The End of Architecture 2

OLLI at PITT - Lecture 3

Philippe Block（2023.02.16）
Matthew Schlueb, Instructor
Flavio Chamis, Guest Instructor


Vatican City
Naples
North Macedonia
Albania
Thessaloniki
Istanbul
Samsun
Trabzon
Georgia
South Ossetia
Armenia
Azerbaijan
Nagorno-Karabakh
Baku
Bursa
Ankara
Erzurum
Balikesir
Greece
Turkey
Turkmenistan
Izmir
Athens
Aydin
Konya
Van
Diyarbakir
Tabriz
Ashgabat
Muğla
Antalya
Adana
Şanlıurfa
Malta
Aleppo
Erbil
Qazvin
Mashhad
Tehran
Slemani
Cyprus
Syria
Sfax
Tunisia
Lebanon
Kermanshah
Qom
Damascus
Iraq
Tripoli
Iran
Isfahan
Al Hillah
Amman
Jordan
Alexandria
Israel
Ahwaz
Cairo
Basra
Kuwait
Shiraz
Libya
Egypt
Bahrain
Saudi Arabia
Qatar
Dubai
Medina
Riyadh
United Arab Emirates
Muscat
0
25
50
75
100
125
150 km









archpaper.com
A multimedia exhibit reveals more details about NEOM’s linear city

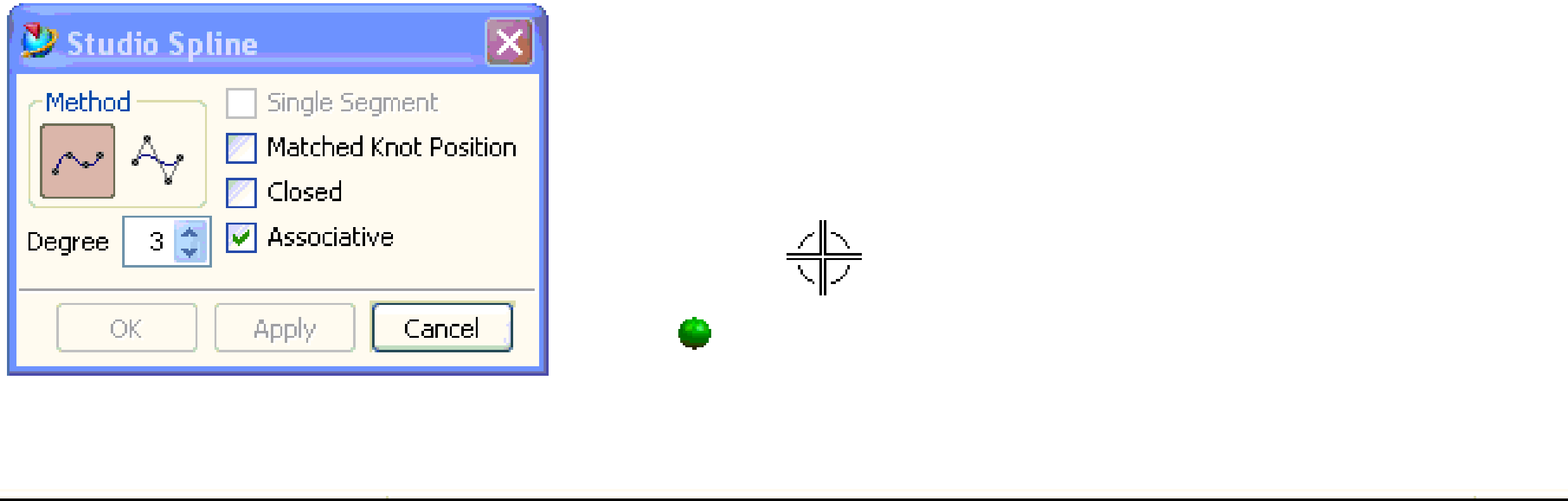
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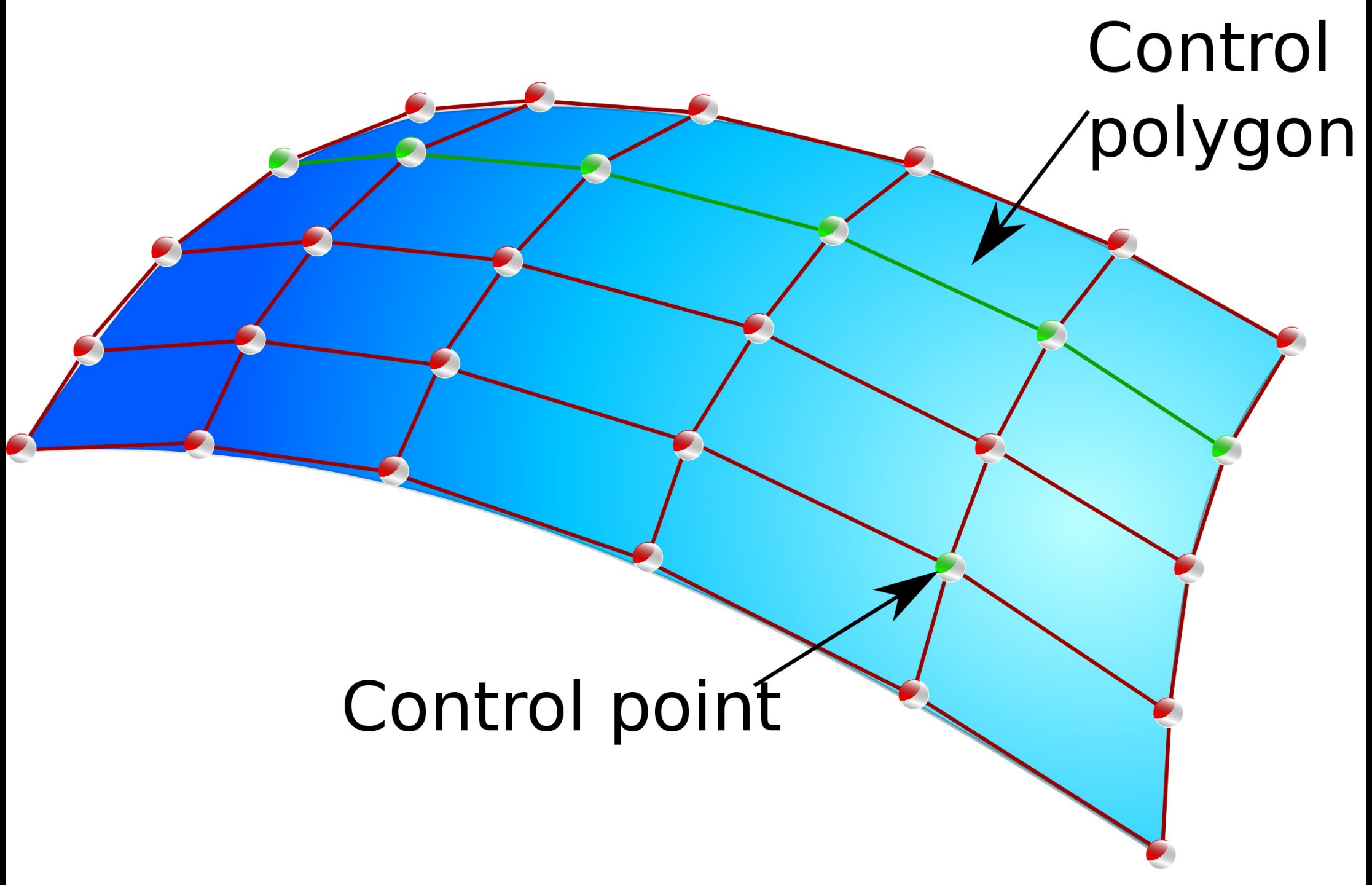


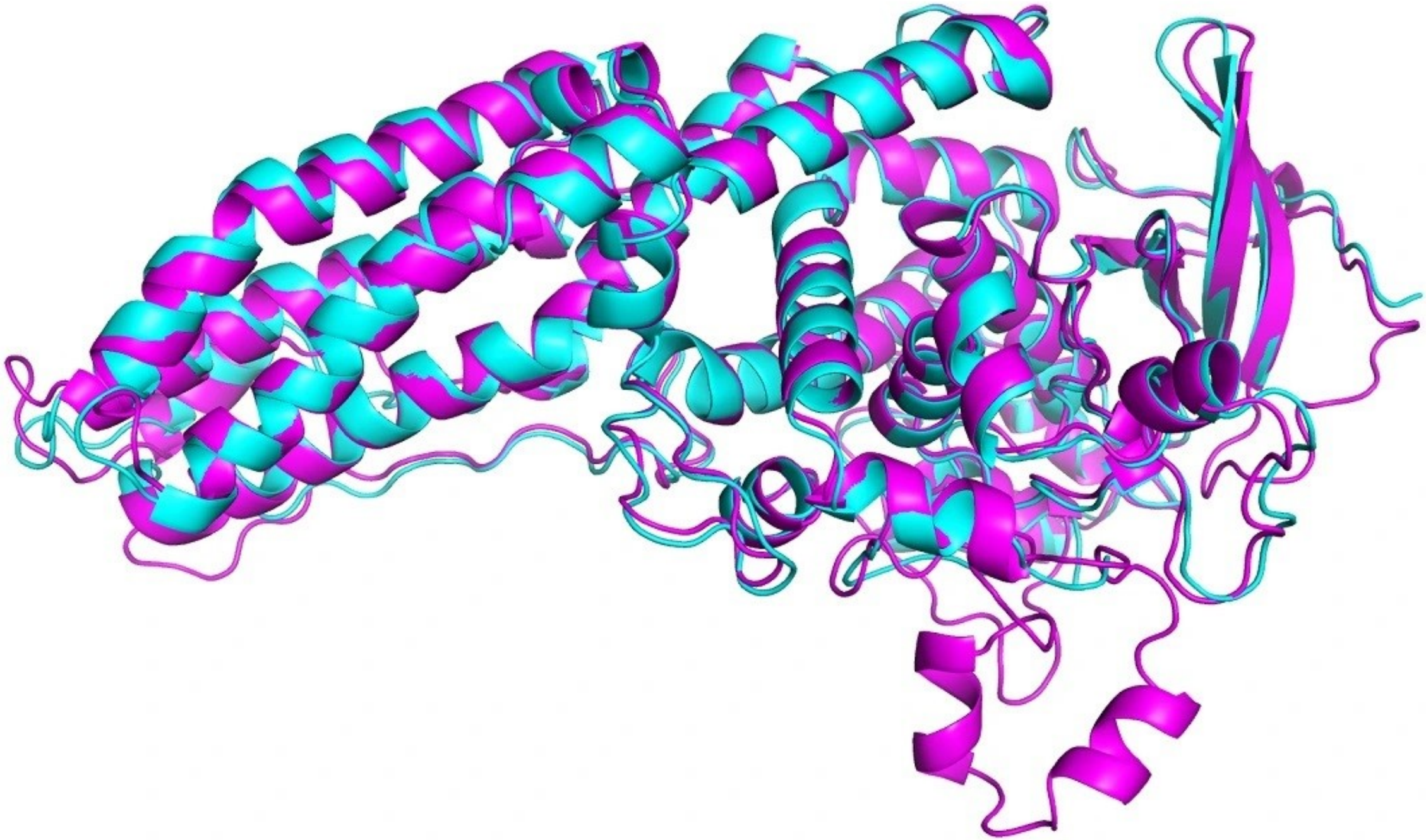


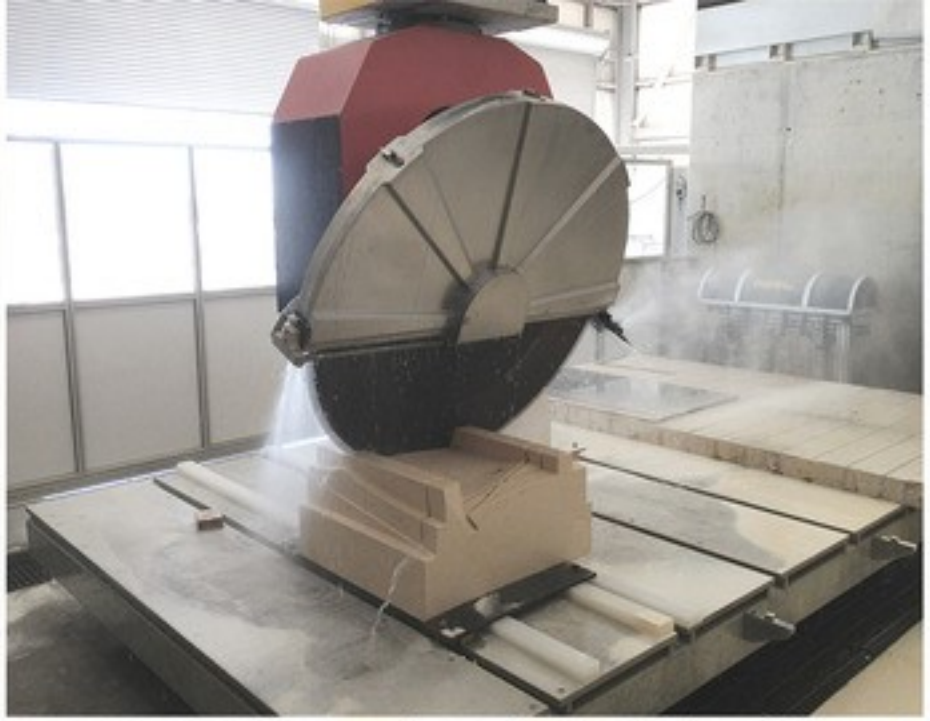




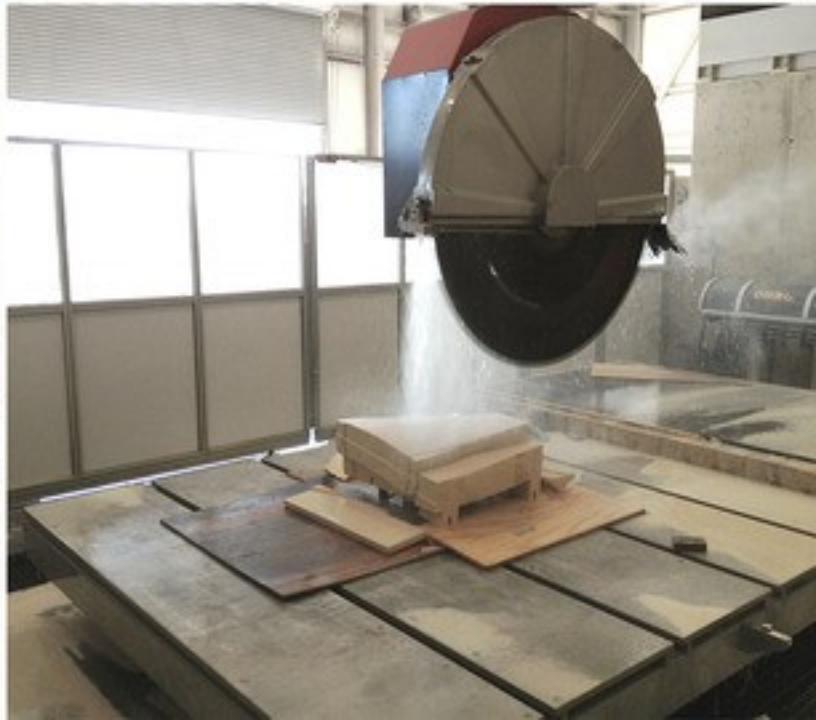

Studio Spline
Method
Single Segment
Matched Knot Position
Closed
Associative
Degree
3
OK
Apply
Cancel


Control
polygon
Control point


















REDLINE
















FIRST
STREET
GARDEN


ETH zürich
BRG


IDEAS CITY
NO SMOKING



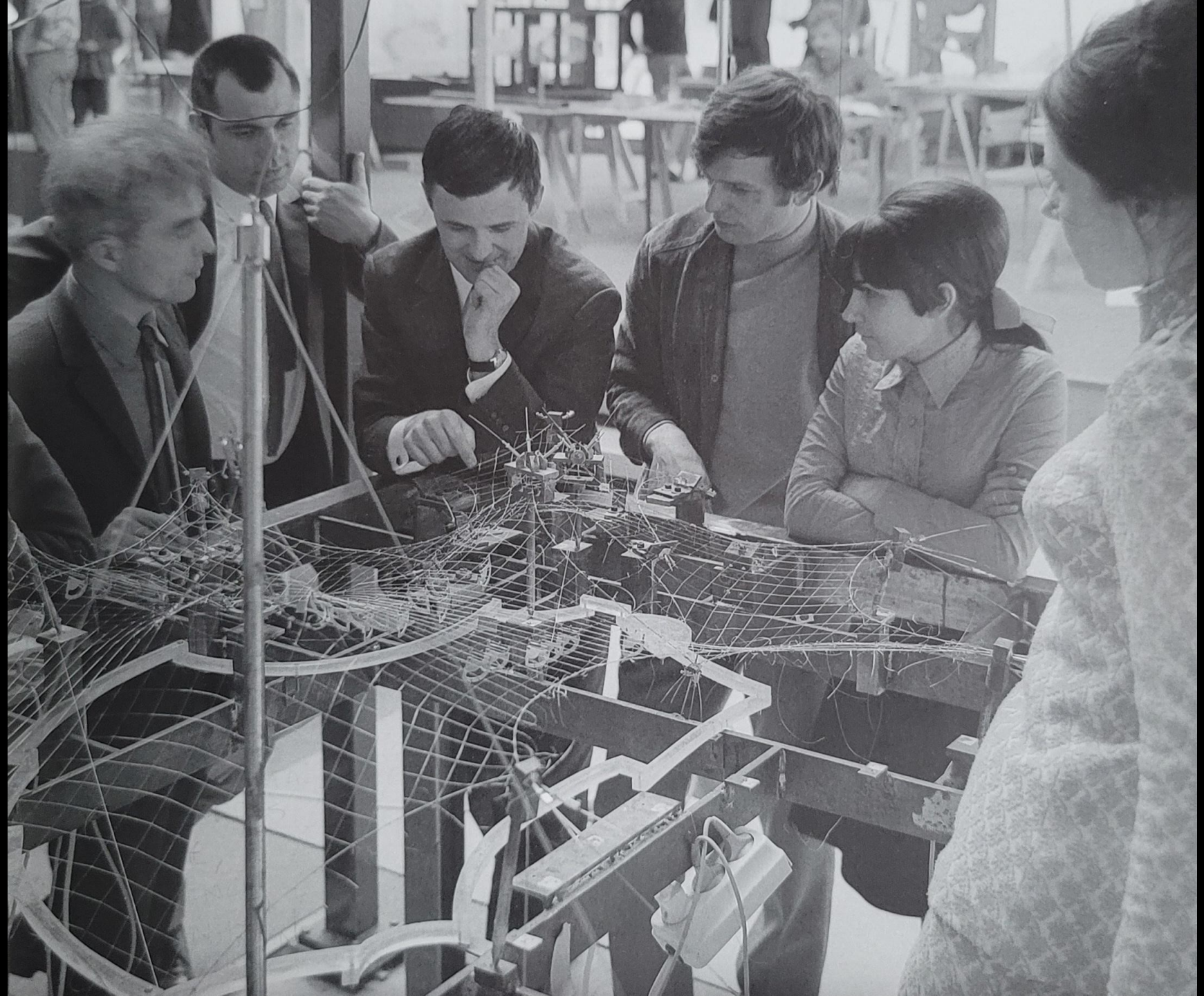


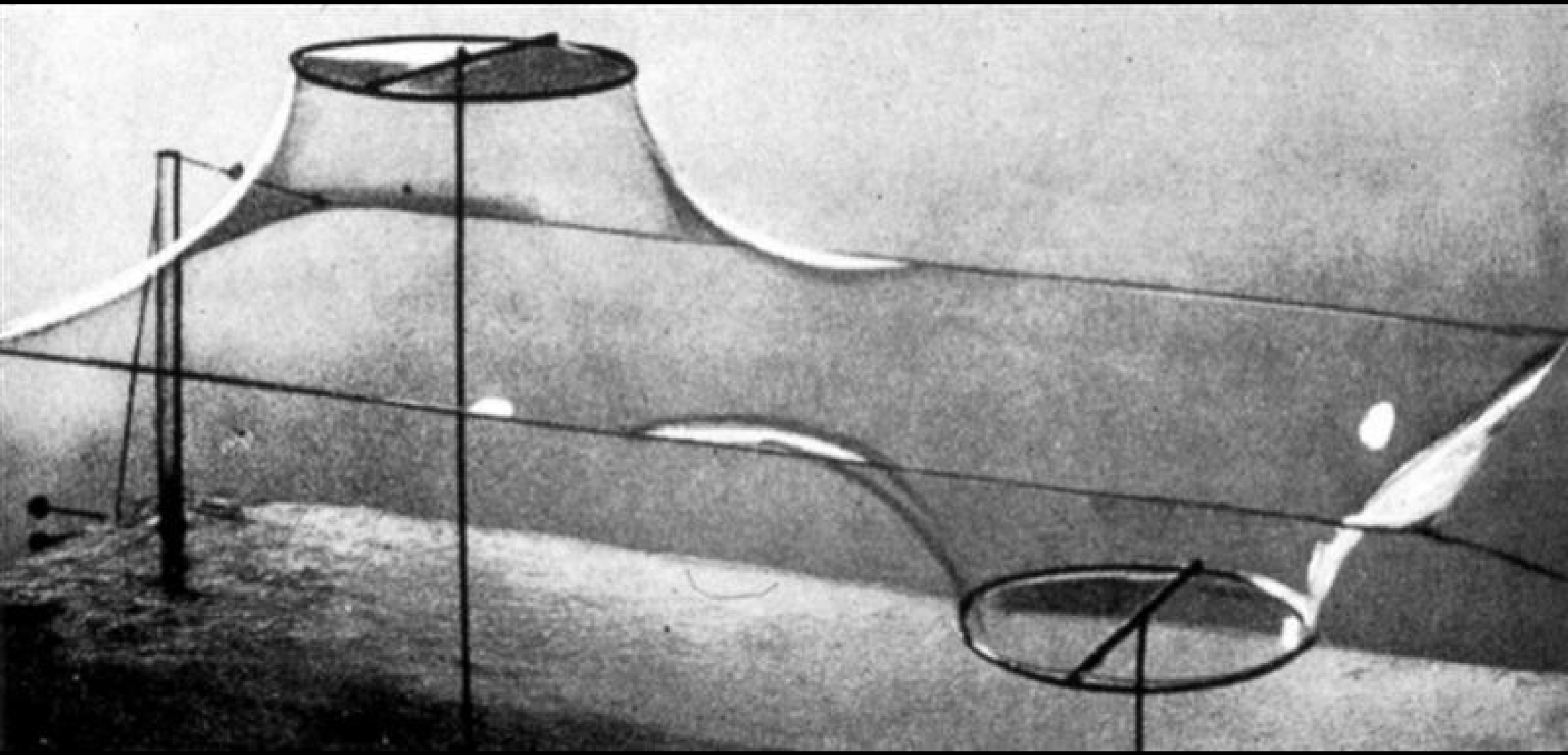



JLG

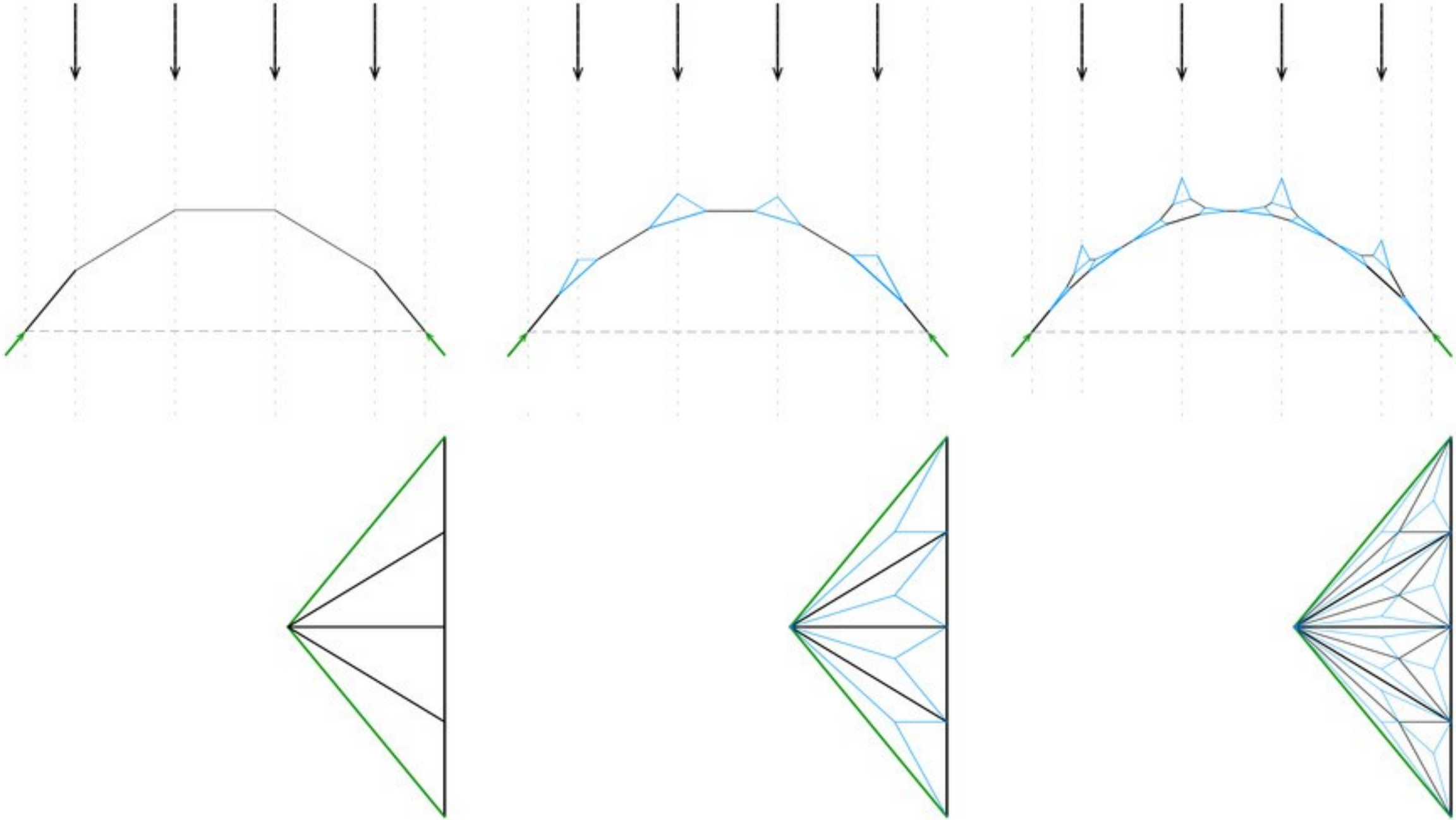


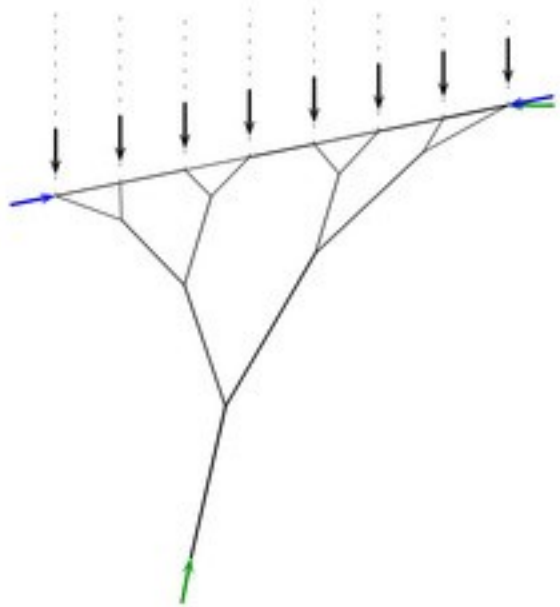


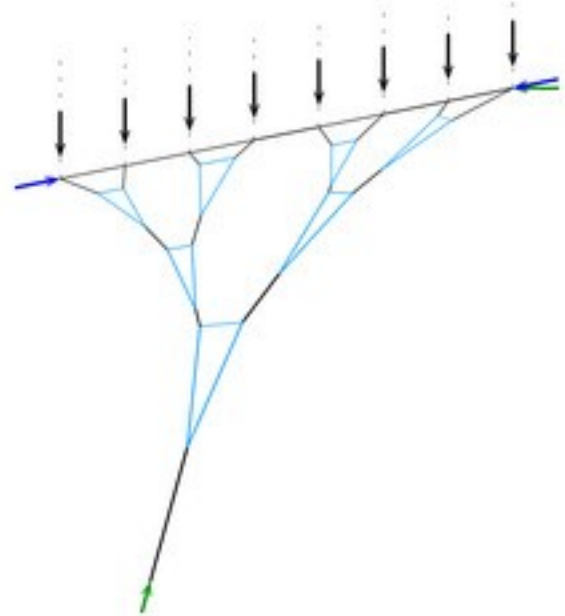


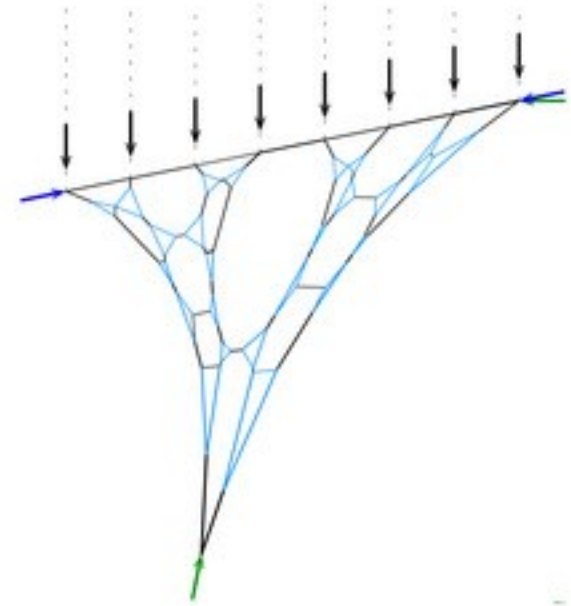


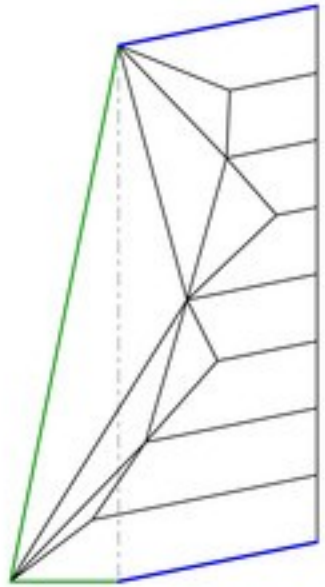


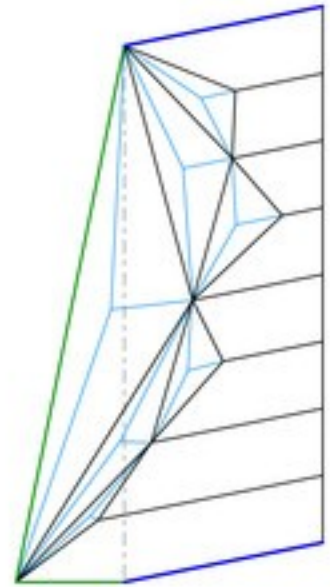


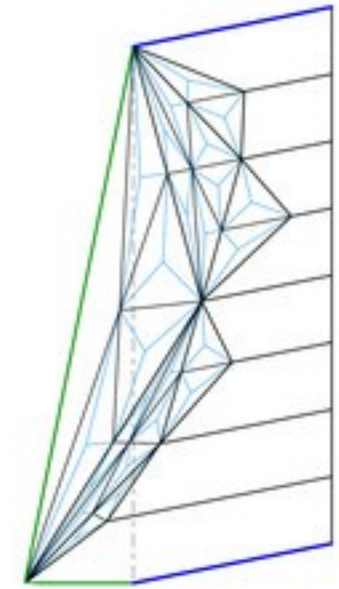


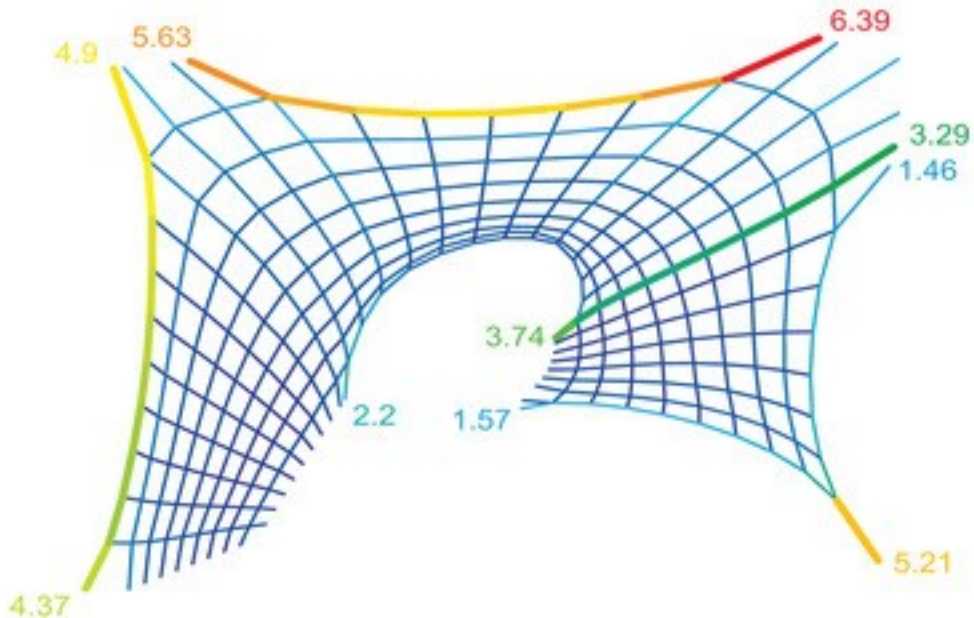


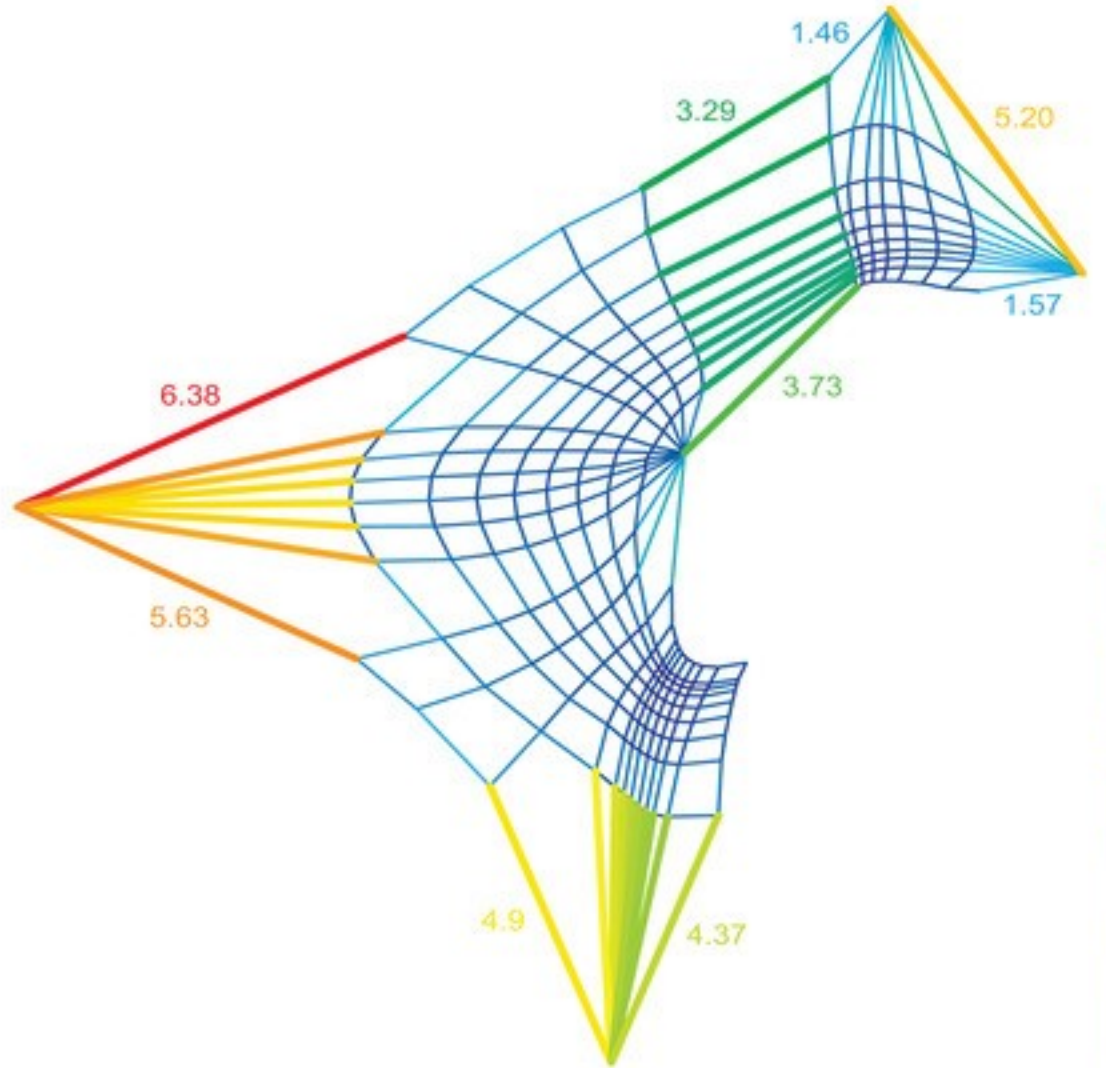




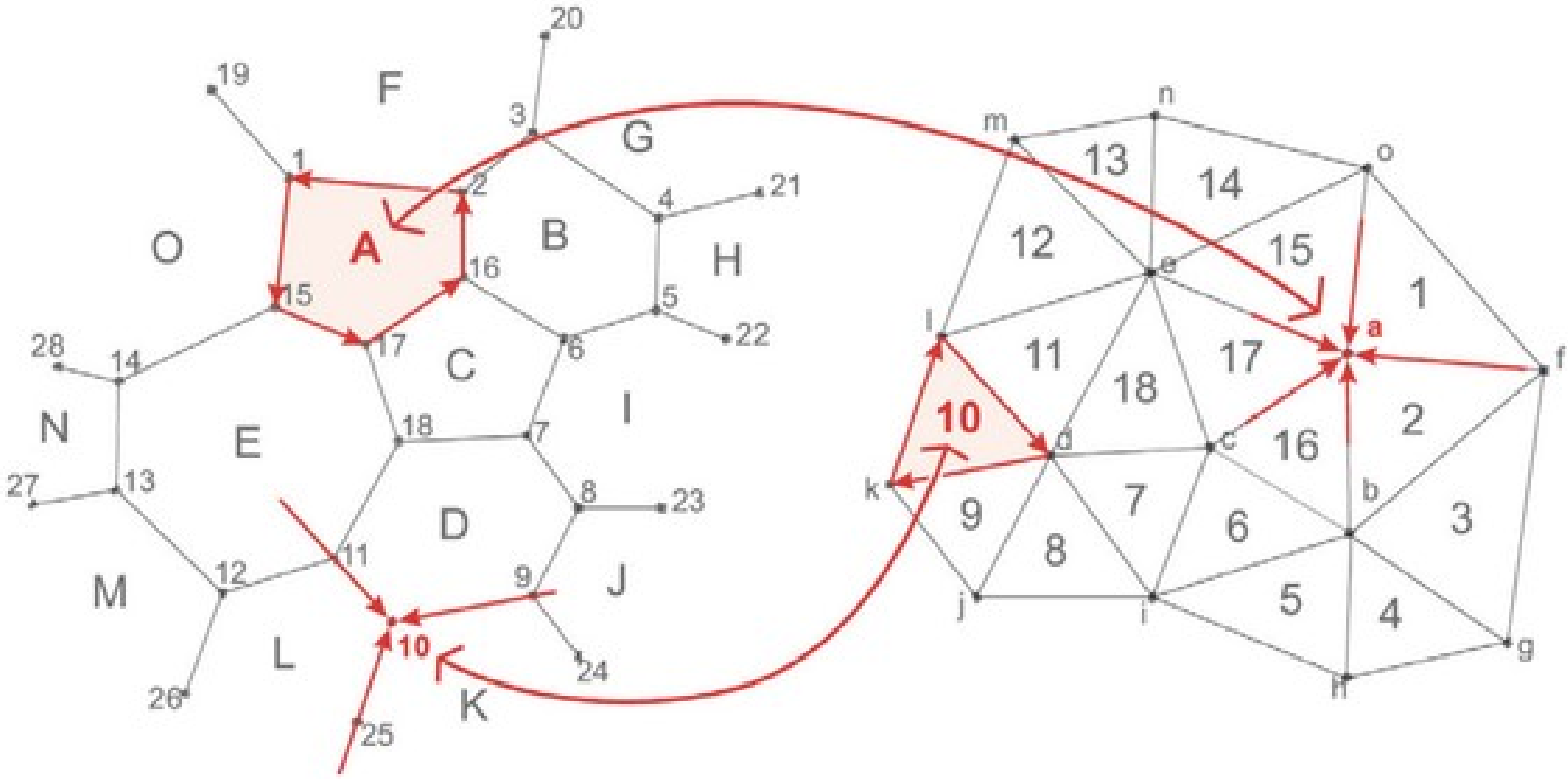


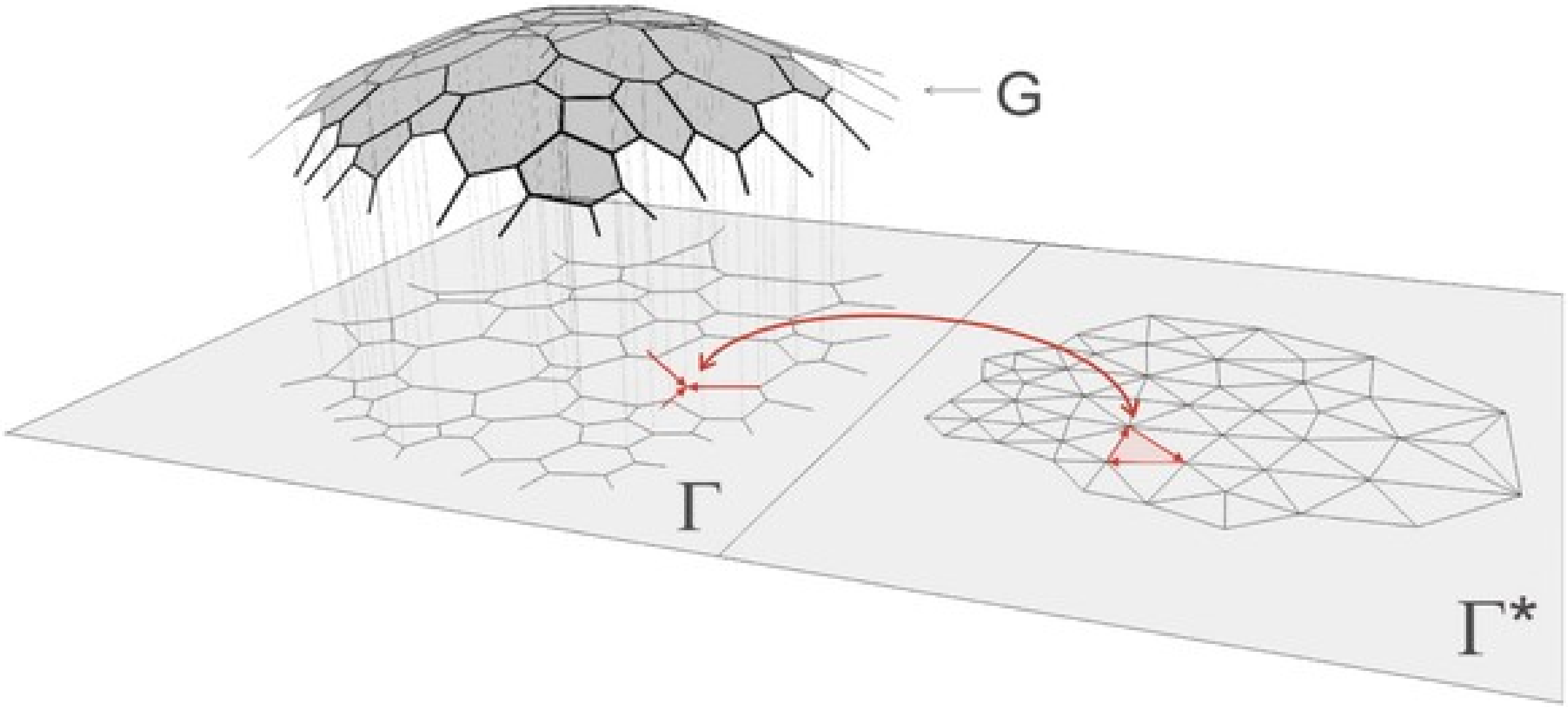


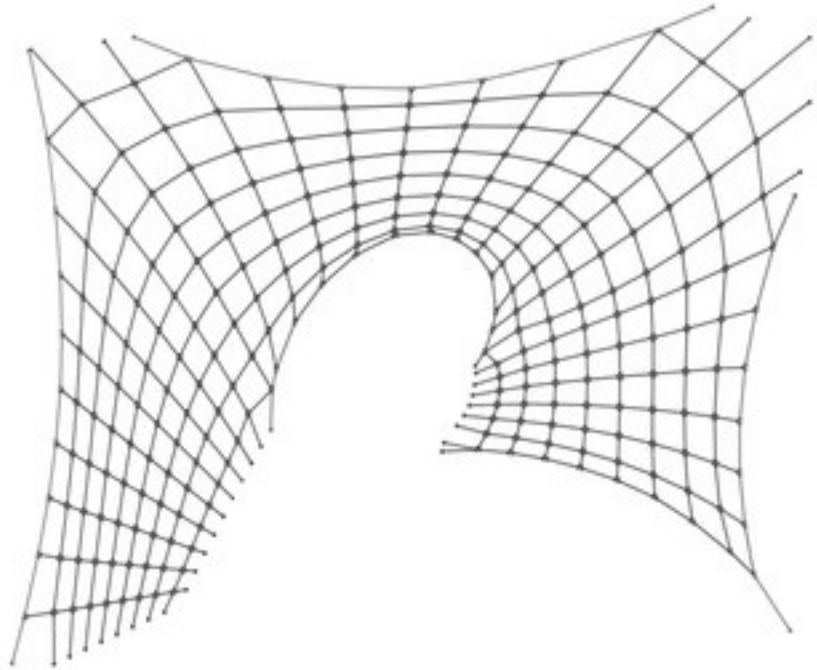

4.9
5.63
6.39
3.29
1.46
3.74
2.2
1.57
5.21
4.37


1.46
3.29
5.20
1.57
6.38
3.73
5.63
4.9
4.37

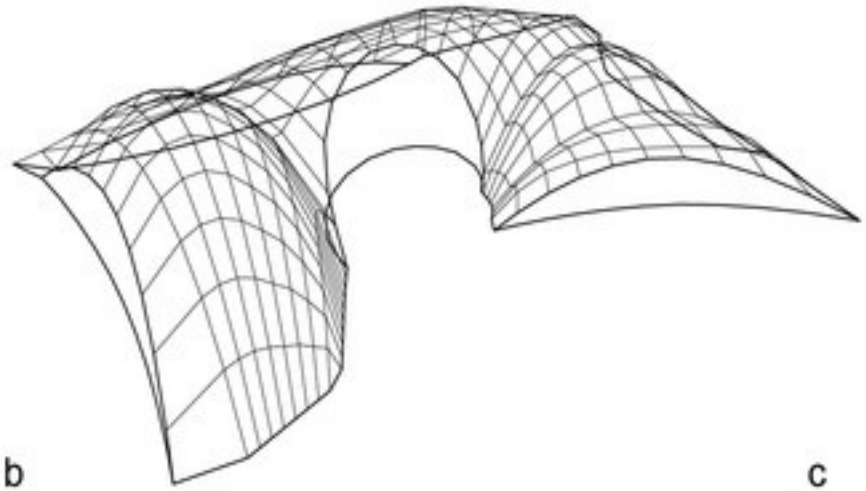

6.39 kN
5.69 kN
4.99 kN
4.29 kN
3.59 kN
2.89 kN
2.18 kN
1.48 kN
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0.08 kN


A
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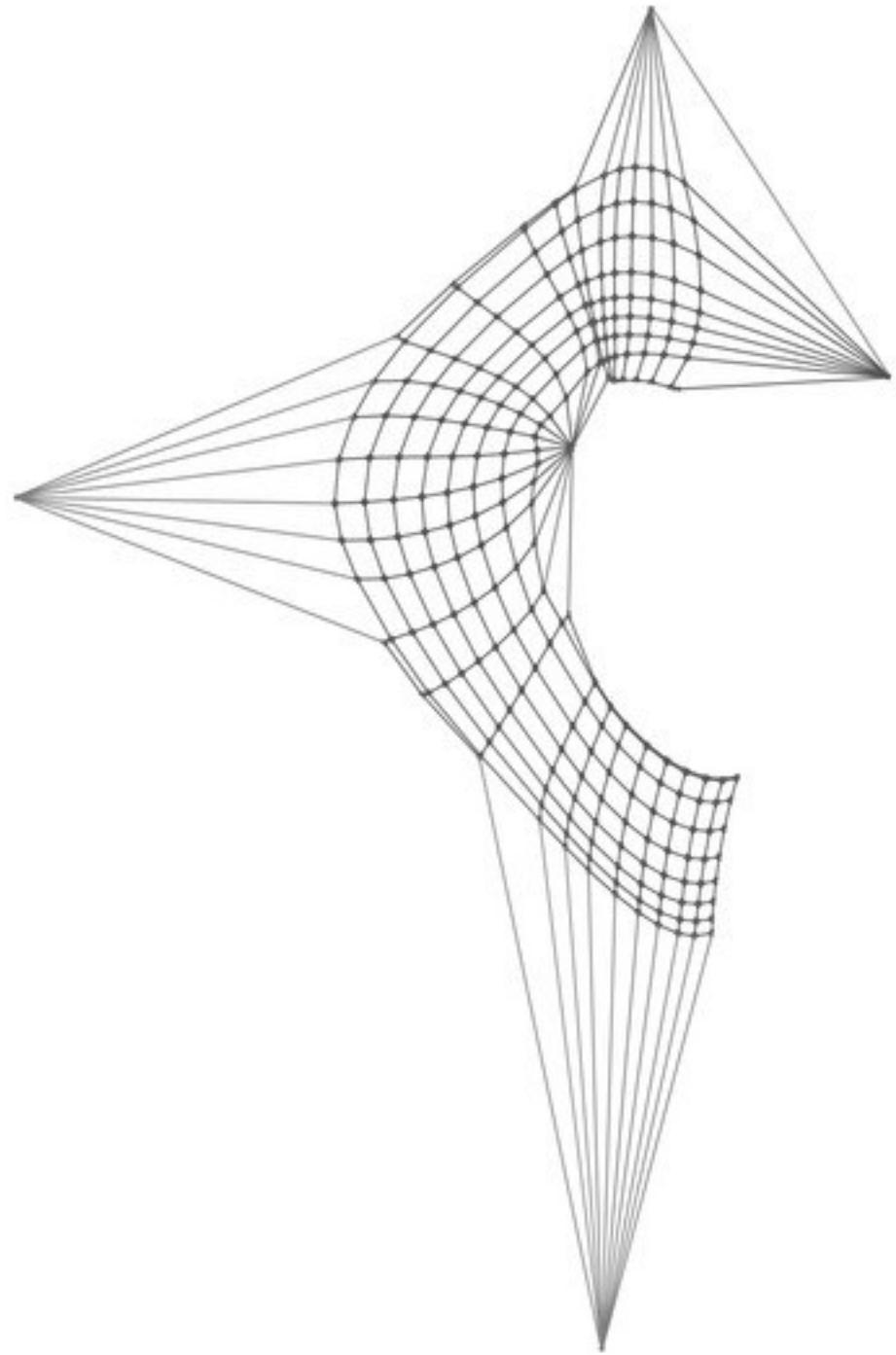

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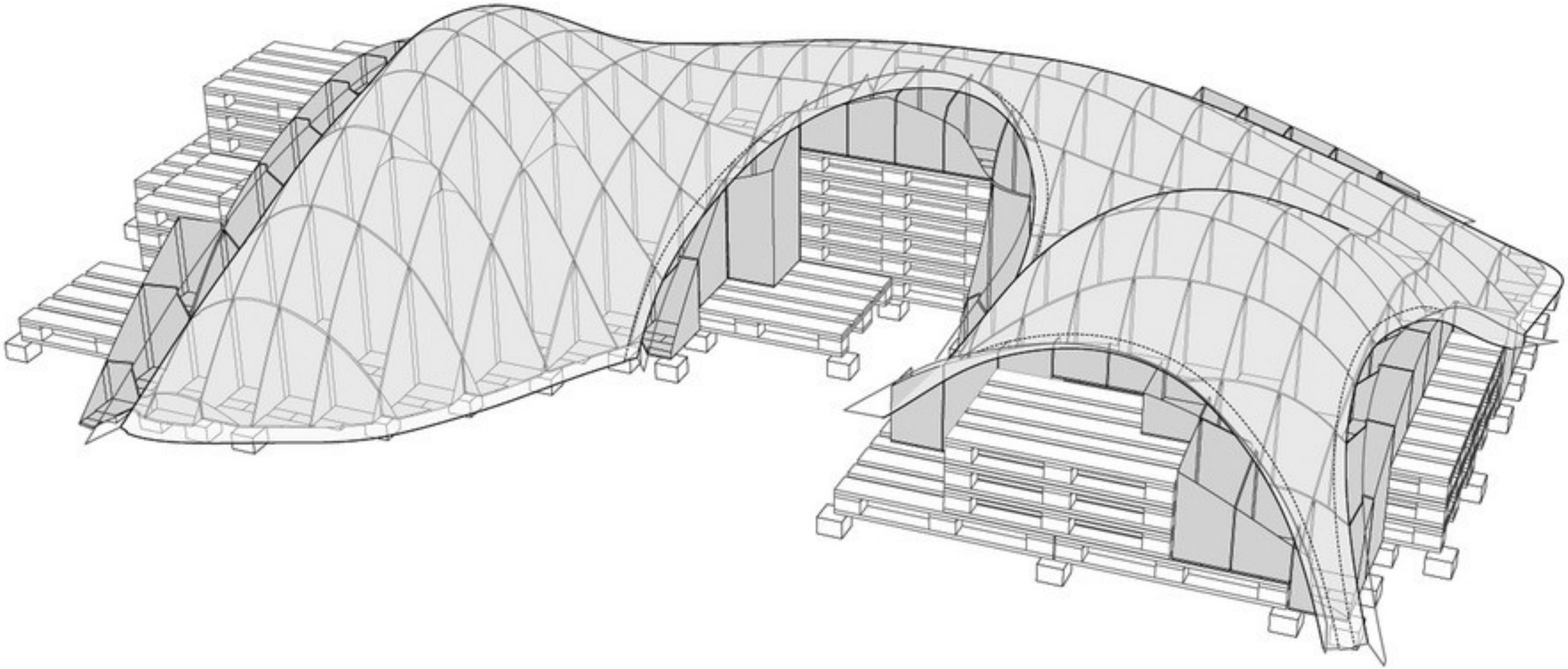
a



b



c













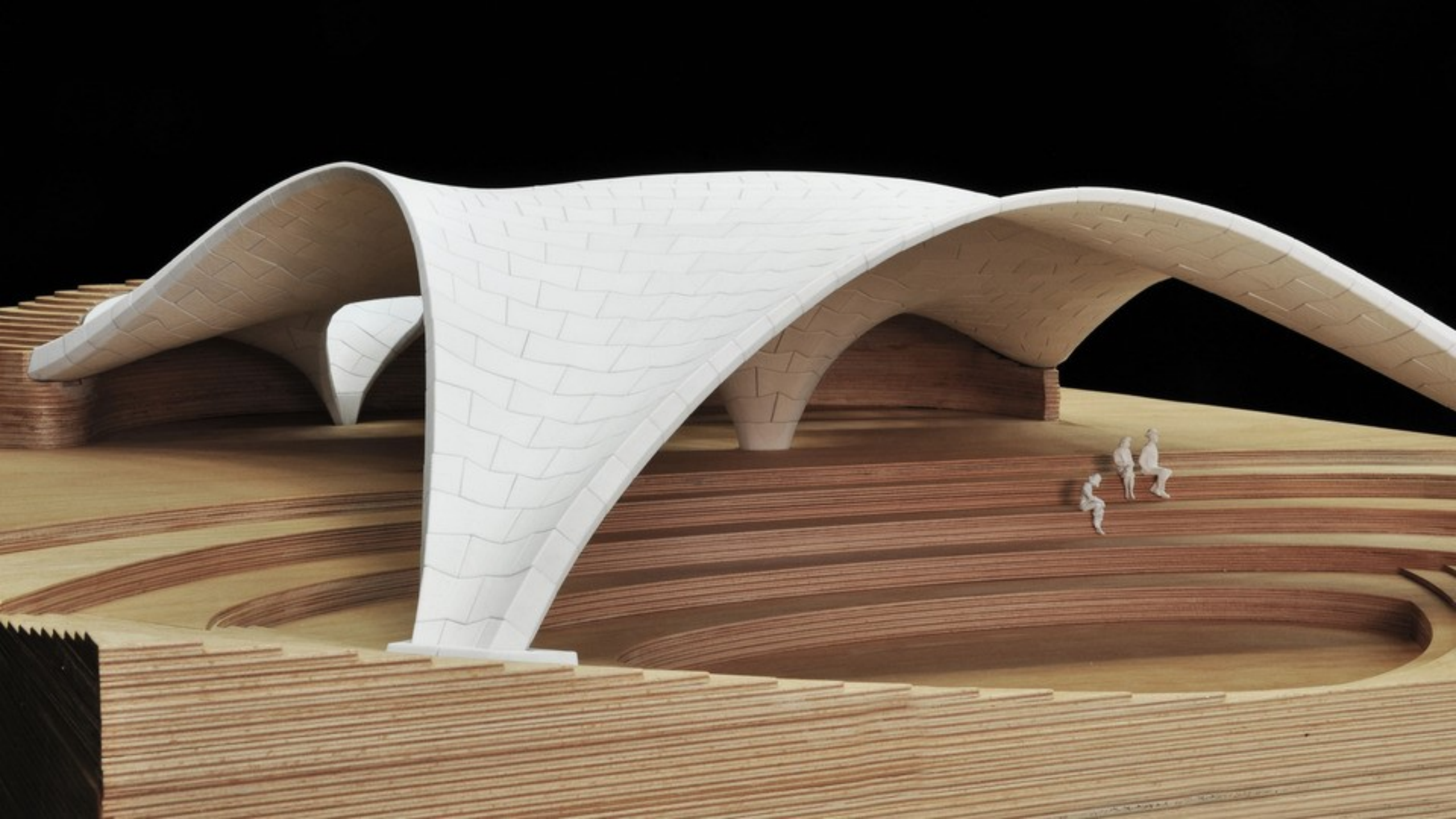


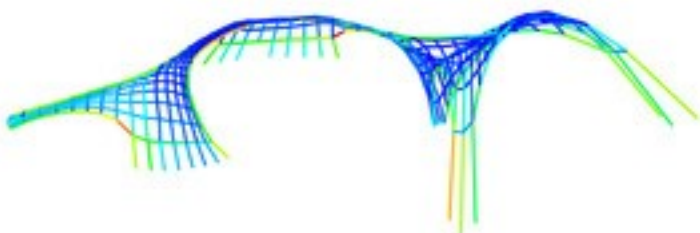




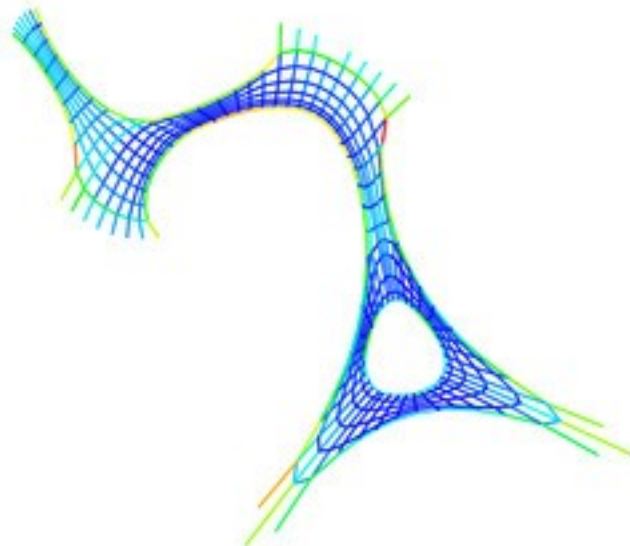




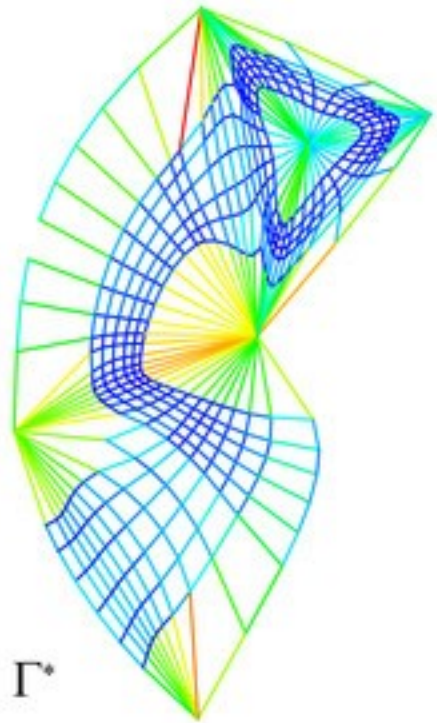




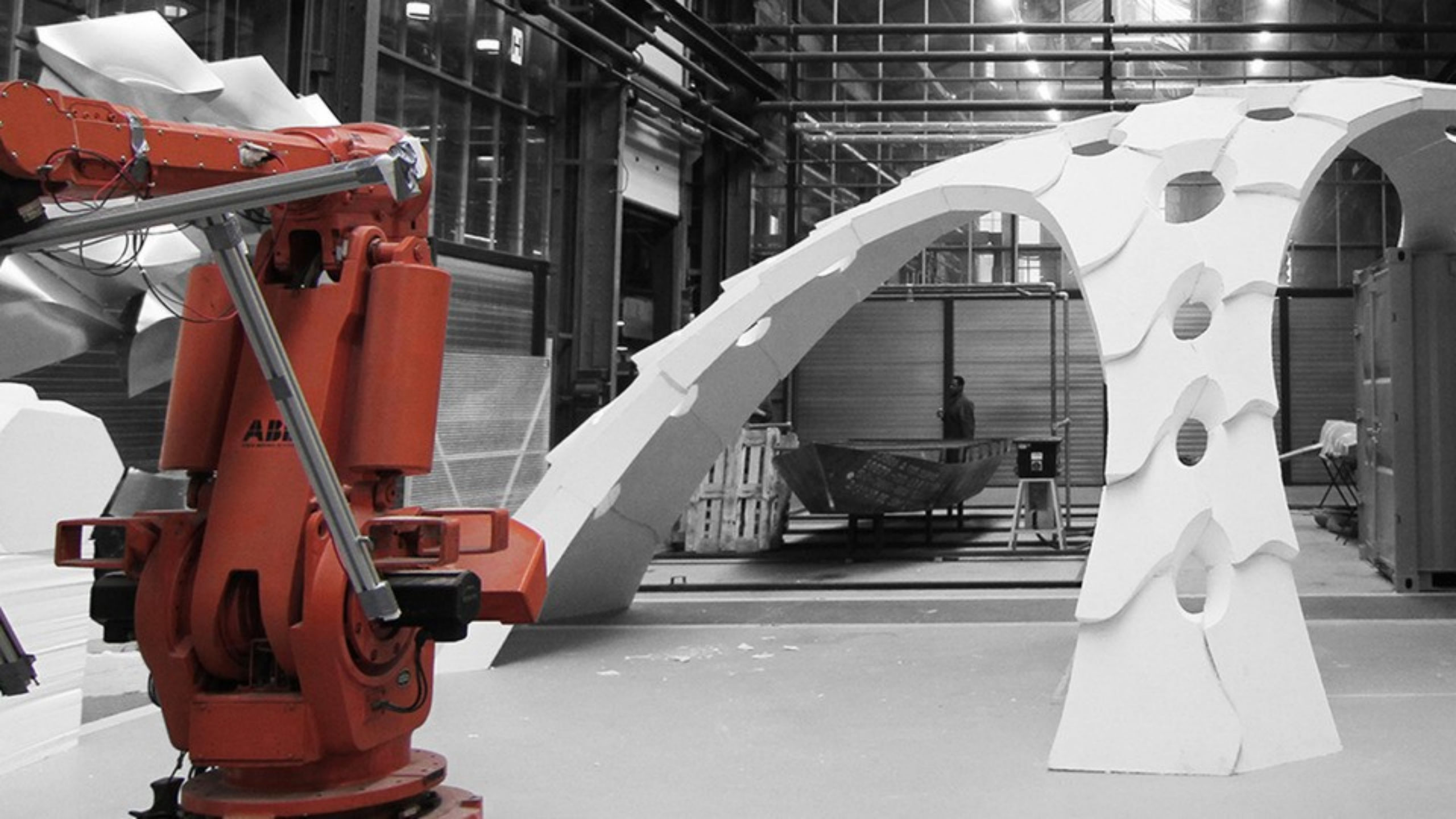
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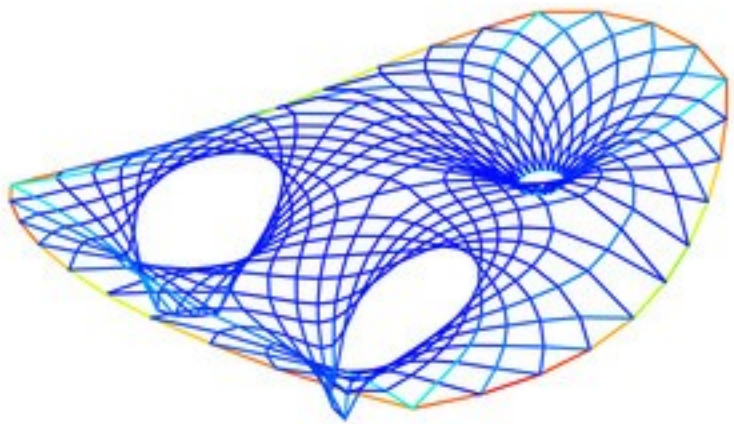


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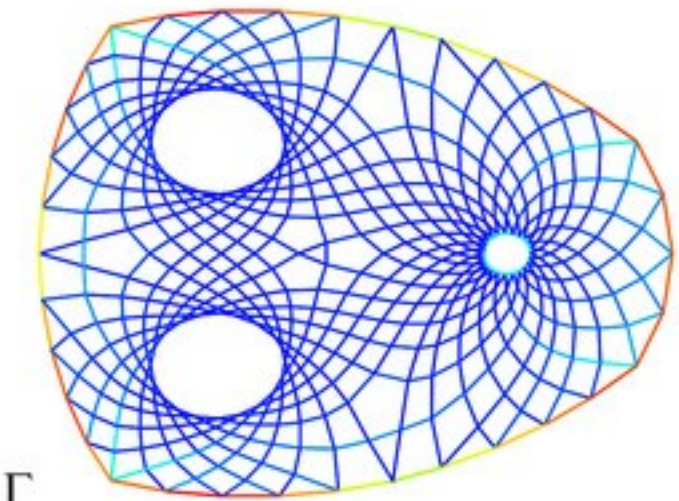


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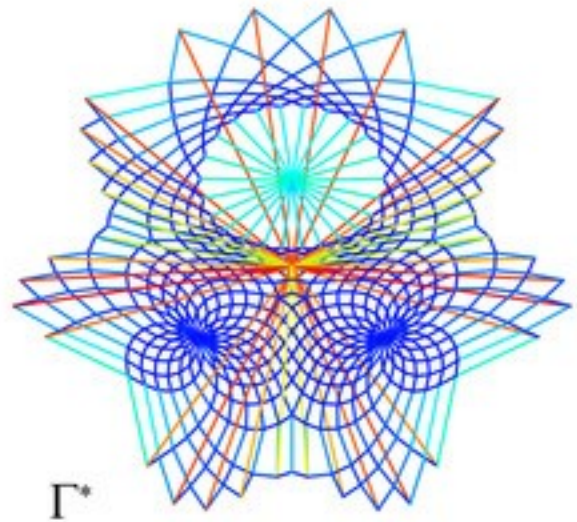




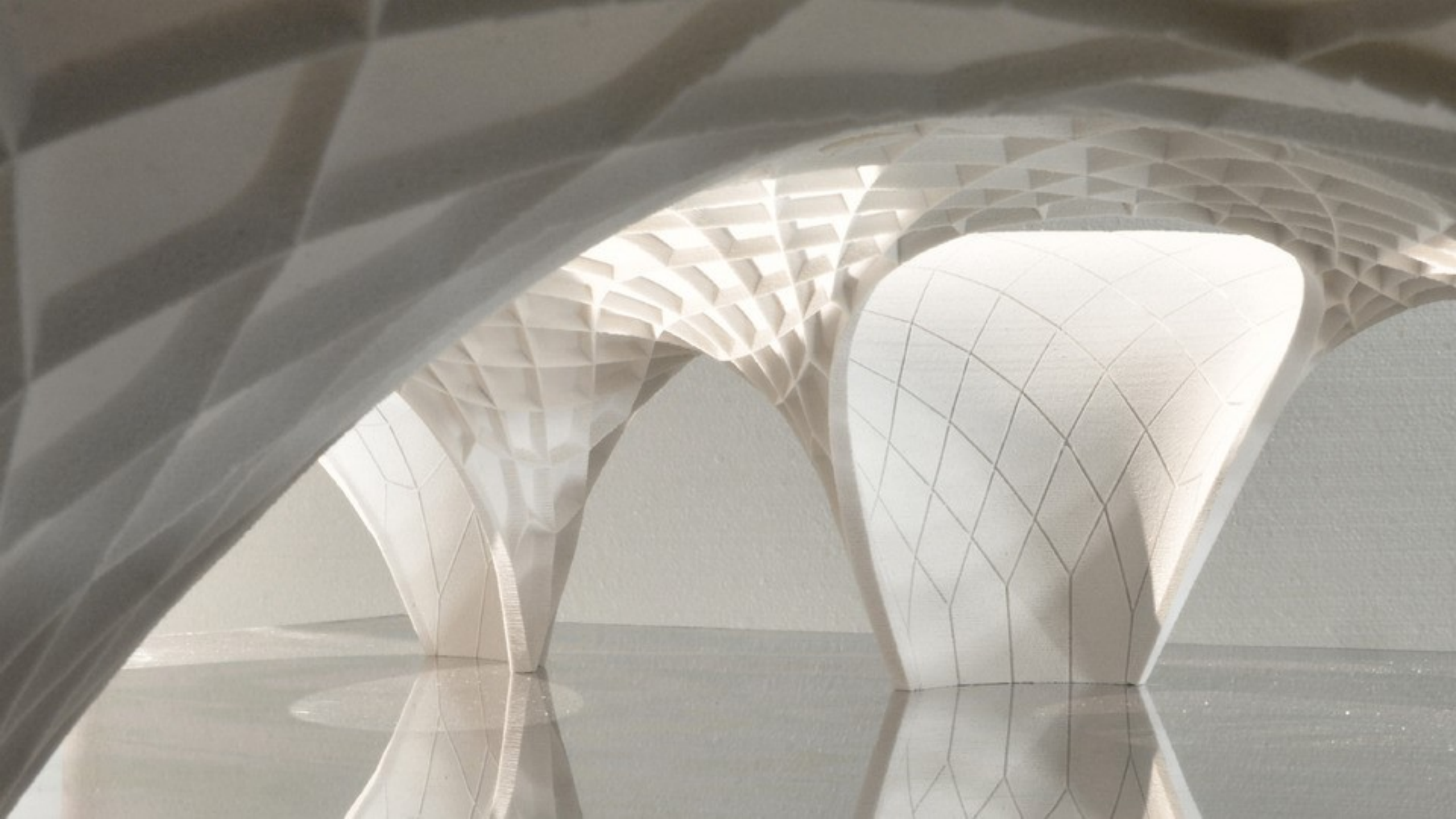
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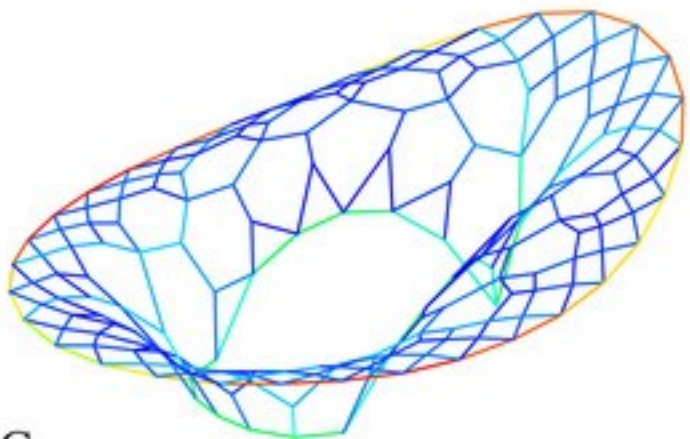


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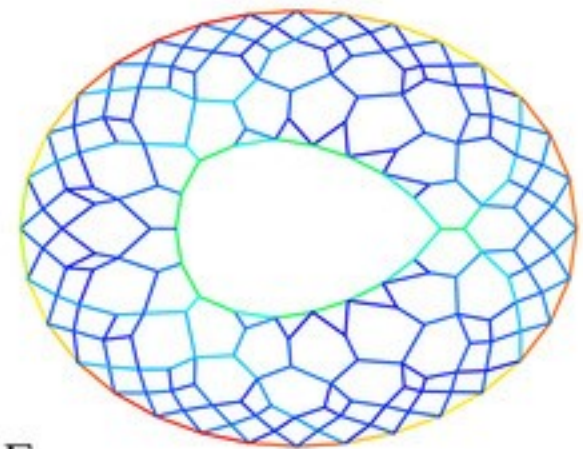


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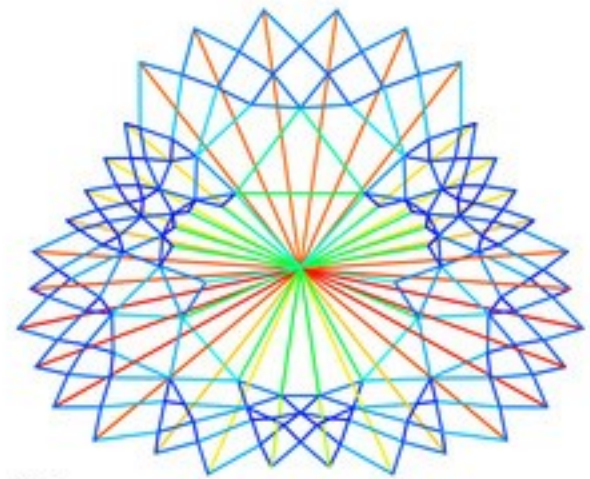




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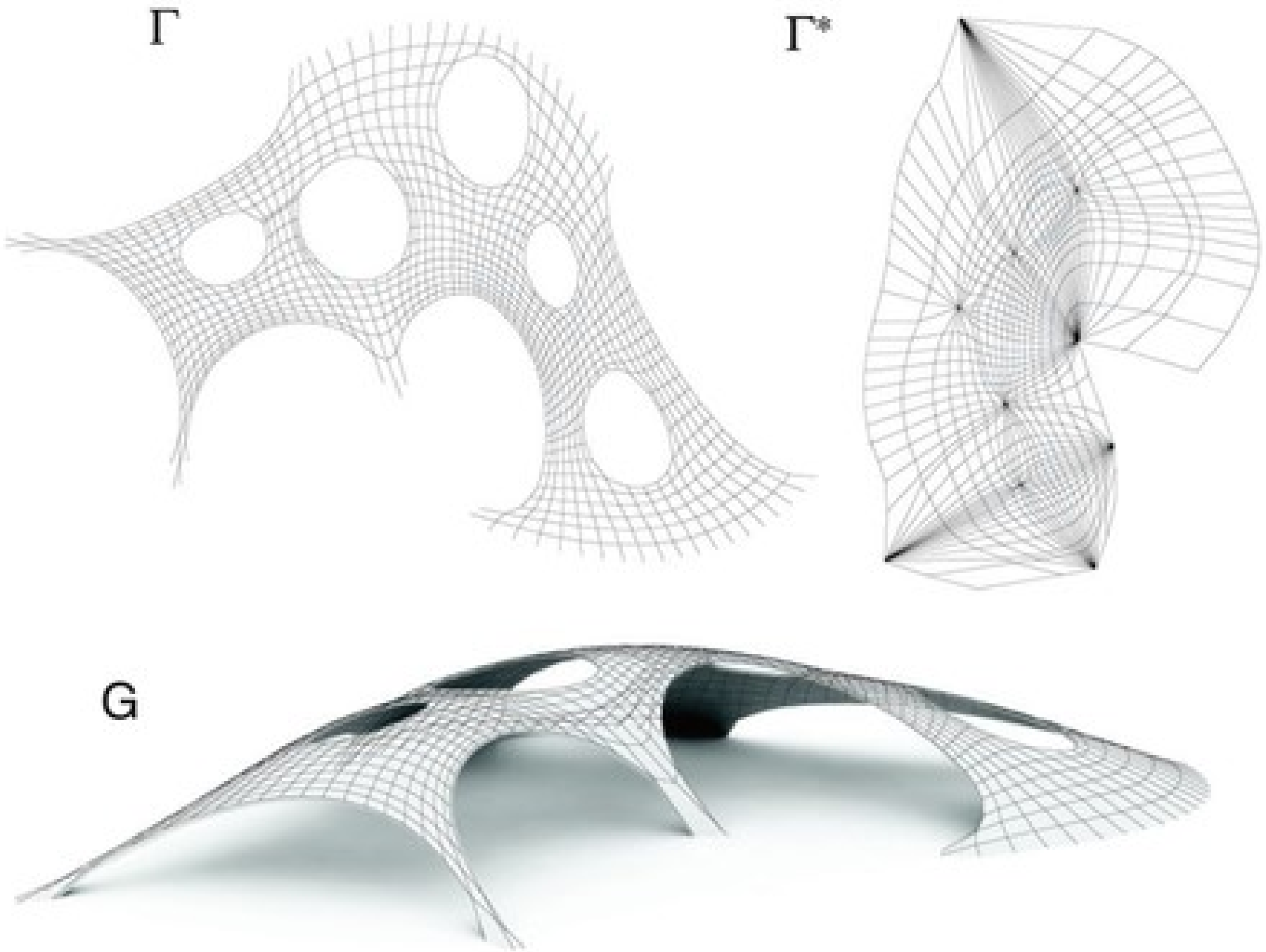


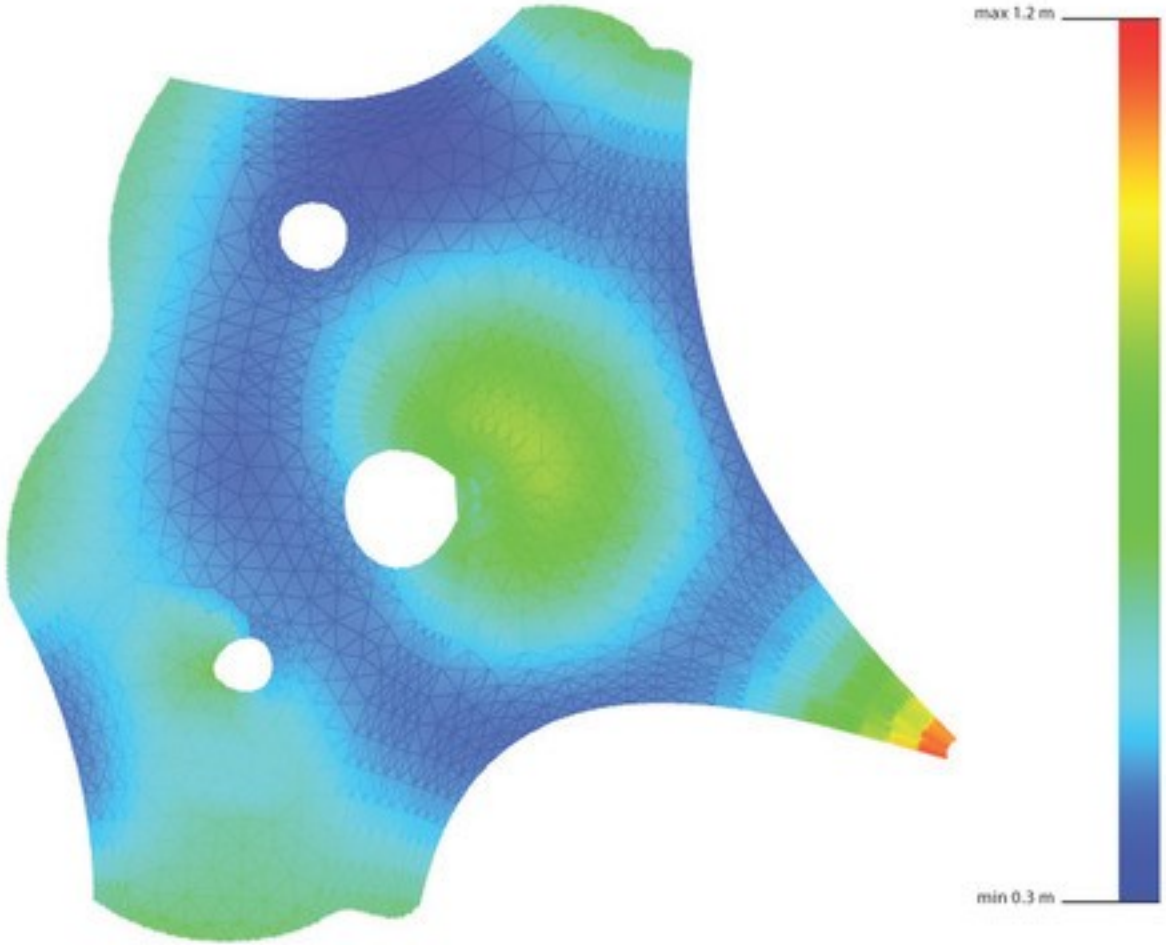
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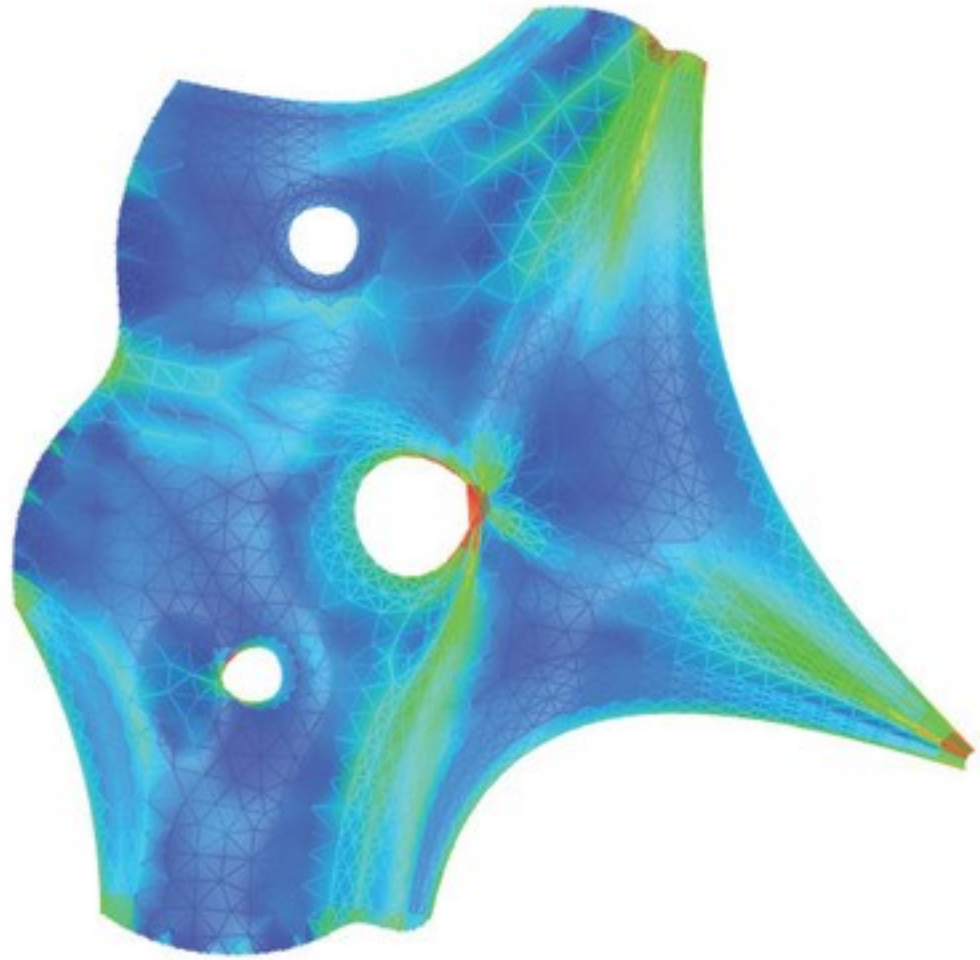


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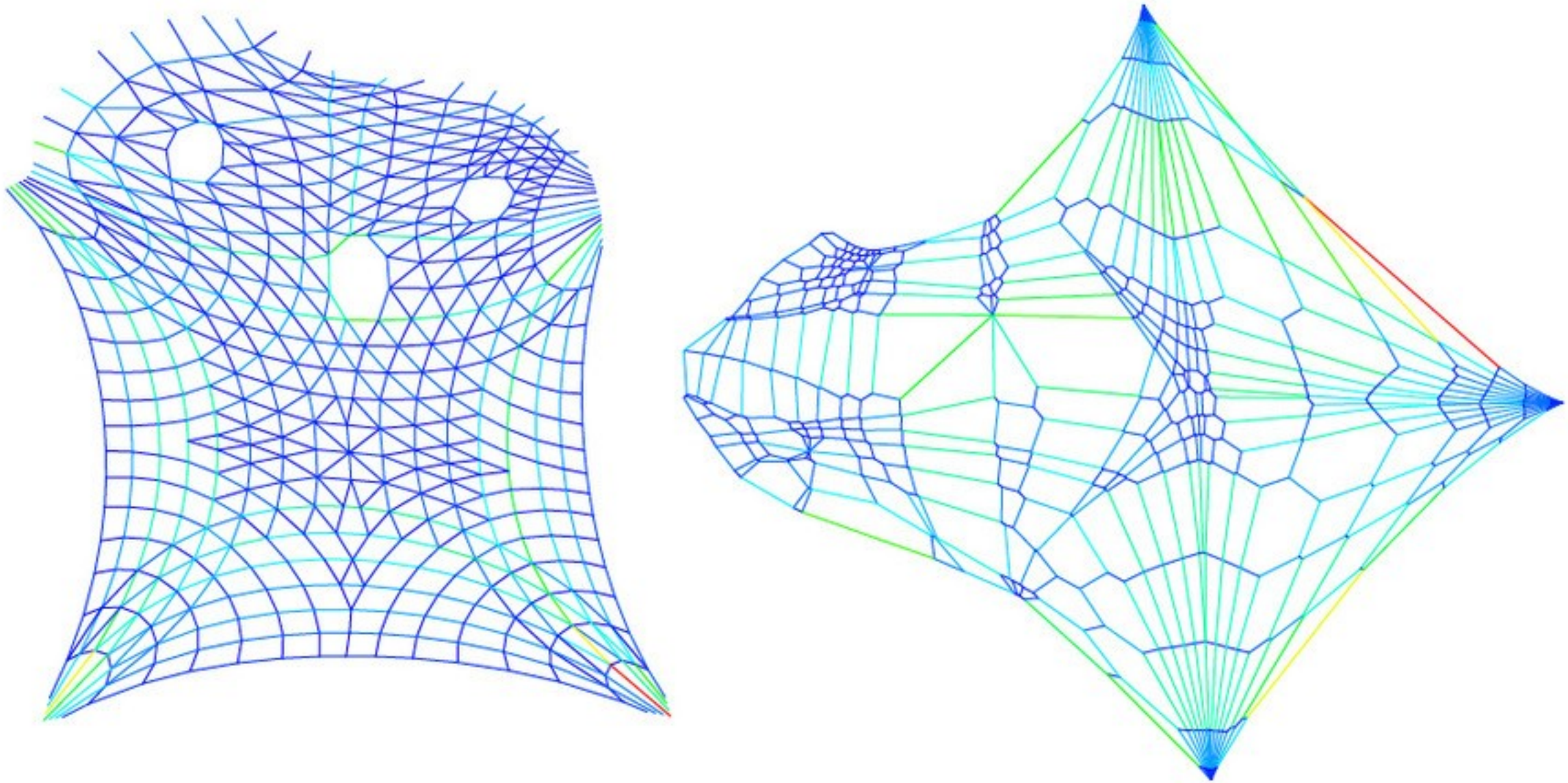

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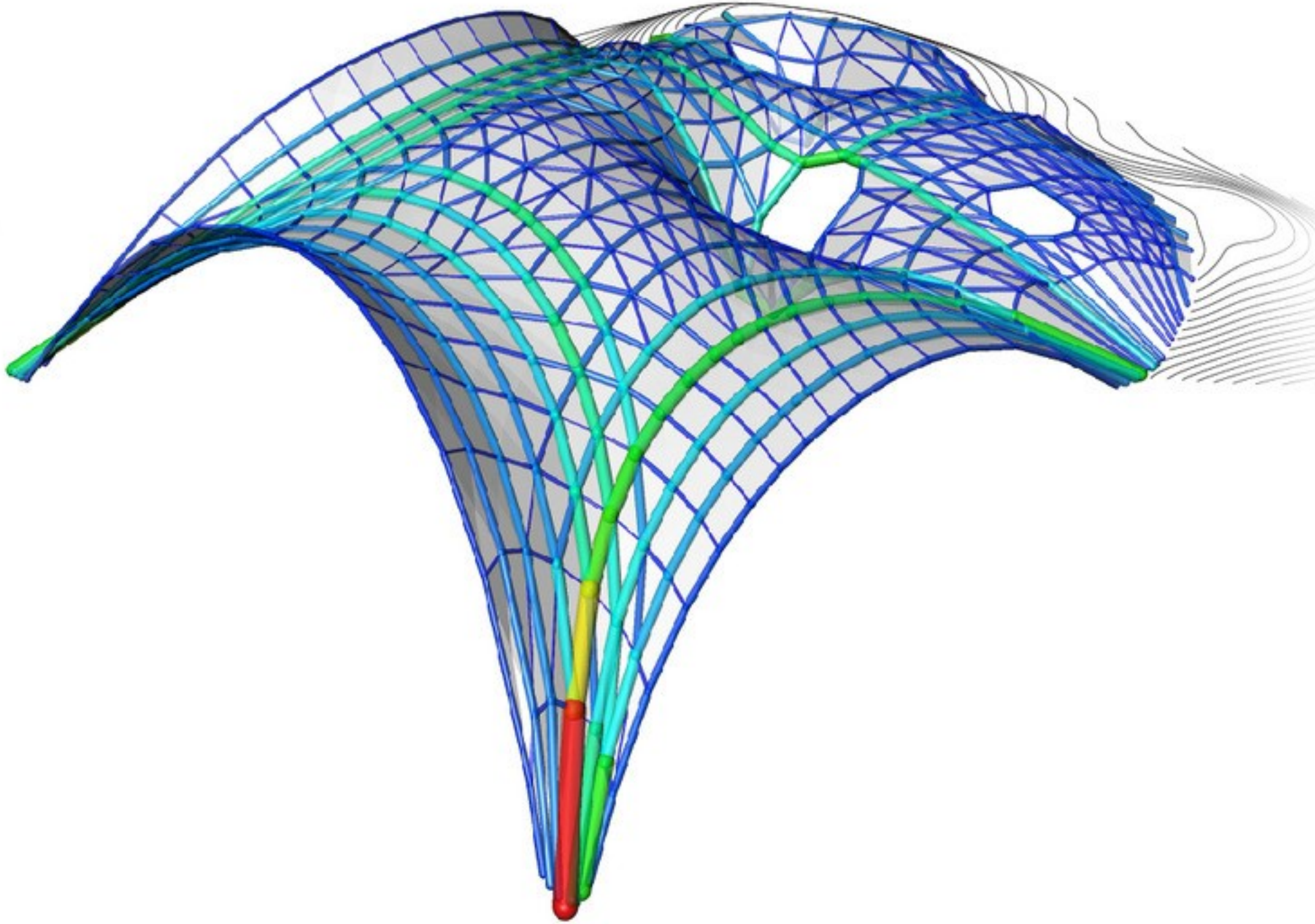


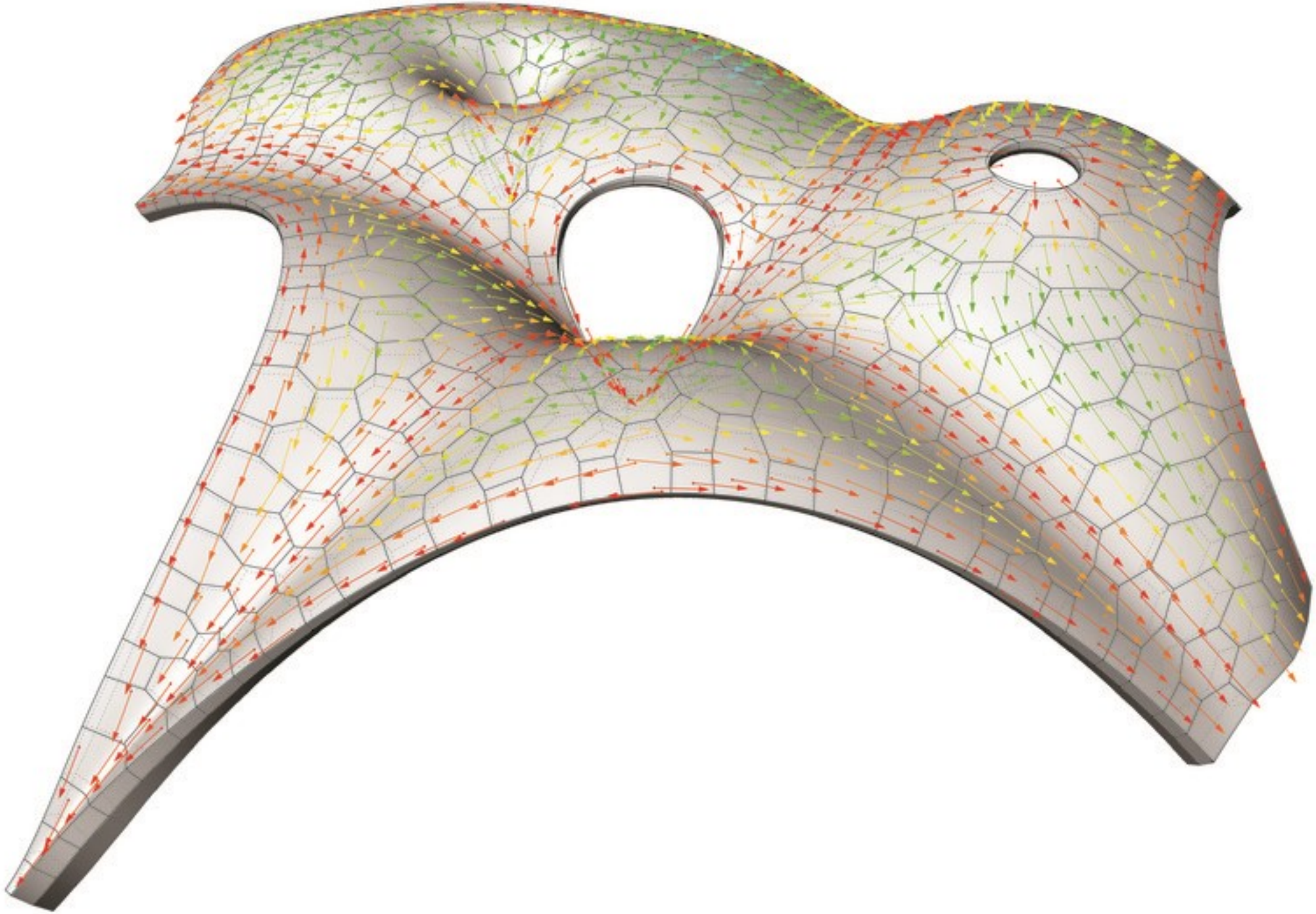


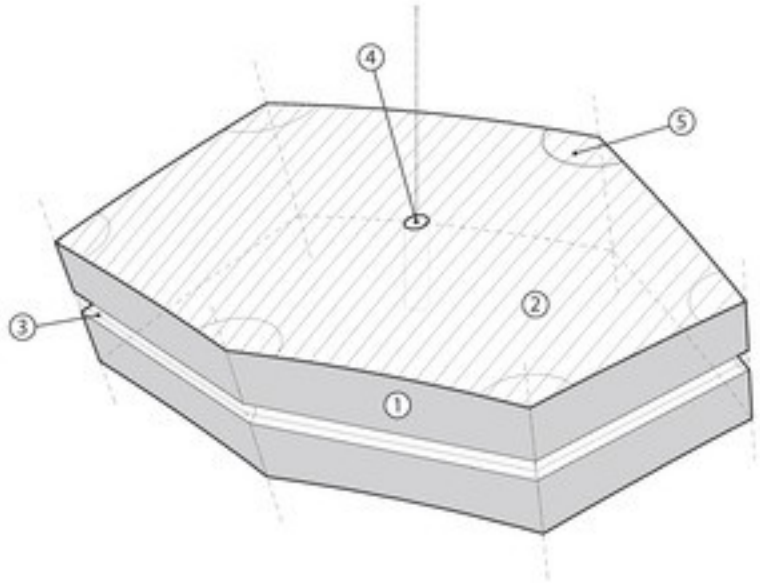


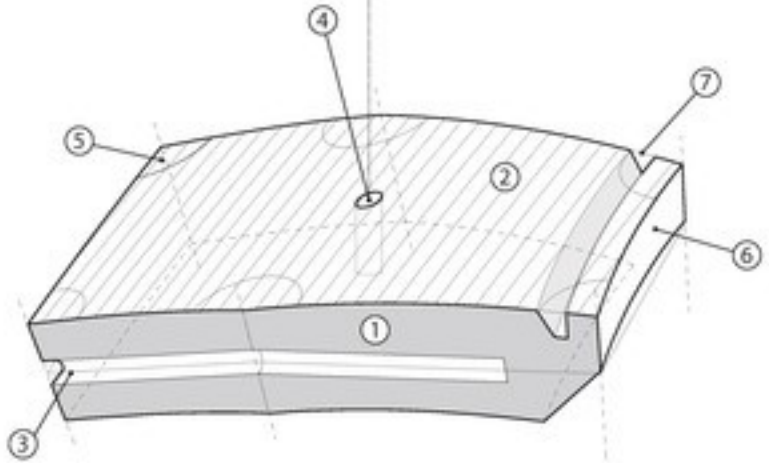
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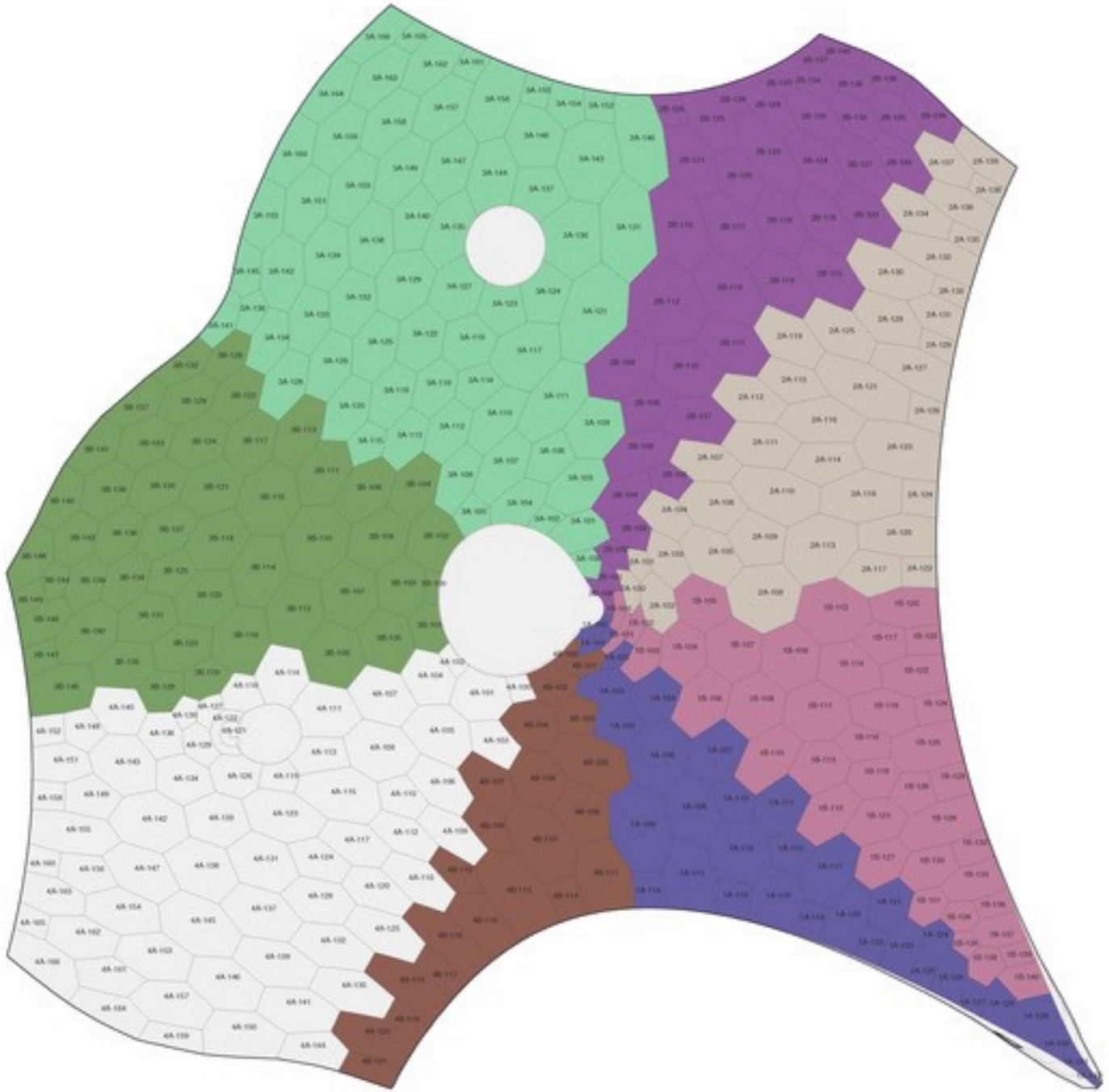

810 kN
720 kN
630 kN
540 kN
450 kN
360 kN
270 kN
180 kN
90 kN
0.4 kN



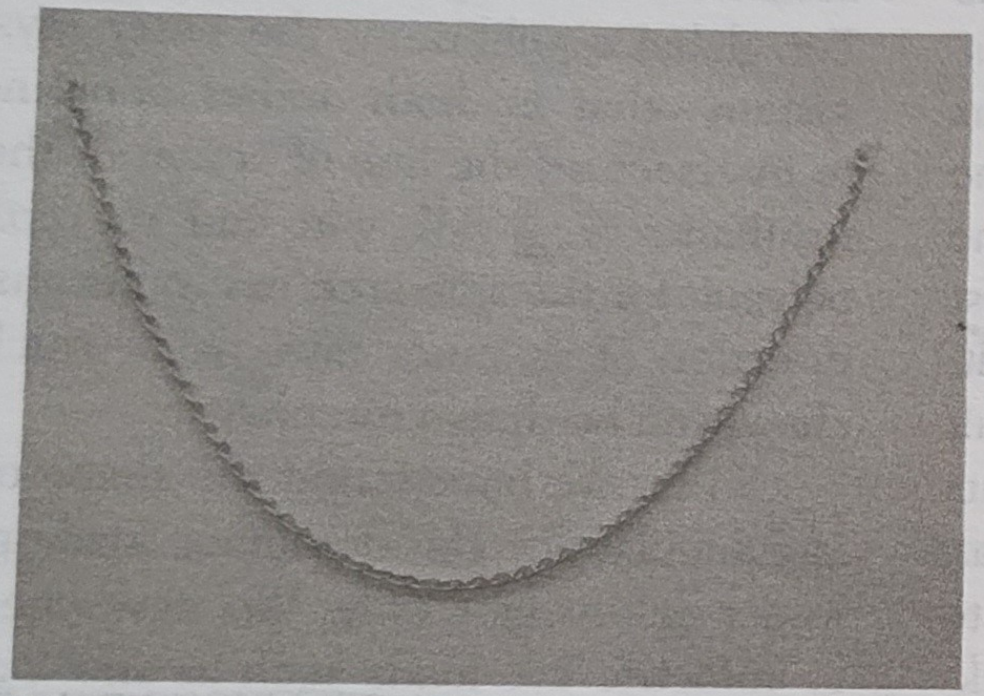



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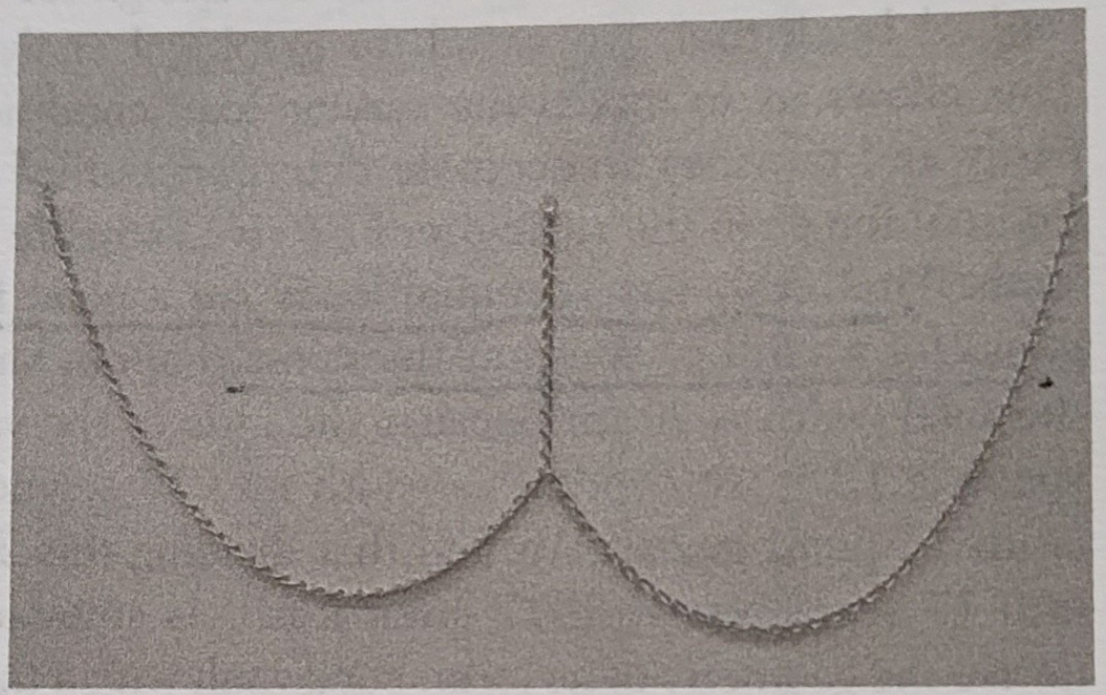

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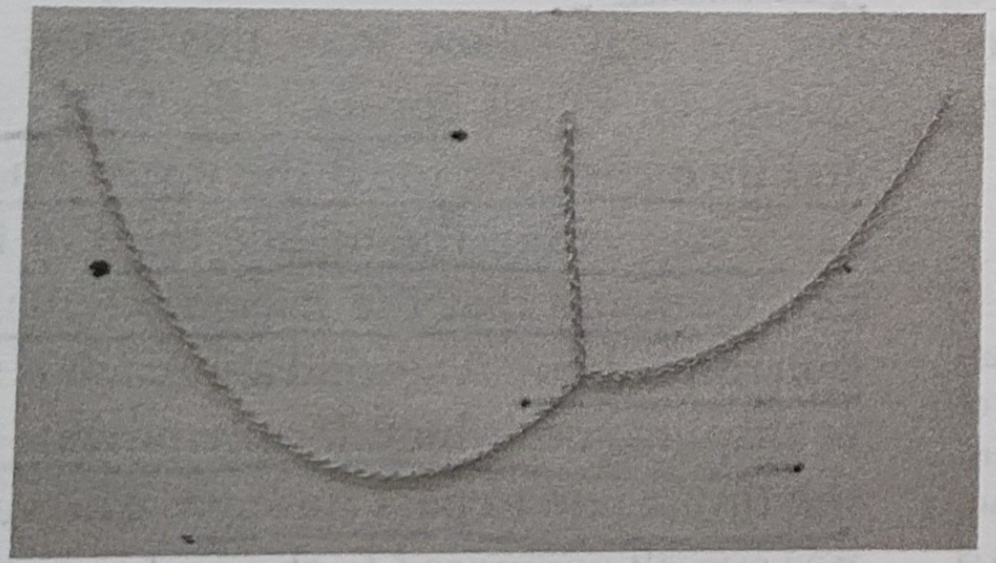




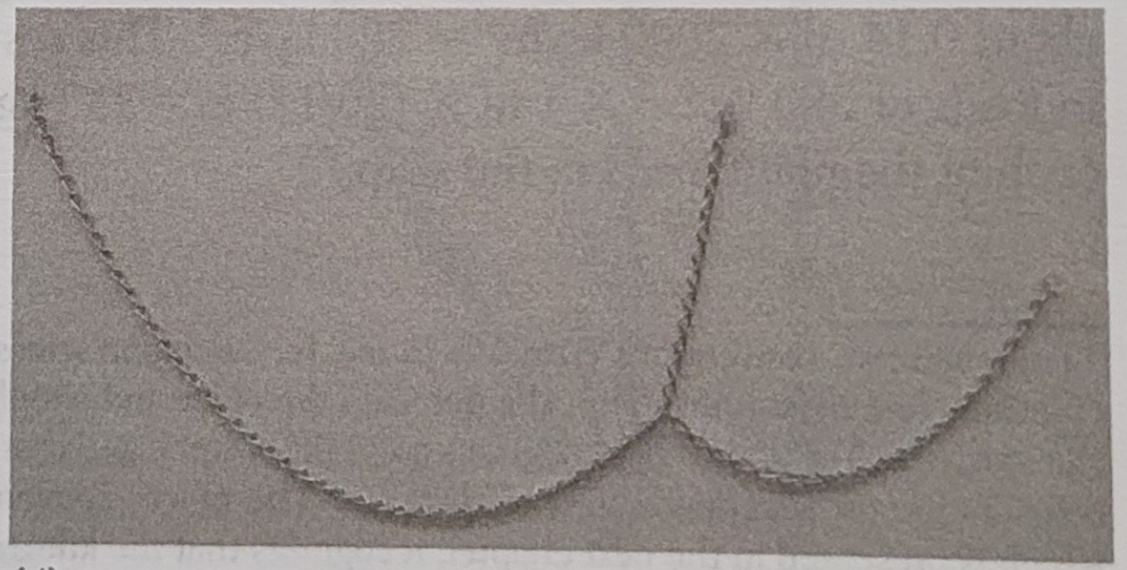
(a)



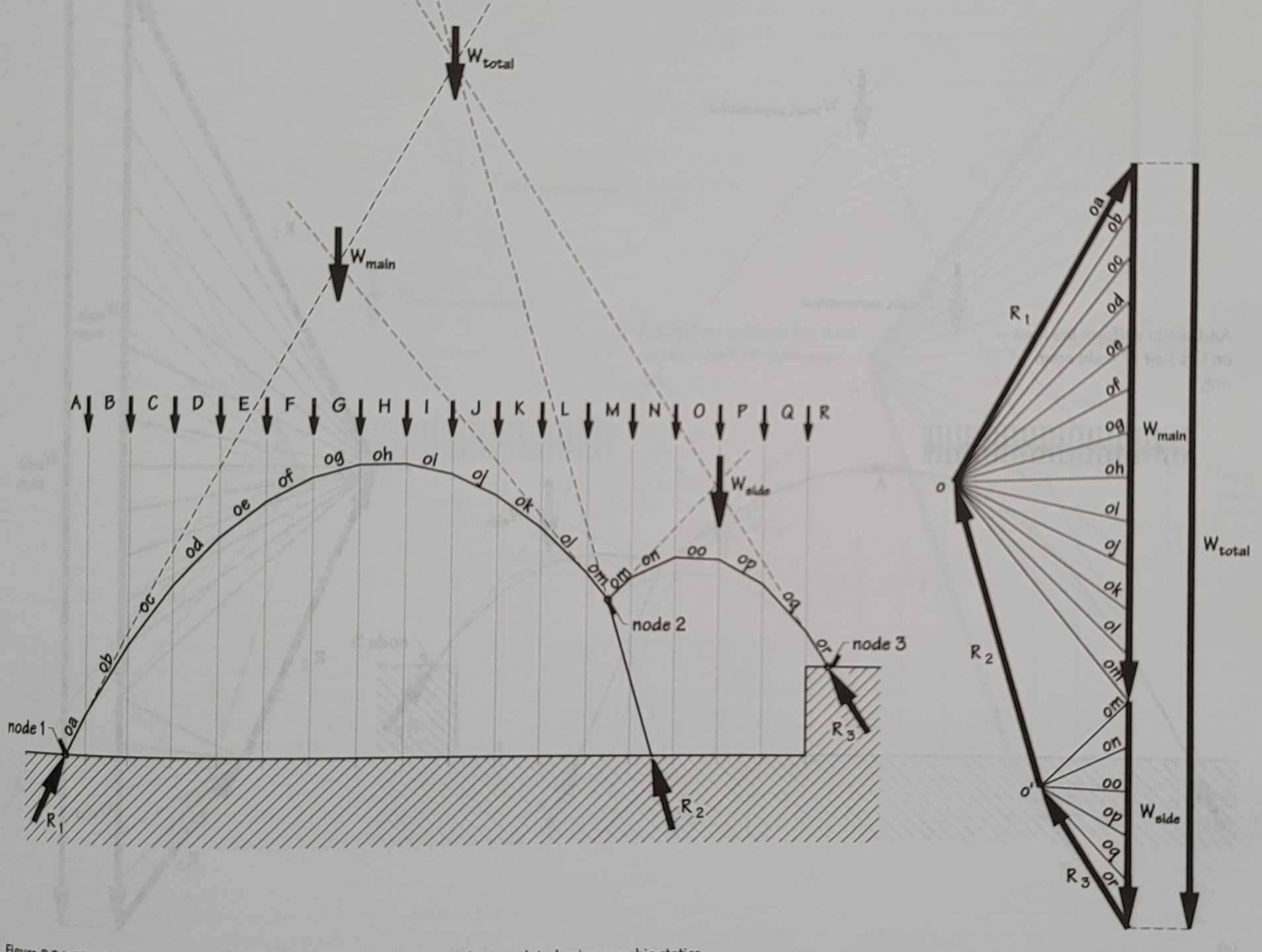
(b)



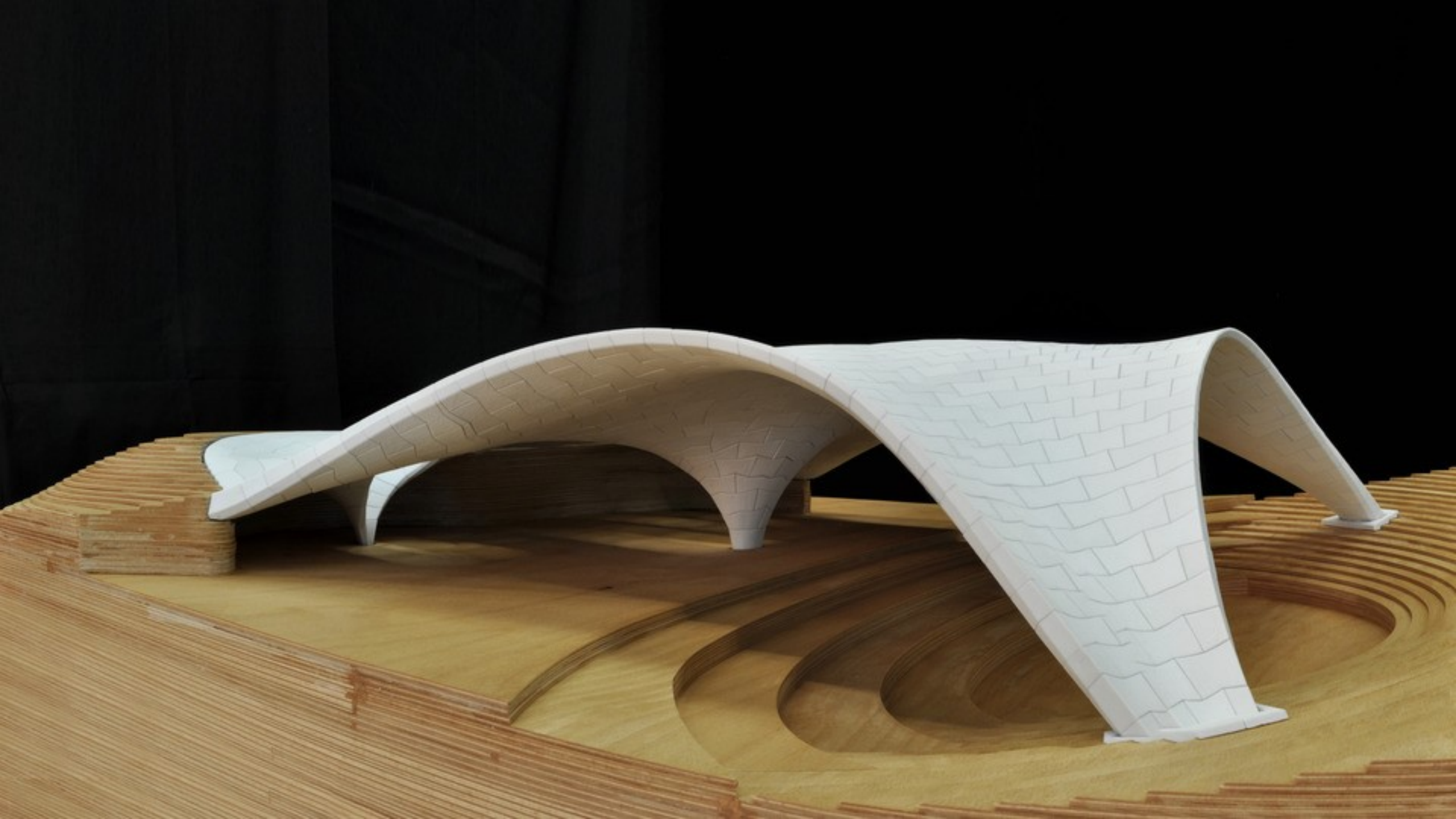
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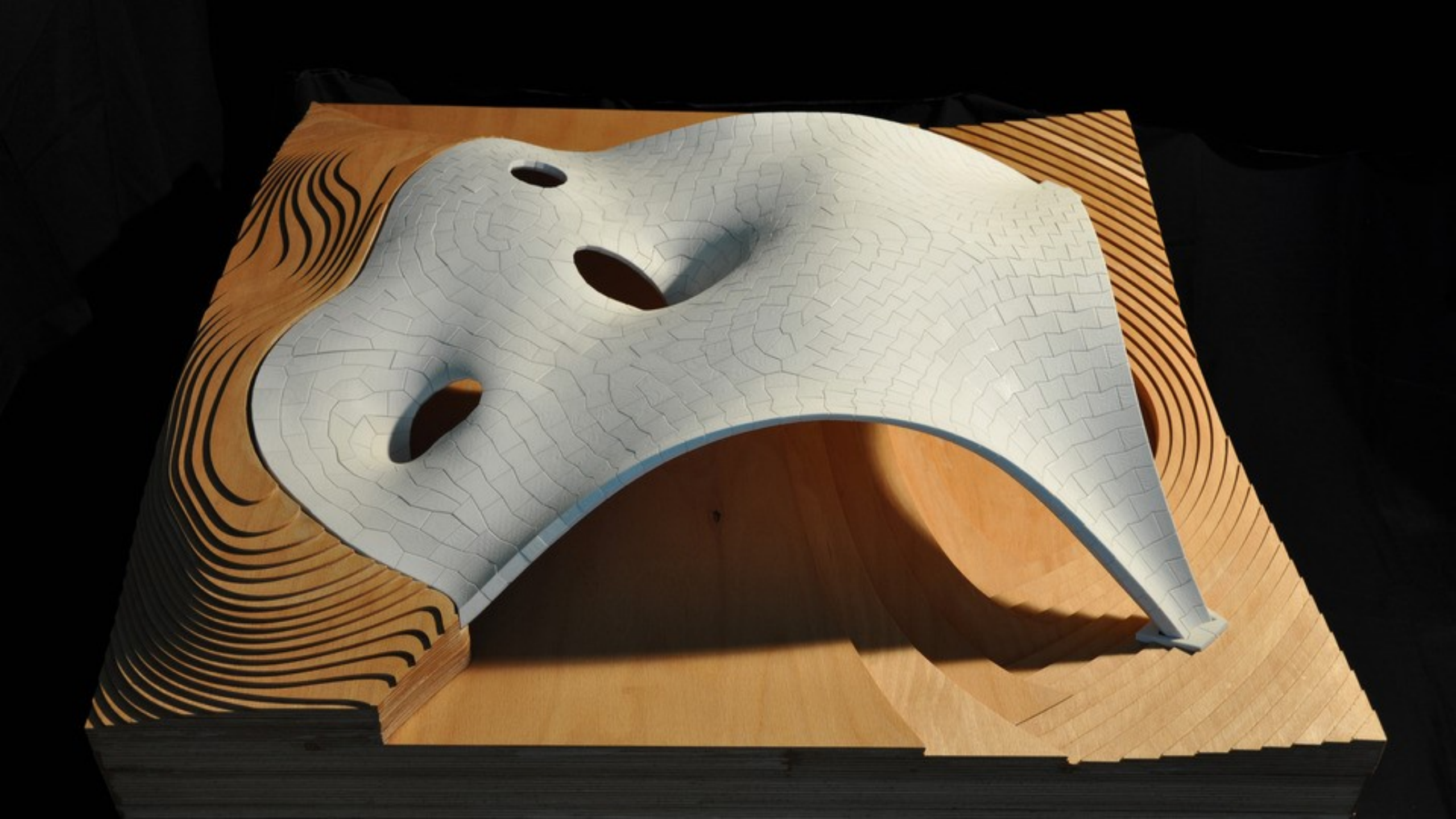


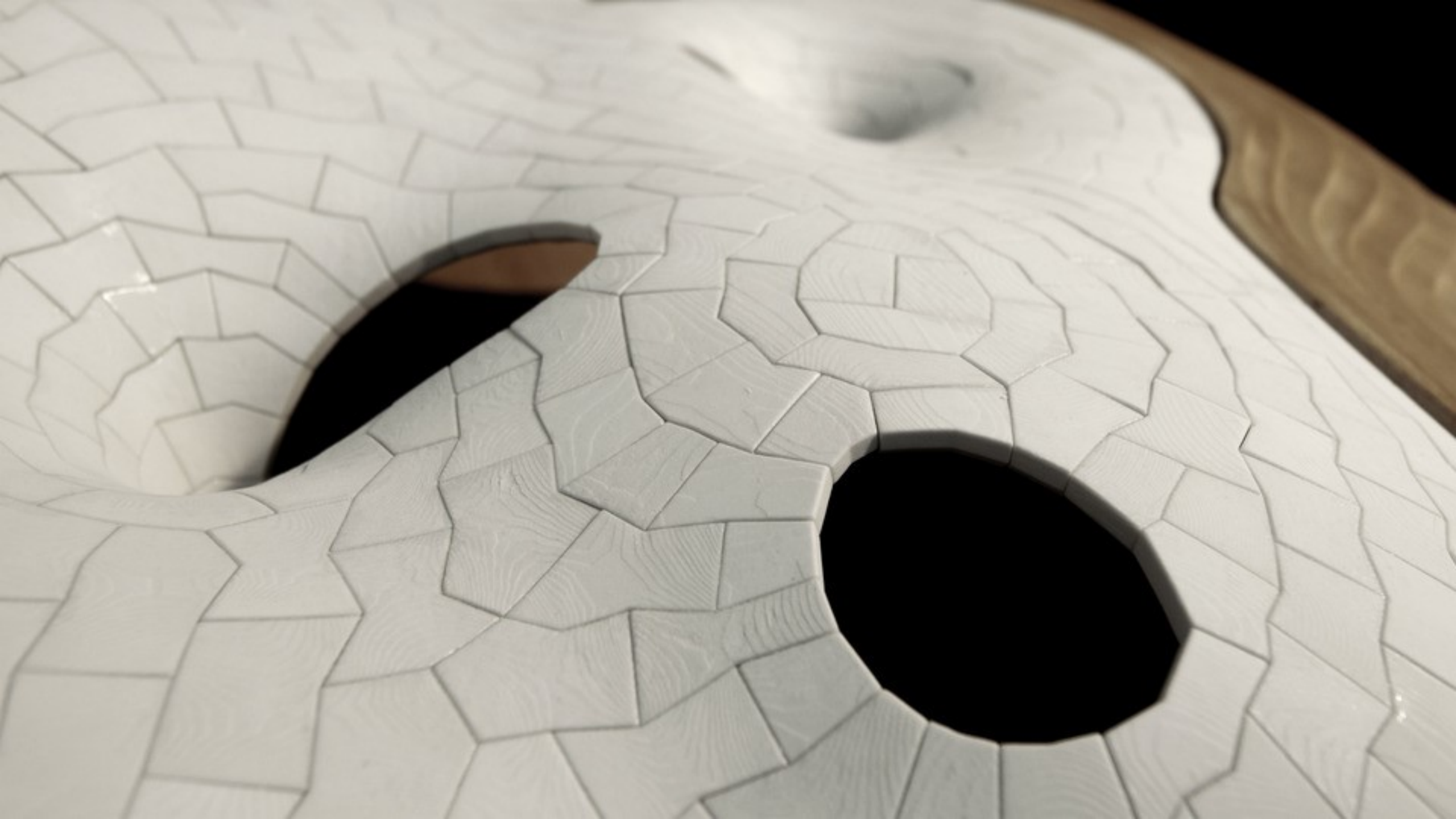
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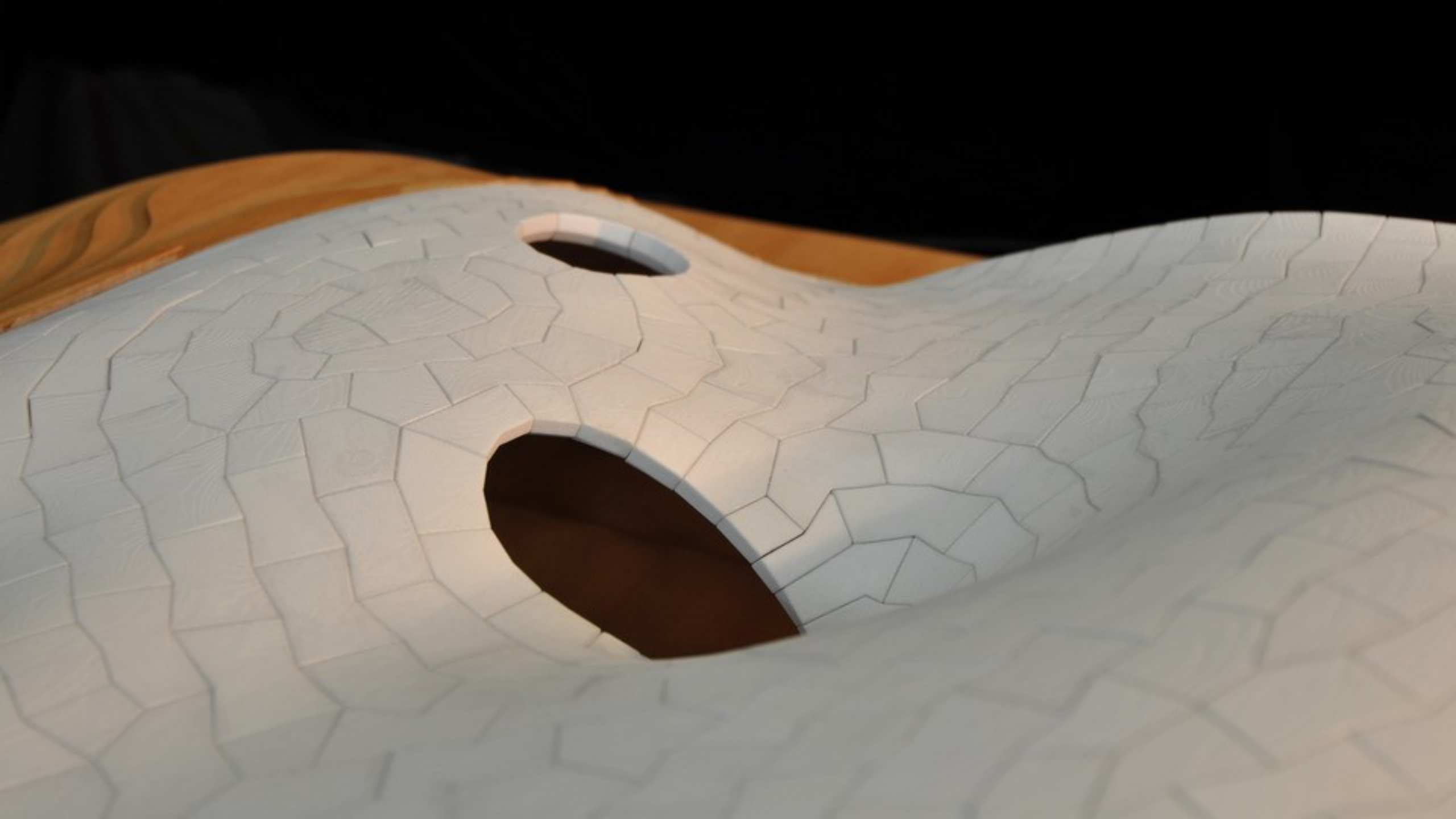

W total
W main
W side
A B C D E F G H I J K L M N O P Q R
oa ob oc od oe of og oh oi oj ok ol om on oo op oq or
node 1
node 2
node 3
R1
R2
R3
o
o'



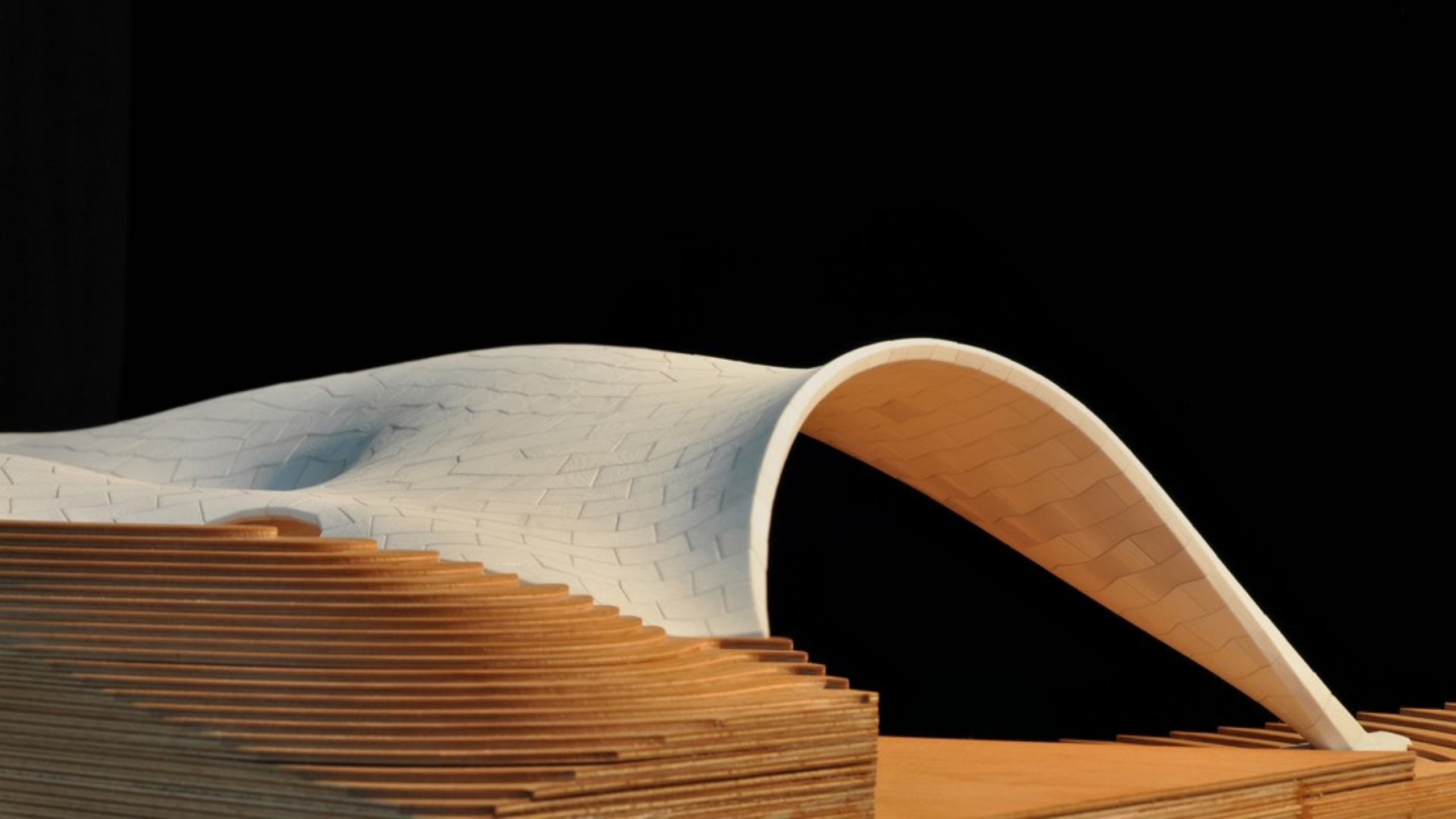




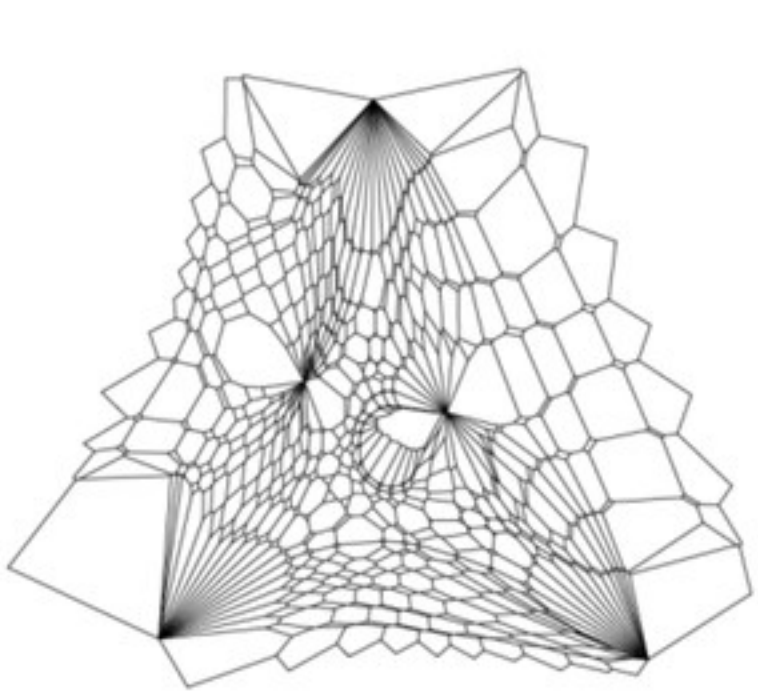




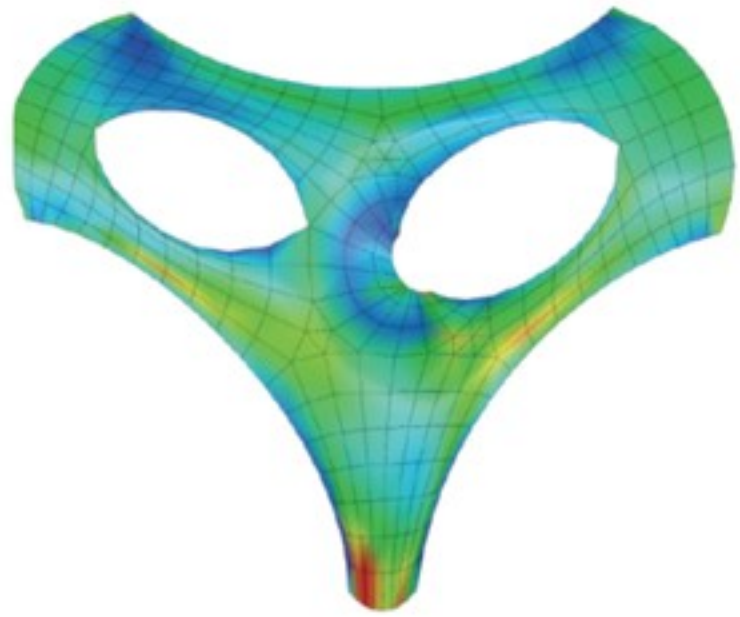










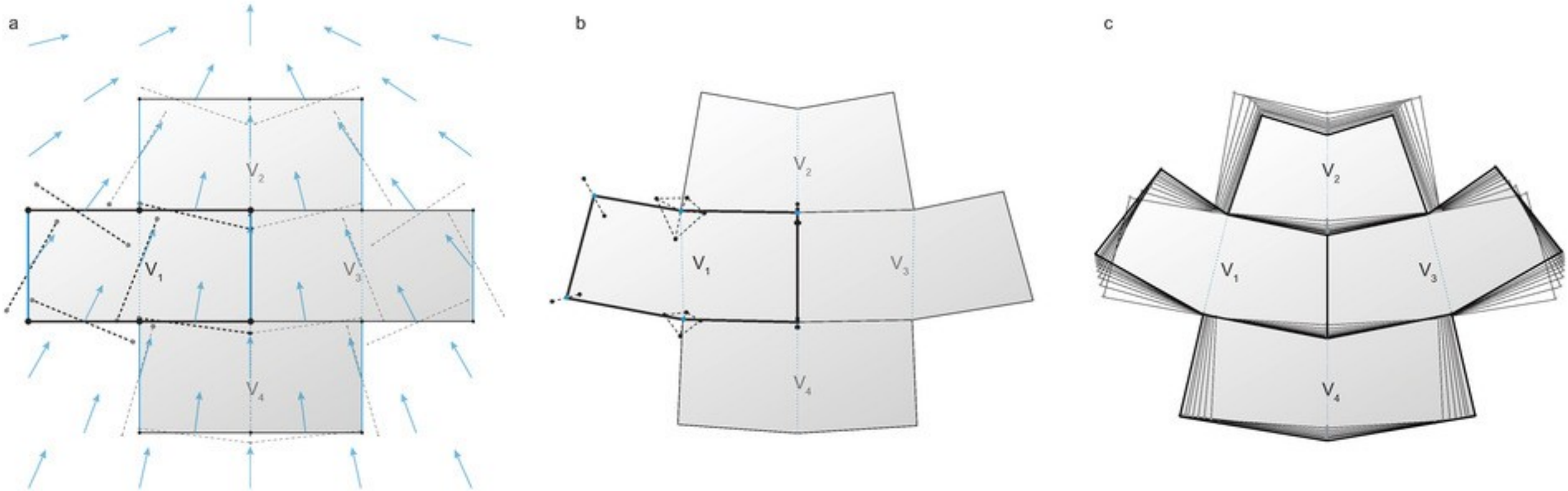


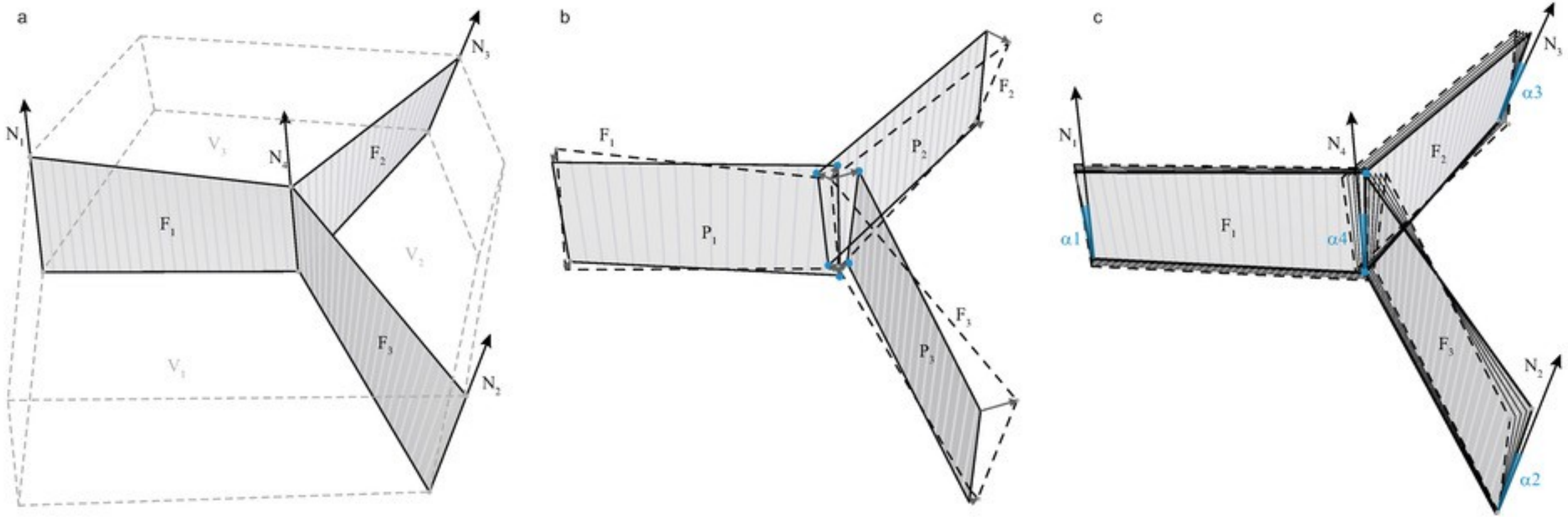

0.006 MPa
0.096 MPa








a
V2
V1
V3
V4
b
V2
V1
V3
V4
c
V2
V1
V3
V4


a
N1
N3
N4
N2
F1
F2
F3
V1
V2
V3
b
F1
F2
F3
P1
P2
P3
c
N1
N3
N4
N2
F1
F2
F3
α1
α2
α3
α4











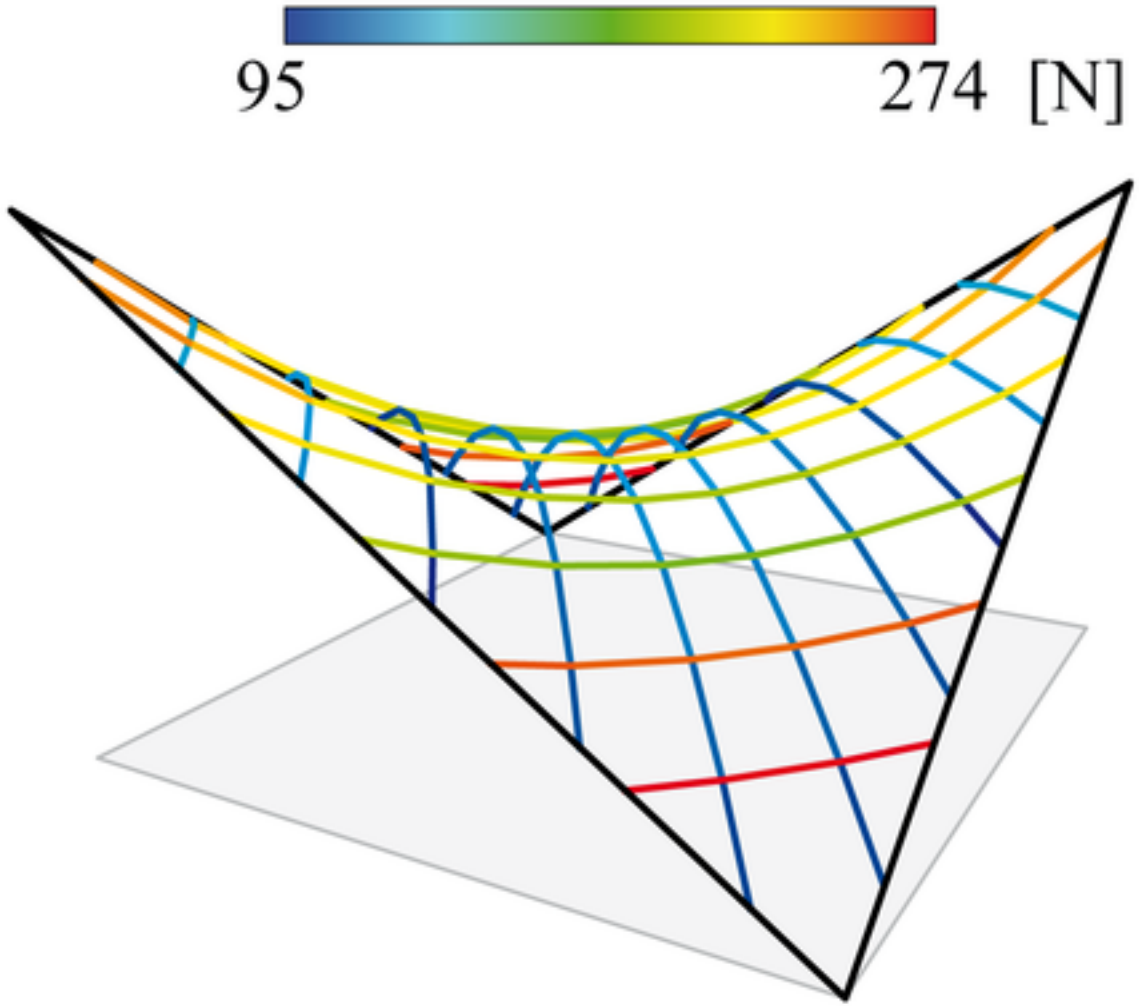

KNAACK
KNAACK

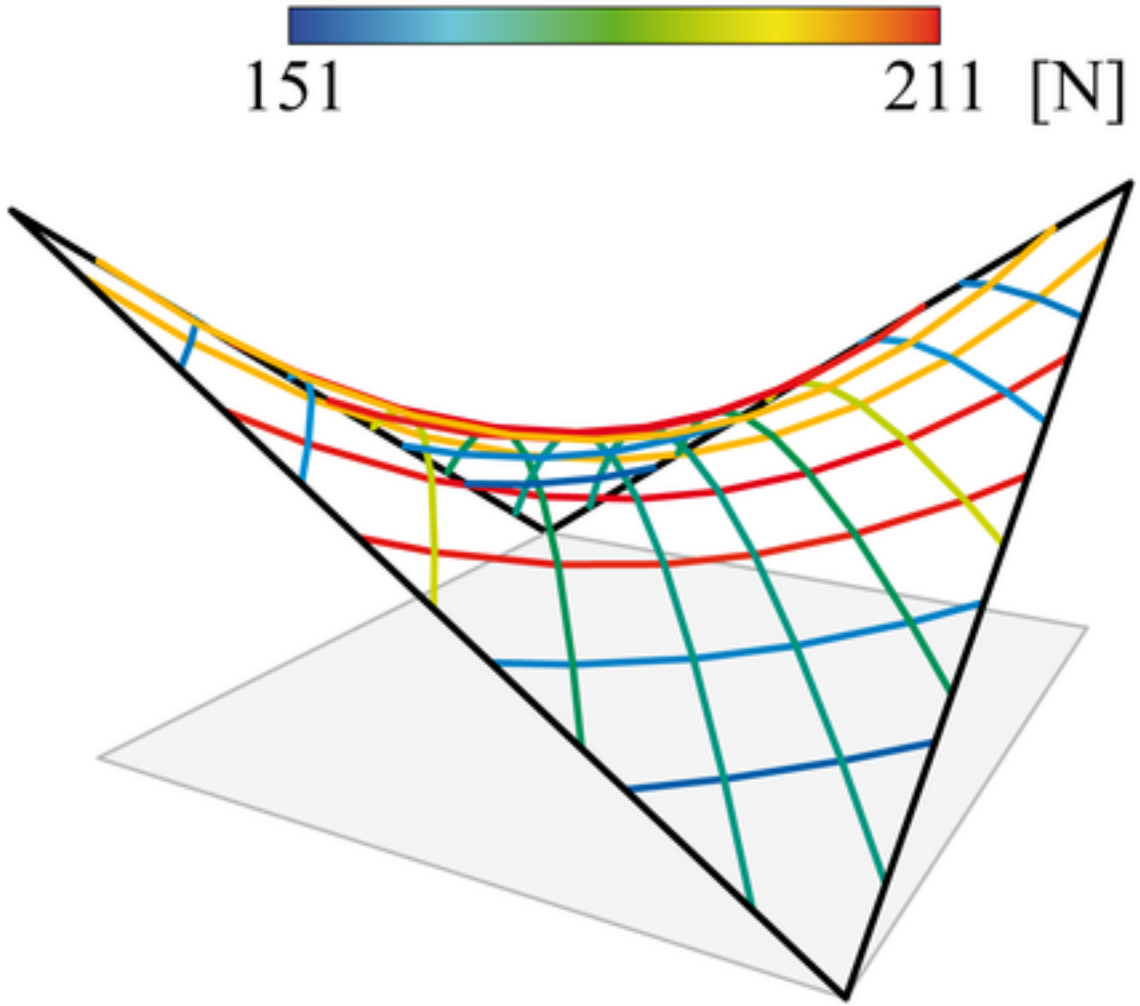




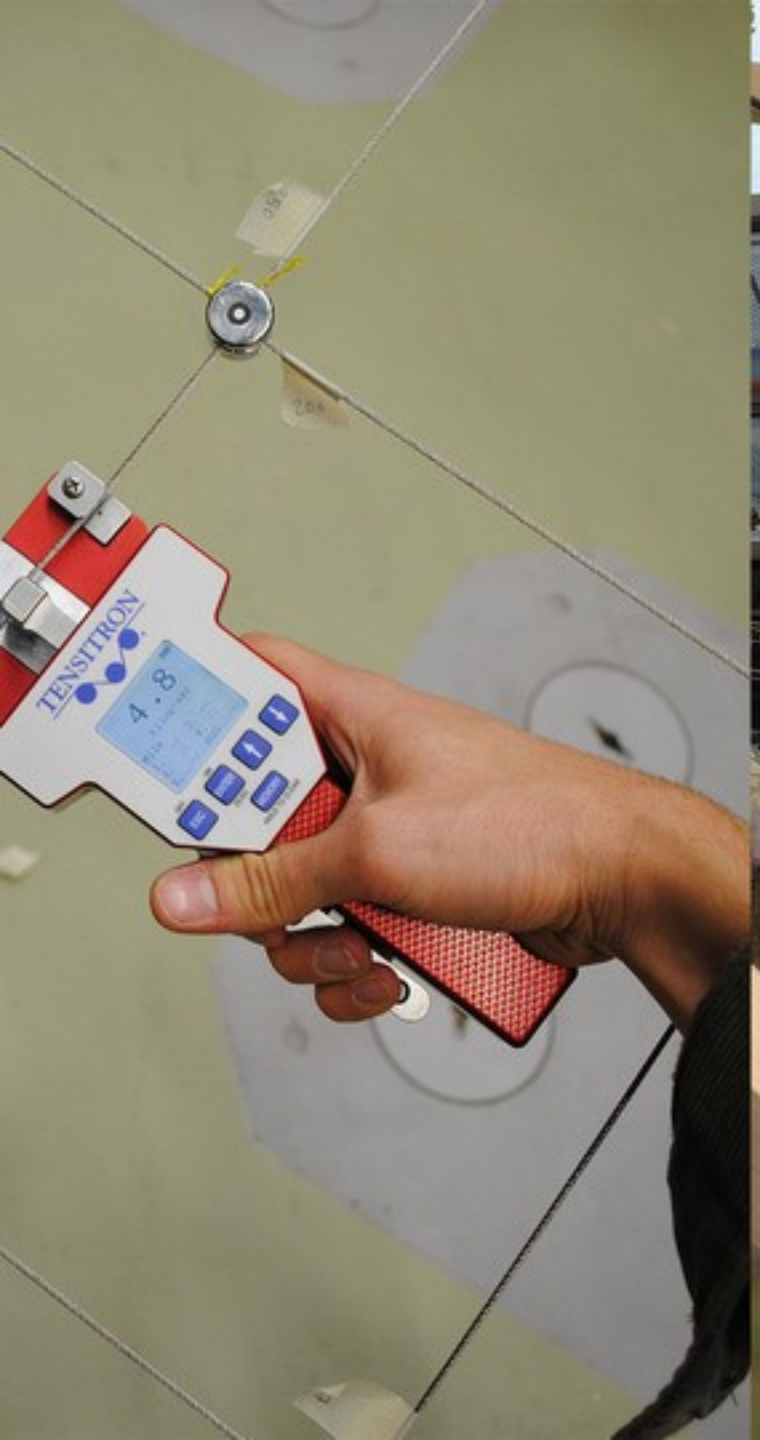

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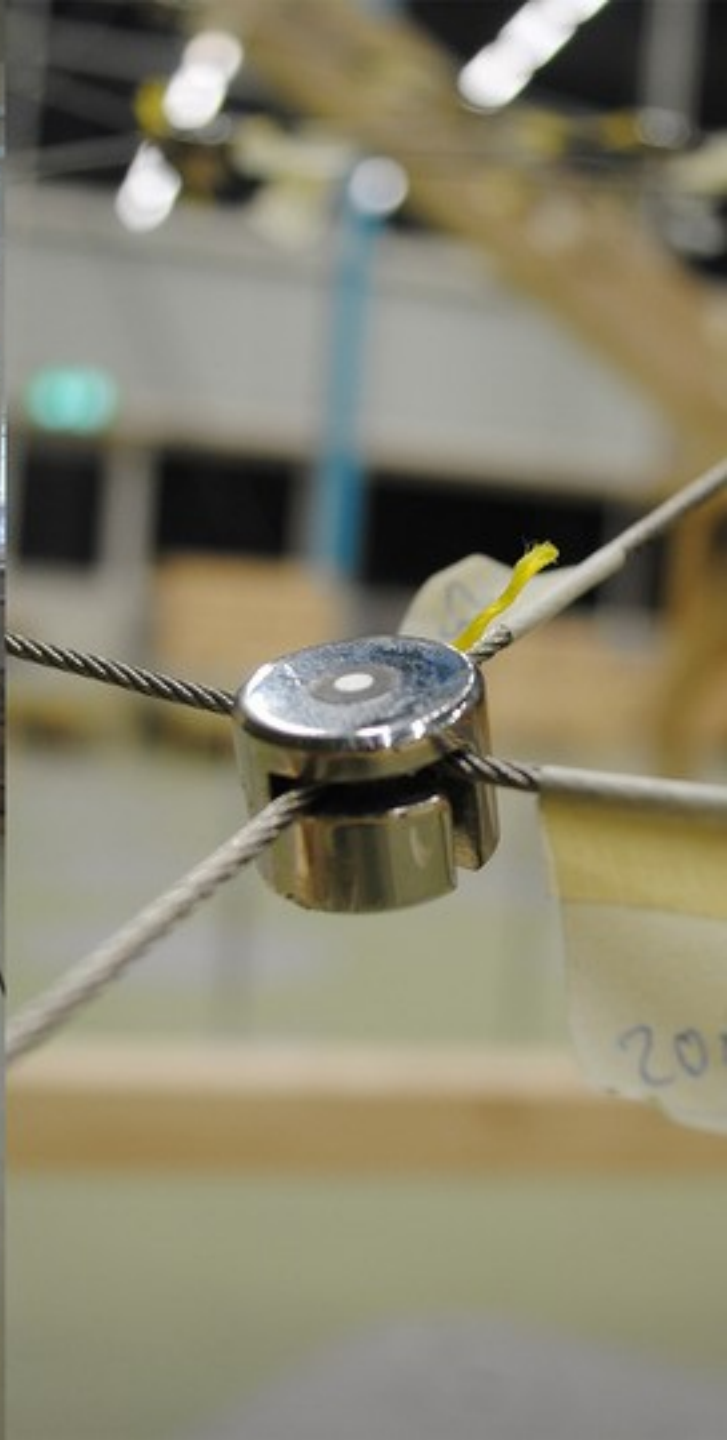



95
274 [N]


151
211 [N]




TENSITRON
4.8




KNAACK















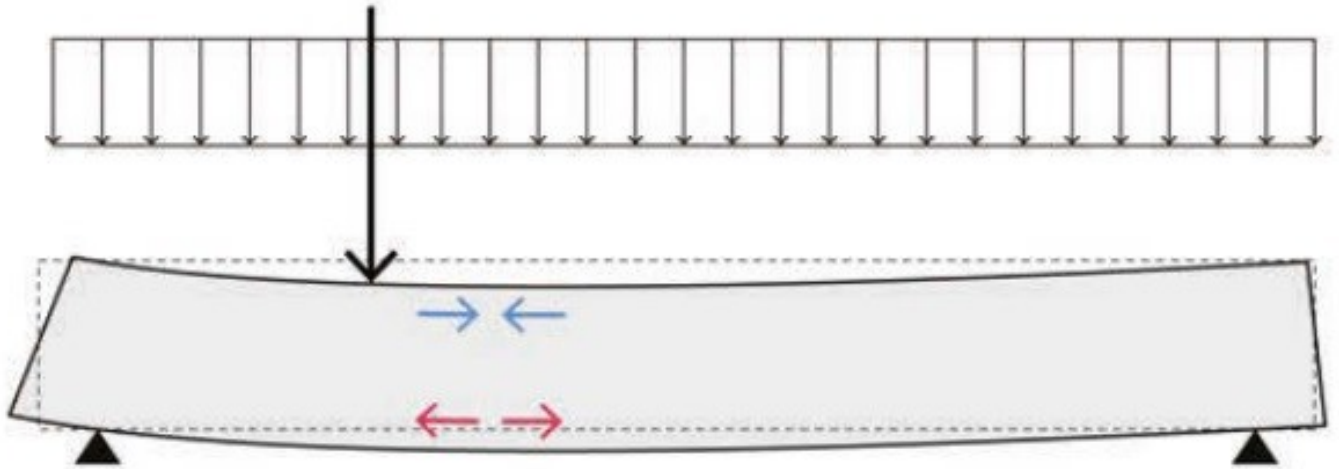




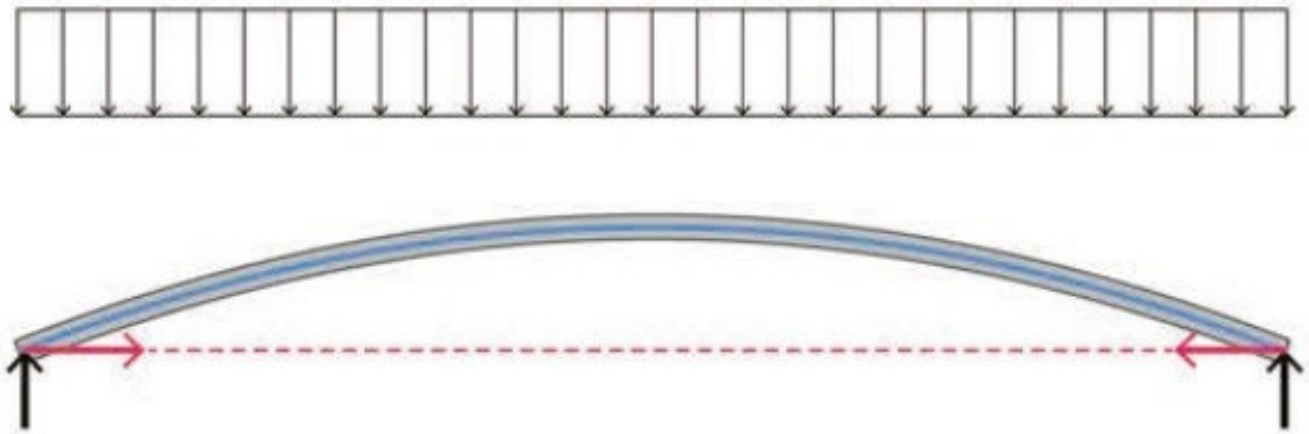

ESCOBEDO



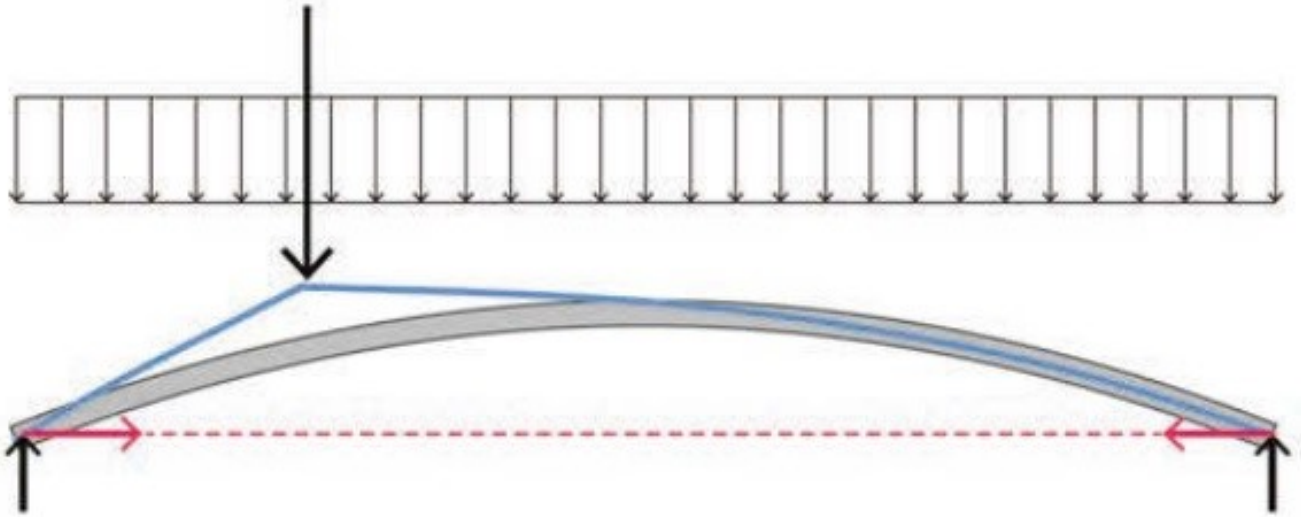




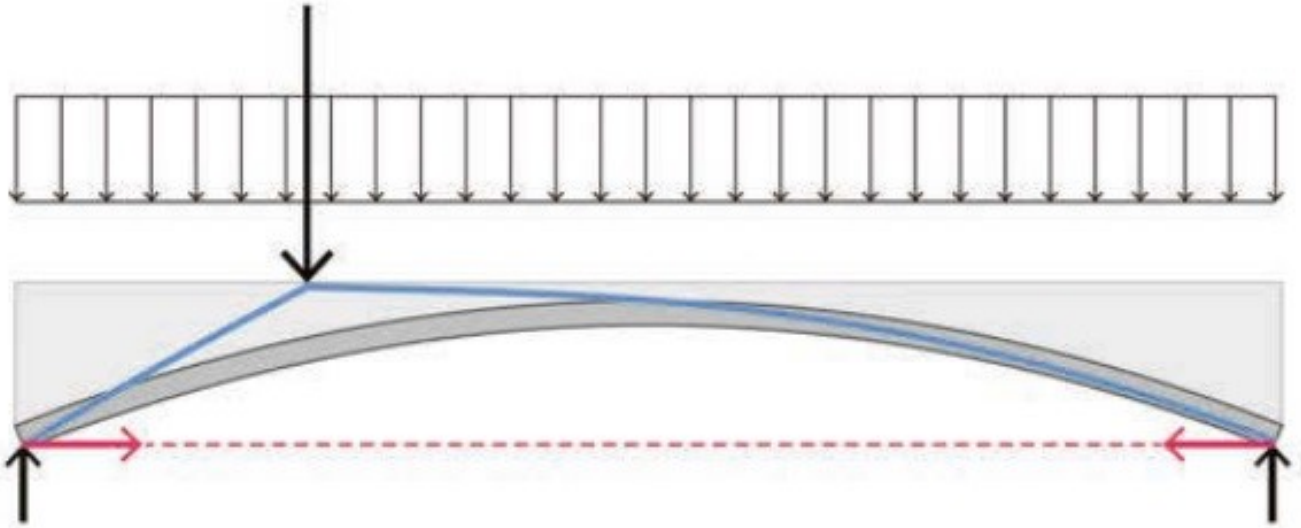
i) Standard concrete element resisting applied loads through bending action



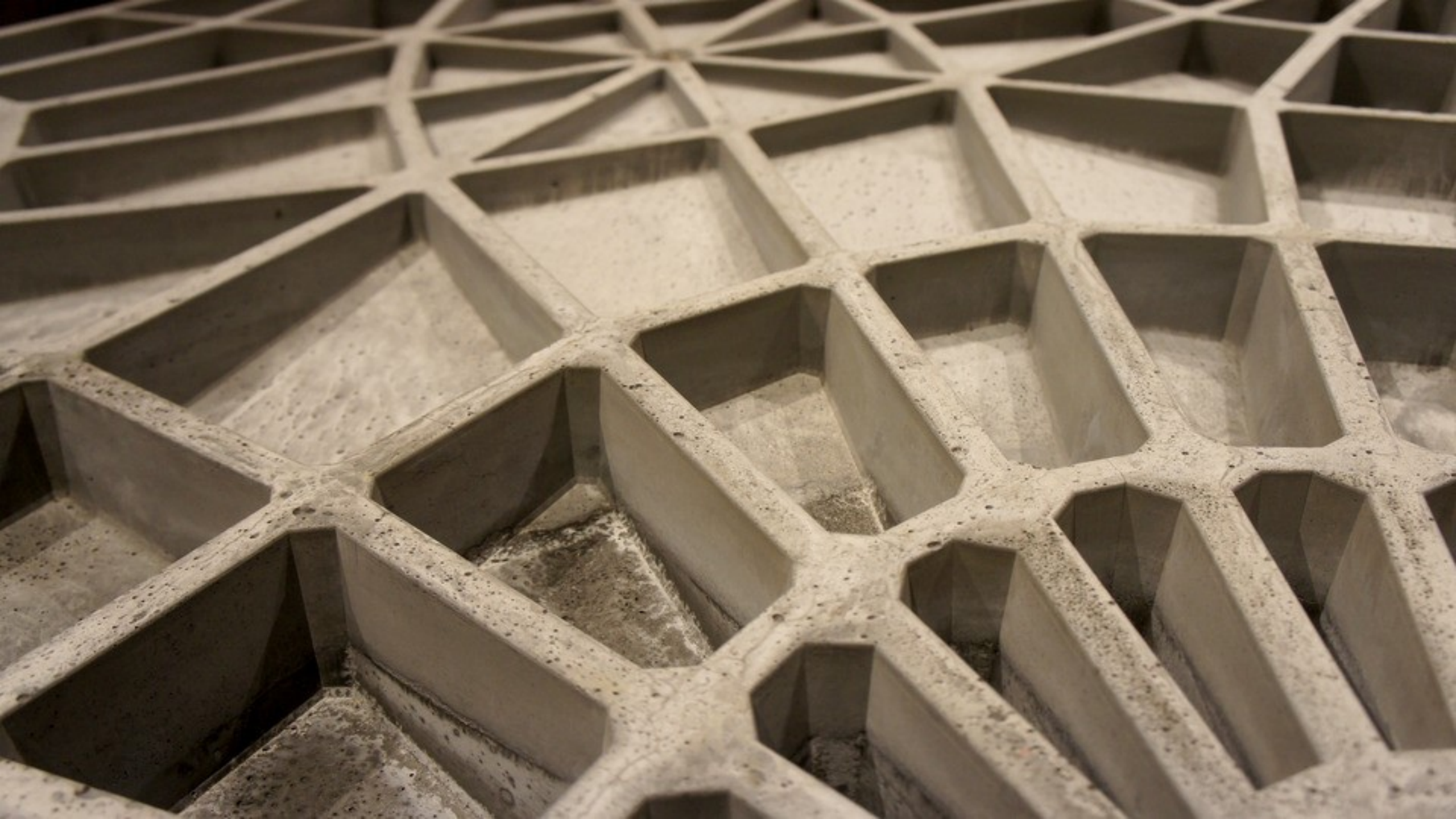
ii) Same load is resisted through funicular (i.e. compression-only) action with dramatic material savings



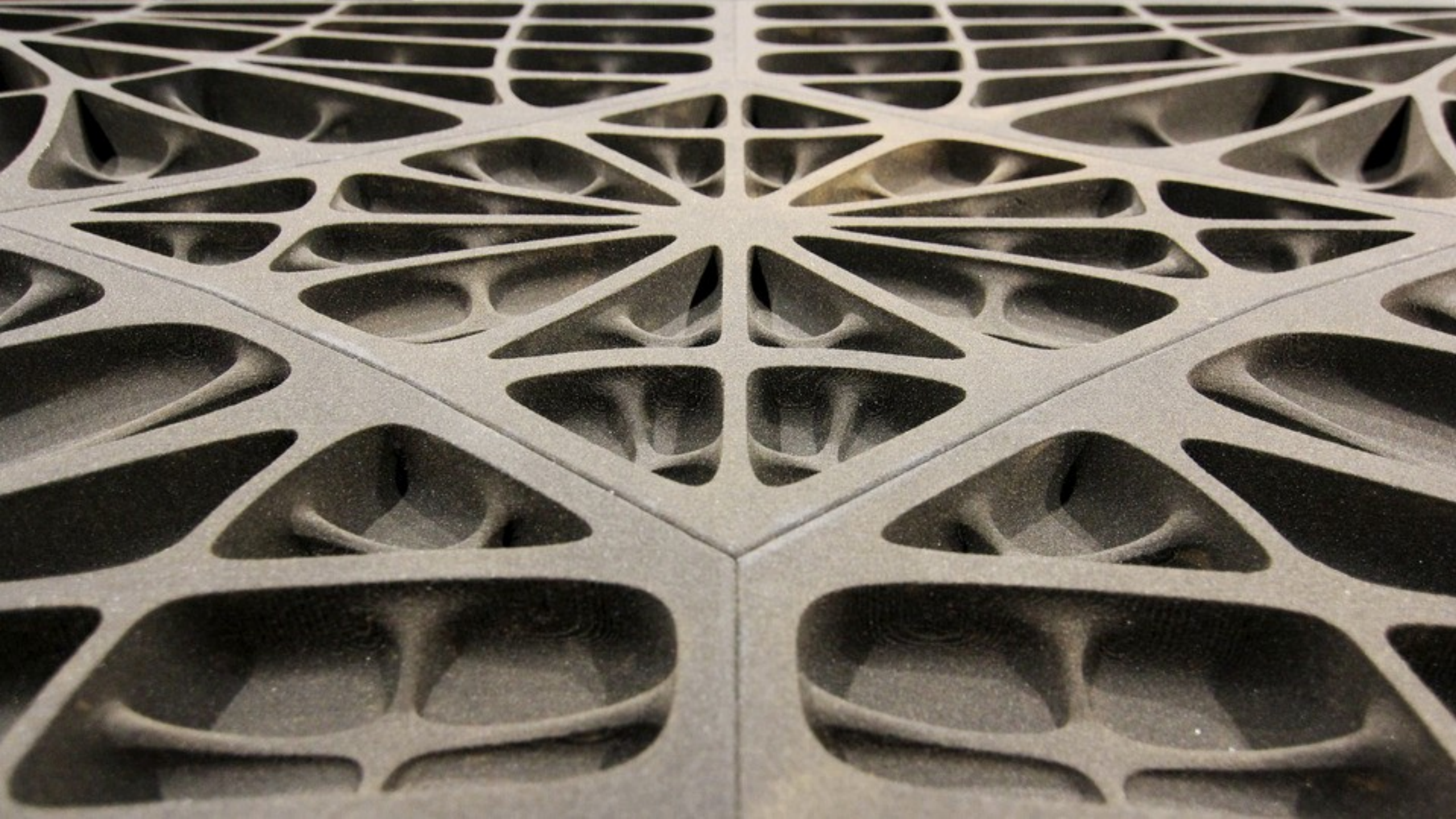
iii) Concentrated loads modify thrust line, which is now outside section of funicular element



iv) Material is reintroduced (in stiffening rib) to enclose thrust line







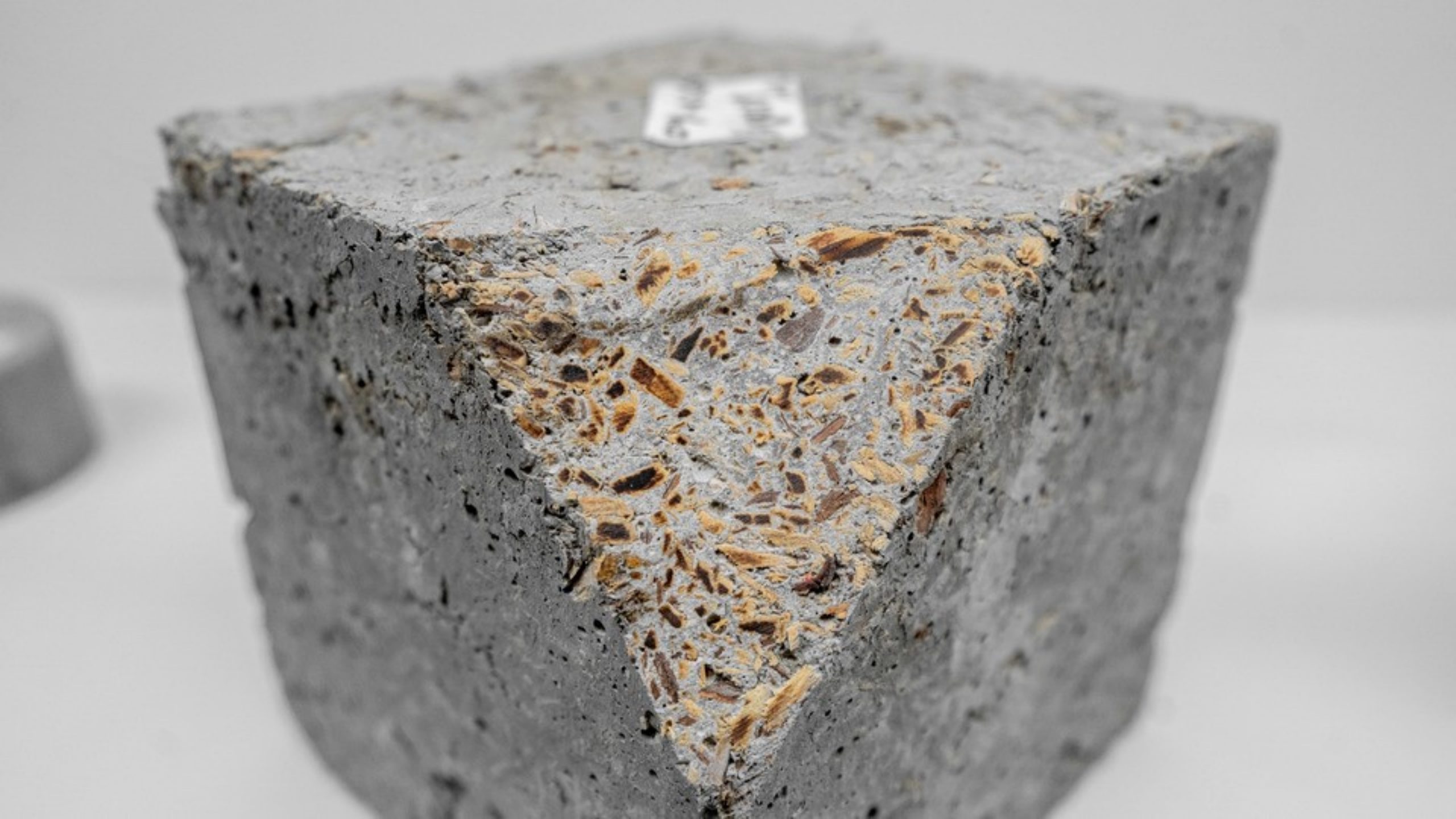





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in South Africa







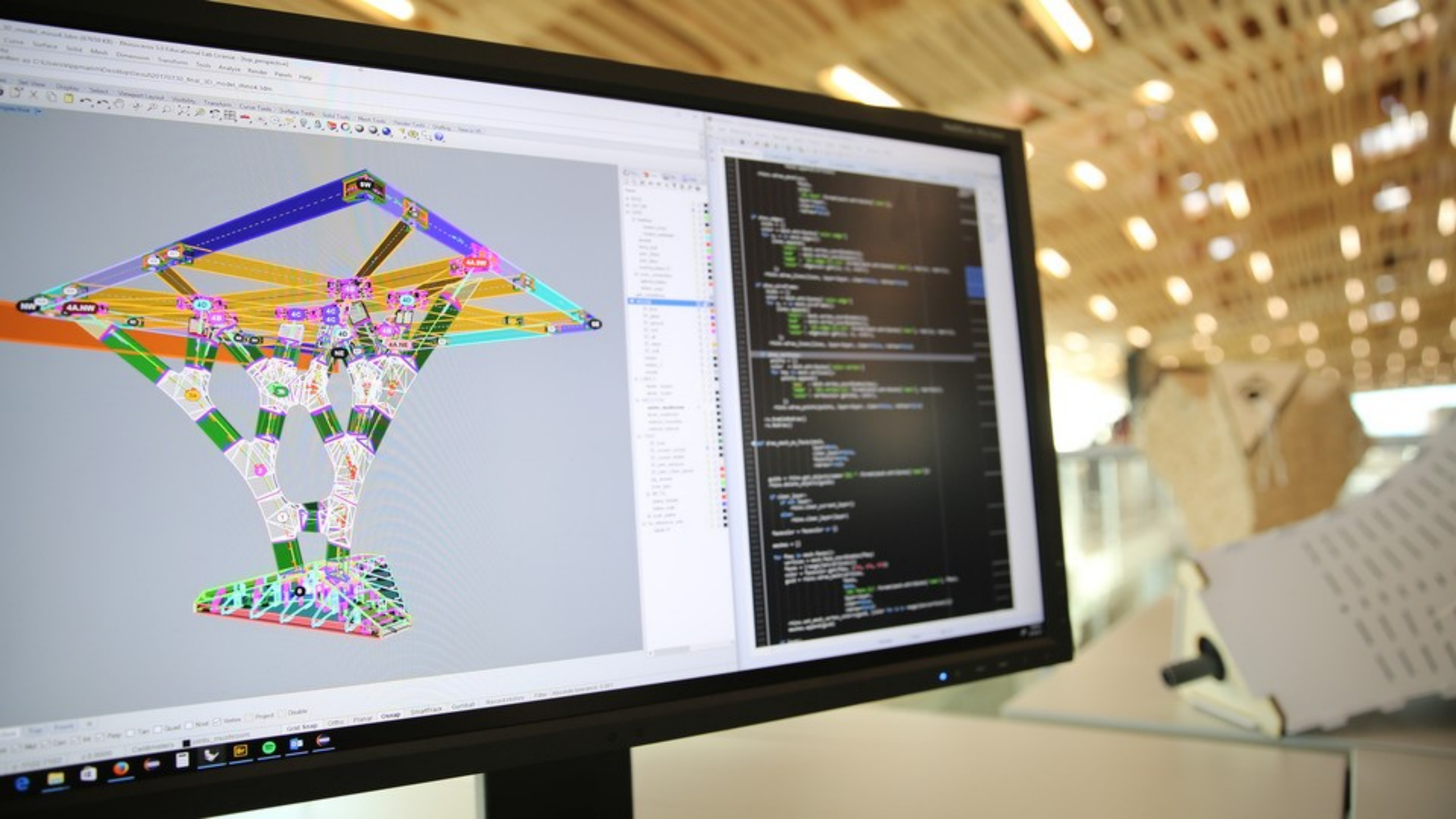

CARINATO



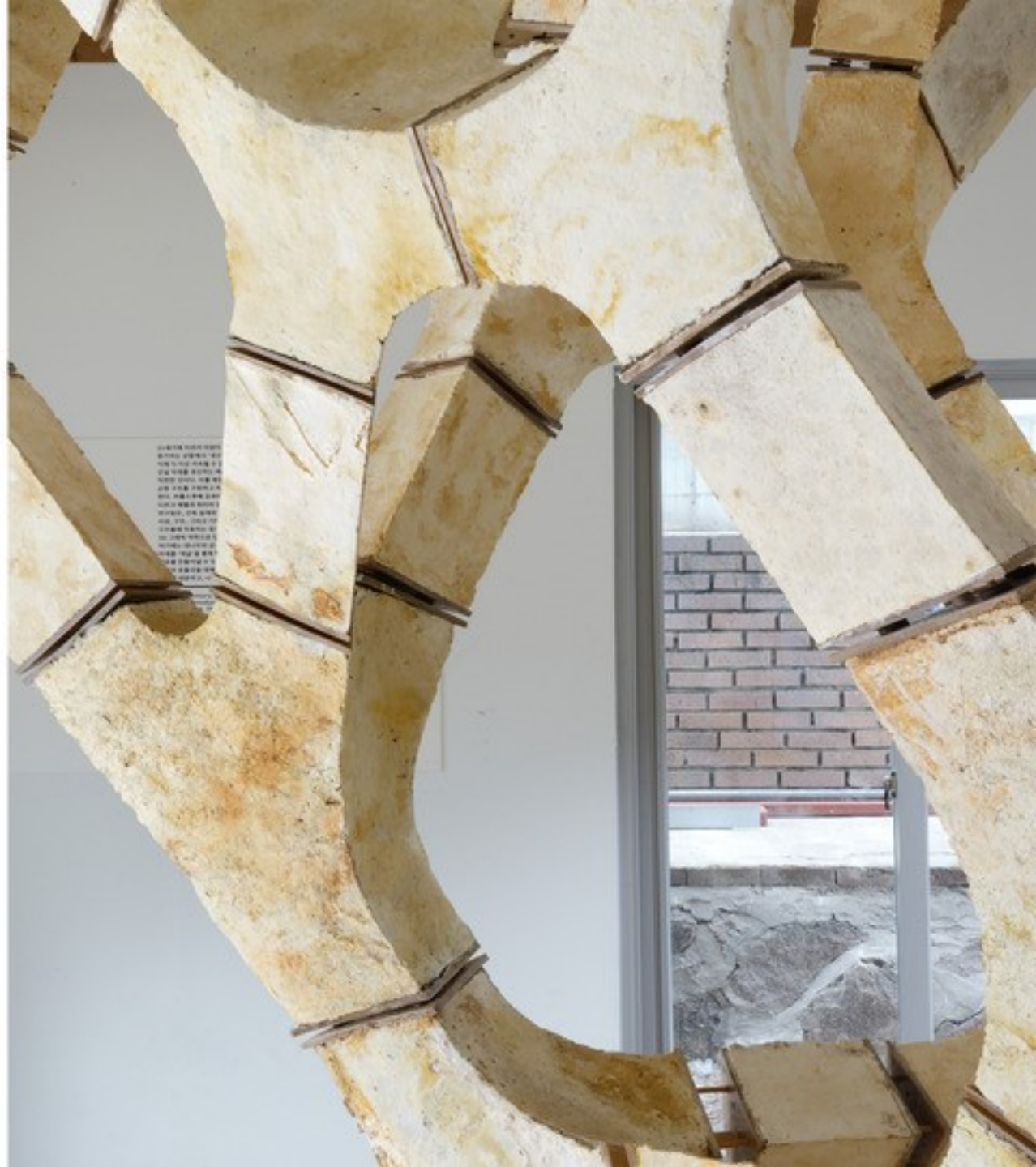




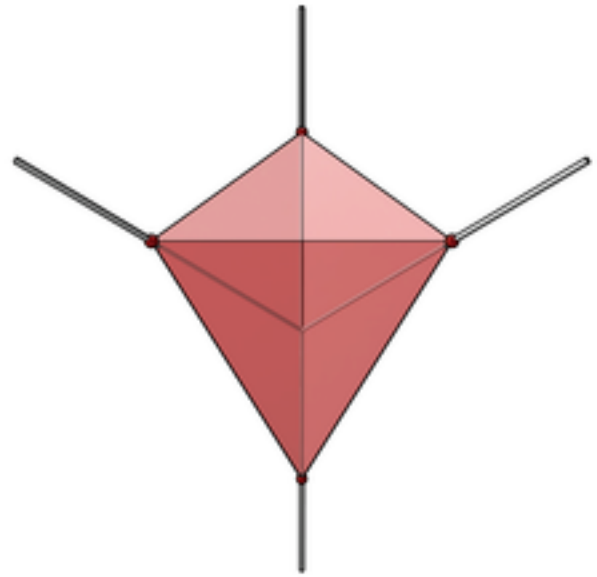


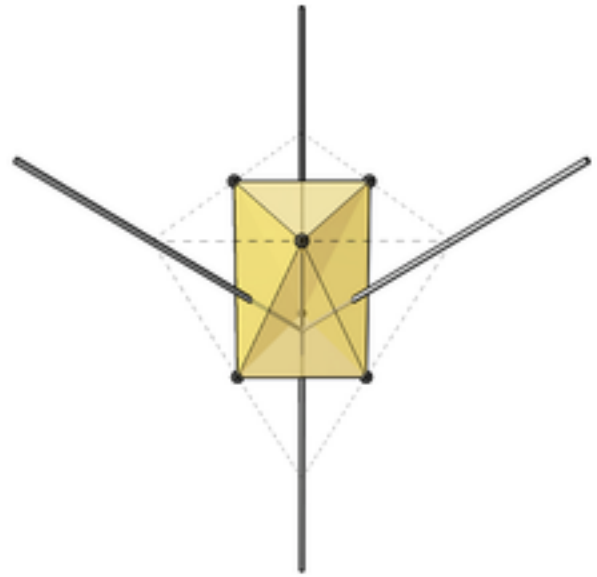


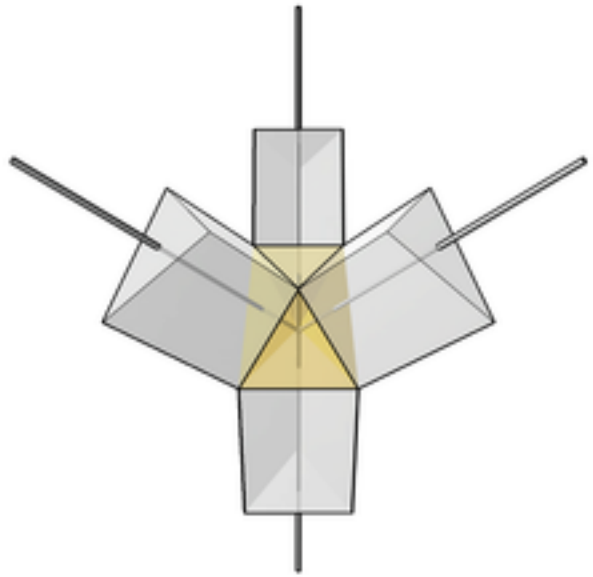


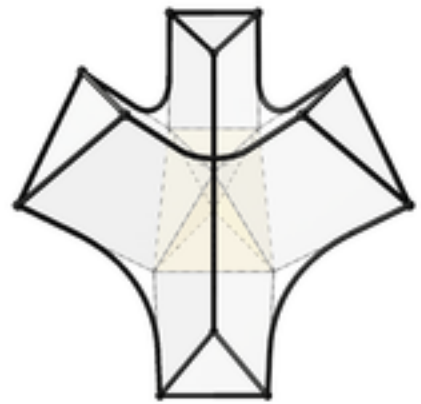


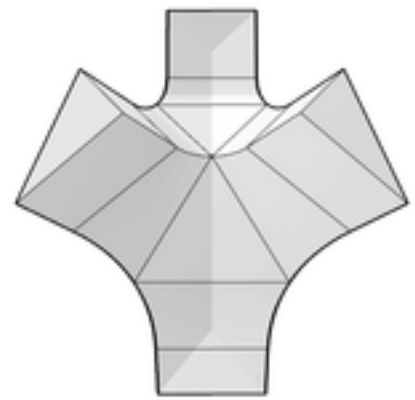


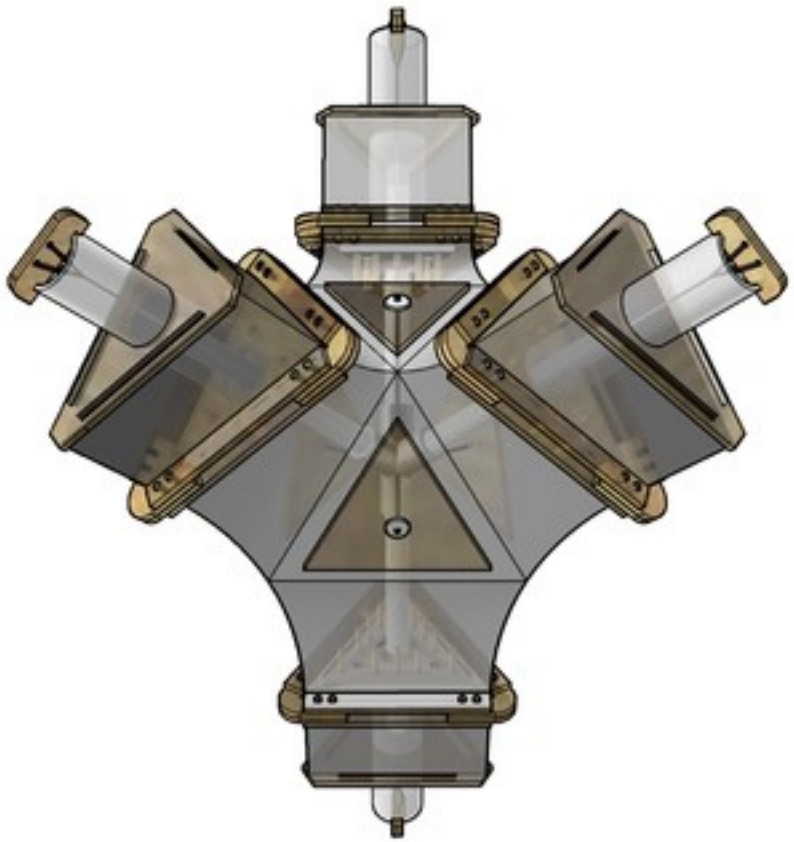


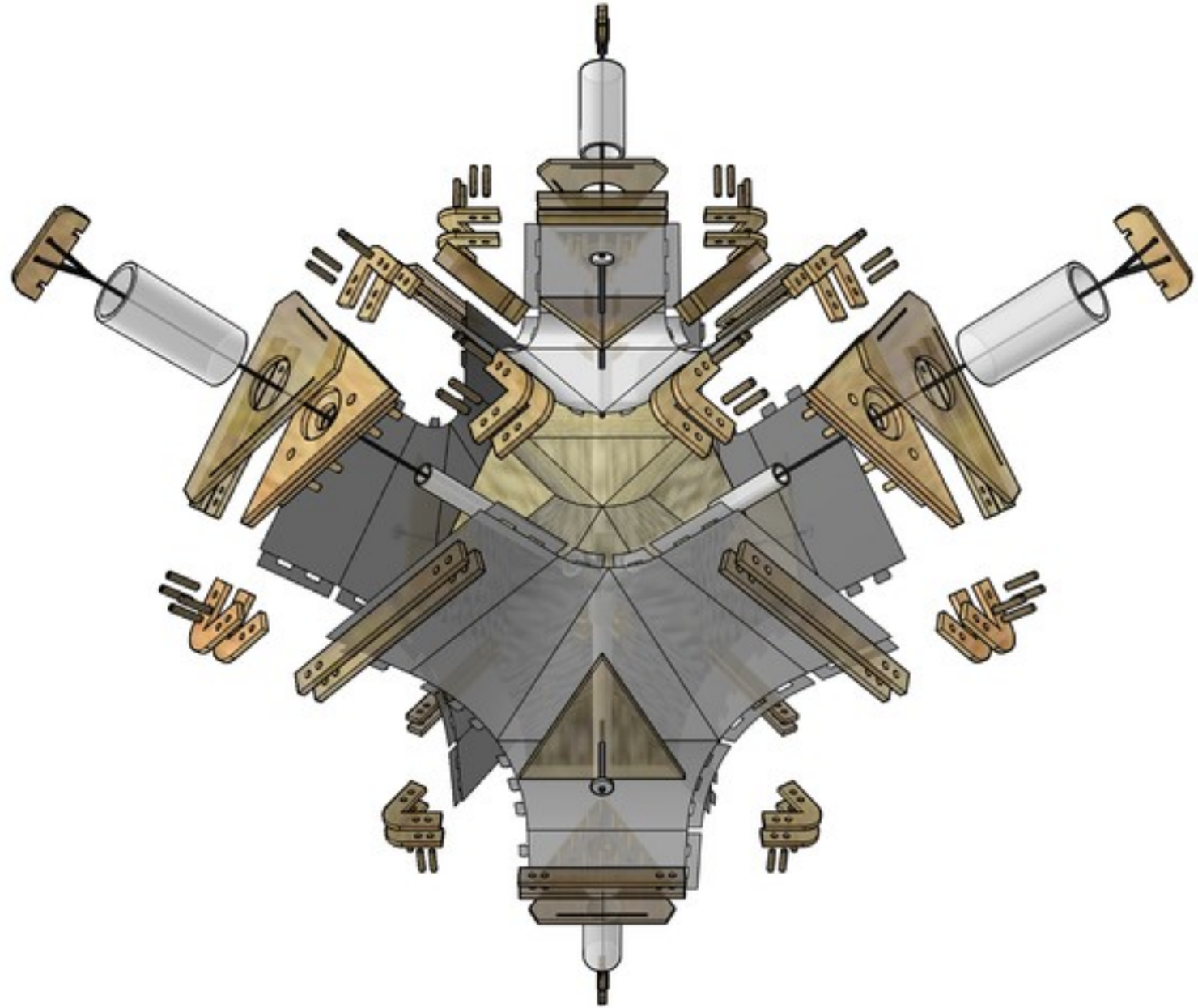


















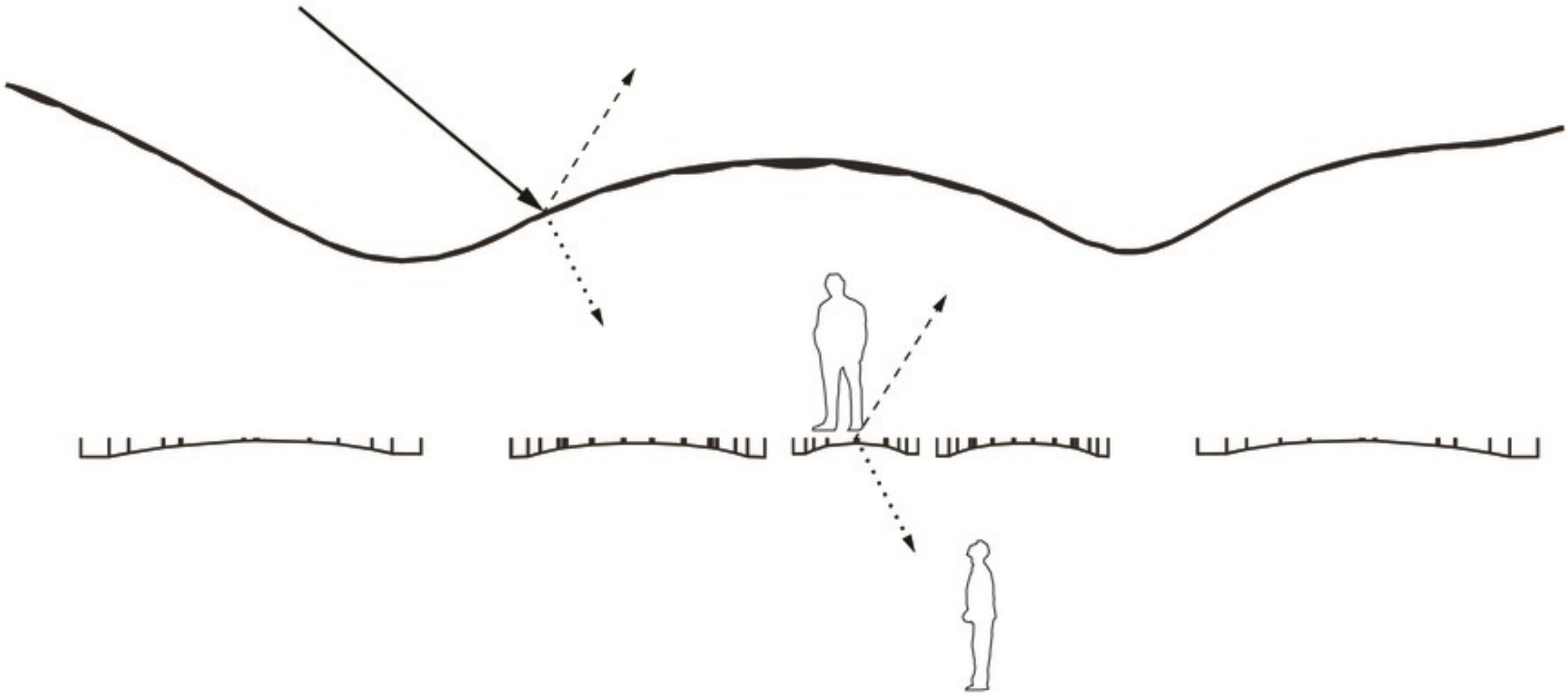





ELEMENT NO. / QTY










Virgile Simon Bertrand















