

# Guggenheim Bilbao

From physical to  
digital lofting

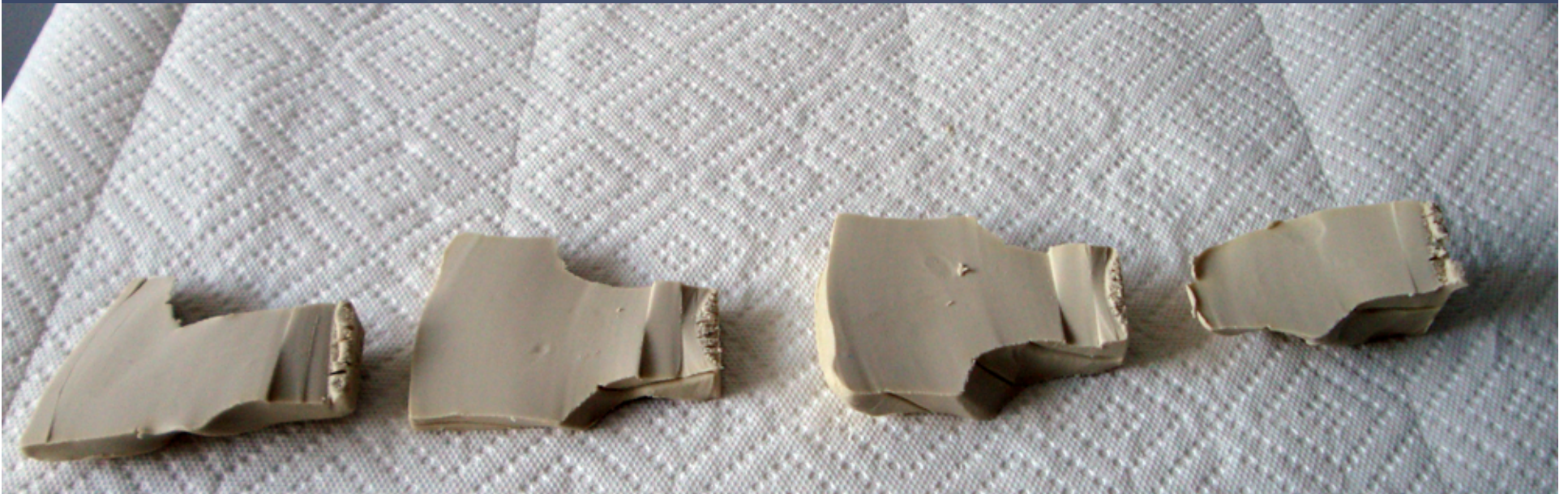


Translation:  
from mass  
to planes  
to lines  
to beams and plates  
to purlins and mullions  
holding skins and surfaces

First, model it, physically or digitally



Second, convert it to planes,  
Slice it at known increments







Take each slice

Third, overlay lines as references

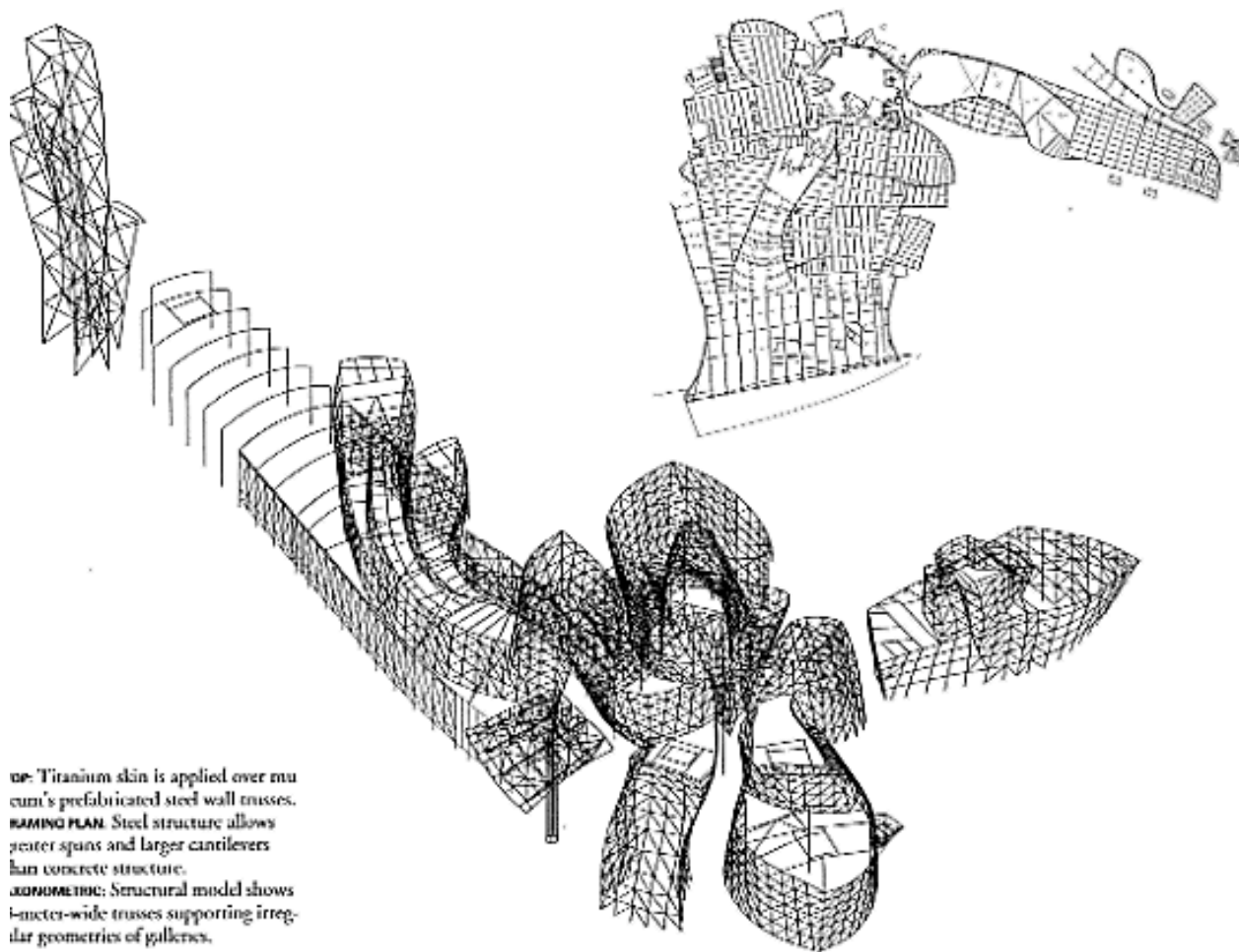


Overlay a grid

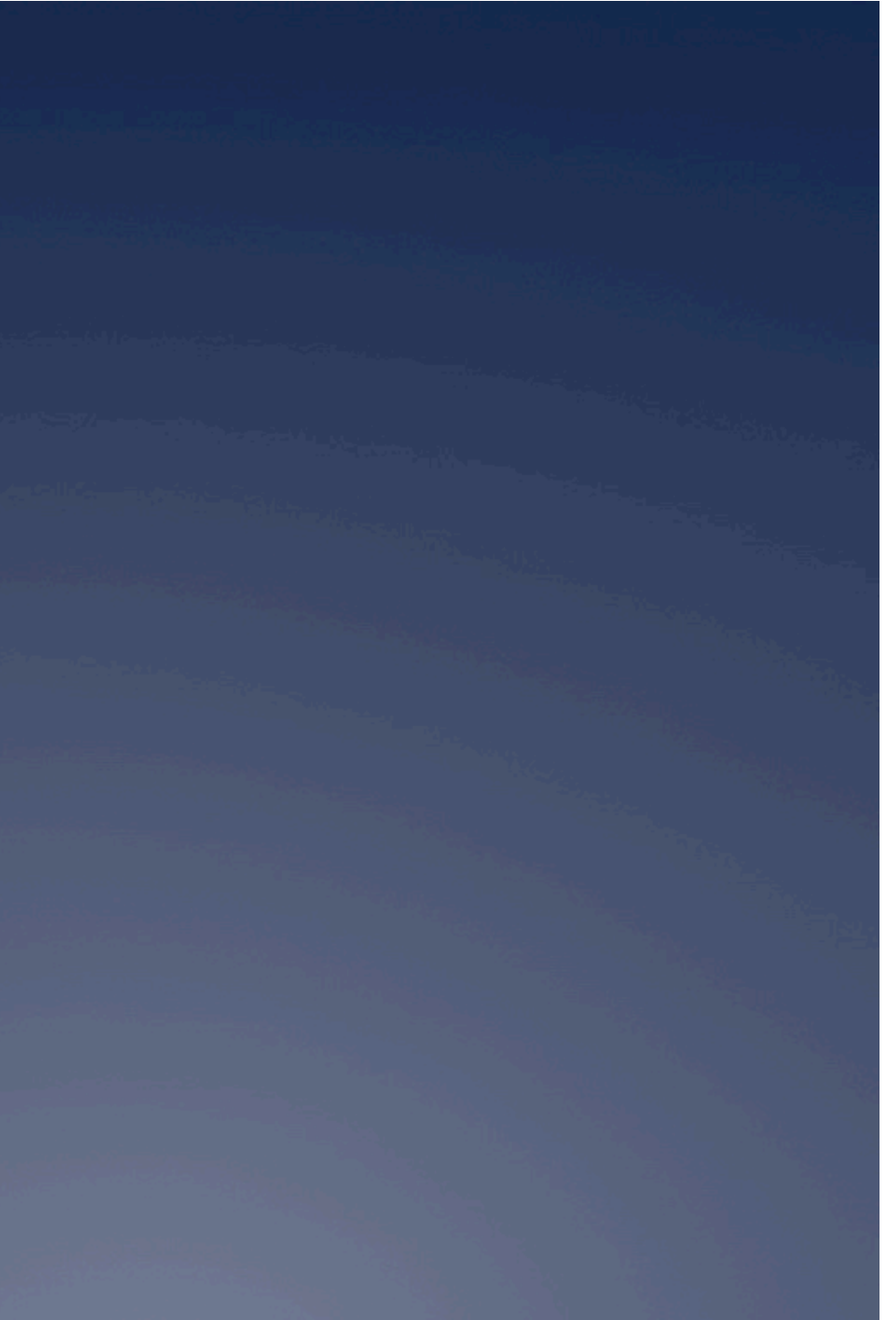




Lines become structure



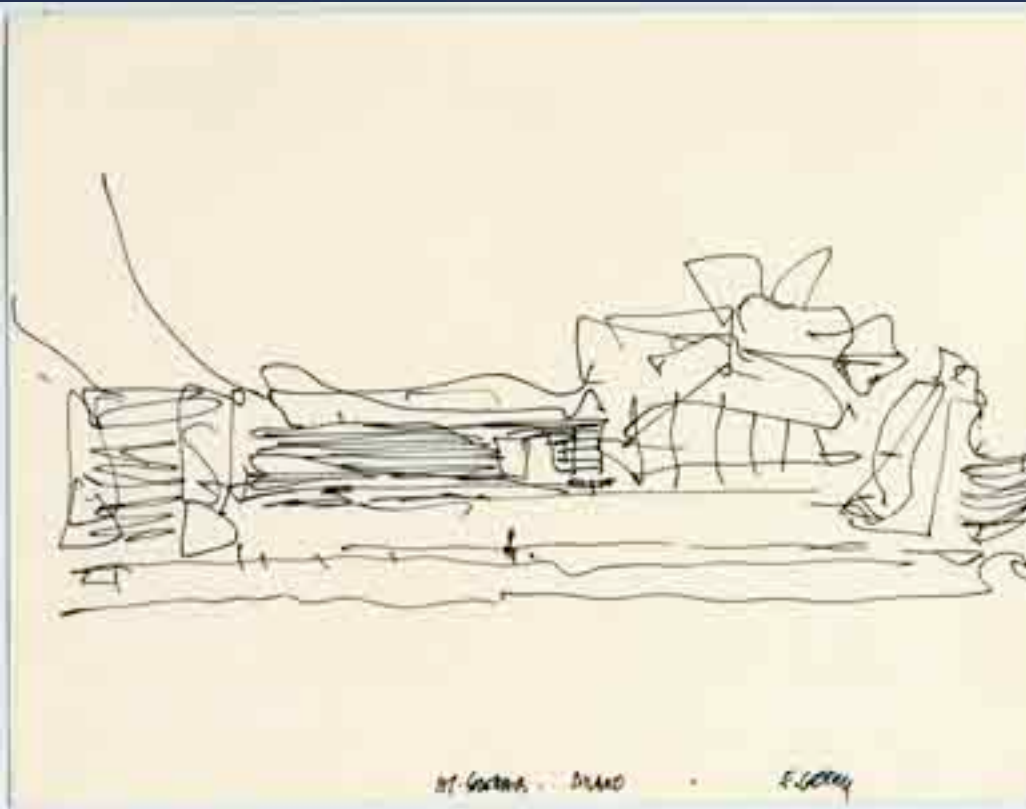






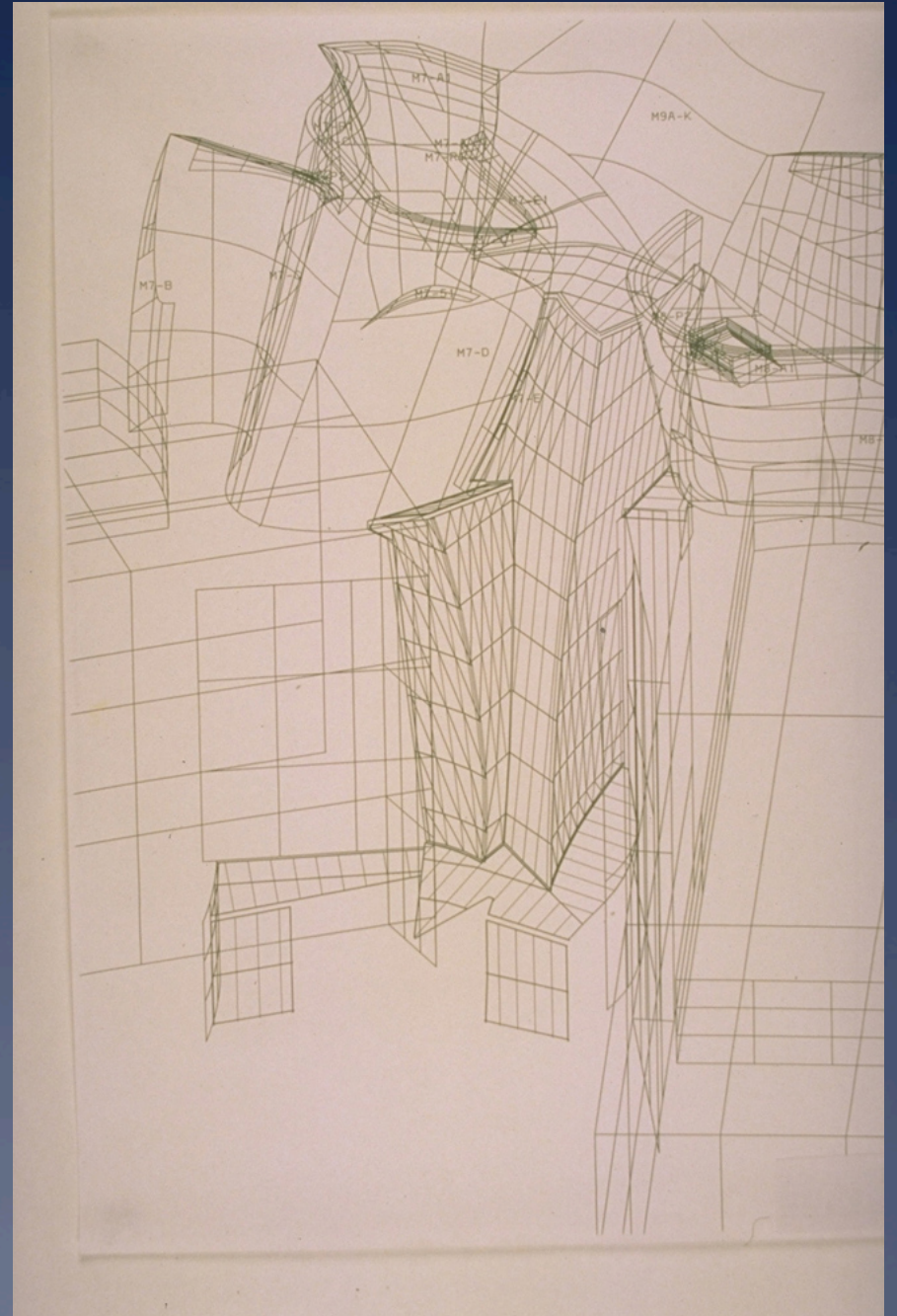




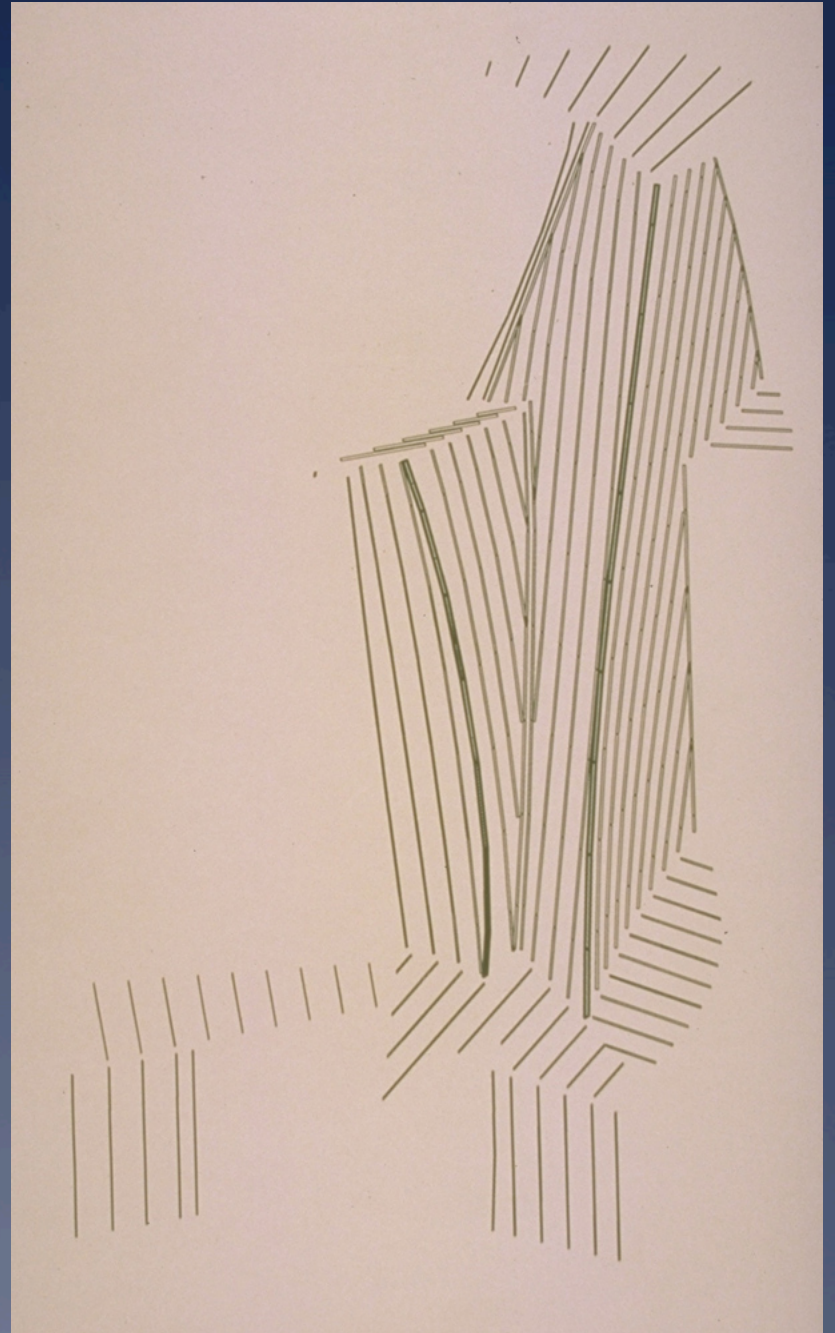




# Curtain wall computer model (1)

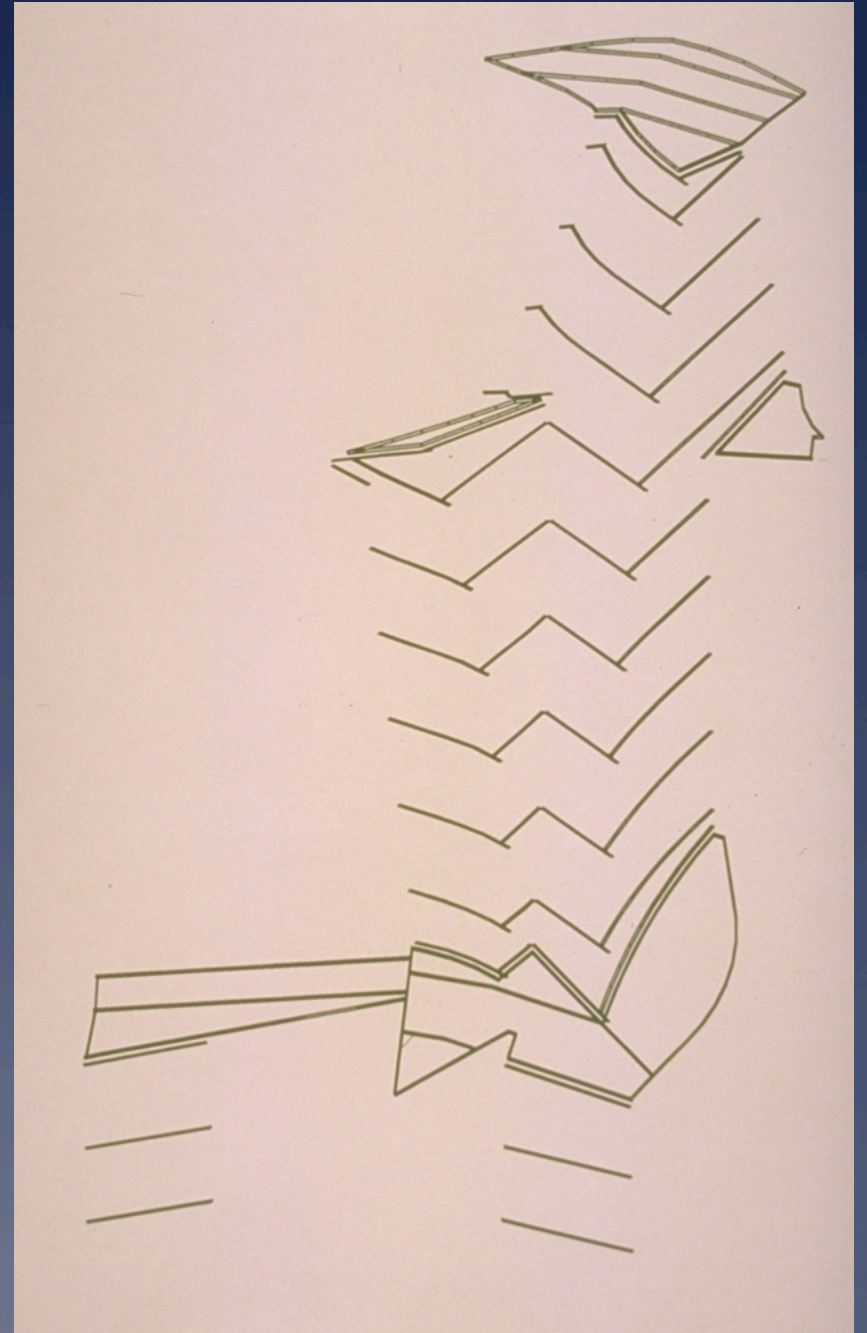


# Curtain wall computer model (2)

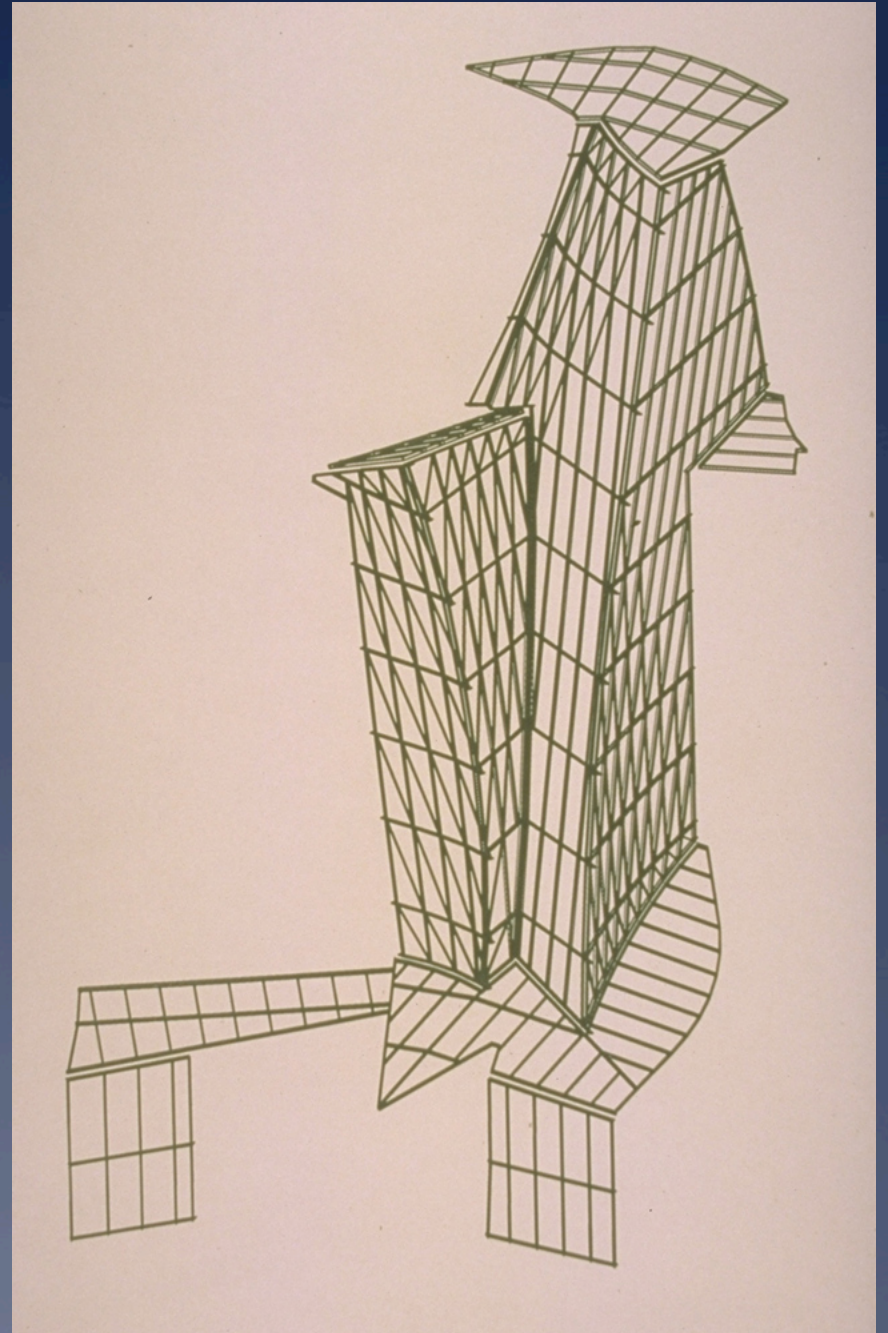




# Curtain wall computer model (3)

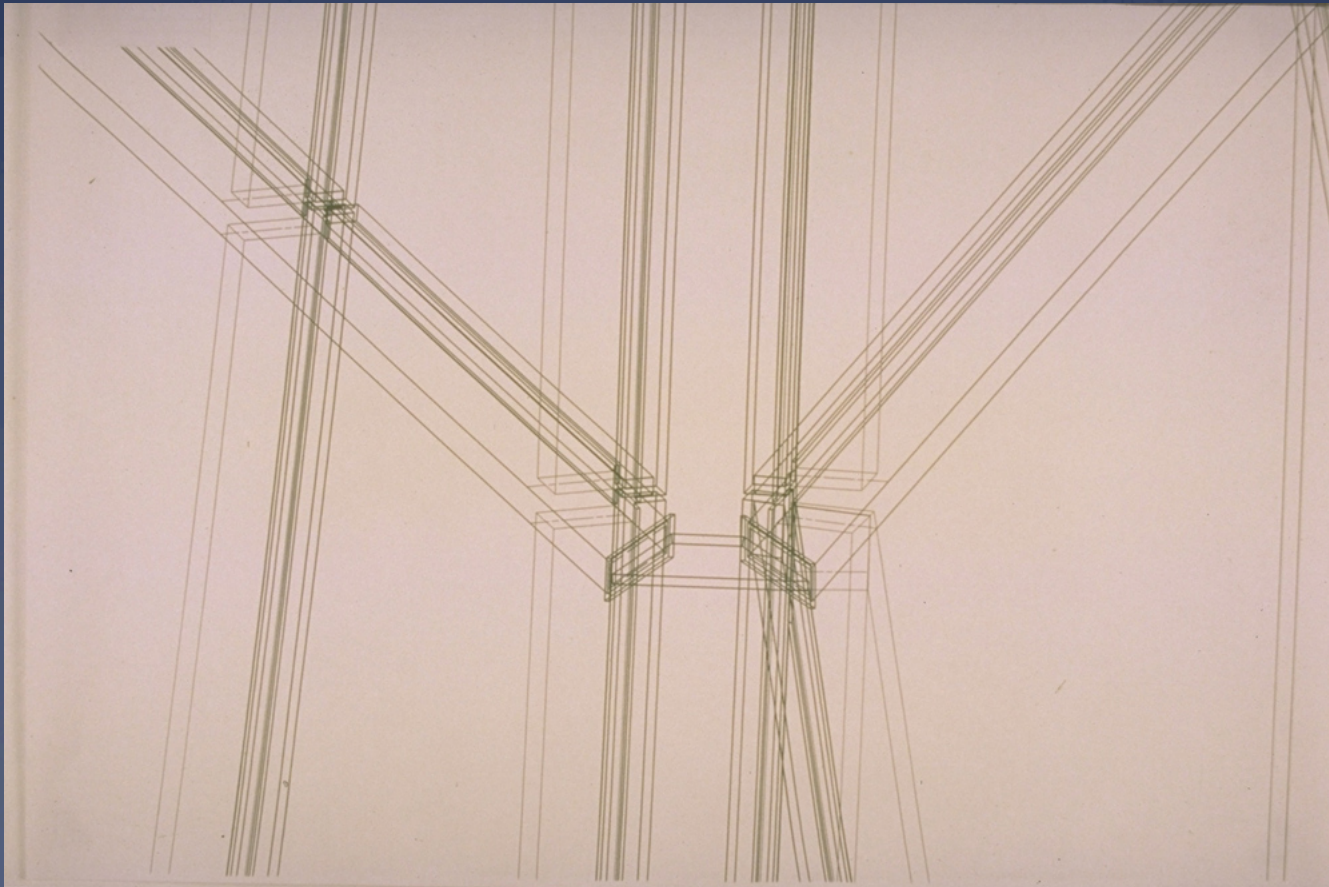


# Curtain wall computer model (4)





# Curtain wall computer model (5)







# Balancing primary and secondary







Luis Rodríguez Llopis IDOM





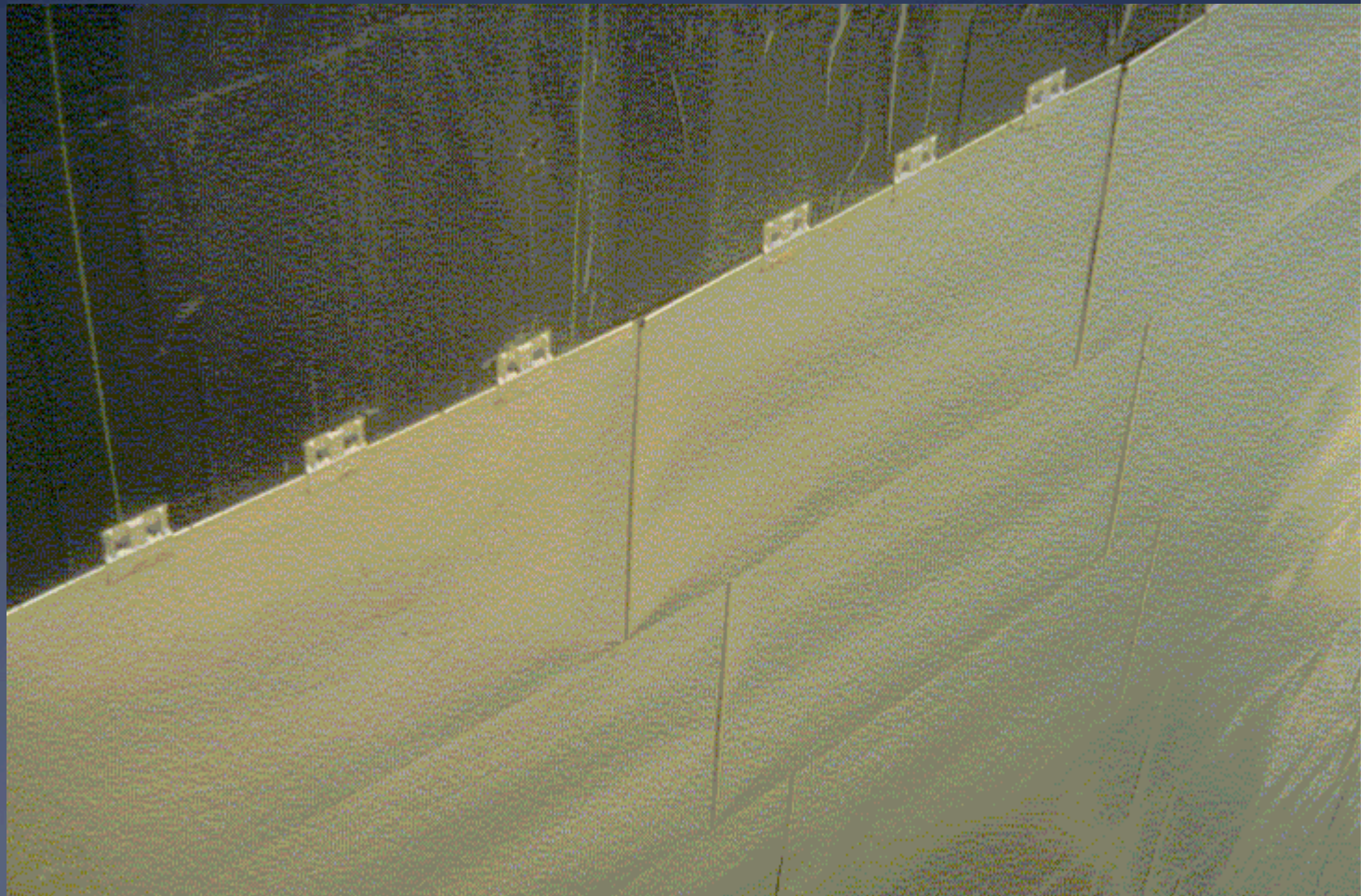
Span across the studs with galvanized (or gypsum sheathing)

Waterproof with bituthene membrane



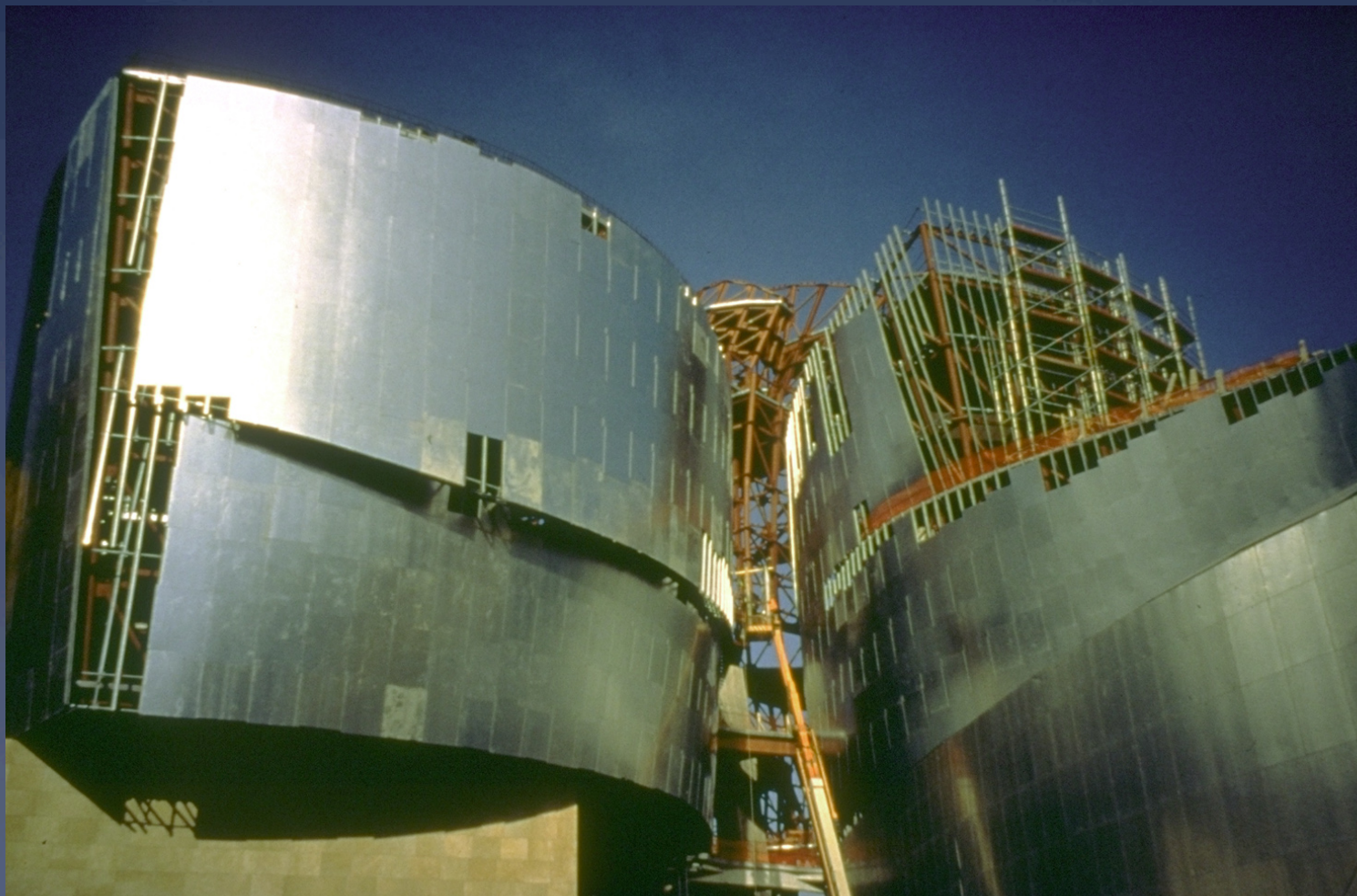
Clad with  
titanium (or  
stainless or  
aluminum)











Luis Rodríguez Llopis IDOM

# Curtain wall and supporting steel structure (Atrium)





# Finished curtain wall (exterior)



# Finished curtain wall (exterior)





# Finished curtain wall (exterior)



# Finished curtain wall (exterior)





