2.1.2 - Mies as Model

The next stage in the inquiry looked at the possibility of using Miesian buildings as models, asking if it was possible to convey the quality of weightlessness that is so often reported of the experience of Miesian architecture?[3] Realising the most immaterial component of Miesian architecture is the grid led to the idea of building just the grid only. The question of how to make a grid, in three-dimensions, out of as little material as possible led to the first experiments with embroidery thread, (at that stage in the inquiry referred to as cotton). Gravity is a problem for the three-dimensional grid made from thread, a support is necessary. The support performs two functions. First it serves as an apparatus for measuring and locating points in space, second it maintains the shape of the grid. Foamboard is a composite material consisting of a polyurethane core, sandwiched between two layers of thin card. The material is light and rigid but not brittle, it is easy to punch small, relatively clean, holes through foamboard (in those days there were no laser cutters to do the cutting and hole-punching work for the researcher). Because of the card surface it was easy to mark setting-out lines on foamboard and it was easy to cut. The grid was made by drawing thread through a network of holes, pierced into panels of foamboard and held taut in the grip of a sharp incision cut into the vertical members of the foamboard armature that gave stability to the holepanels.

The first Miesian work to serve as a model was the 860-880 Lake Shore Drive Apartments, Chicago, 1948-51. The cadence of the grid was extrapolated from a one-to-five-hundred scale plan and section of Mies' design. The design of the foamboard support consisted of two components, the holepanels and a framework of vertical and horizontal brackets, referred to as 'stiffners.' Some but not all stiffners were sliced with a rhythm of fine incisions, corresponding to the rhythm of the holepanels. Because the foamboard yields, the incisions were sufficient to hold the thread taut. Prior to fabrication an electronic model of the Lake Shore grid and support was produced, this served two practical purposes. First it could be used to generate cutting and hole punching templates for the holepanels and stiffners, second it could be used to generate a coloured ground. The coloured ground was pasted to the inner face of the holepanels, the Lake Shore model was given a very dark grey, almost black, lining and was sewn in a pale blue thread. The thread had a light sheen to it, which meant that sometimes it seemed to radiate, not blue, but silver or white.

The second Miesian work to serve as a model was the Seagram Building, New York, 1954-58. The production process for the Seagram grid was identical to that of Lake Shore, but the form and the colours were different. The lining of Seagram was a deep olive green and the embroidery thread was gold.

The third Miesian work to serve as a model was the Office Building, Westmount Square, Montreal, 1965-68, this grid came to be known as Marilyn, her cadence was extrapolated from a one-to-two-hundred scale plan and section of Mies' design. Unlike Lake Shore and Seagram, Marilyn was sewn into an unlined support made from black foamboard. Her colour scheme was not chosen in order to emulate the aura of the original Miesian work, rather it was chosen for the sake of the colour itself. Although she had highlights of white, pink, and honey blonde, Marilyn was primarily red. As with Lake Shore and Seagram, there was both a Marilyn made of thread and an electronic Marilyn, made in the computer.

The fourth and final Miesian work to serve as a model a repeated the Seagram model, only the cadence of this fourth model, like that of Marilyn, was extrapolated from a one-to-two-hundred-scale plan and section of Mies' design. The model came to be known as Chrystophene. Like Marilyn, Chrystophene was sewn into a black, unlined support and her colour scheme, primarily green, was chosen for the sake of the colour. As with all the other models, there were two Chrystophenes, one made from thread the other electronically, in the computer.

Because they were built to a larger scale, Marilyn and Chrystophene were much bigger than the earlier Lake Shore and Seagram grids and as a result the specific AIR Grid effects were clearer, much bolder. With the earlier grids there was a lingering tendency to read them as representational, not only because of the choice of colour scheme but also because the original lift shafts were represented in the grid. One of the saddest moments of the research was the demise of thread-Marilyn and thread-Chrystophene. Unfortunately the support frame for both grids was inadequate to hold the lattice in tension and they lost their shape. All that remains of them today is a number of images taken with a digital camera. In order to sustain three-dimensional grids on the scale of Marilyn and Chrystophene the support structure needed to be reinforced either with more, or with deeper, stiffners.

The electronic grids served two purposes, one practical, the other experimental. First they were invaluable as part of the design and fabrication process for making the thread grids. Second, they could be used to generate perspective views inside the computer, which could be compared to the experience of looking at the thread grid in 'real' space.

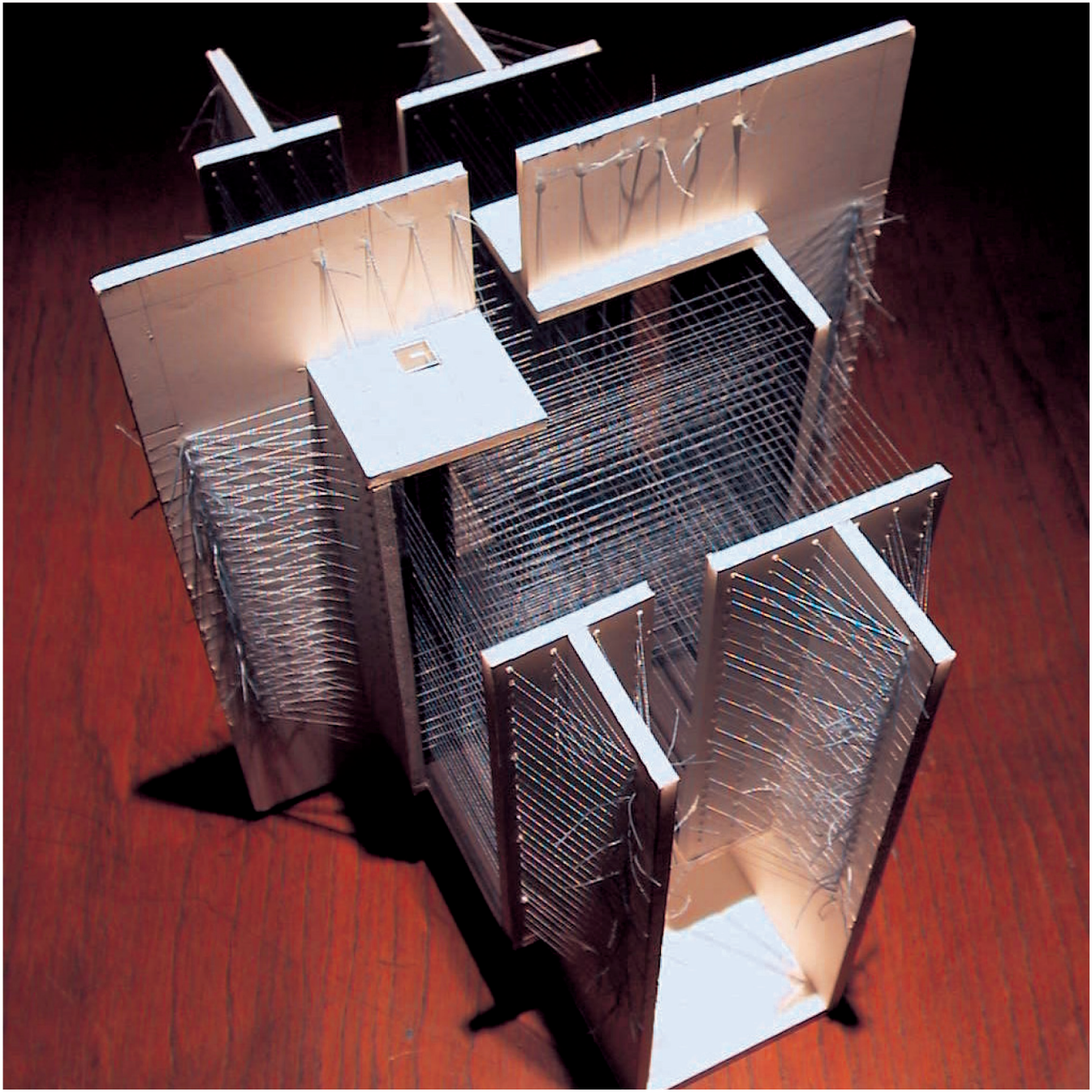
Although the electronic grid could not emulate the lustre and the effects of light and shadow of the thread grid, it could reproduce another, perhaps more striking effect, this being the effect of change. With the electronic model the space of the lattice is virtual, there is no gravity in computer space and hence no need of a support

to hold the lattice in place. This meant that in the views of the electronic grid the support could be taken away. In removing the support it was possible to emulate views of a purely optical, colour grid. And with the removal of the support one of the three existential moments of the thread grid was removed too, that being the first moment, where living being attends to the support, rather than the grid. With the first moment removed the third and second moments could be studied more carefully. Attending to the existential conditions of the electronic grid revealed an additional moment, somewhere between the second and the third moments of the thread grid. In the additional moment the computer's virtual camera captures the grid as a hybrid of both parallel planes and a misty volume of colour, the relative proportions of each depending upon the direction and angle of the camera. The absolute stillness of the virtual camera views cannot be experienced in 'real' space, where living being is constantly animated by desire, as their living eyes scan back and forth.

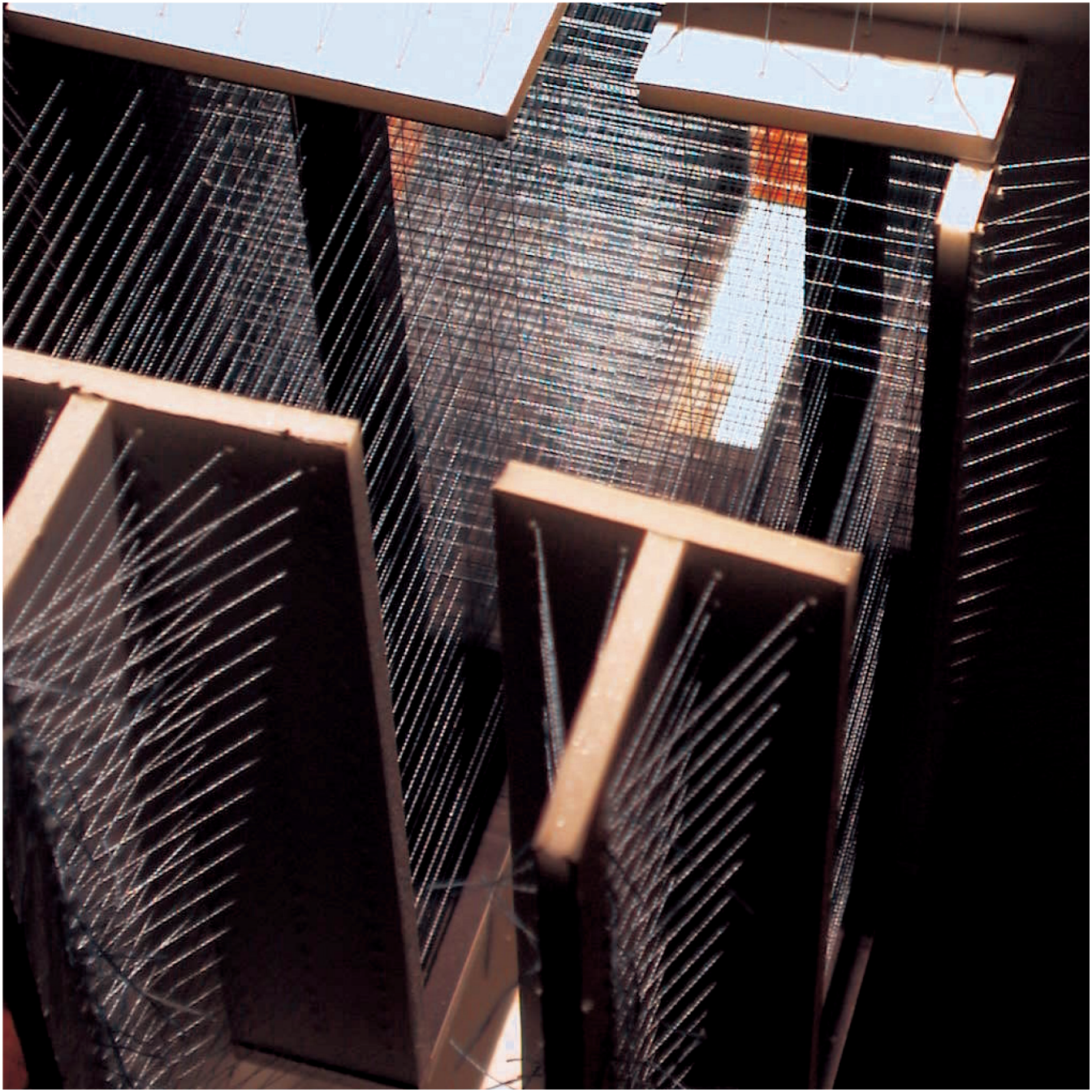
By the same token it is not possible for the computer to replicate the animated desire of living being as the creature moves about its environment, This is because virtual animation, whether produced by electronic or photographic means, cannot reproduce the feeling of immediacy that characterises lived space. Virtual animation might be able to simulate movement but it cannot replicate the exact psychodynamics of AIR Grid experience in lived space. When living being watches any animation they are, of course, experiencing movement, but what actually moves are the film stills, the apparent movement of objects in the film is an illusion.

There is in fact no medium in which it is possible to capture what it is actually like to really look at an AIR Grid. All the images documented in this thesis are total failures in that respect. The thesis images serve merely to document and catalogue the process of research and development, to illuminate ideas about the grids, but they cannot substitute for AIR Grid experience in lived space. For this reason it is essential for anyone who is interested in AIR Grid to visit an exhibition of AIR Grid artefacts whilst studying the thesis.

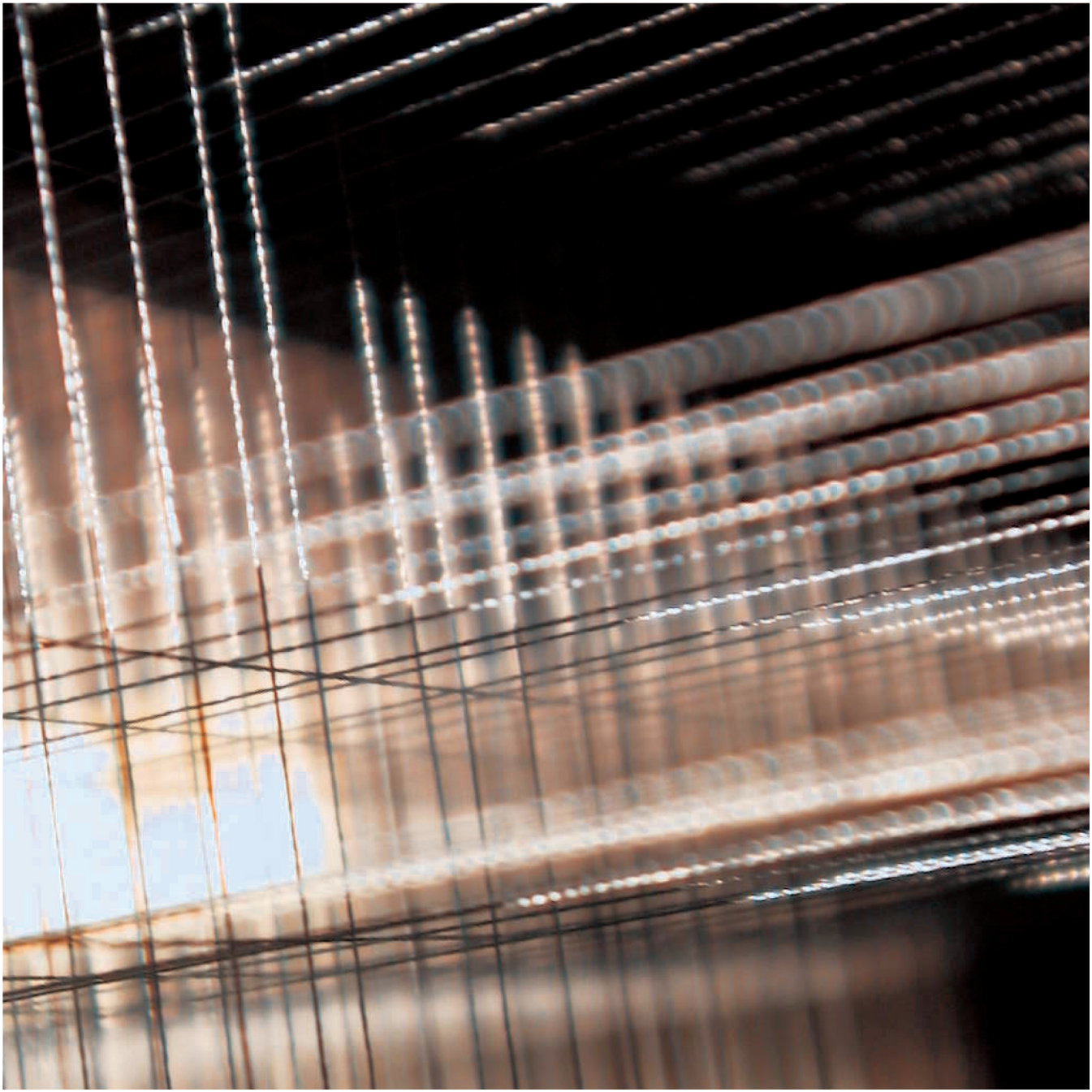
LAKE SHORE, model, view, foamboard, embroidery thread & inkjet print, approx., 25 x 33 x 28 cm



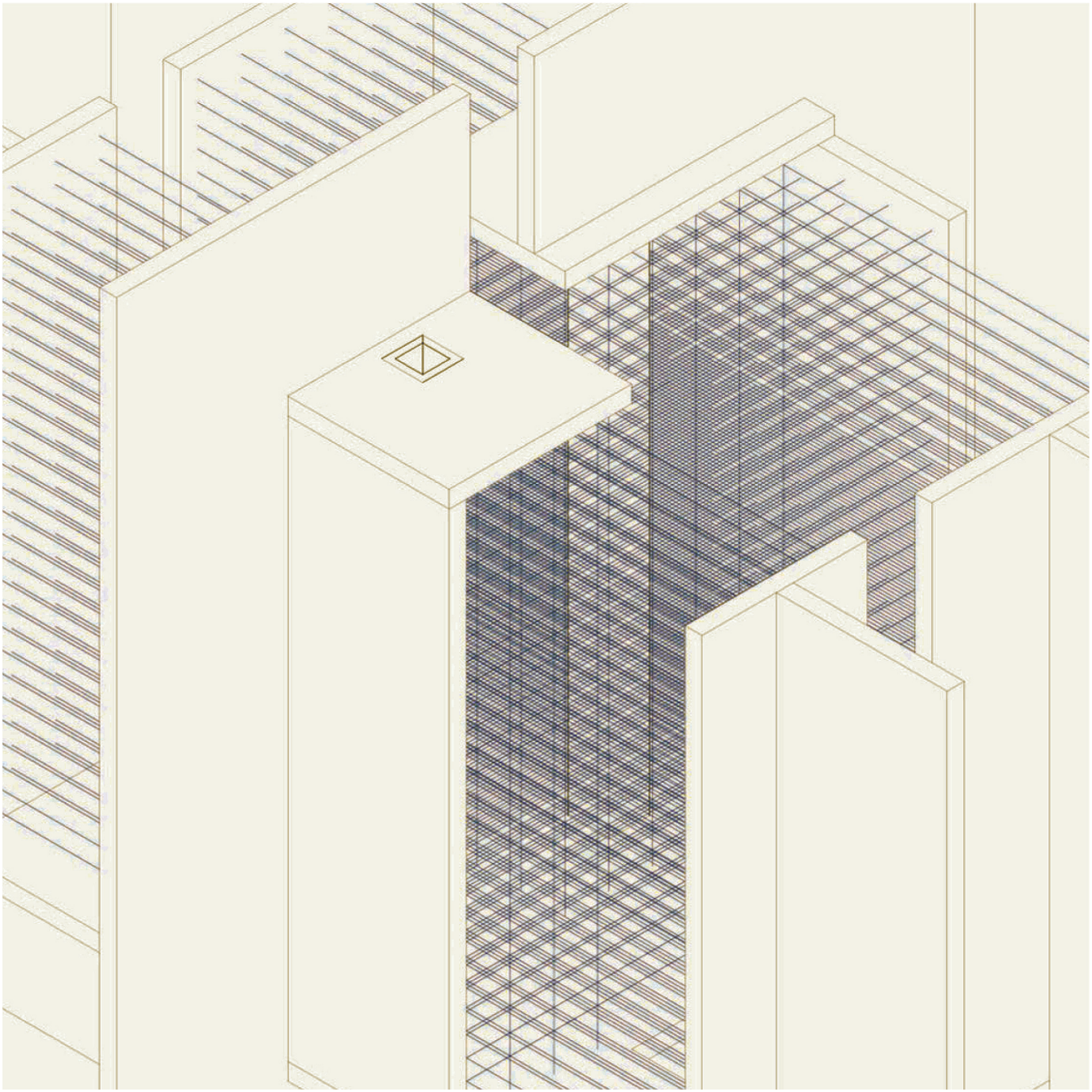
LAKE SHORE, model, interior view, foamboard, embroidery thread & inkjet print, approx., 25 x 33 x 28 cm



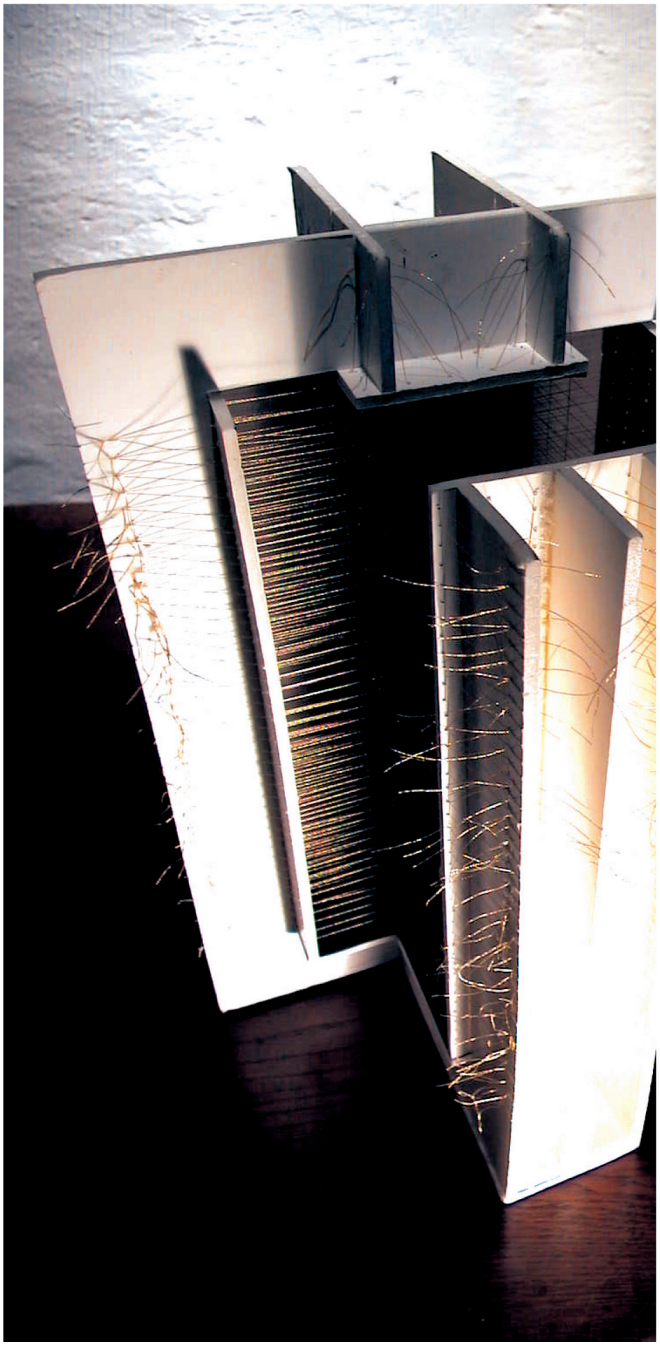
LAKE SHORE, model, detail view, foamboard, embroidery thread & inkjet print, approx., 25 x 33 x 28 cm



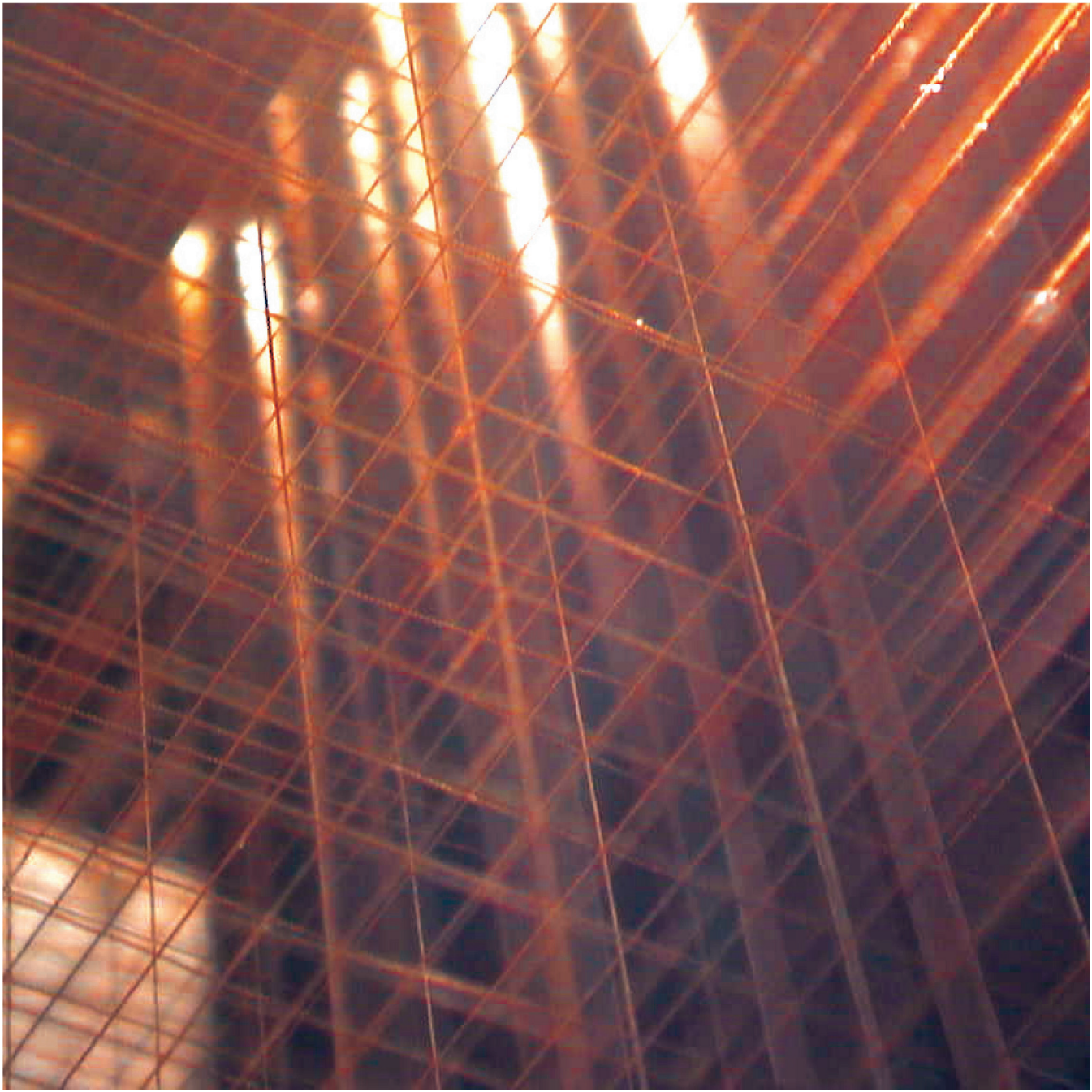
LAKE SHORE, electronic model, view



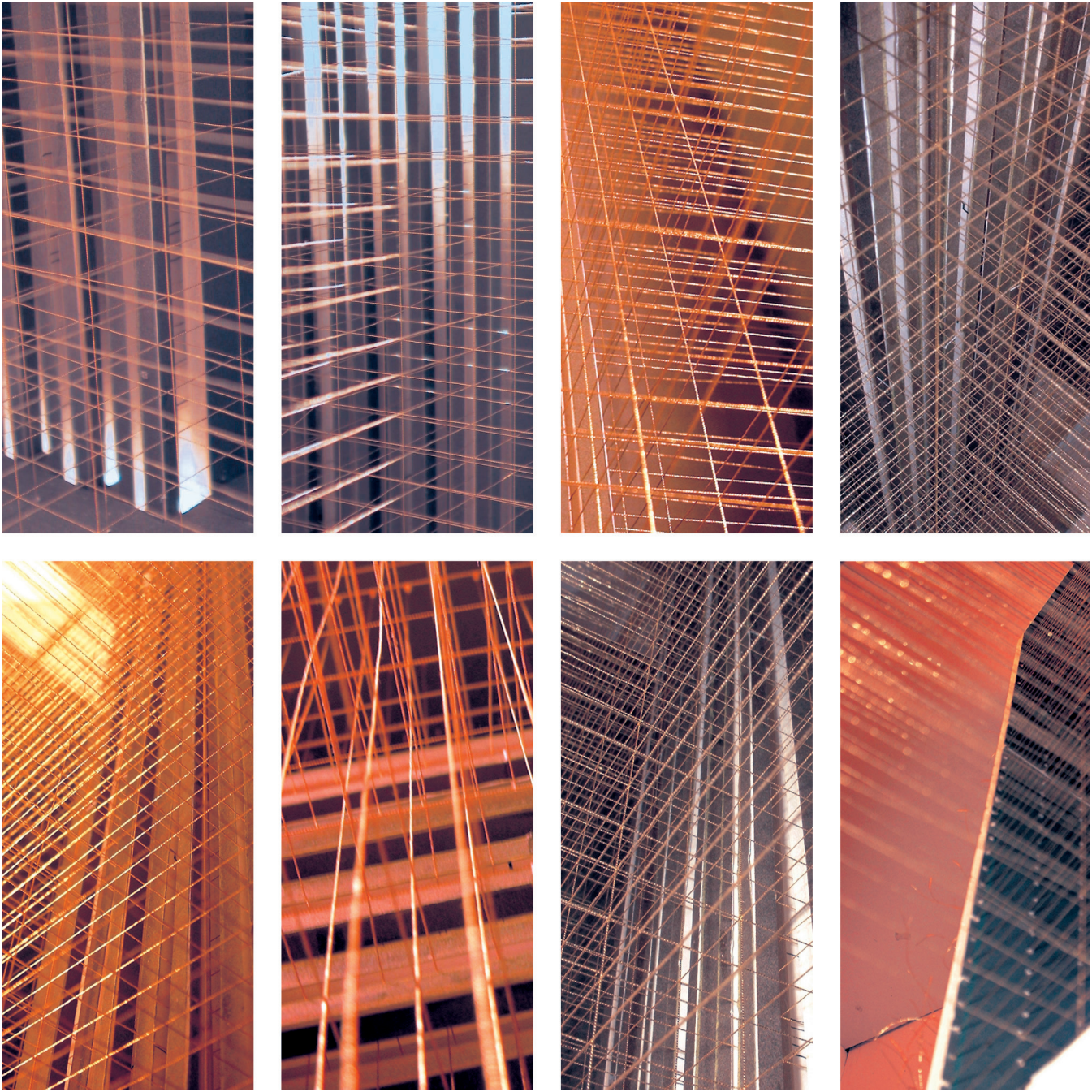
SEAGRAM, model, two views, foamboard, embroidery thread & inkjet print, approx., 25 x 30 x 44 cm



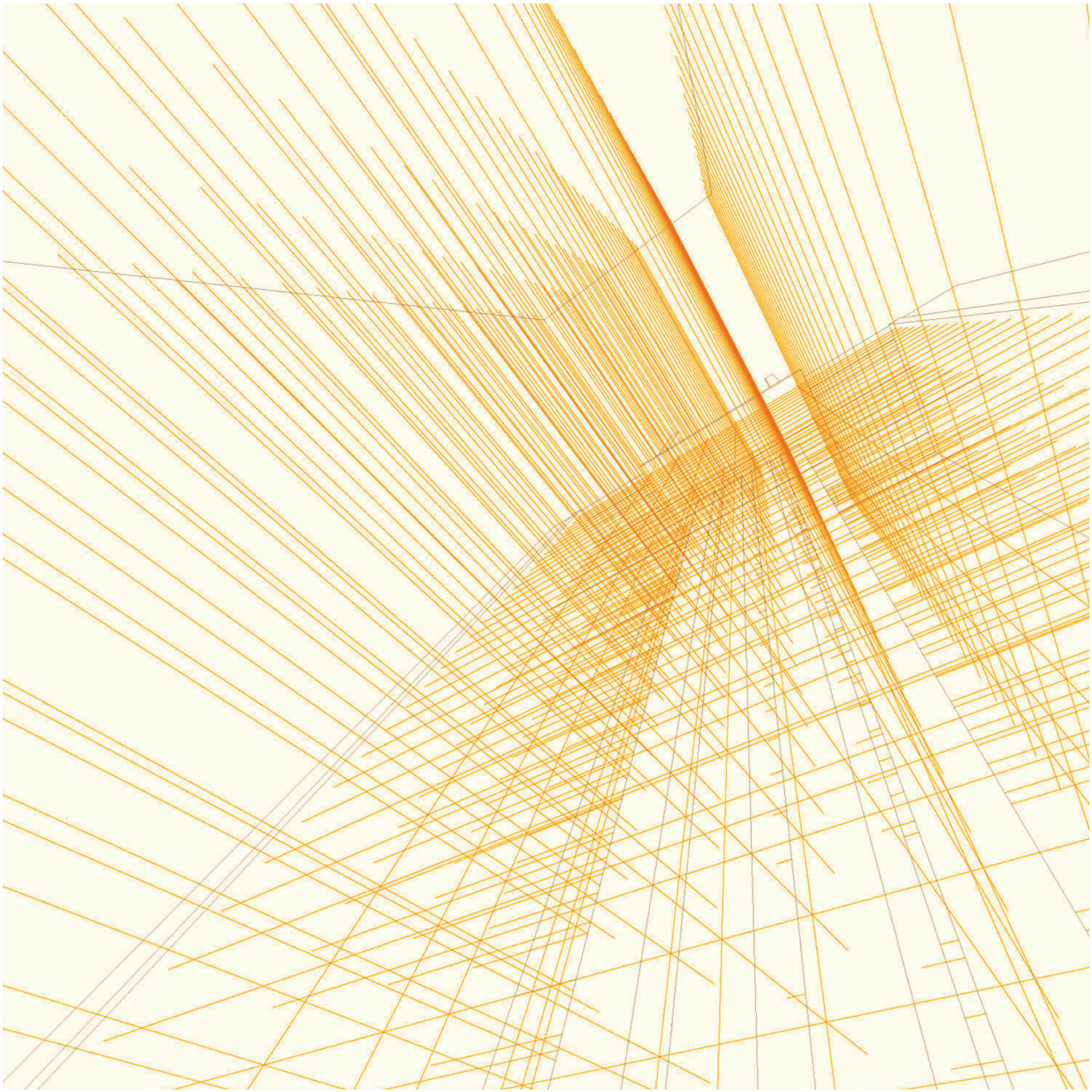
SEAGRAM, model, interior view, foamboard, embroidery thread & inkjet print, approx., 25 x 30 x 44 cm



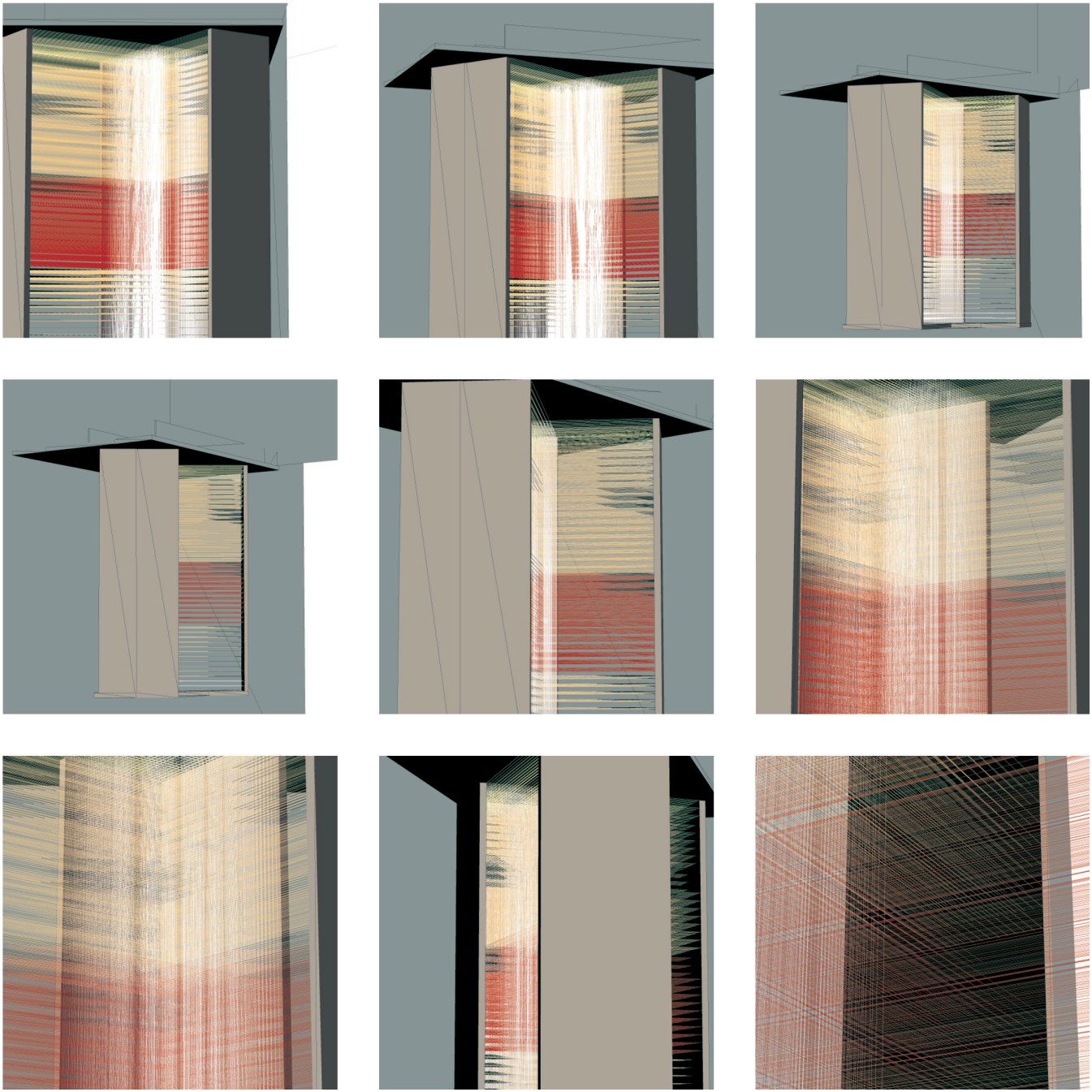
SEAGRAM, model, detail views, foamboard, embroidery thread & inkjet print, approx., 25 x 30 x 44 cm



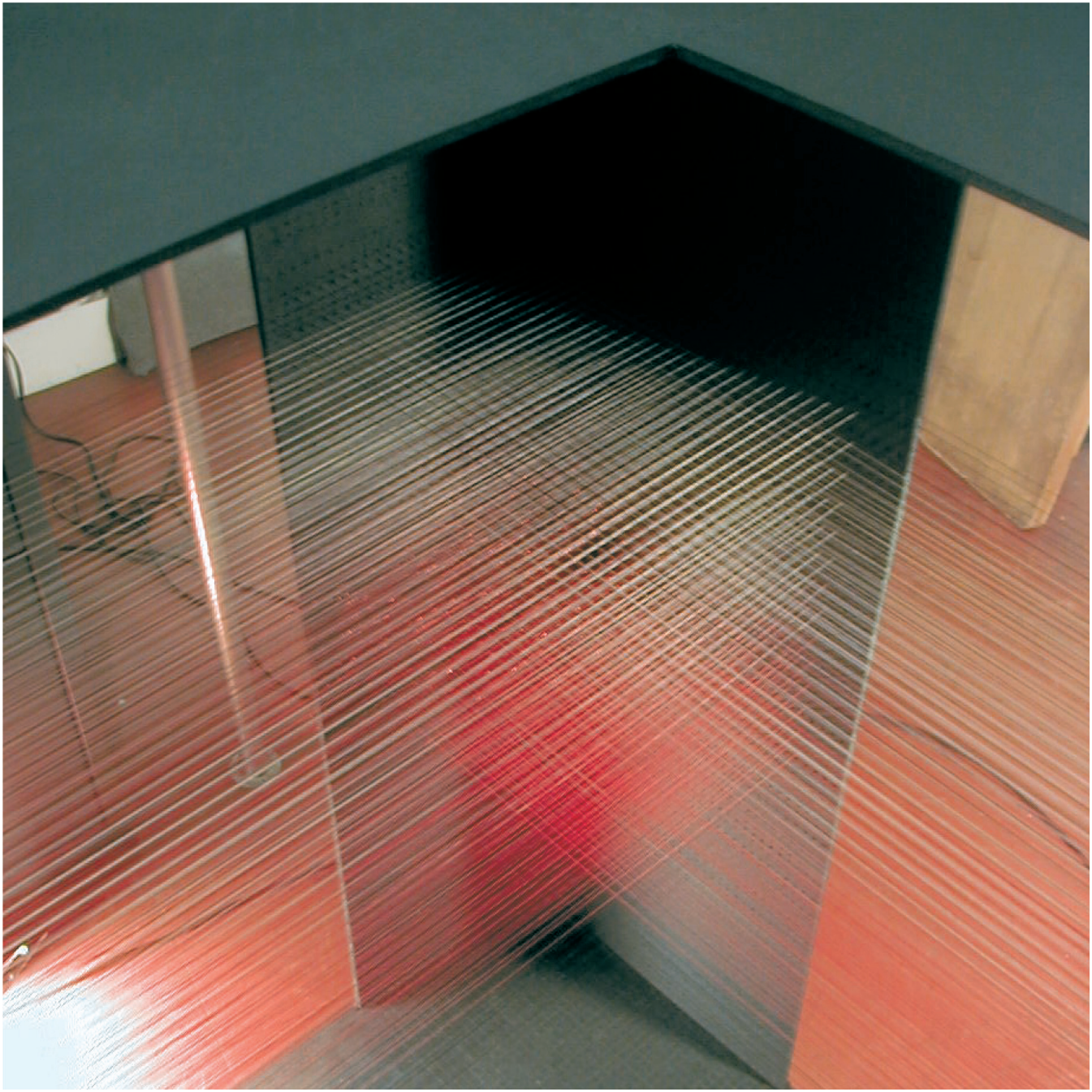
SEAGRAM, electronic model, interior view



MARILYN SUSPENDED, electronic model, a sequence of views

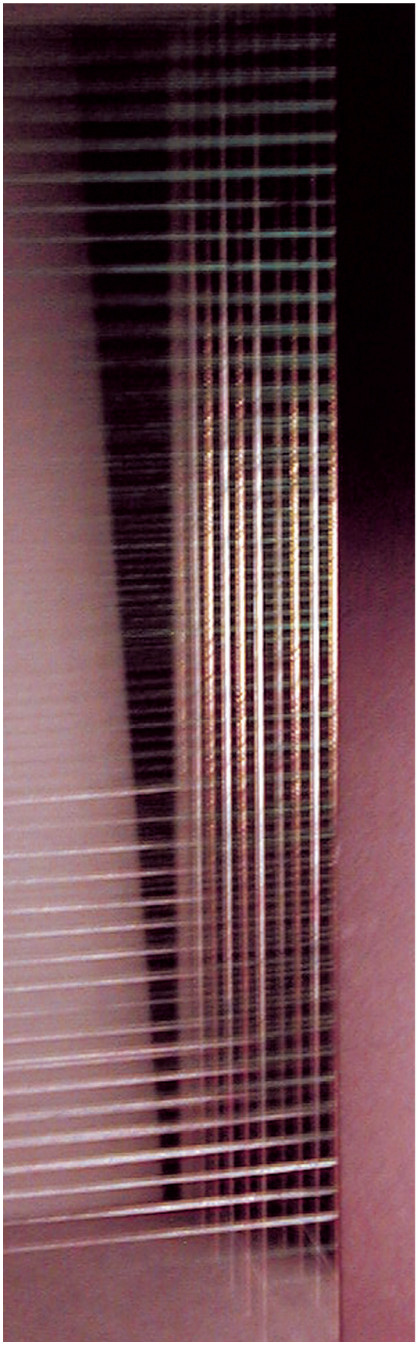


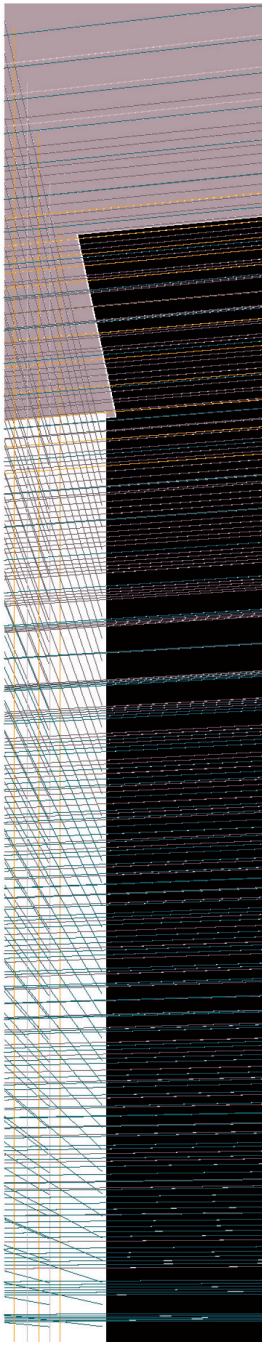
MARILYN UNDER THE TABLE, foamboard, embroidery thread, approx., 60 x 60 x 78 cm



CHRYSTOPHENE, two interior views, foamboard, embroidery thread, approx., 48 x 52 x 78 cm

CHRYSTOPHENE, electronic model, view





CHRYSTOPHENE, electronic model, two views

CHRYSTOPHENE, interior view,
foamboard, embroidery thread,
approx., 48 x 52 x 78 cm