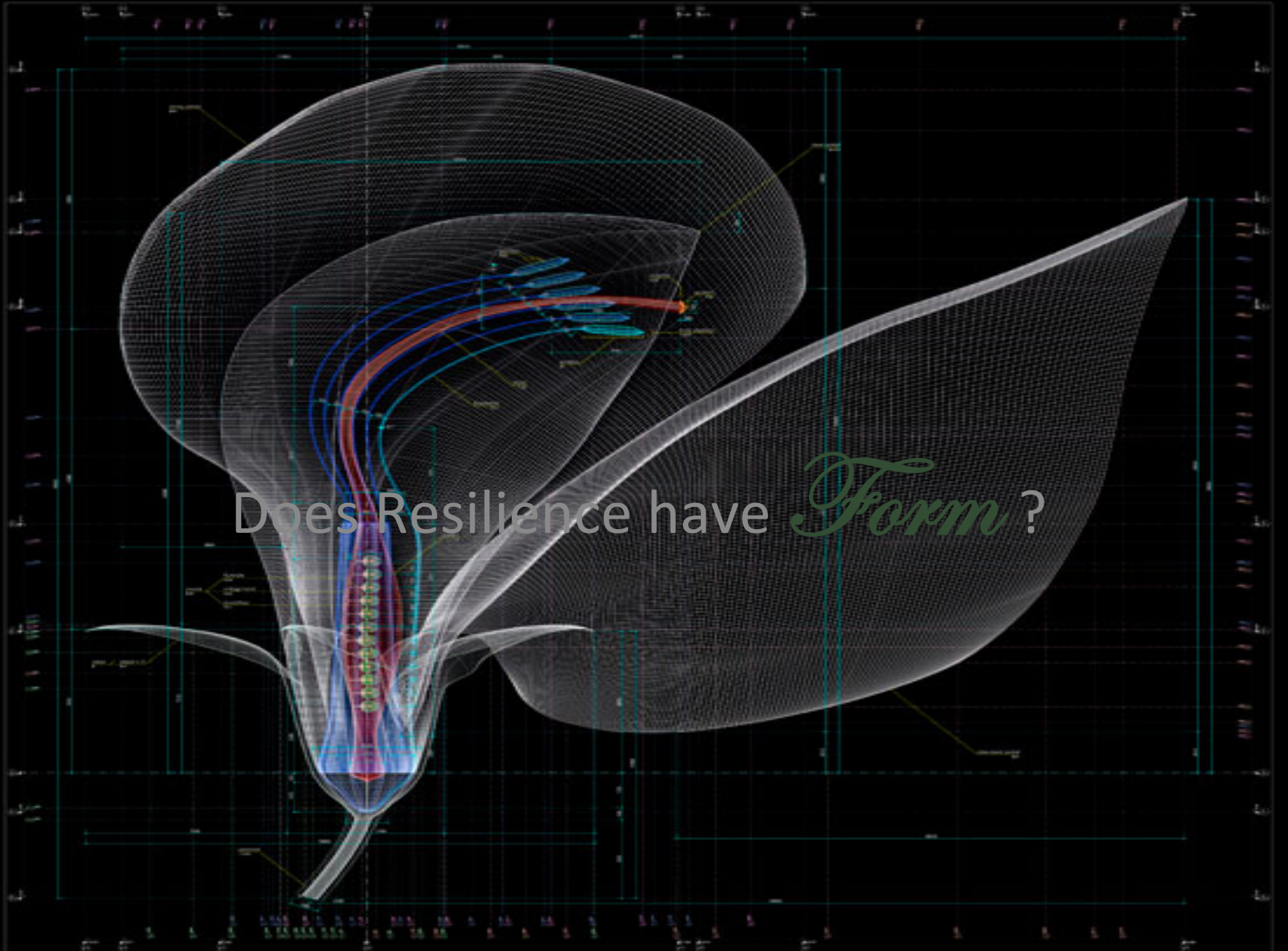


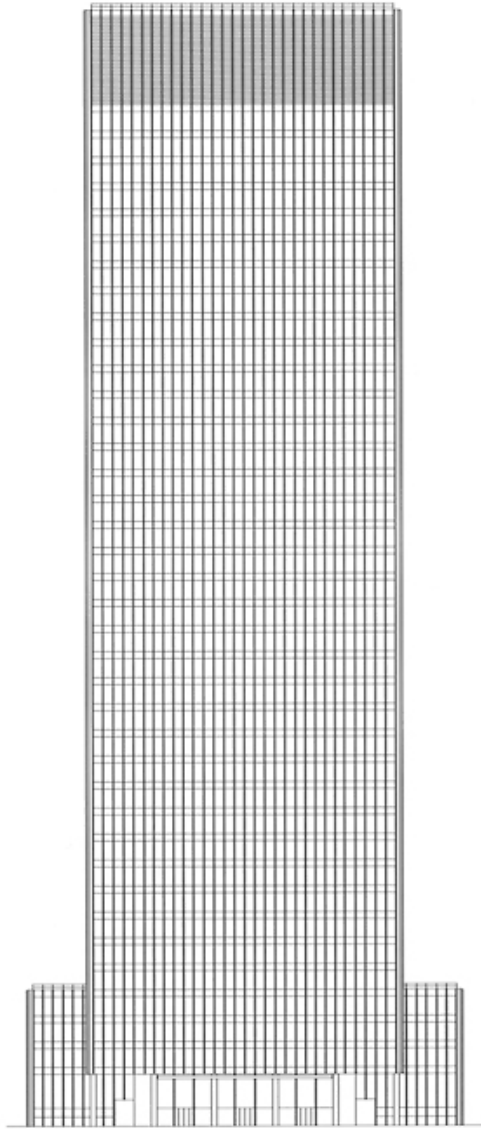
*Penn Spring 2015 700 Studio Sulan Kolatan + Robert Cervellione*

THE *GEOMETRY* of *GREEN*

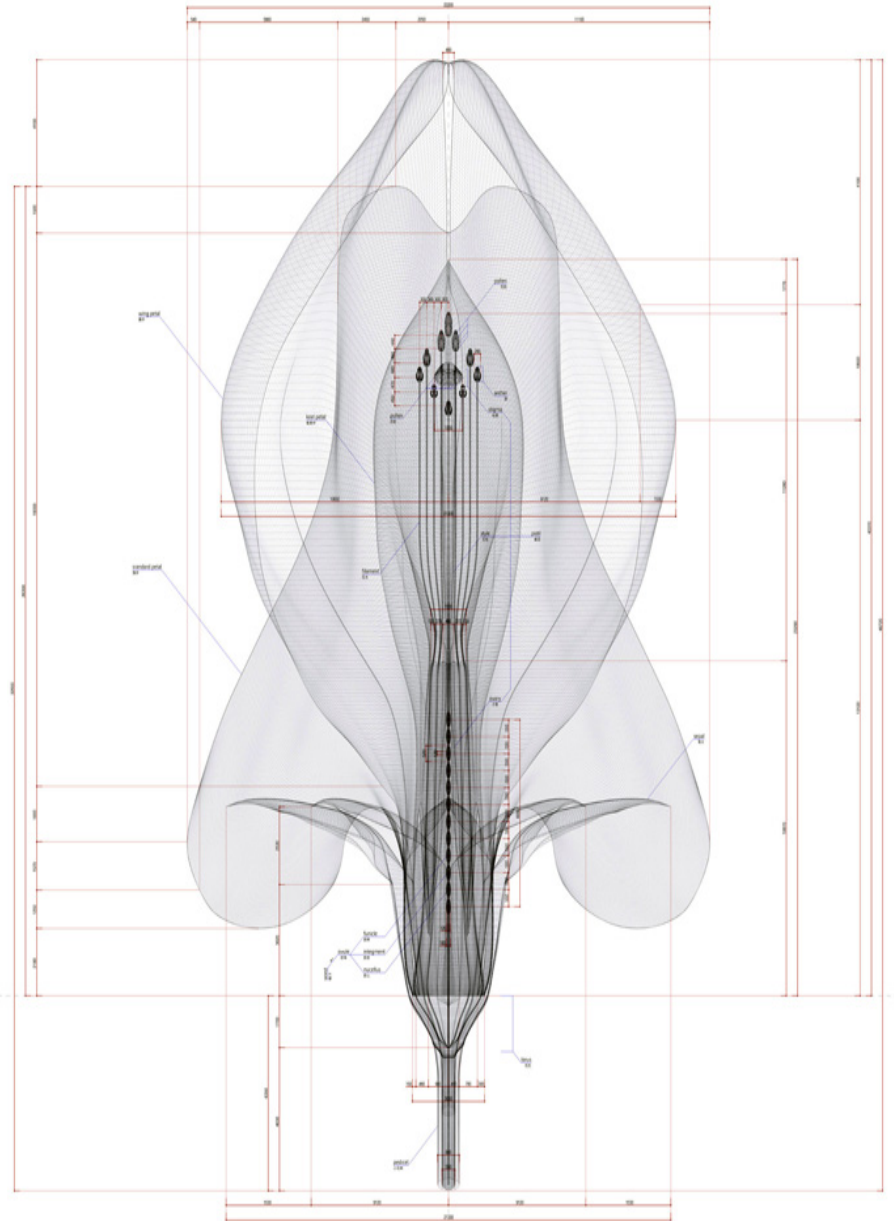
Mutualities  
between  
Architecture  
+  
Computation  
+  
Ecology



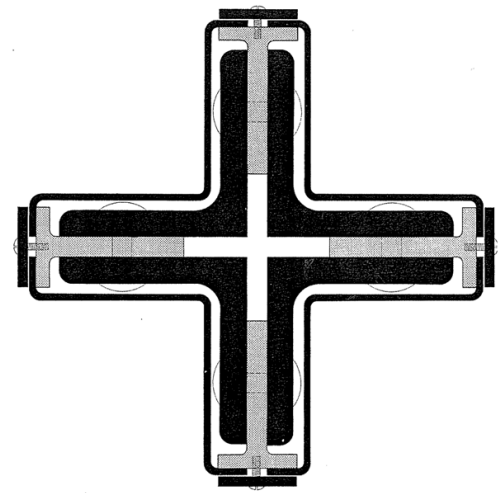
Does Resilience have *Form* ?



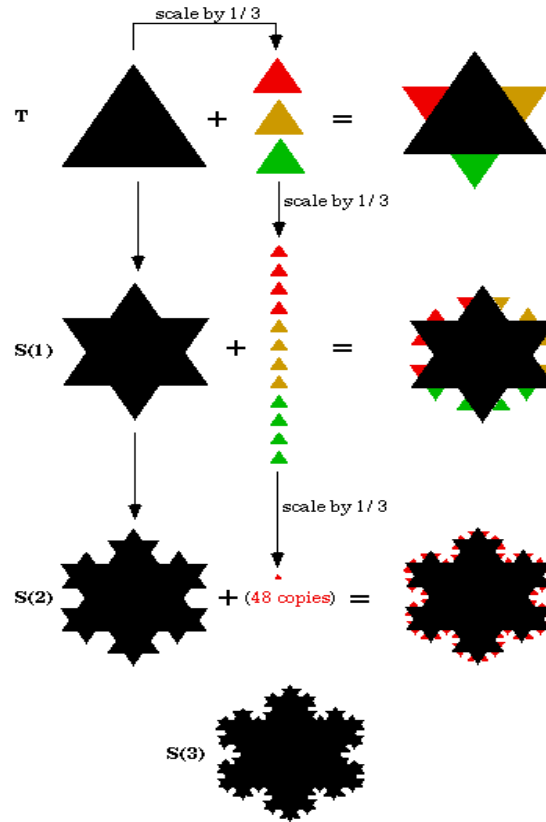
Seagrams Building  
Mies van der Rohe



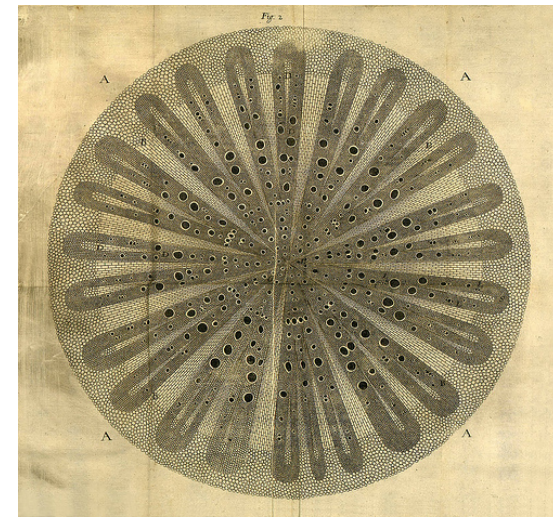
Inorganic Flora  
Macoto Murayama








Section Detail  
Barcelona Pavillion  
Mies van der Rohe



Section Detail  
Anatomy of Plants  
Nehemiah Grew





EUCLIDEAN DIMENSION		FRACTAL DIMENSION	
.	(point) 0	-----	0.4
—	1		1.4
	2		1.8
	3		2.6



Urformen der Kunst  
Karl Blossfeldt

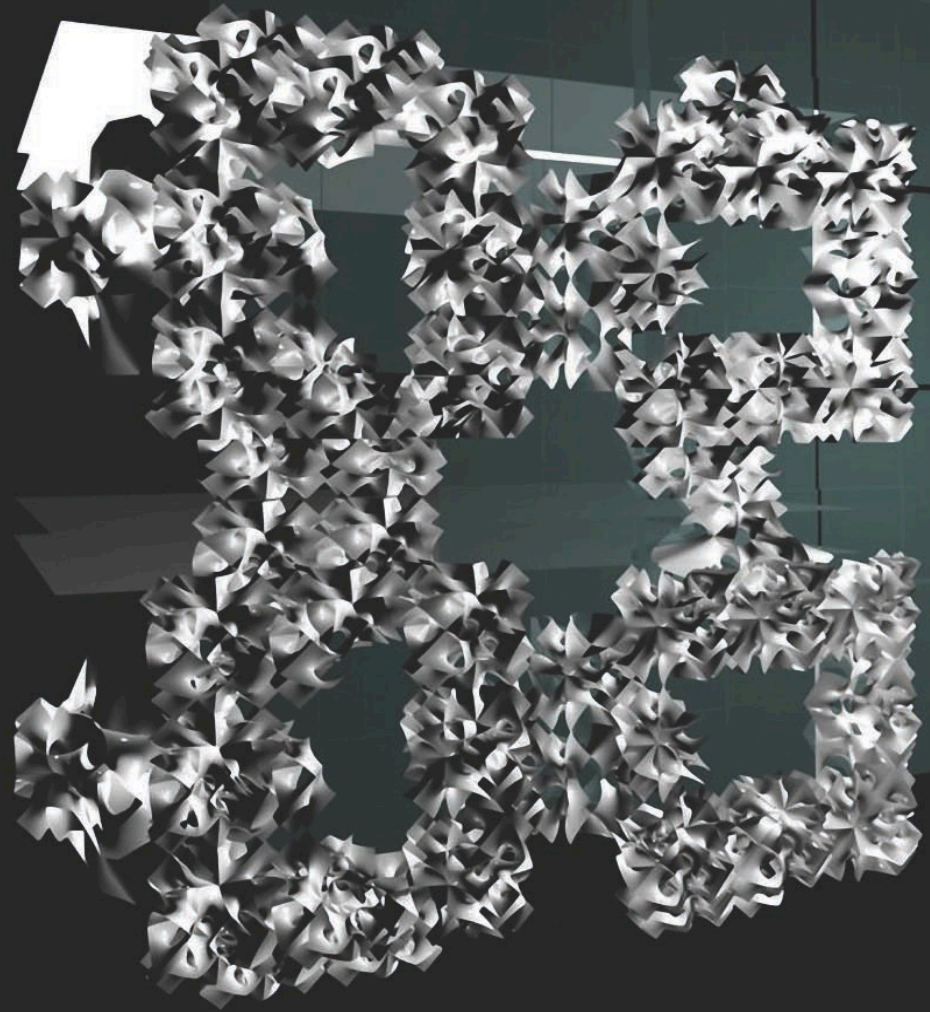


Lever House  
SOM Gordon Bunshaft

INVERSAbrane  
KOL/MAC LLC



All glass version. Section

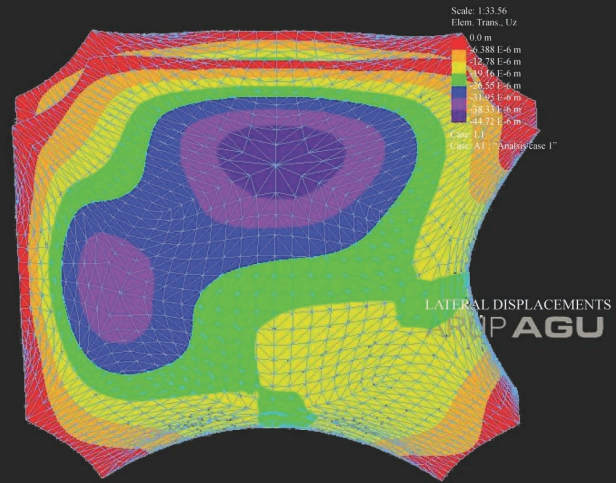
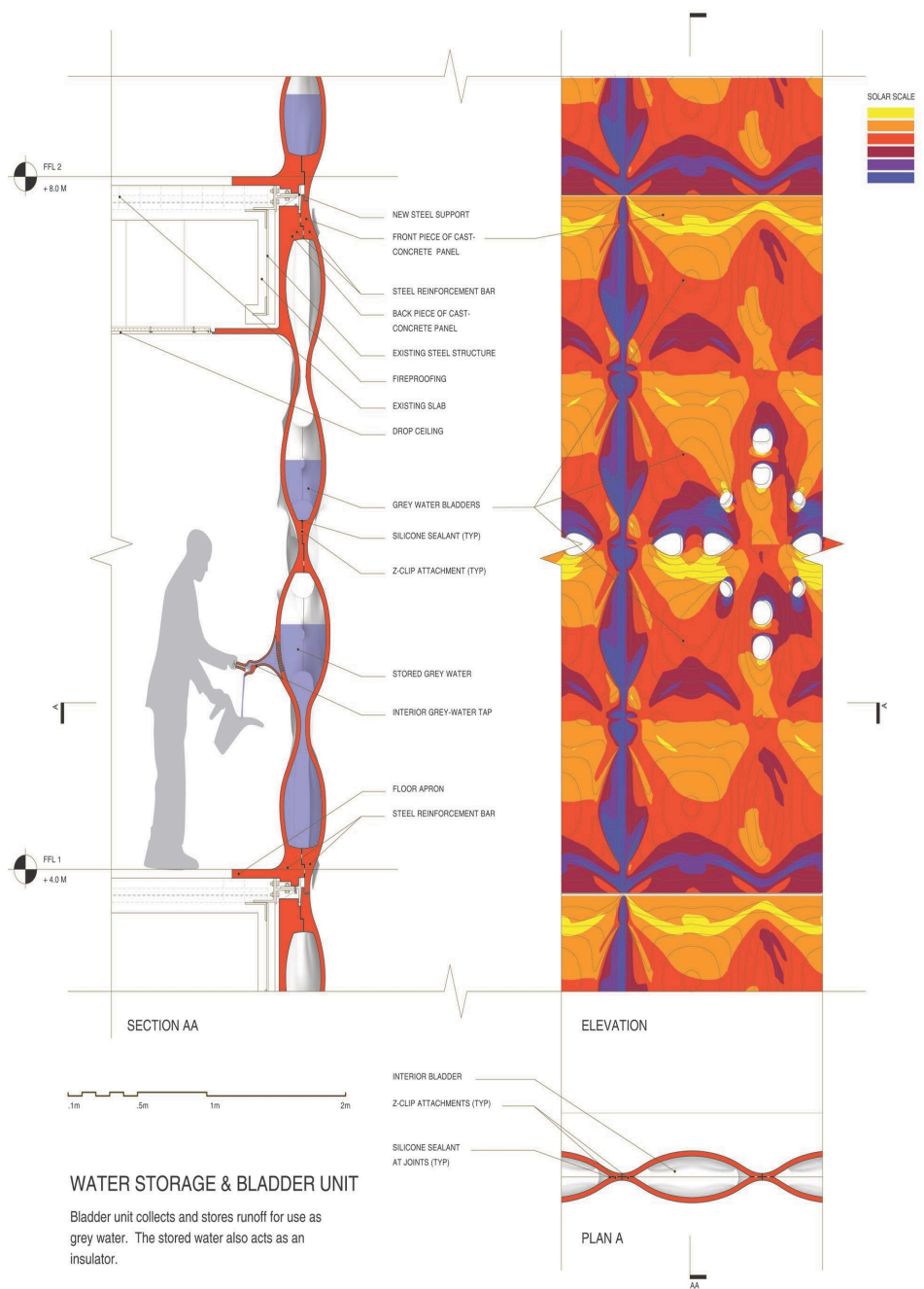


Air-cleaning cells, clusters and fenestration



MoMA prototype. (Exhibition photo. SAFE - Design Takes on Risk)





Arup AGU : Minimal Surface Structural Test

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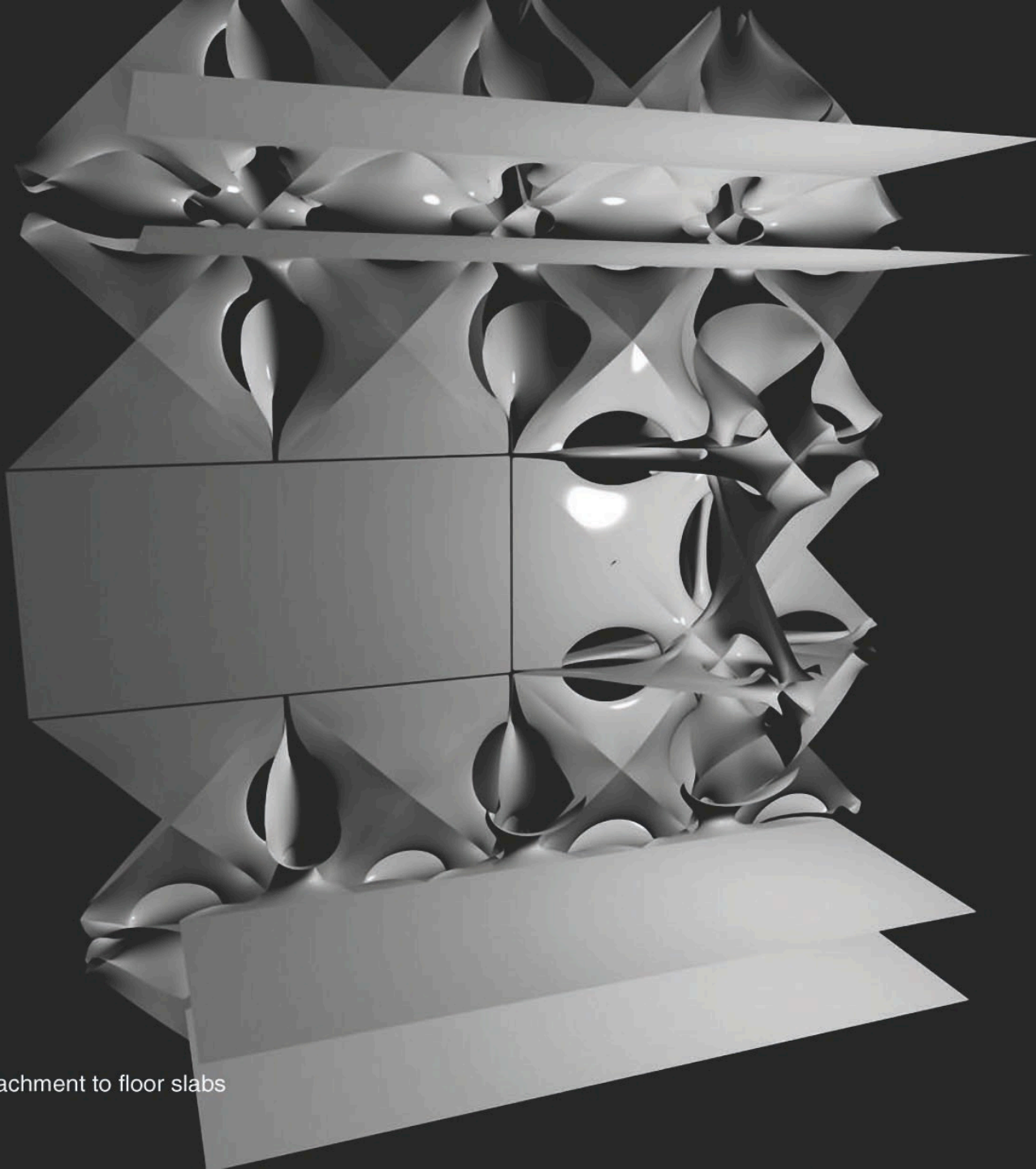


Solar exposure analysis

**INVERSAbrane**  
**KOL/MAC LLC**

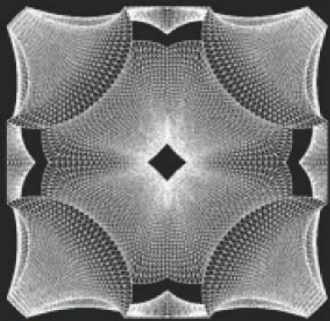
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INVERSAbrane  
KOL/MAC LLC

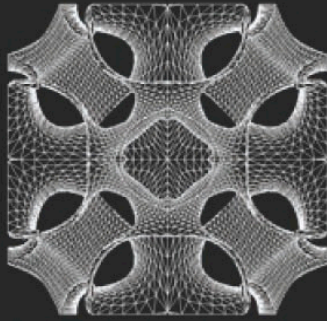


Attachment to floor slabs

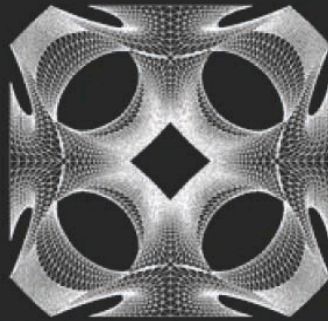
**Air Cleaning Capacity of INVERSAbrane Cells**  
 based on surface area of open 1 m x 1 m panels



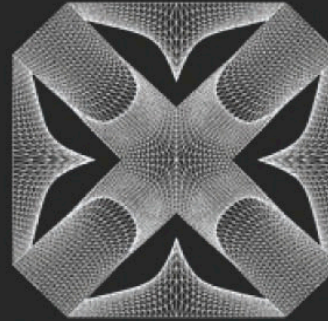
**Cell 04**  
 Area = 1.14 m<sup>2</sup>  
 Air Cleaning = 441.87 m<sup>3</sup>/hr



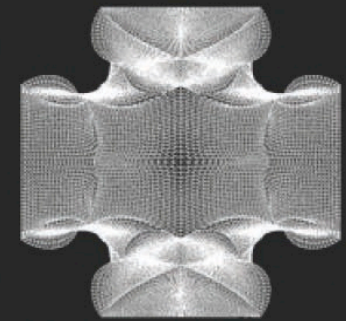
**Cell 05**  
 Area = 1.49 m<sup>2</sup>  
 Air Cleaning = 579.95 m<sup>3</sup>/hr



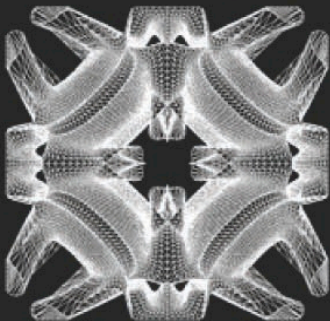
**Cell 10**  
 Area = 1.23 m<sup>2</sup>  
 Air Cleaning = 477.37 m<sup>3</sup>/hr



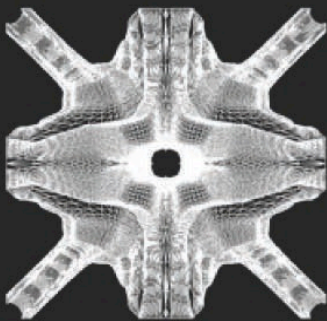
**Cell 12**  
 Area = 1.27 m<sup>2</sup>  
 Air Cleaning = 493.15 m<sup>3</sup>/hr



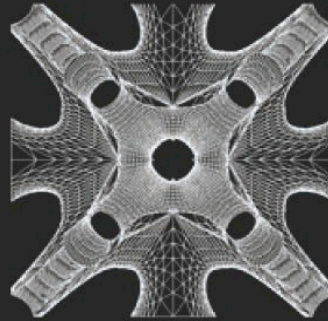
**Cell 21**  
 Area = 1.24 m<sup>2</sup>  
 Air Cleaning = 481.32 m<sup>3</sup>/hr



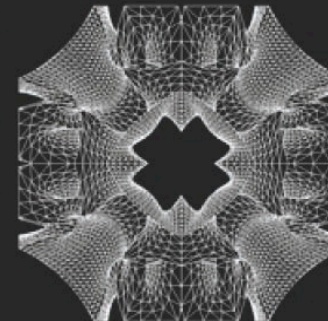
**Cell 23**  
 Area = 2.21 m<sup>2</sup>  
 Air Cleaning = 856.12 m<sup>3</sup>/hr



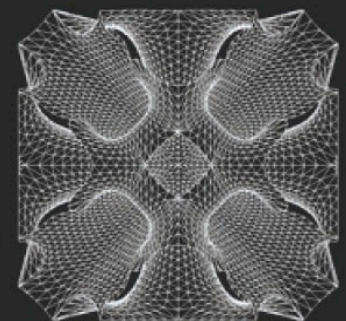
**Cell 29**  
 Area = 1.80 m<sup>2</sup>  
 Air Cleaning = 698.31 m<sup>3</sup>/hr



**Cell 30**  
 Area = 1.21 m<sup>2</sup>  
 Air Cleaning = 469.48 m<sup>3</sup>/hr



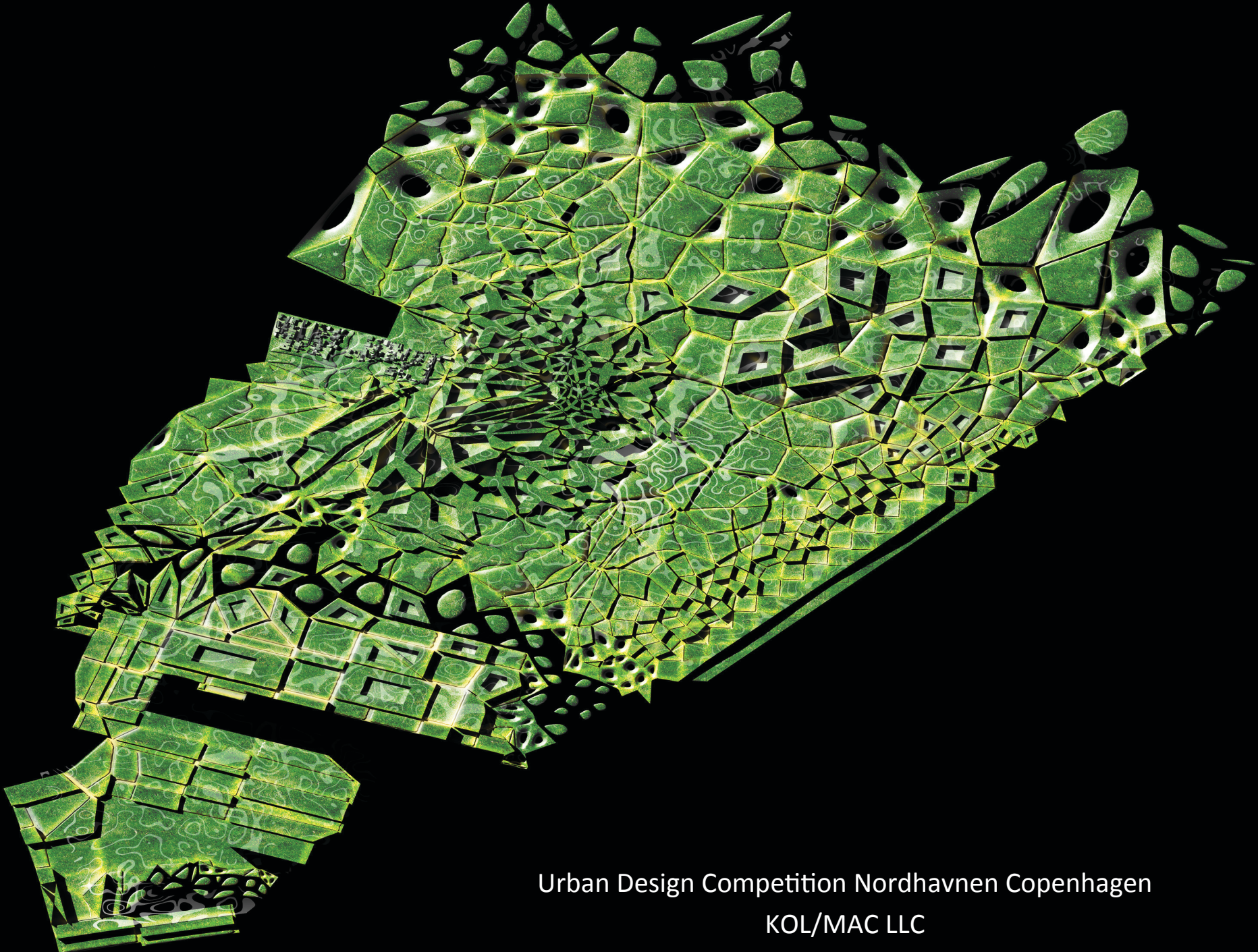
**Cell 31**  
 Area = 1.84 m<sup>2</sup>  
 Air Cleaning = 714.09 m<sup>3</sup>/hr



**Cell 37**  
 Area = 1.64 m<sup>2</sup>  
 Air Cleaning = 635.18 m<sup>3</sup>/hr



**INVERSAbrane**  
**KOL/MAC LLC**

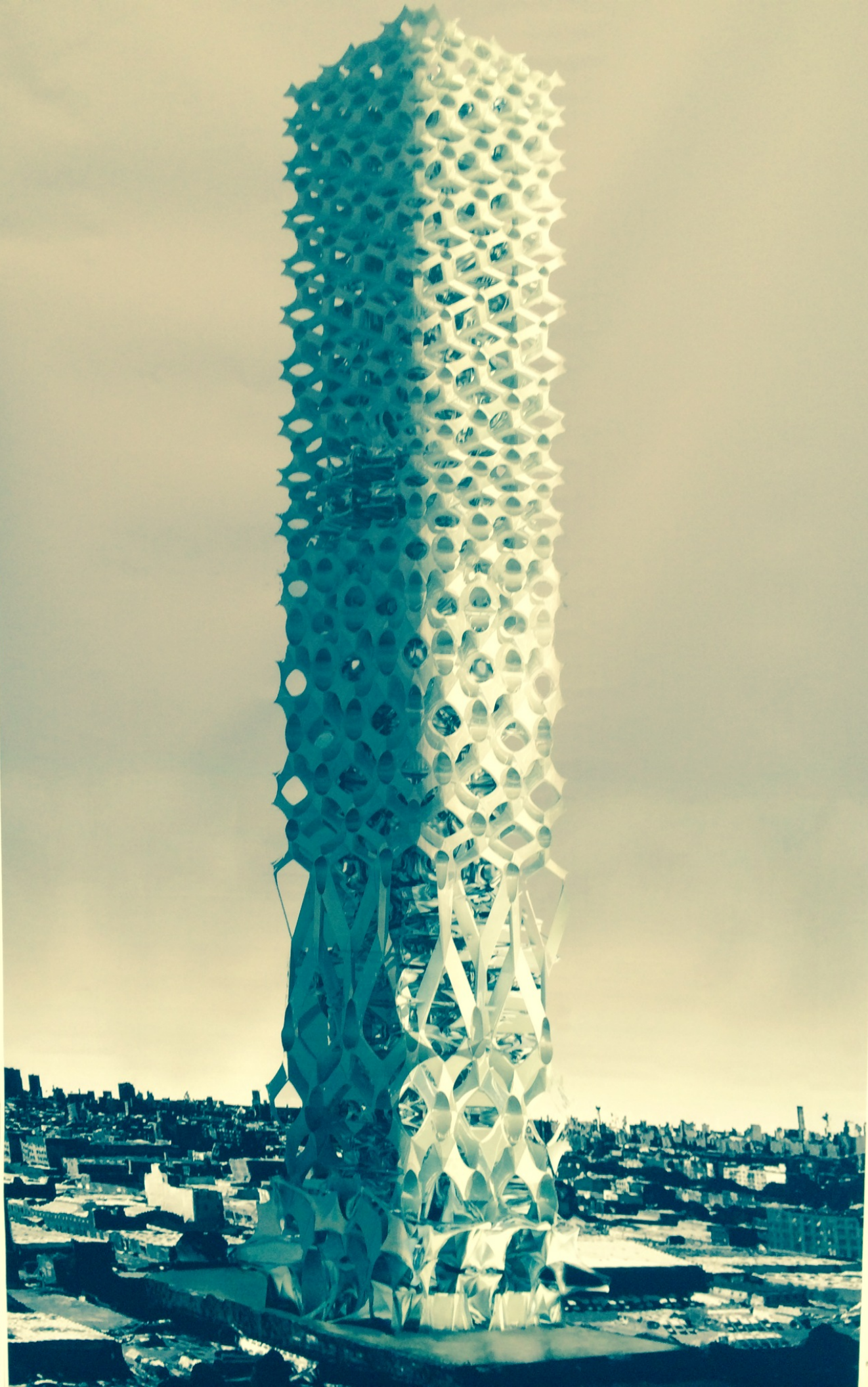


Urban Design Competition Nordhavnen Copenhagen

KOL/MAC LLC





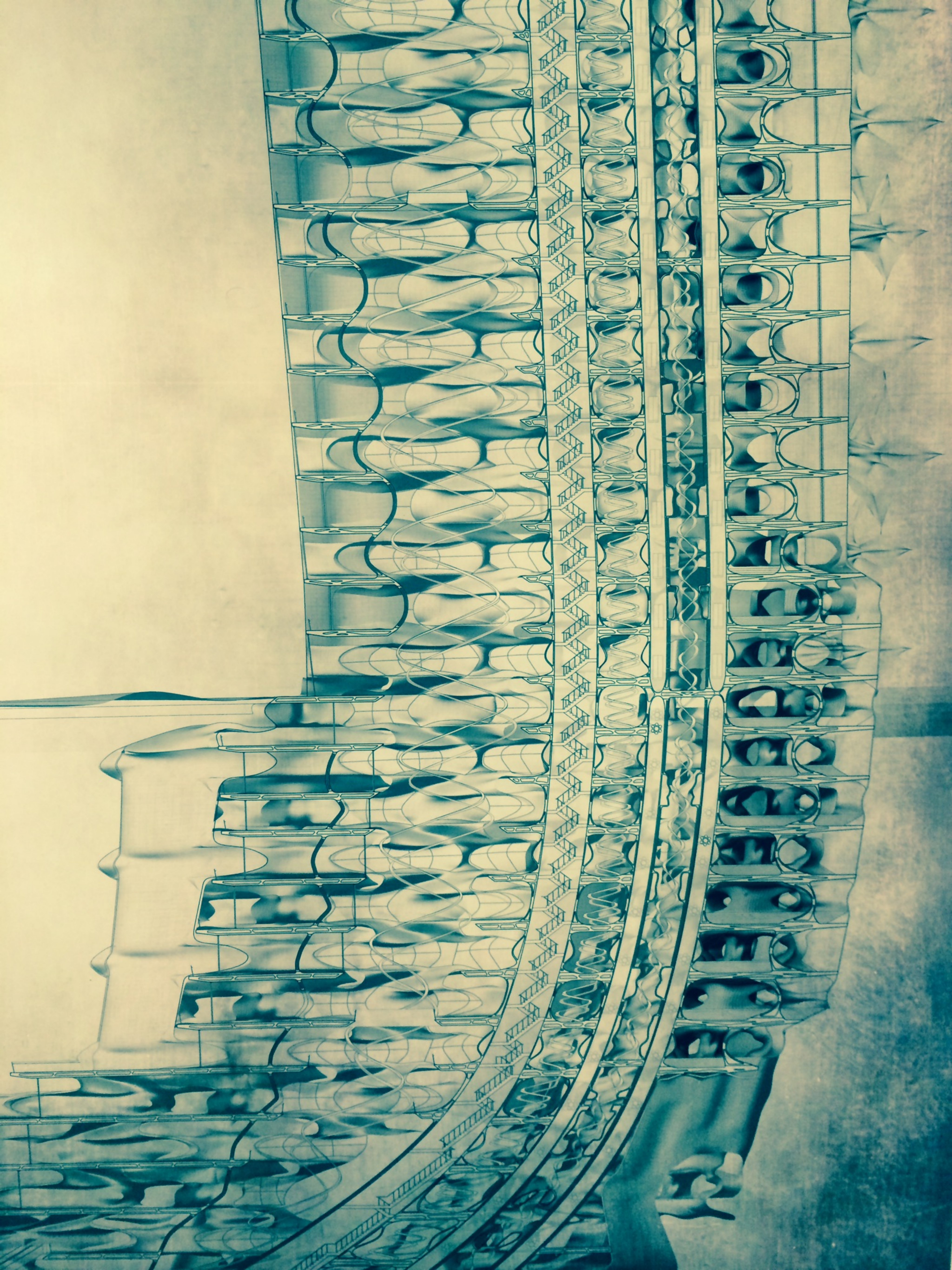


STORY

DISTRIBUTION CENTER

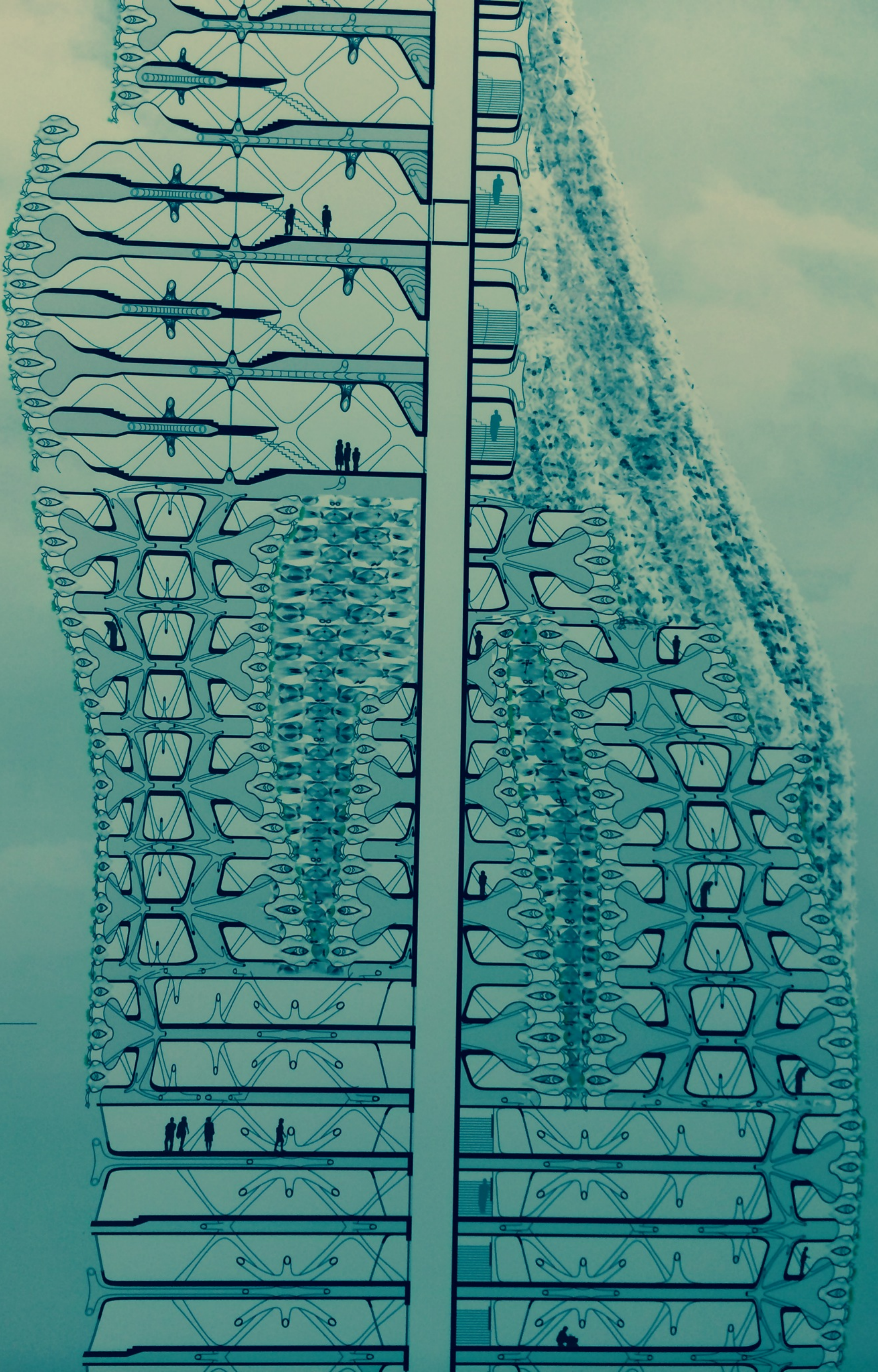




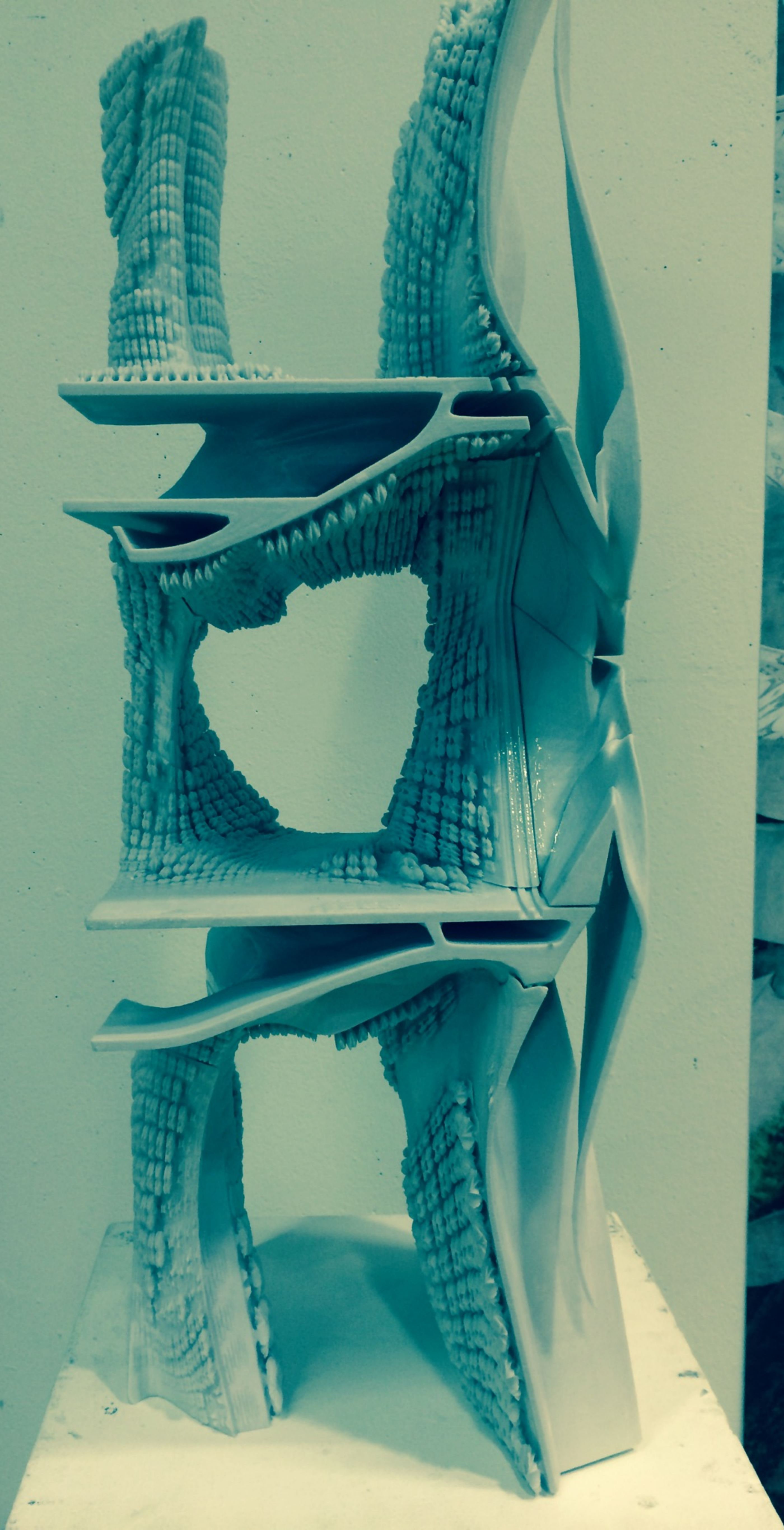




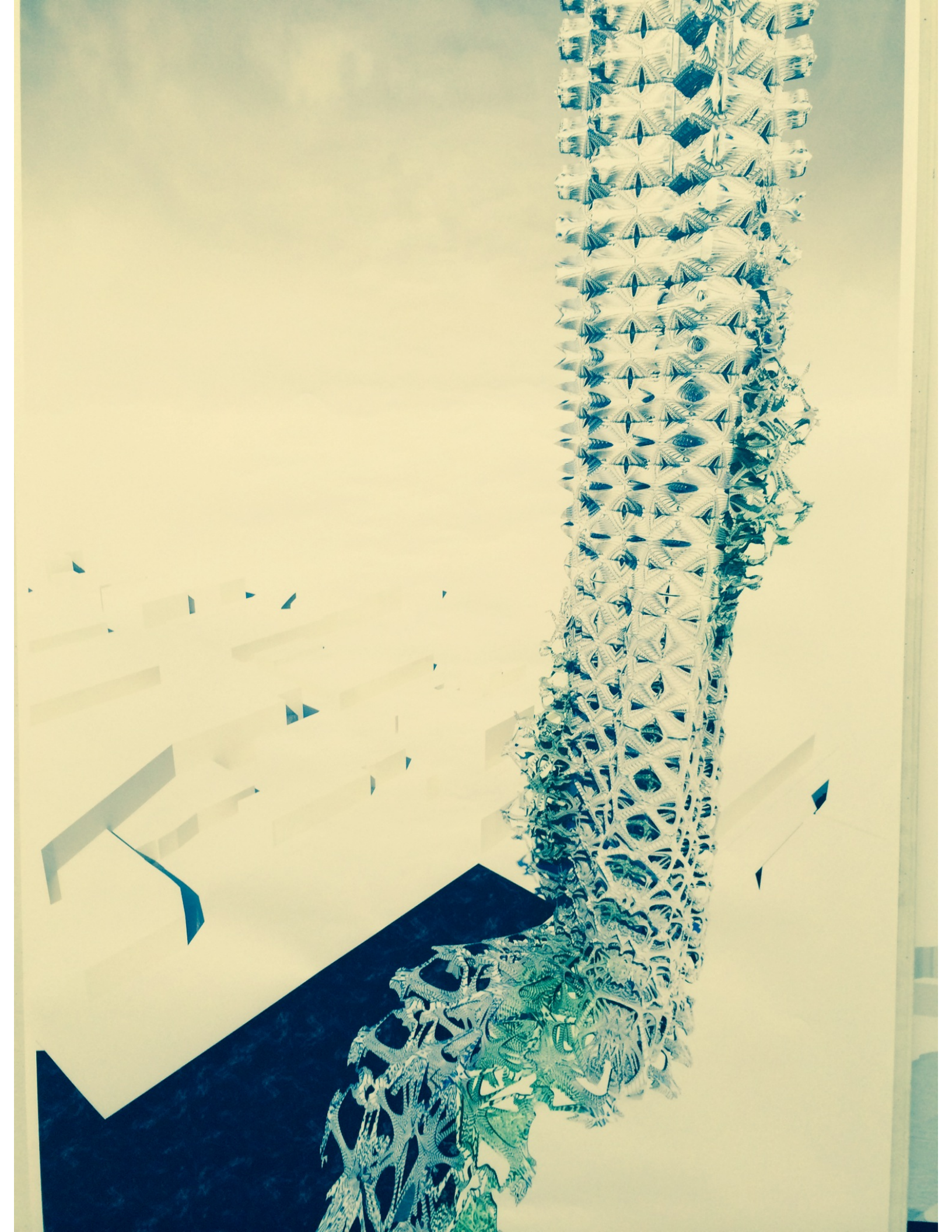




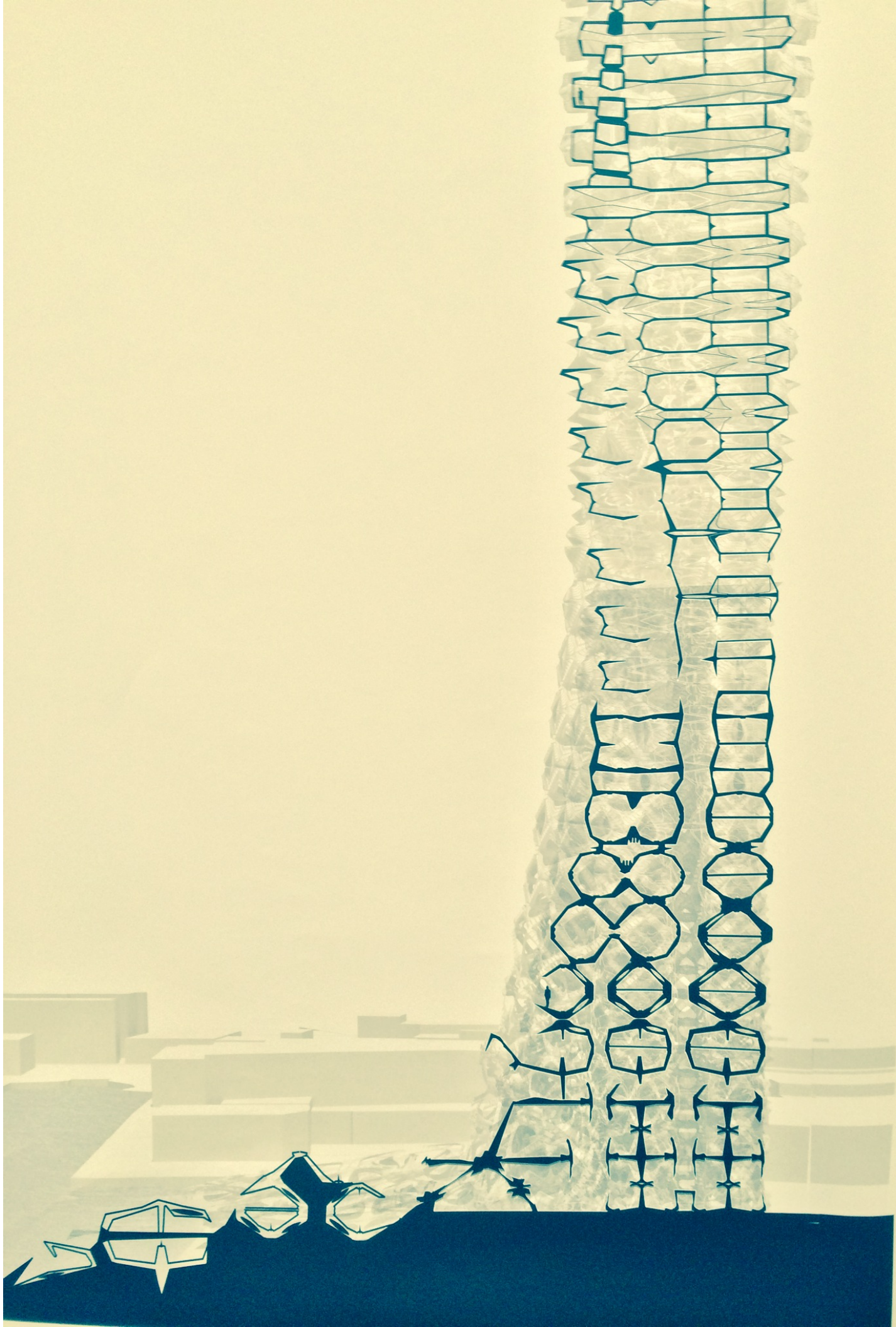




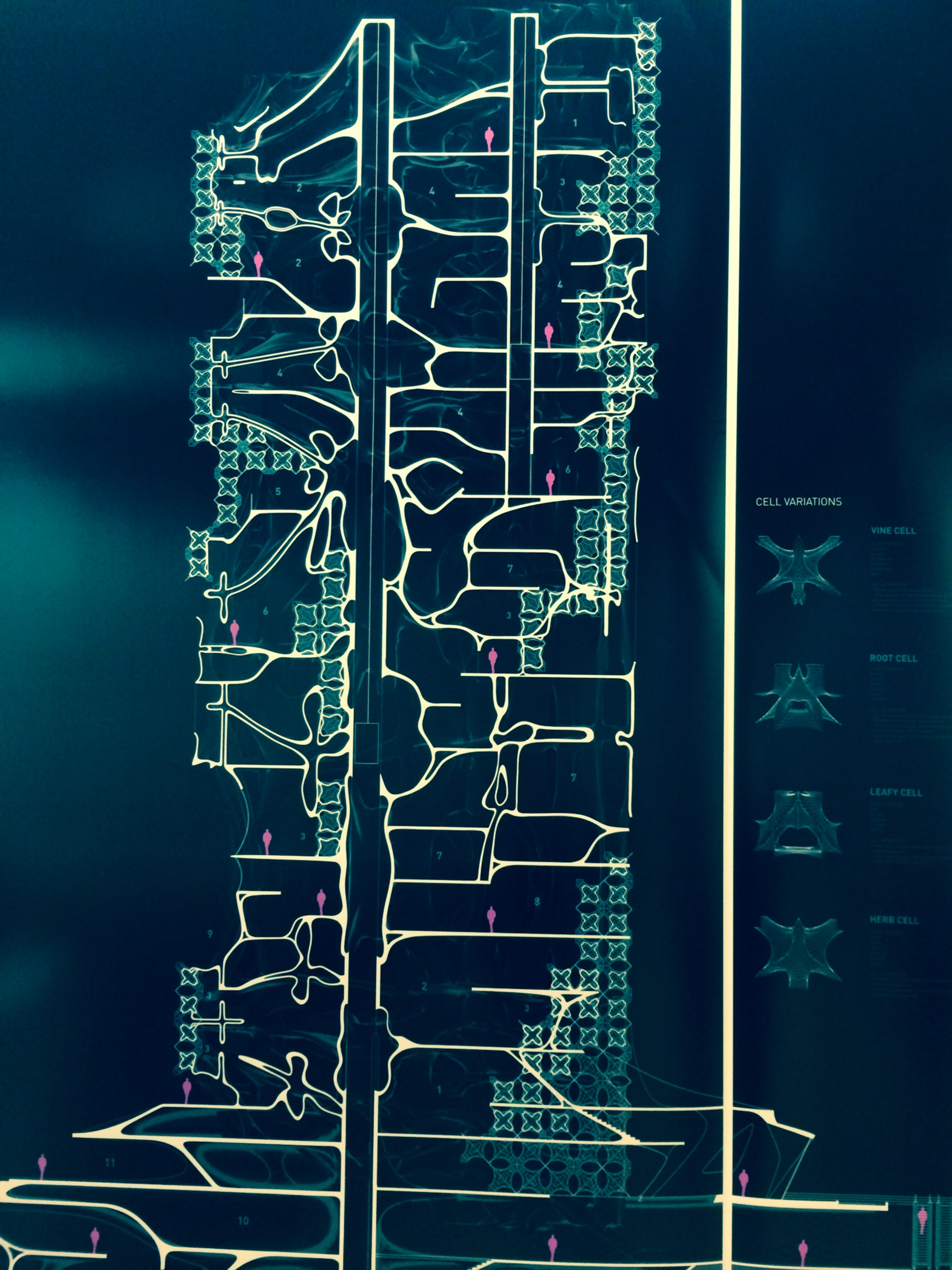




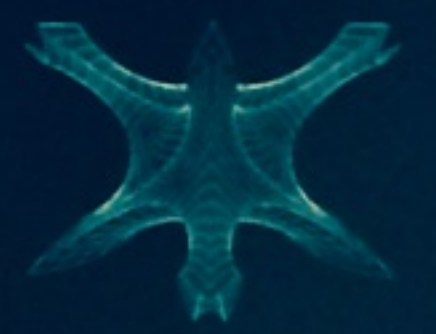








CELL VARIATIONS



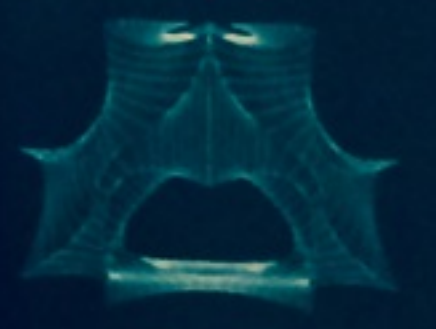
VINE CELL

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11



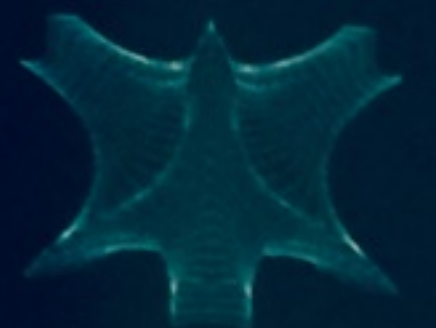
ROOT CELL

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11



LEAFY CELL

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11



HERB CELL

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11

