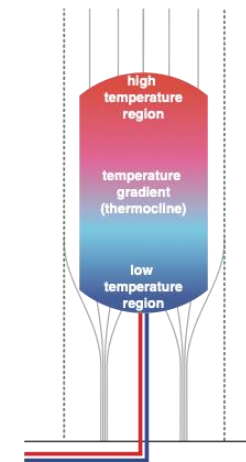
**Community energy network**



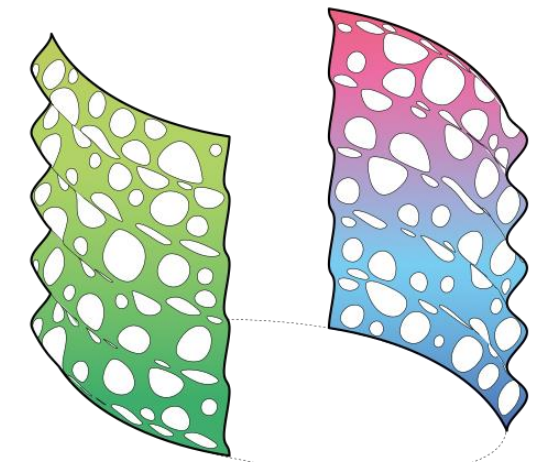
**Community beacon**



**Energy Tree Grenfell Tower  
Community symbol**



**Temperature Gradient  
Educational tool**



**Outside screen colours Inside screen colours  
Informative and interactive tonkin liu**



## Green Energy Trees

Notting Dale Heat Network

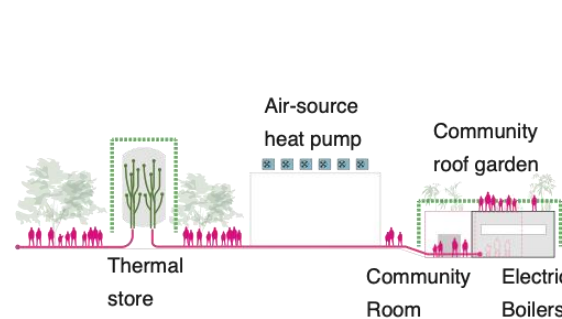


## The Floating Island Renewable Energy Centre

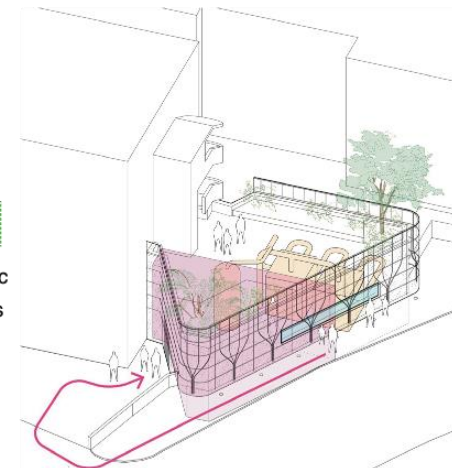
Camelford Walk Boiler building is refurbished with the new community centre at its roots and the existing community garden at its tree-top, and a window that invites views into the inner workings of the new energy centre. Access to the community room is through an improved landscape on the lower level. Through responsive inner and outer lighting, the “net-curtain effect” enables the screen to appear and disappear. The delicate structural artwork is responsive, informative, and interactive, using minimal material and integrated with gentle lighting. Together with the thermal store and the landscape, they create a holistic, integrated community symbol of hope that tells a story of positive growth and of a shared future with affordable and renewable energy.



Community energy hub



Landscape of energy and people



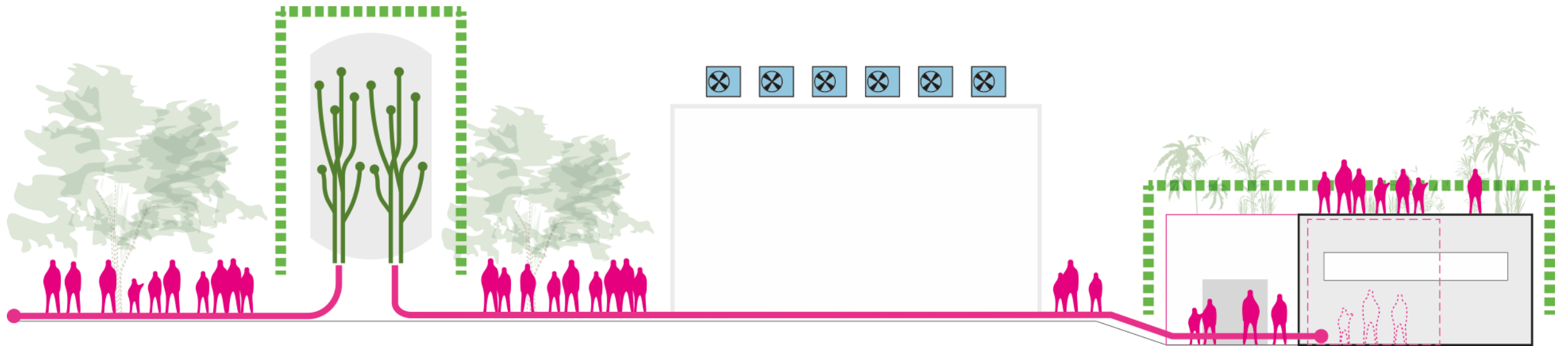
Community centre & garden



District Heating and Eating



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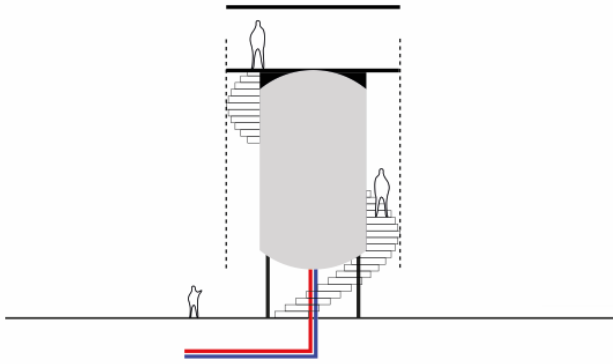


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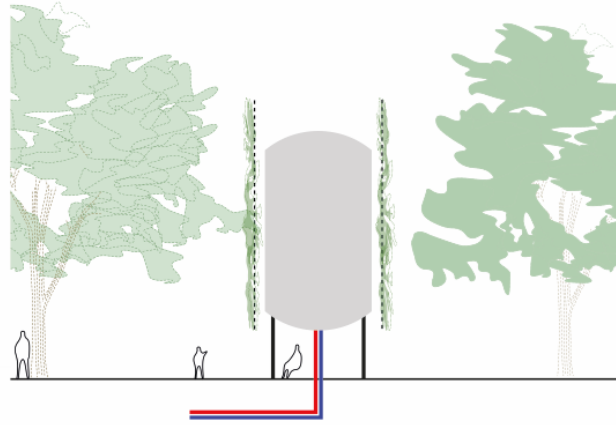
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The Watchtower



- + visitors could see air source heat pump array
- Health and safety risk to allow public access
- Public access may require full time monitoring on site, which is unfeasible

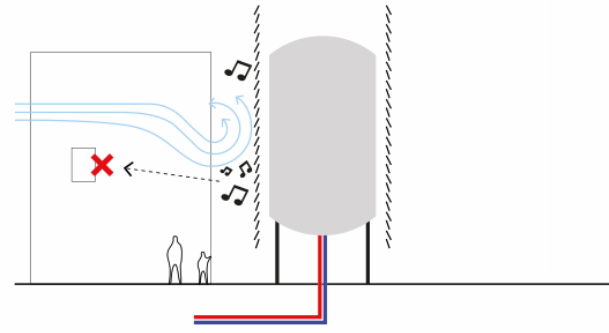
The Climber



- + green coverage welcomes visitors
- difficult to maintain plants
- plants will blend in to surrounding trees from afar so will not be visible



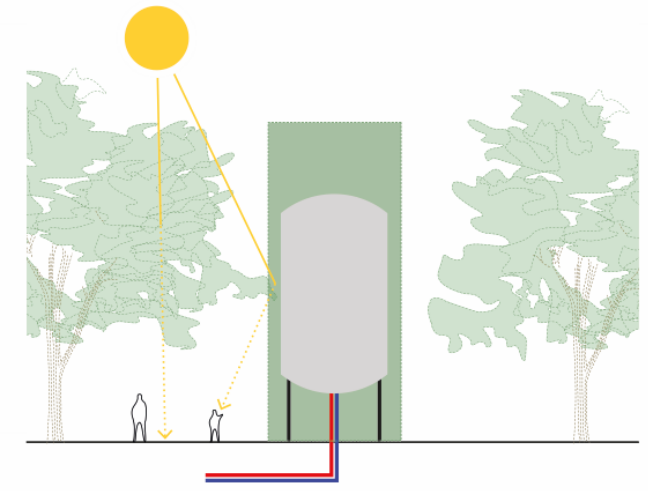
The Windchime



- + engaging with the natural elements
- sound unable to be controlled
- too close to nearby residential properties



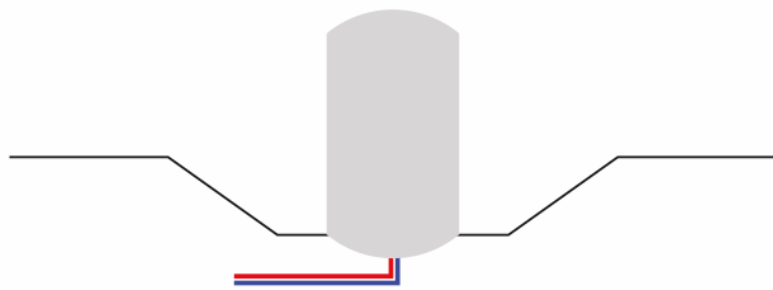
The Tree of Light



- + Engages the public through natural and artificial light
- + Extends existing line of trees
- + Could be educational tool explaining thermal gradient inside

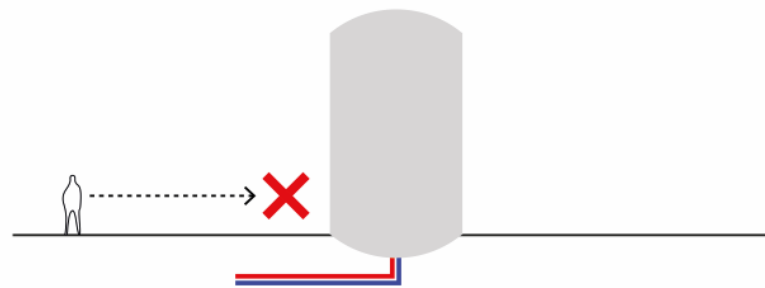


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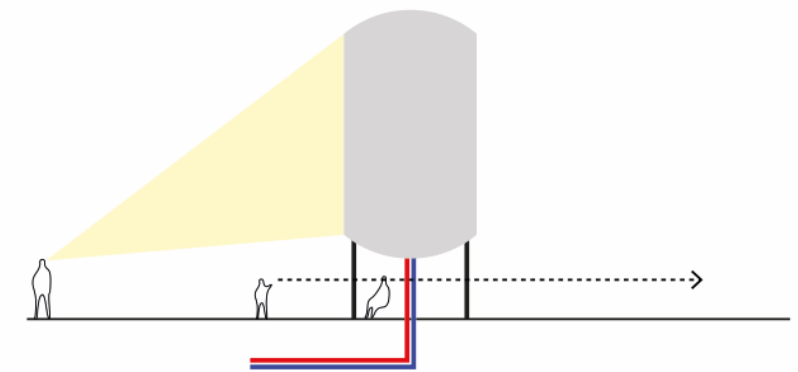
+ creates public space hub

- expensive to excavate
- not a visual way marker



+ simple to place on ground

- visually obtrusive



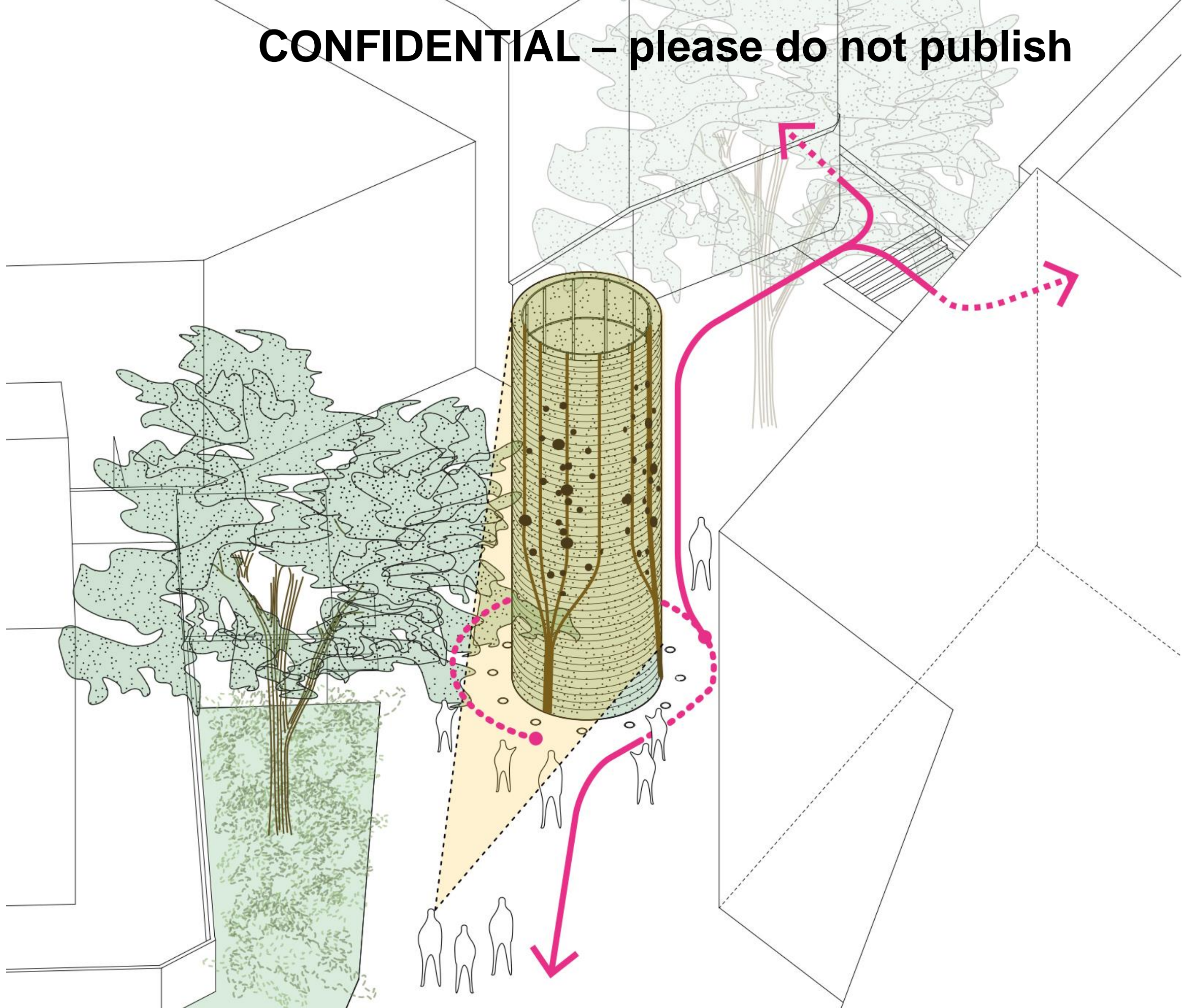
+ visual way marker  
+ potential to experience from below

- structural challenge to lift above ground



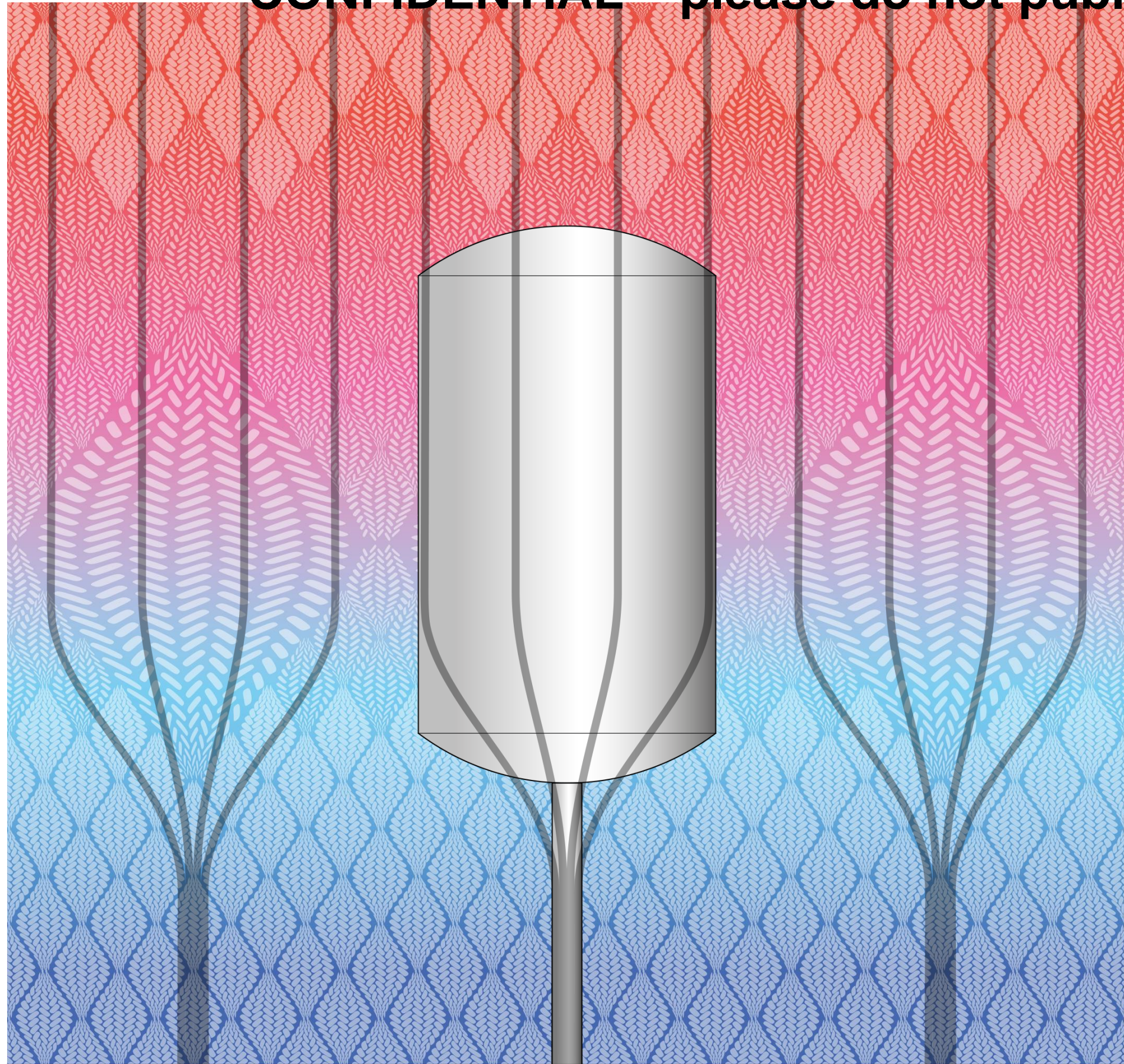


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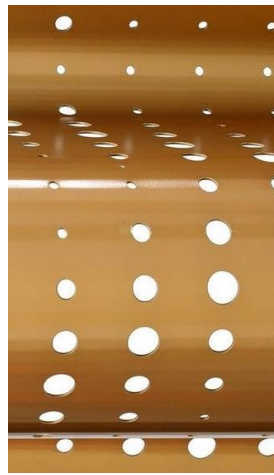
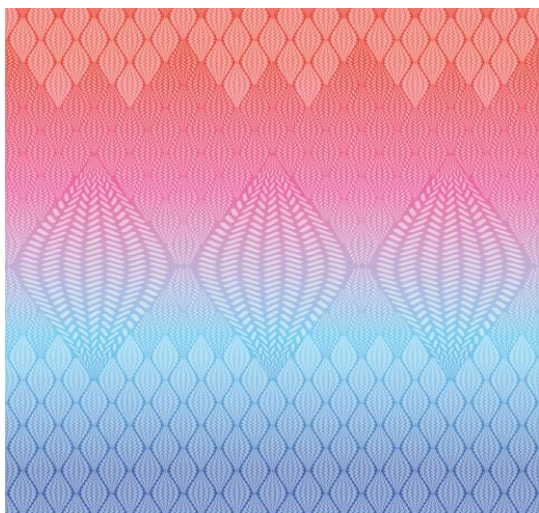
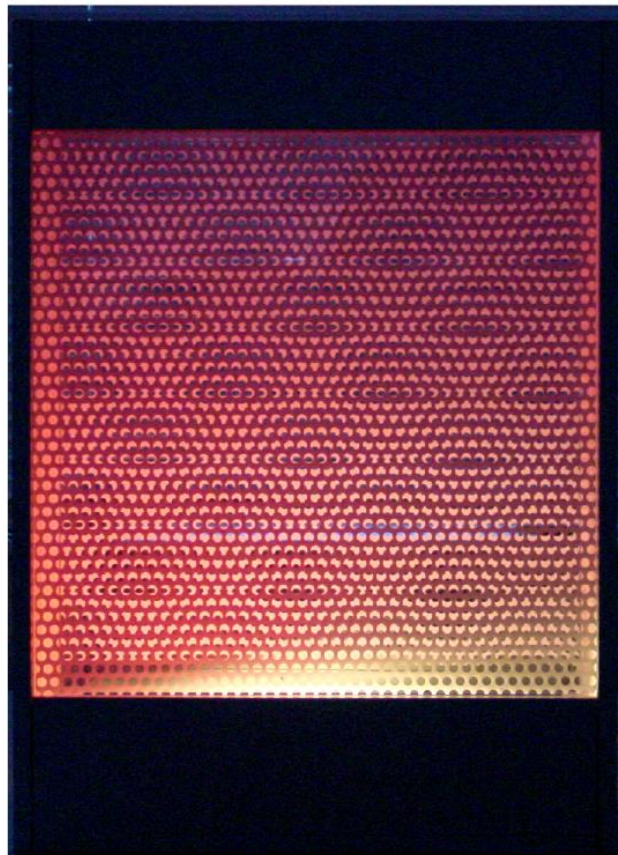
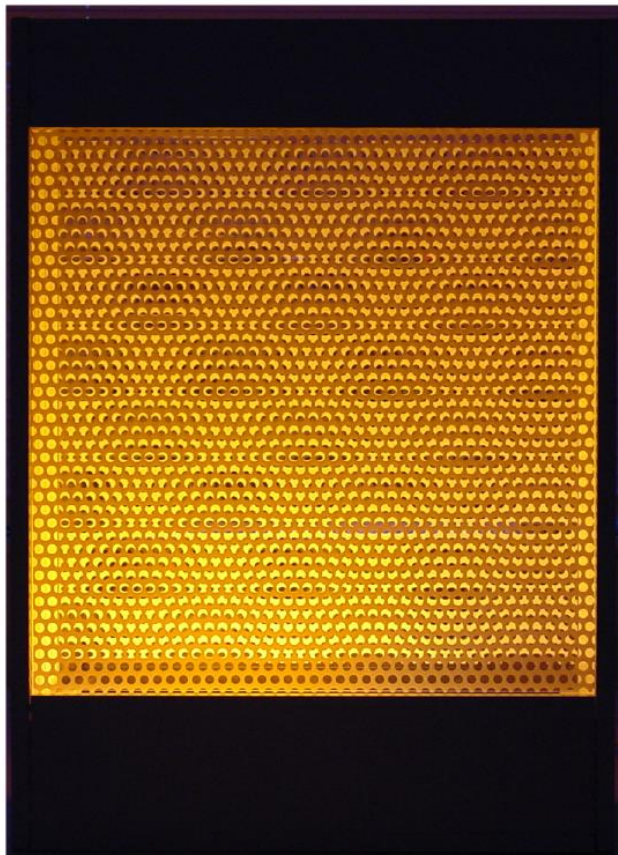
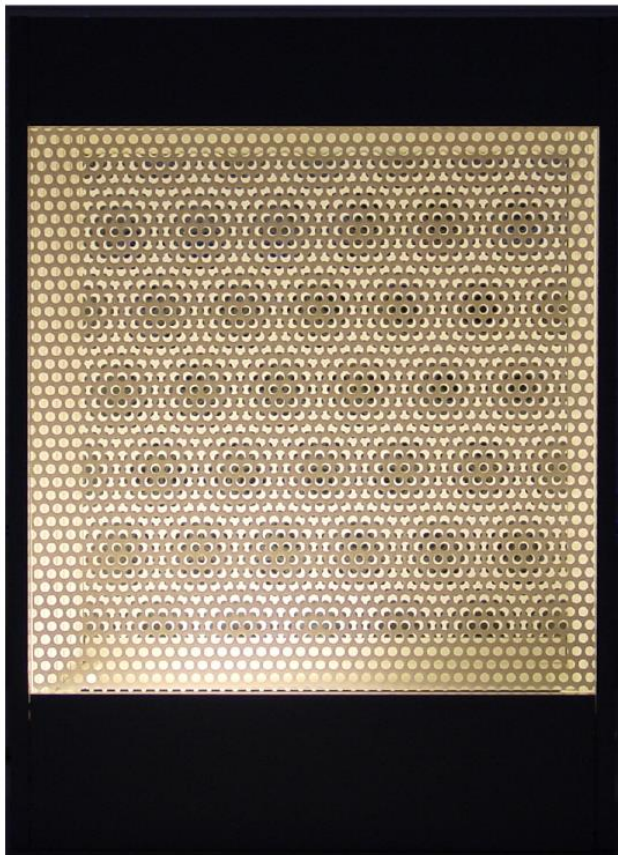
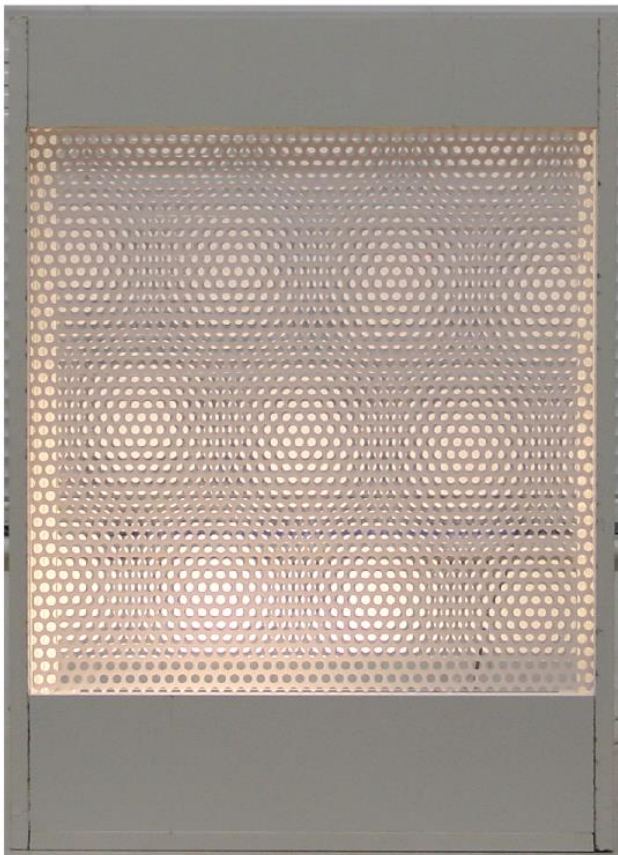




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Thank you

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