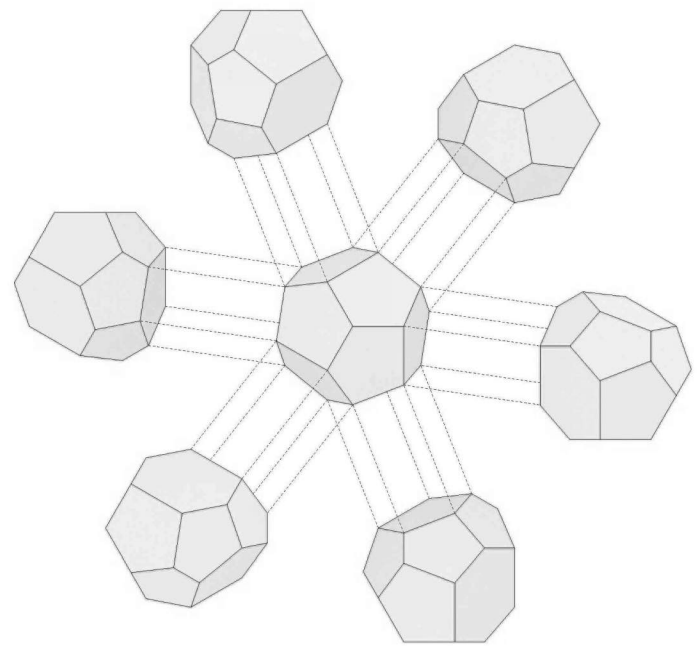
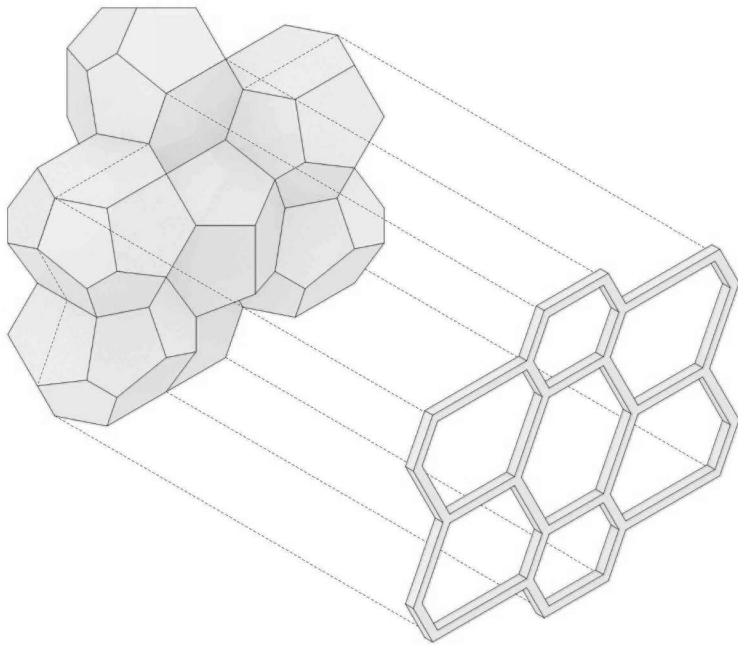
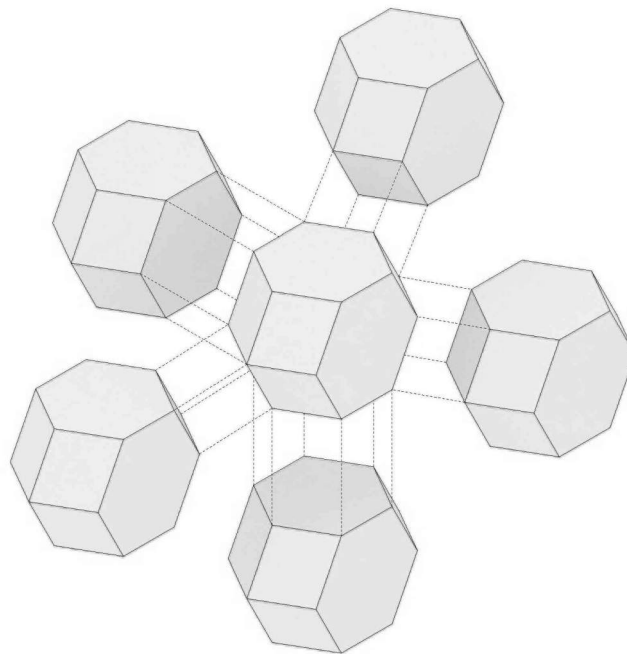


the BEEHIVE

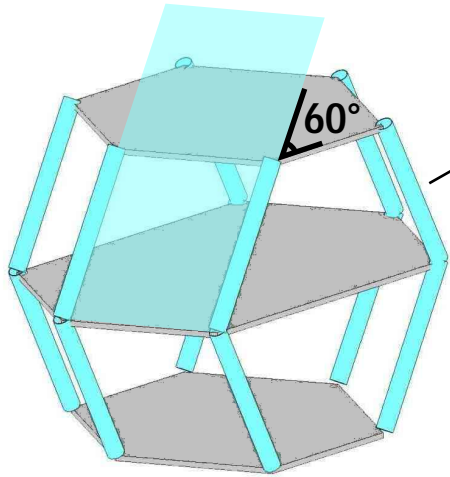
ARCE 415 | COLLABORATORY HIGH RISE DESIGN
team05 - MICHAEL AYERS - 06.04.2020



WEAIRE-PHELAN STRUCTURE

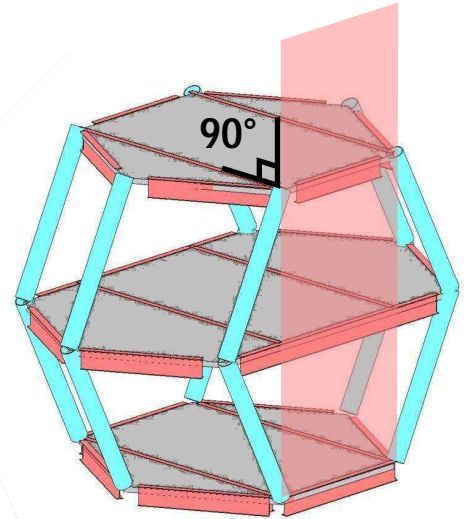


RHOMBO-HEXAGONAL DODECAHEDRON

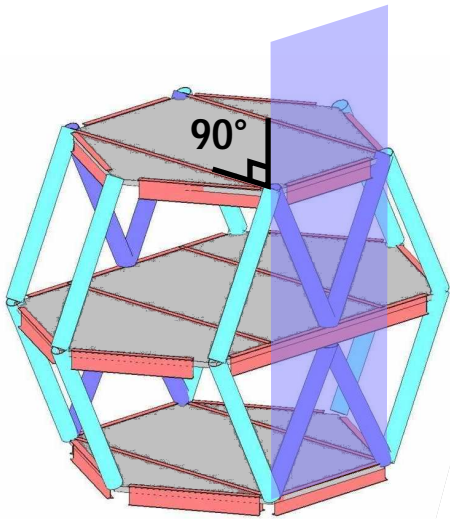


OUTLINE **FORM** OF DODECAHEDRON
(rhombo-hexagonal dodecahedron)

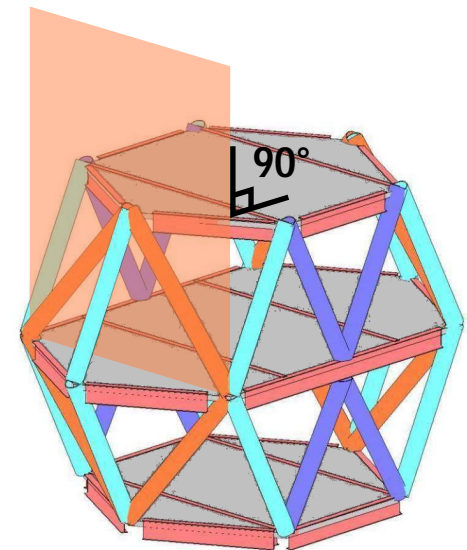
ADDITION OF **GRAVITY** SYSTEM



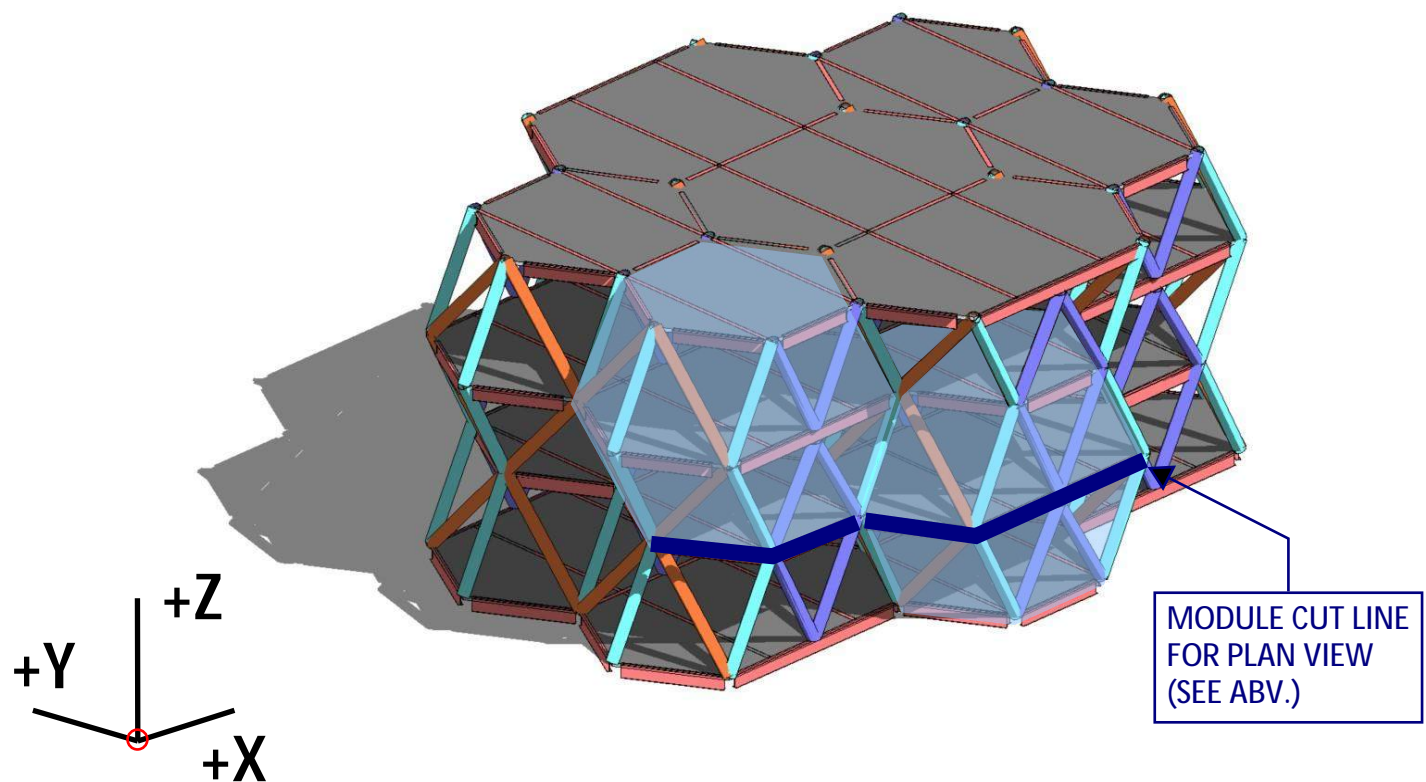
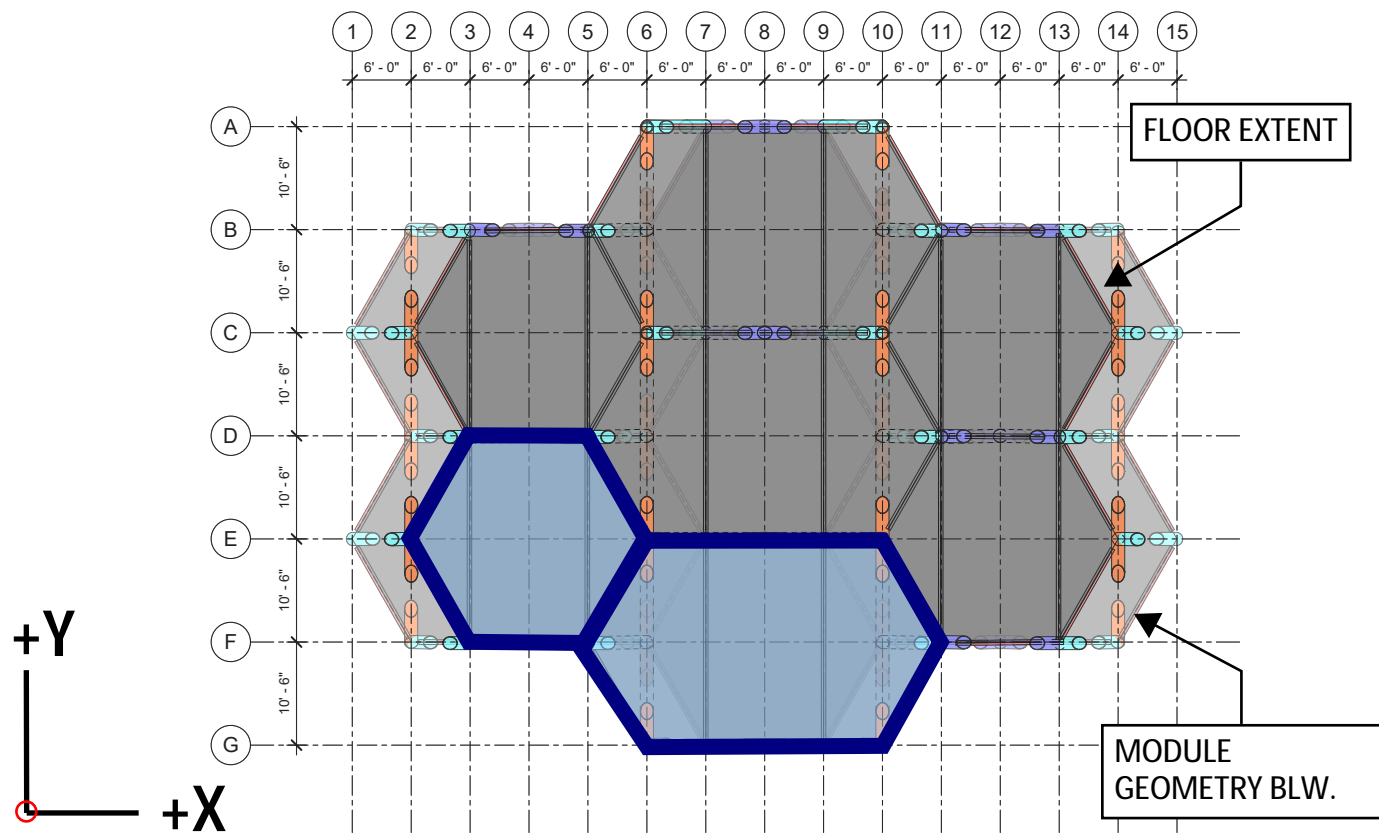
BRACING ADDED IN HEXAGON
FACES OF MODULE



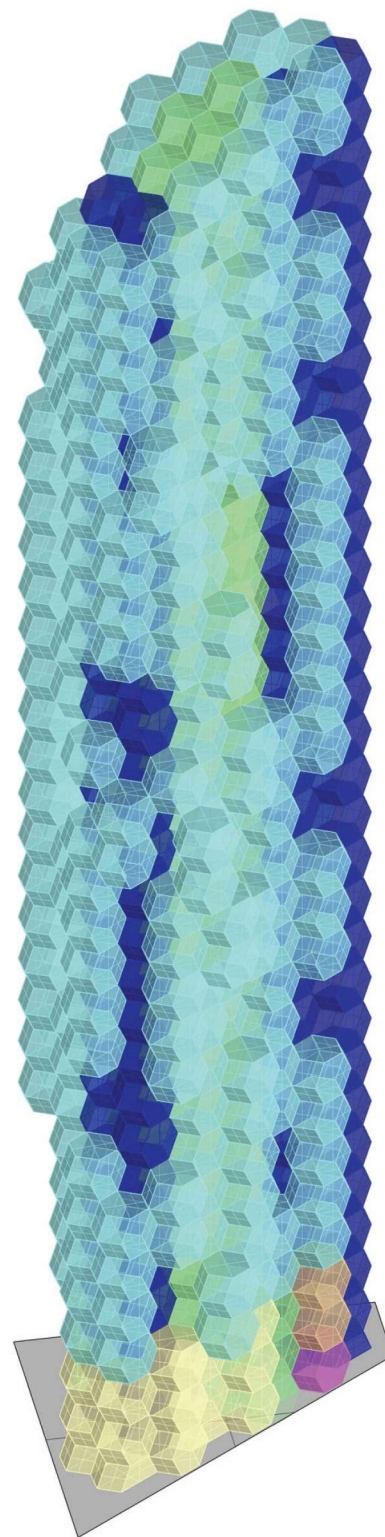
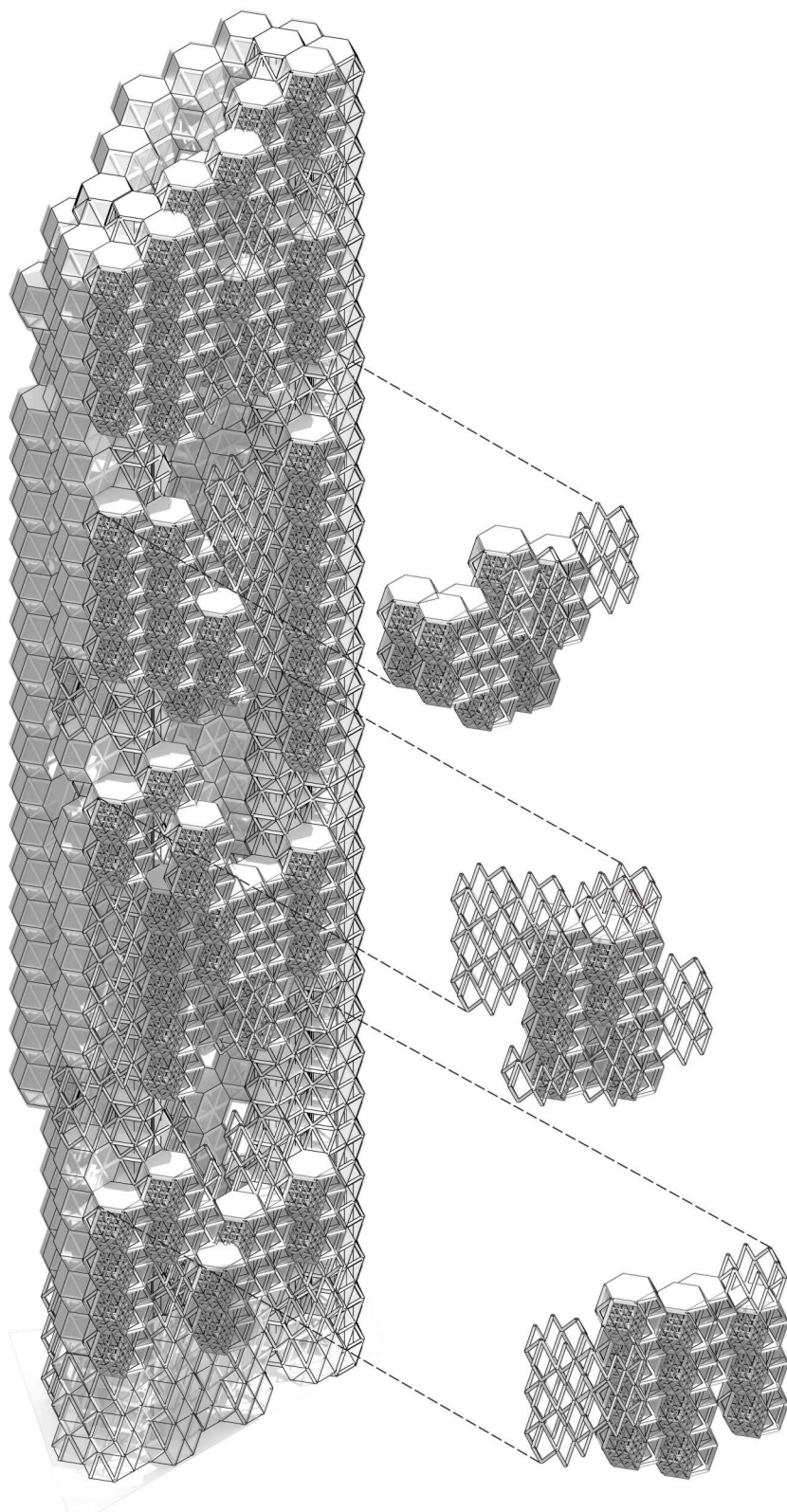
BRACING ADDED IN RHOMBUS
FACES OF MODULE



STRUCTURE

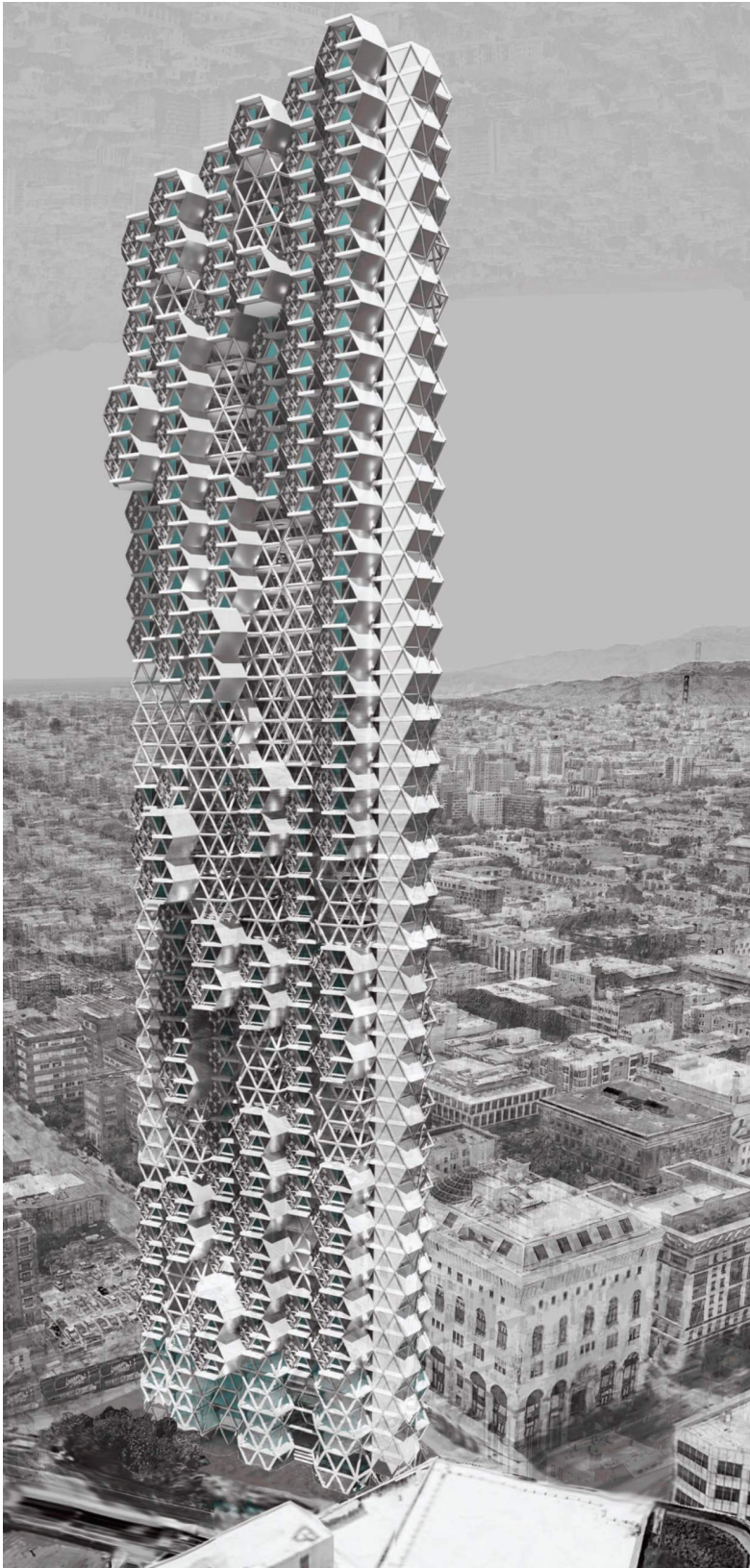


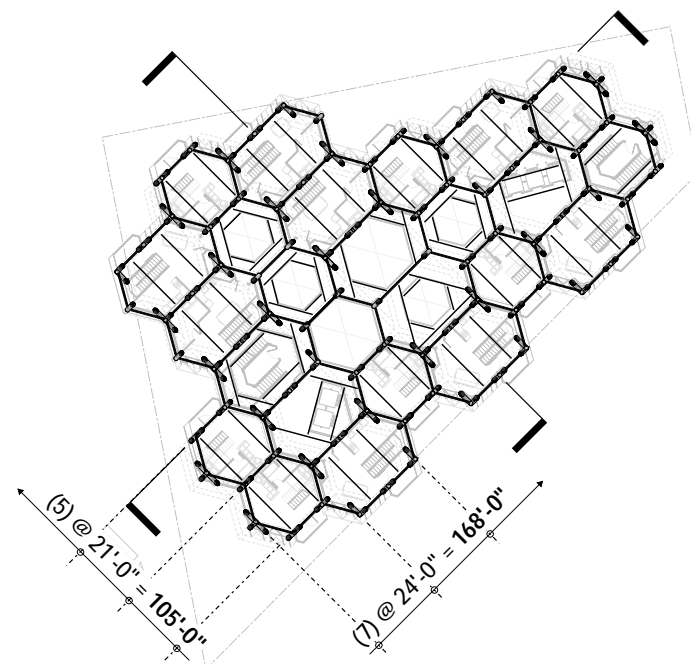
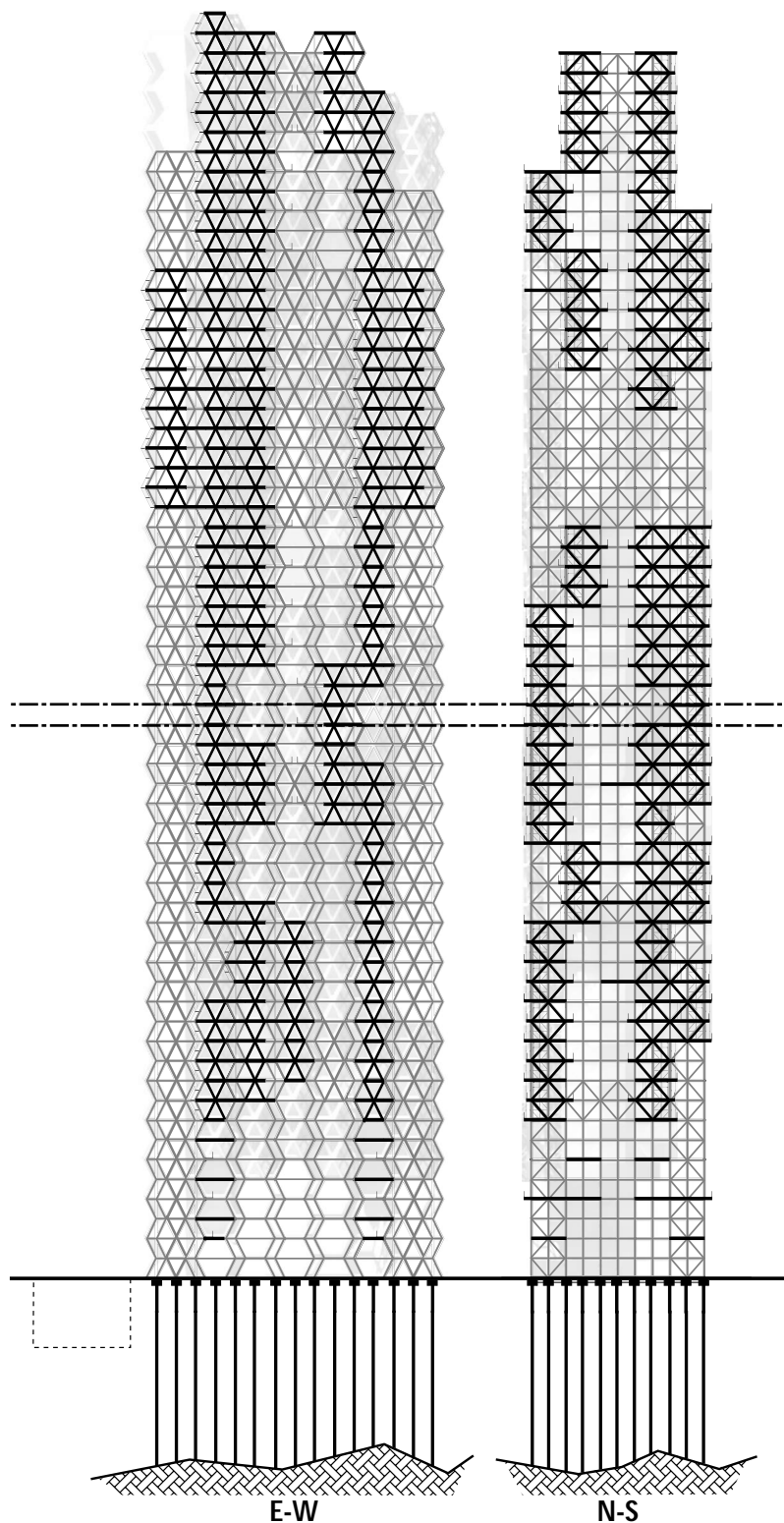
TESSELLATION



- Muni Lobby
- Residential Lobby
- Podium
- Atrium
- Housing Units
- Circulation Core

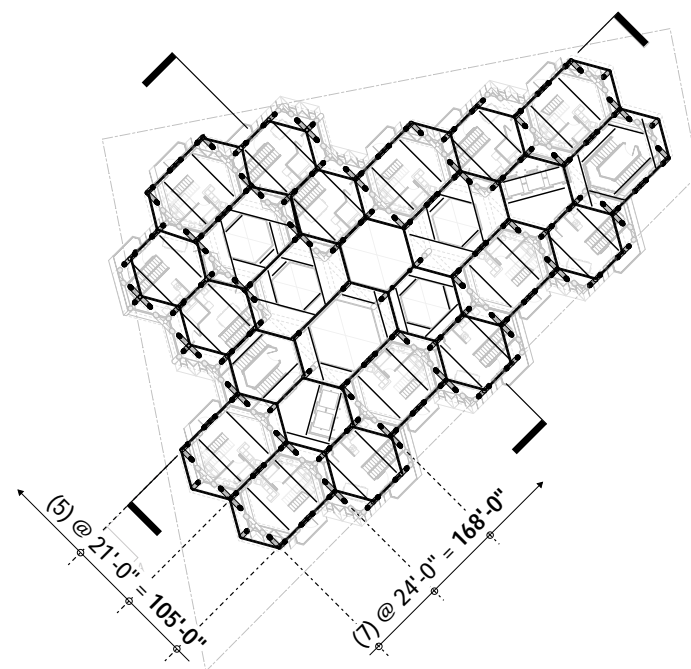
FORM



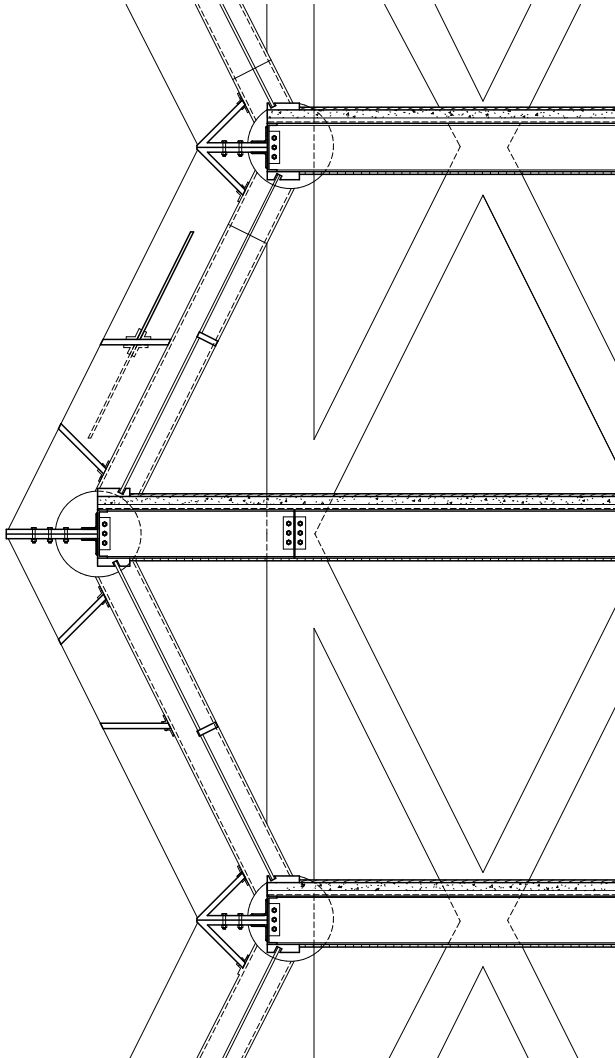


TYPICAL FRAMING

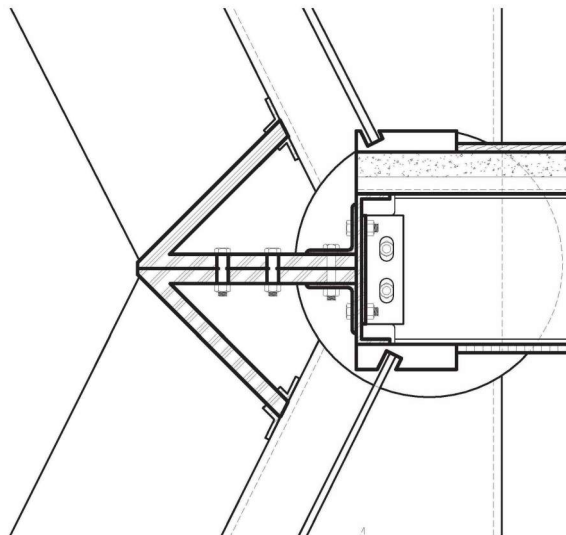
RECIPROCAL FRAMING



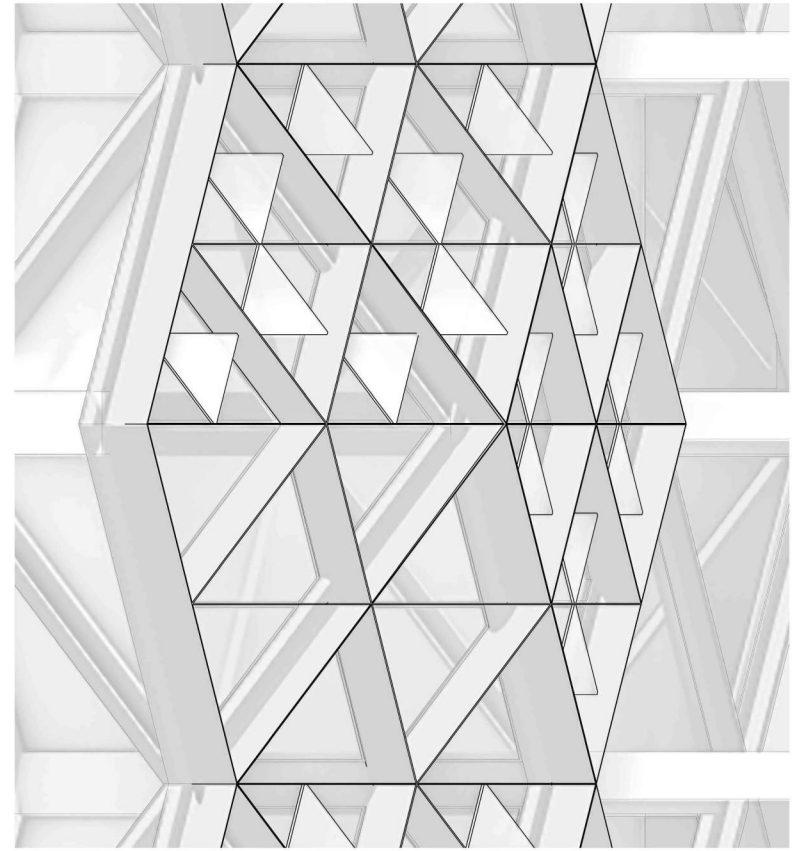
DRAWINGS



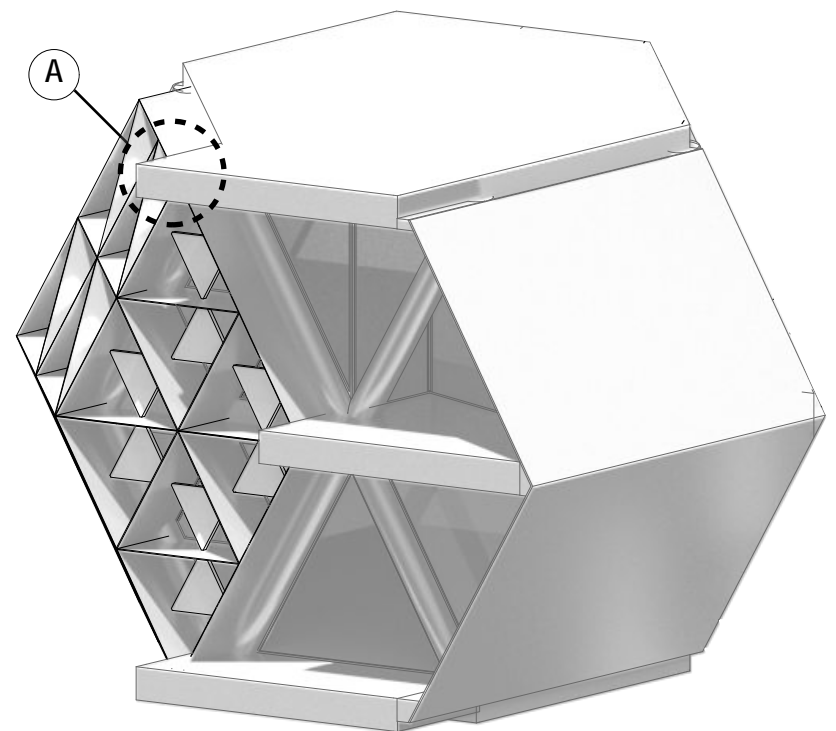
ENVELOPE SECTION



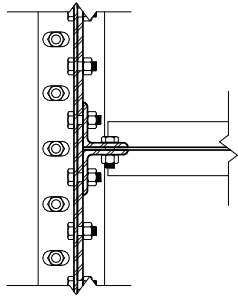
Ⓐ MODULE INTERACTION



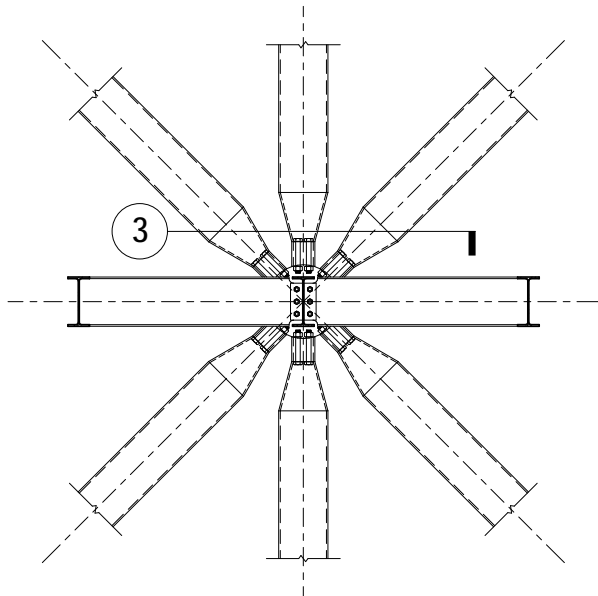
ENVELOPE ELEVATION



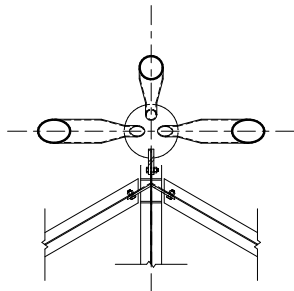
SINGLE MODULE



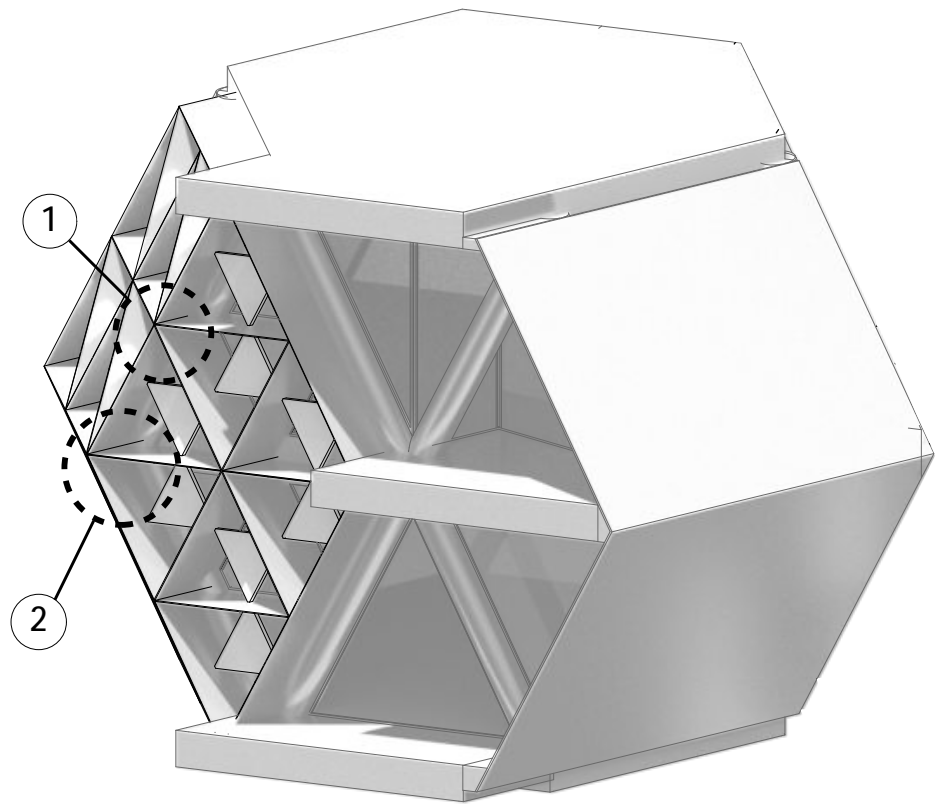
1 UPPER MODULE PLAN



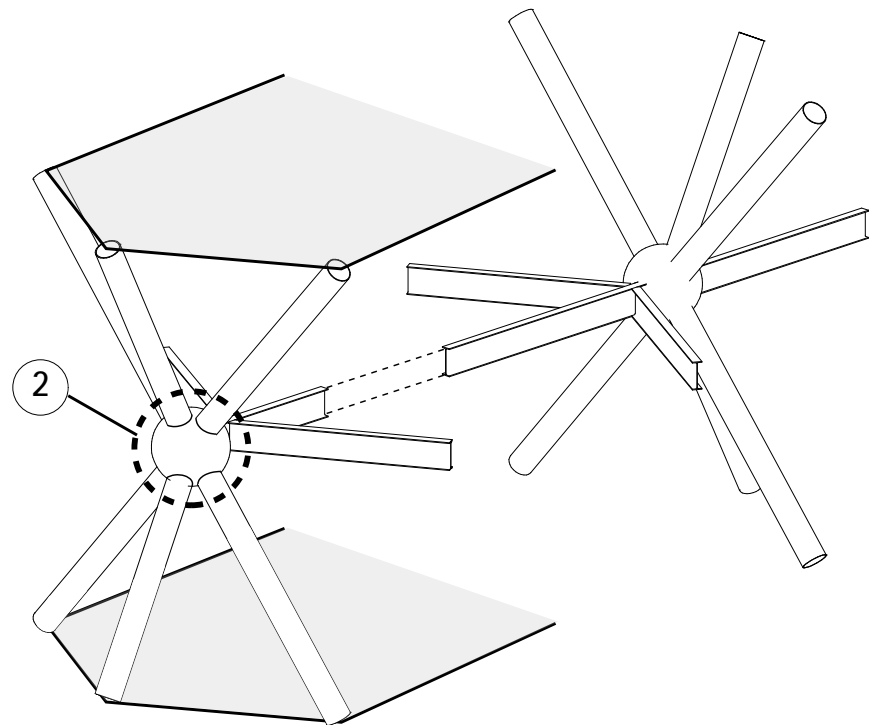
2 BALL JOINT AT BM



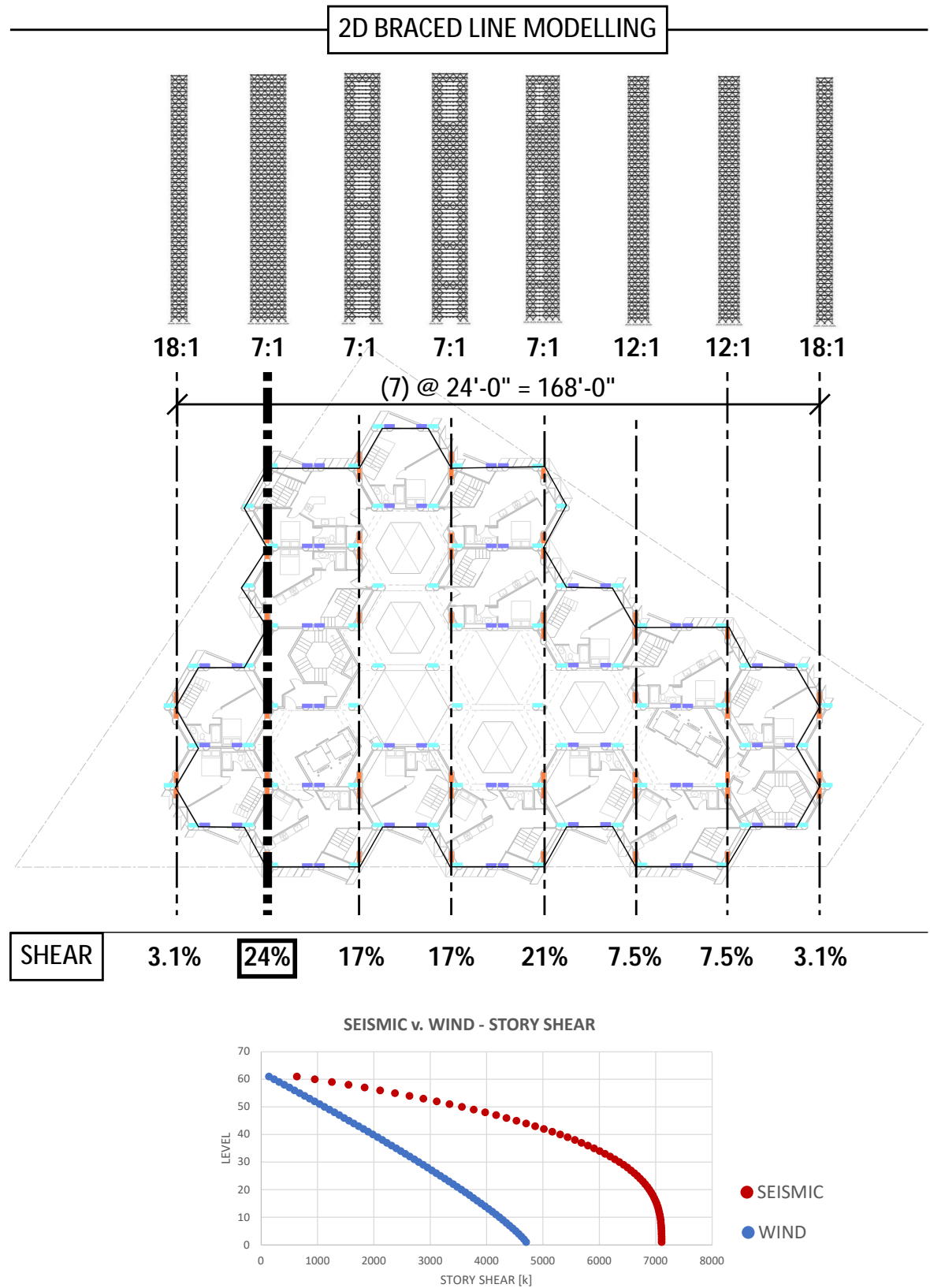
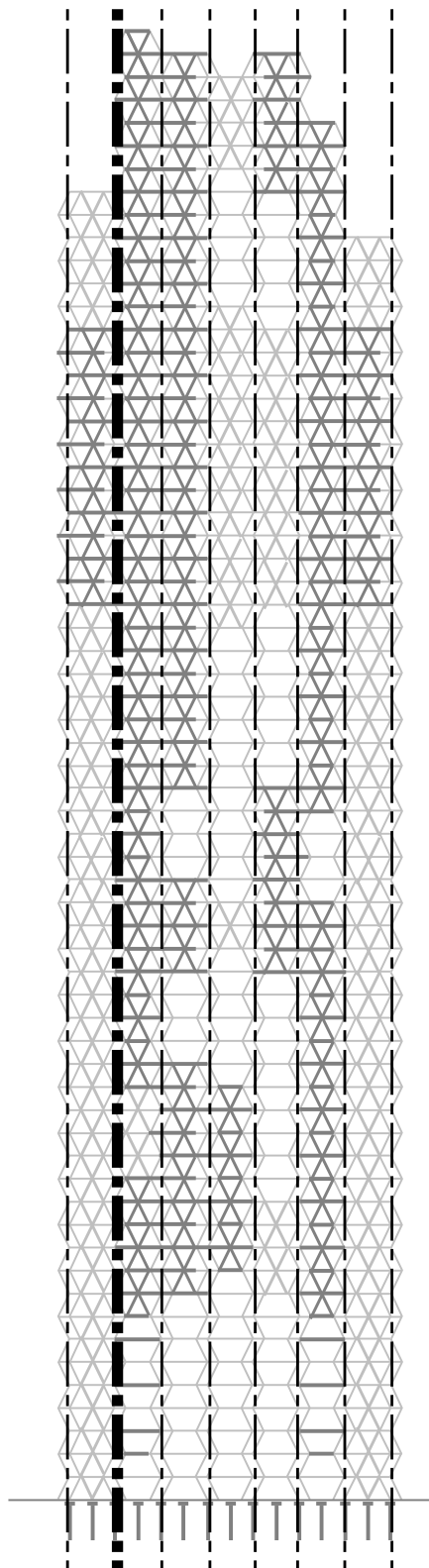
3 BALL JOINT PLAN

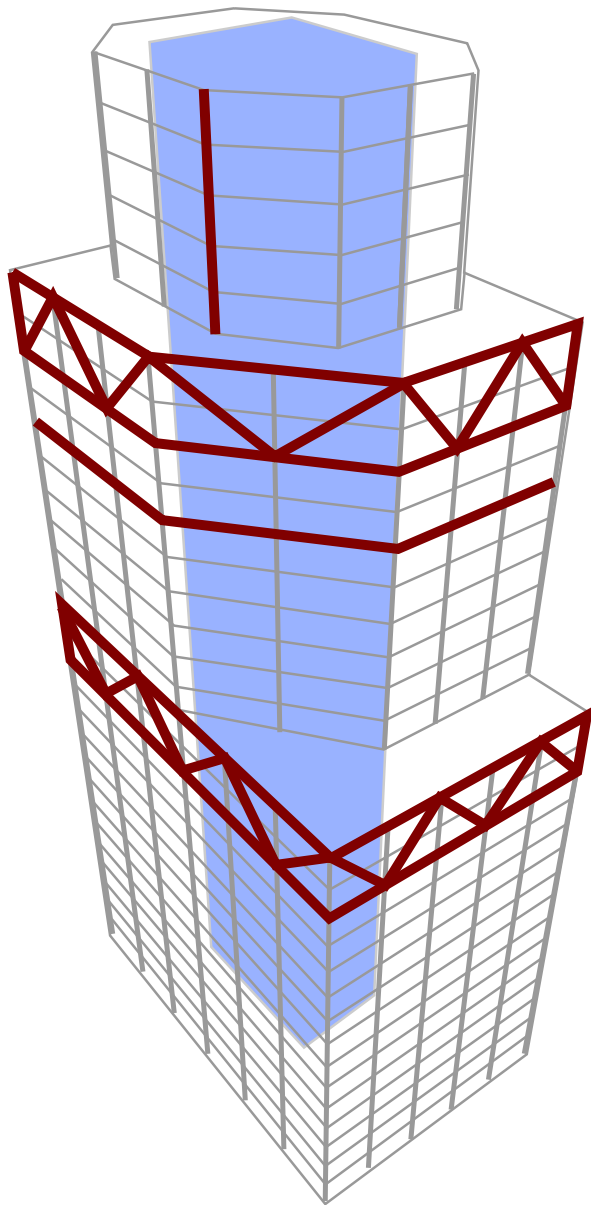


SINGLE MODULE

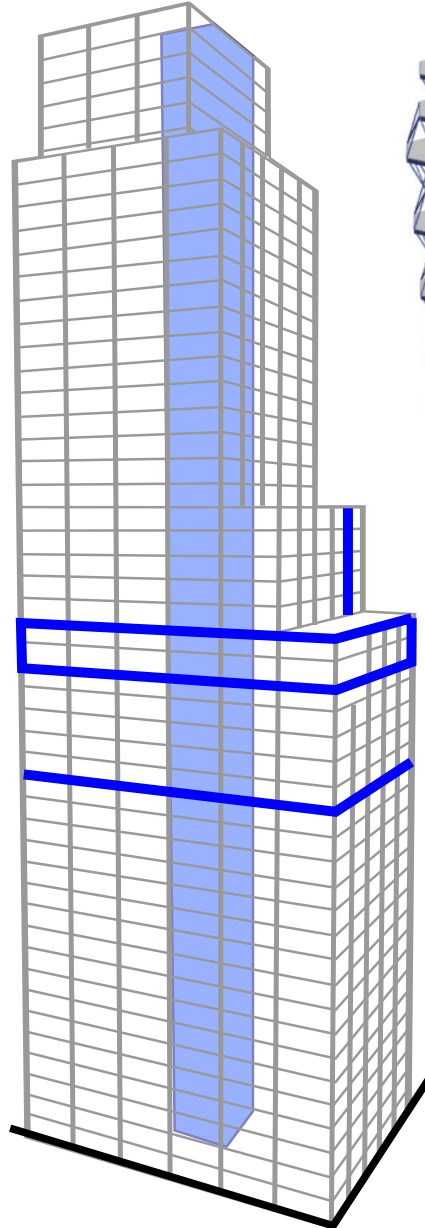


BALL JOINT CONNECTIVITY

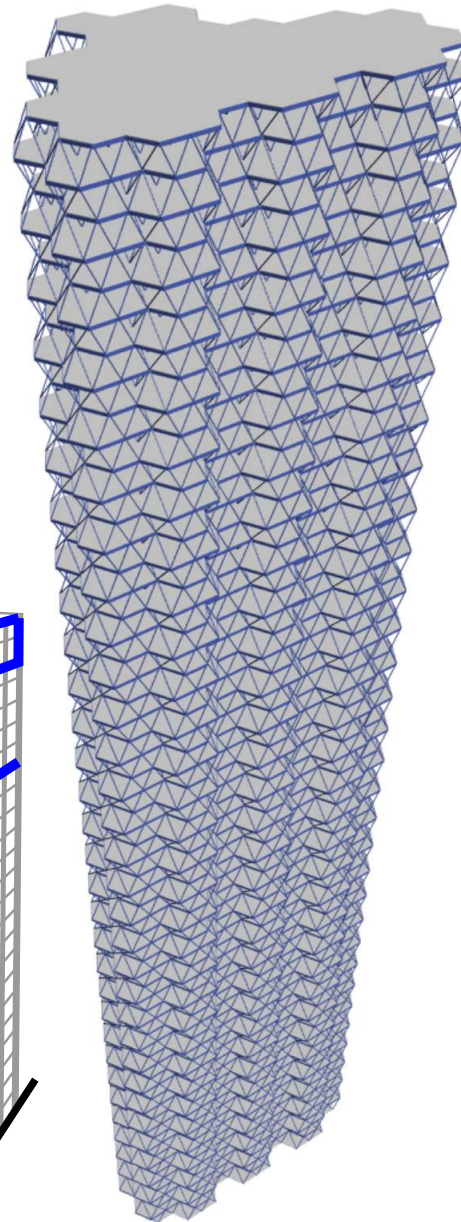




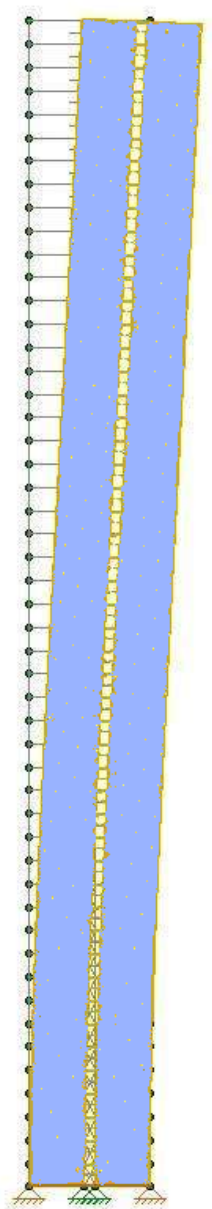
Steel Outrigger | Belt Truss



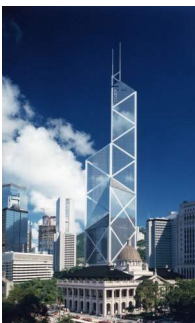
Conc. Flat Slab | Vierendeel Belt



Load Flow | Dynamic Effects



Wall Coupling



BANK OF CHINA



ROSE RAYHAAN



1000 MUSEUM



SHANGHAI WFC



KK100



JIN MAO



30 HUDSON



AL HAMRA

PROCESS



QUESTIONS