SFB1244
Design Study

Mathias Maierhofer
Chris Kang
Shirin Shevidi

Table of content

1.1 50 x 50 x 50
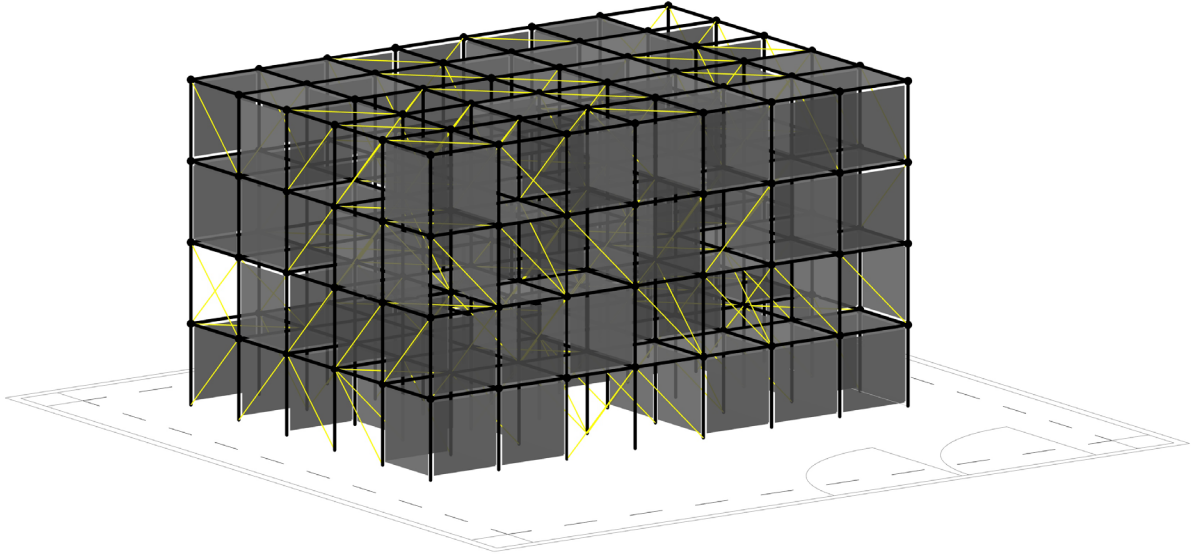
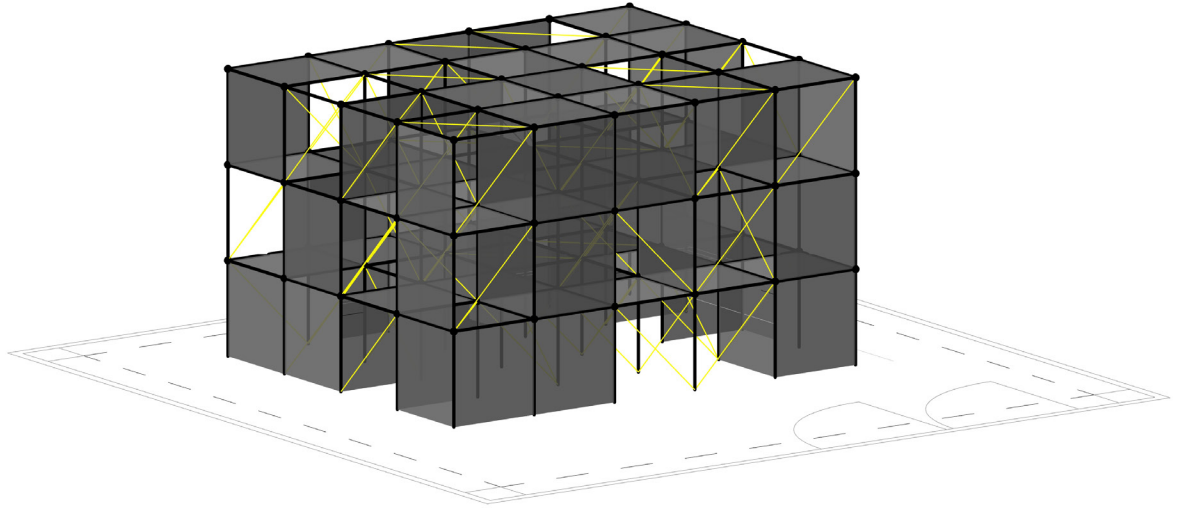Dimensions (xyz) (cm) : 50 x 50 x 50

Number of all lines : 743

Number of diagonals : 223 (30%)

Number of nodes : 192

Seed : 0

1.2 60 x 60 x 60

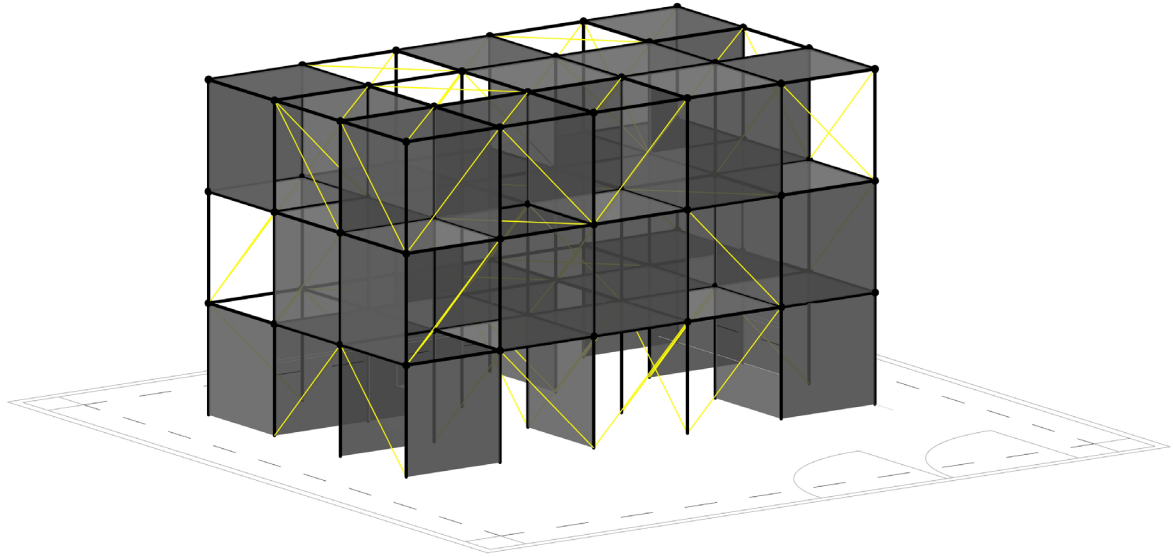Dimensions (xyz) (cm) : 60 x 60 x 60

Number of all lines : 339

Number of diagonals : 102 (30%)

Number of nodes : 90

Seed : 0

1.3 70 x 70 x 70

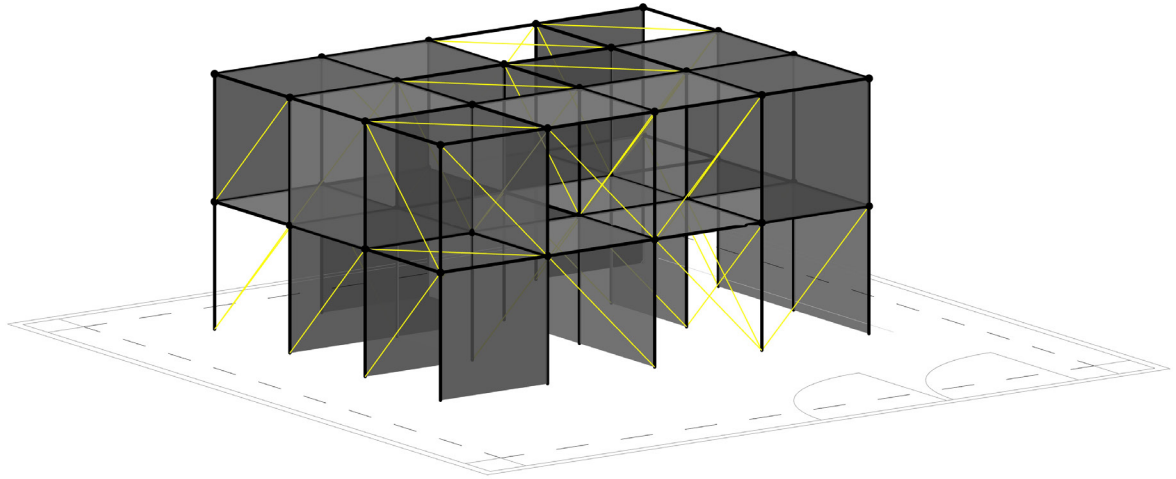Dimensions (xyz) (cm) : 70 x 70 x 70

Number of all lines : 266

Number of diagonals : 80 (30%)

Number of nodes : 72

Seed : 0

1.4 80 x 80 x 80

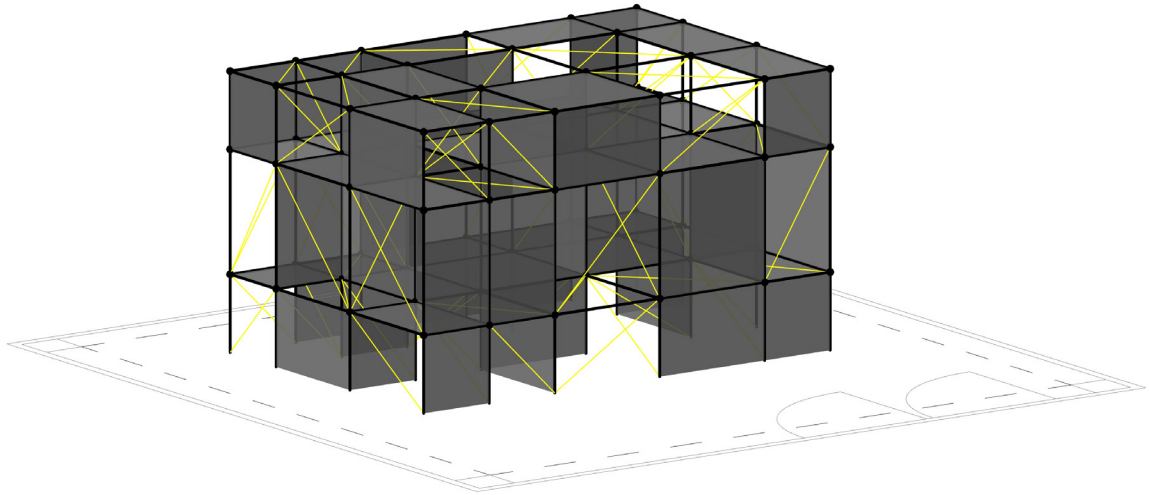Dimensions (xyz) (cm) : 80 x 80 x 80

Number of all lines : 146

Number of diagonals : 44 (30%)

Number of nodes : 40

Seed : 0

2.1 Combination #1

Number of all lines : 266
Number of diagonals : 80 (30%)
Number of nodes : 72
Seed : 0
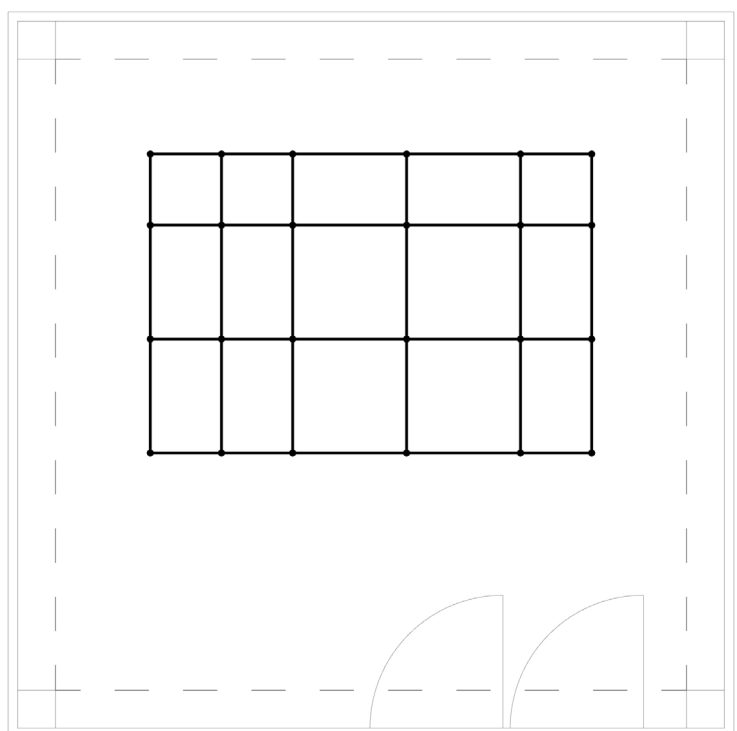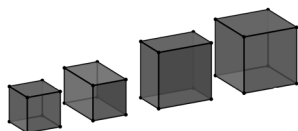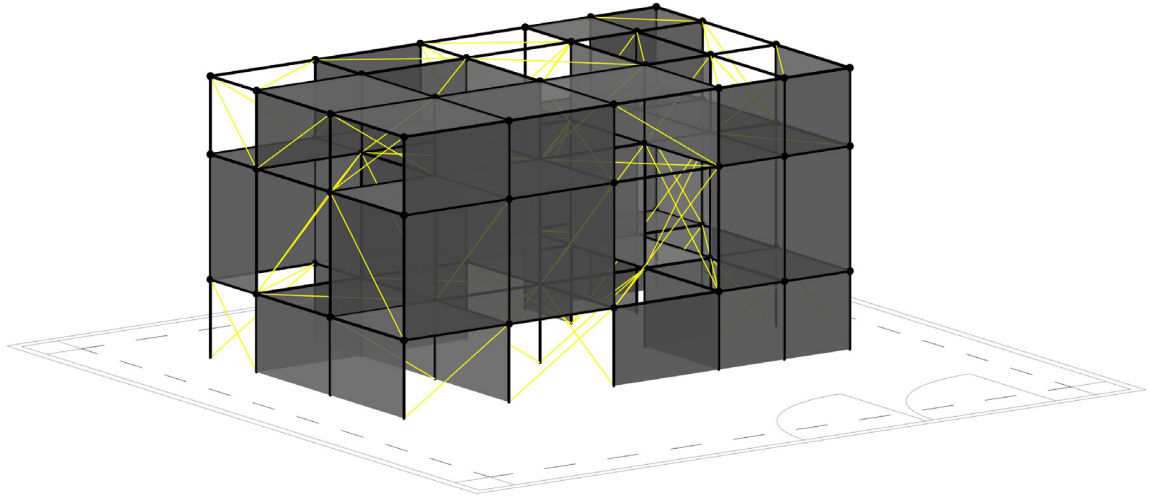
Units (xyz) :
      1. 50 x 50 x 50
      2. 50 x 80 x 50
      3. 80 x 80 x 50
      4. 80 x 80 x 80

2.2 Combination #2

Number of all lines : 266
Number of diagonals : 80 (30%)
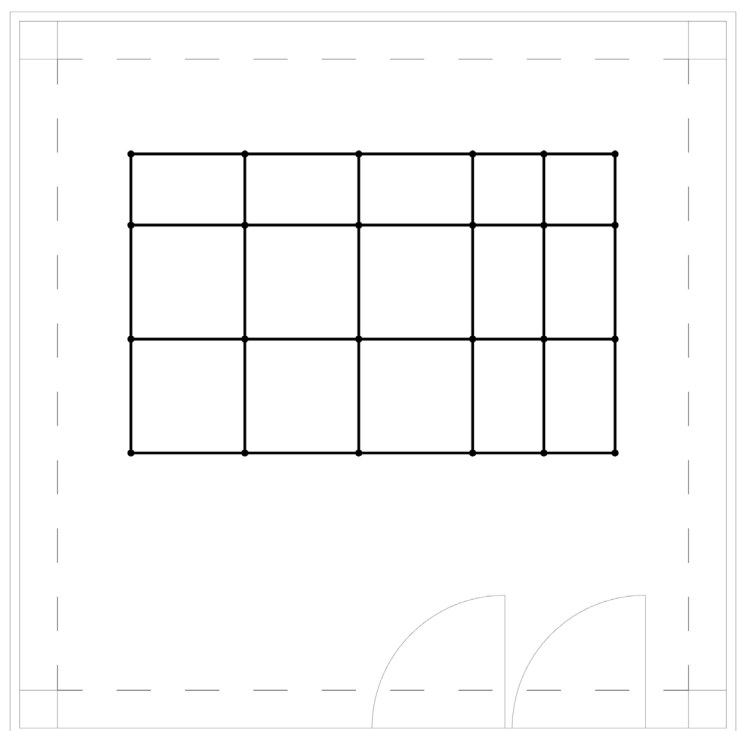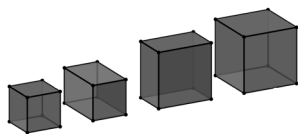Number of nodes : 72
Seed : 0
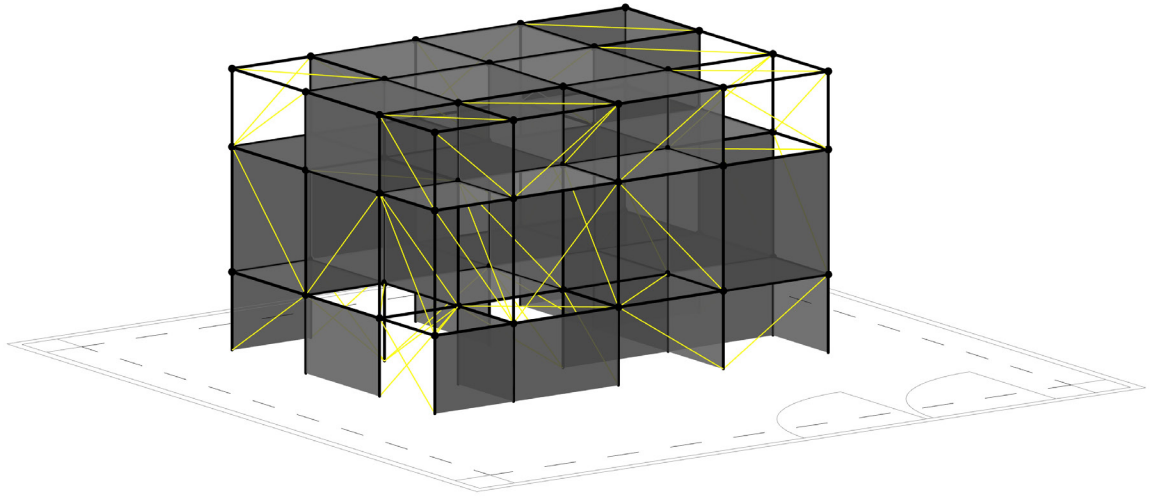
Units (xyz) :
    1. 50 x 50 x 50
    2. 50 x 80 x 50
    3. 80 x 80 x 50
    4. 80 x 80 x 80

2.3 Combination #3

Number of all lines : 219

Number of diagonals : 66 (30%)
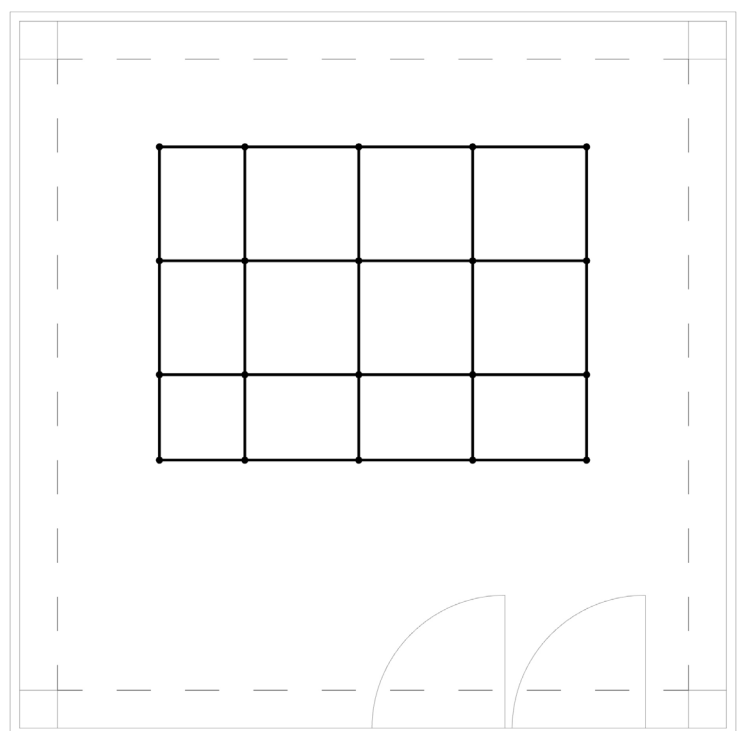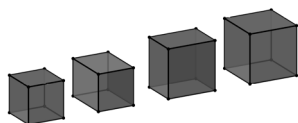
Number of nodes : 60

Seed : 0
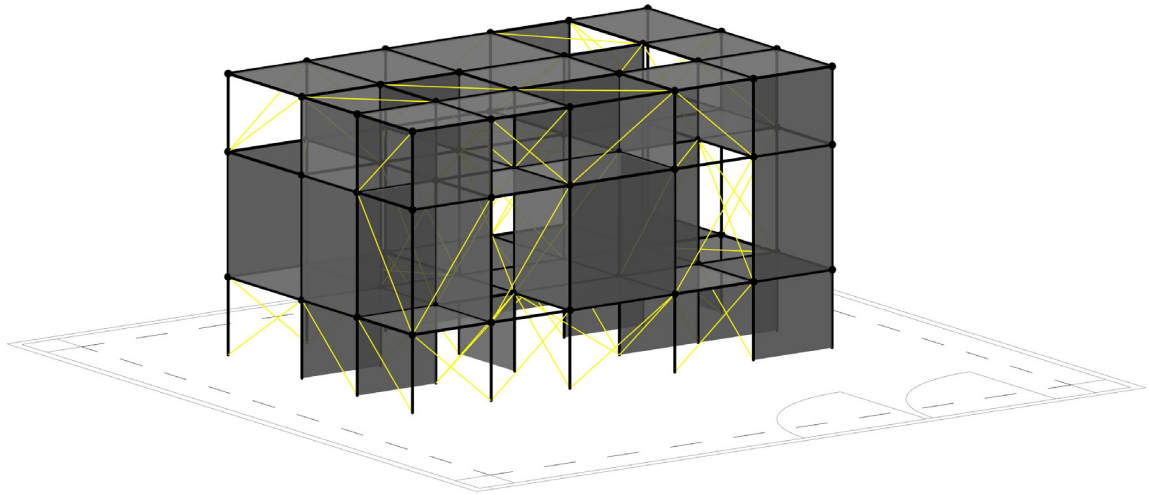
Units (xyz) :
1. 60 x 60 x 60
2. 60 x 80 x 60
3. 80 x 80 x 60
4. 80 x 80 x 80

2.4 Combination #4

Number of all lines : 266
Number of diagonals : 80 (30%)
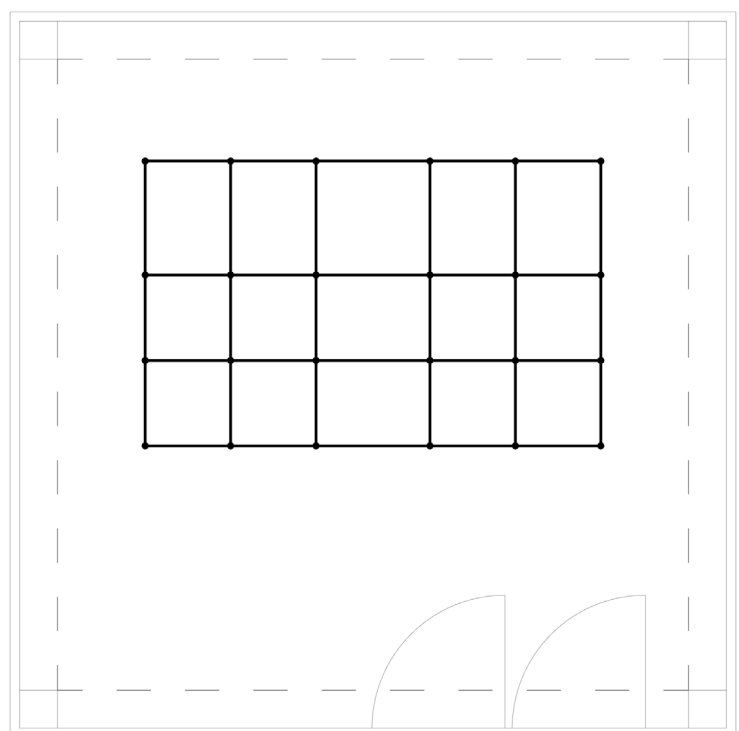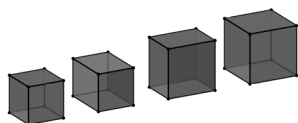Number of nodes : 72
Seed : 0
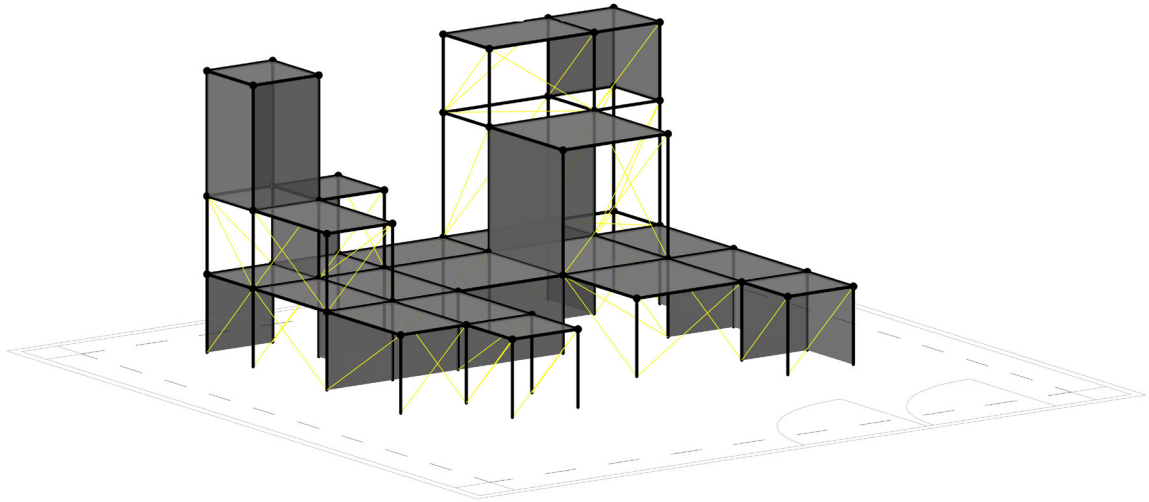
Units (xyz) :
    1. 60 x 60 x 60
    2. 60 x 80 x 60
    3. 80 x 80 x 60
    4. 80 x 80 x 80

3.1 Design Study #1

Number of all lines : 183
Number of diagonals : 55 (30%)
Number of nodes : 54
Seed : 16
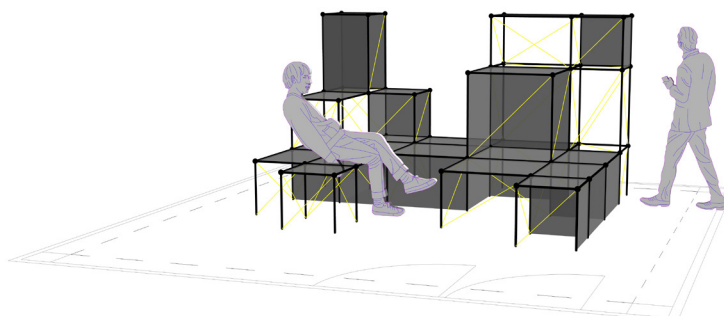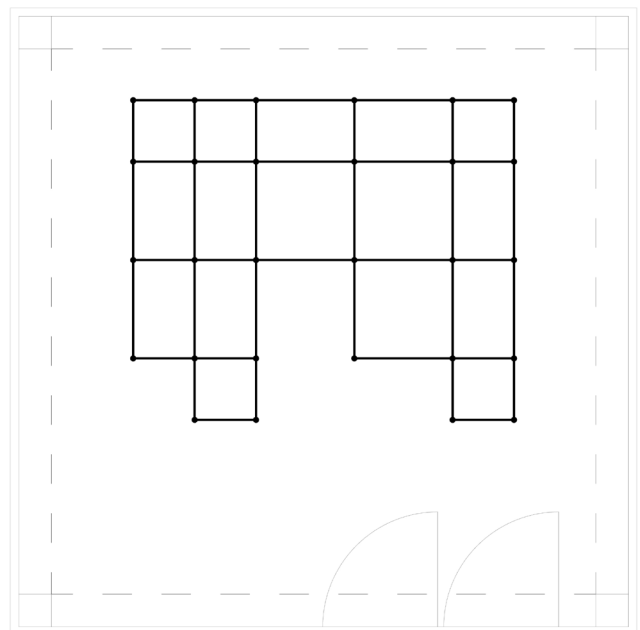
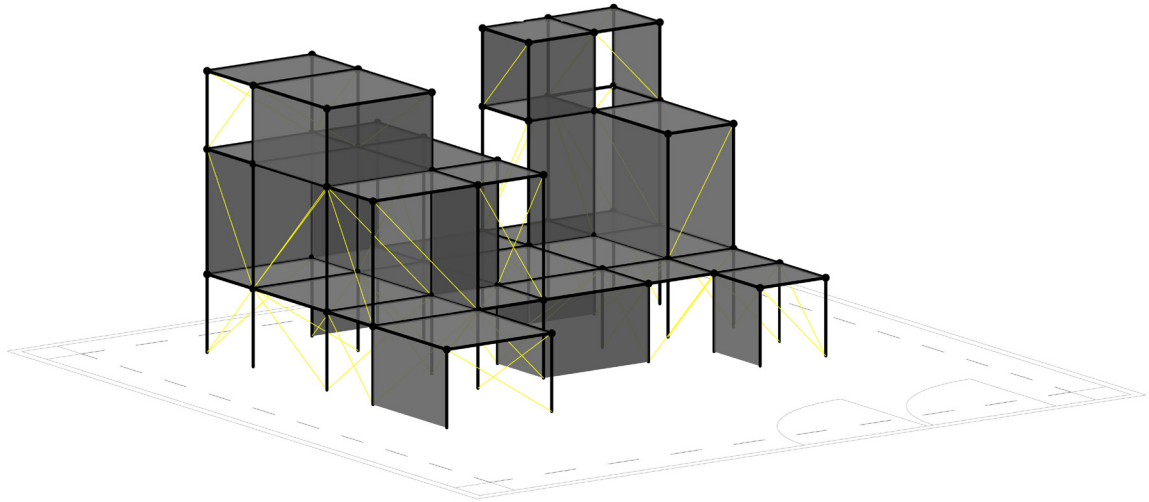Units (xyz) :
      1. 50 x 50 x 50
      2. 50 x 80 x 50
      3. 80 x 80 x 50
      4. 80 x 80 x 80

3.2 Design Study #2

Number of all lines : 207
Number of diagonals : 62 (30%)
Number of nodes : 60
Seed : 41

Units (xyz) :
      1. 50 x 50 x 50
      2. 50 x 80 x 50
      3. 80 x 80 x 50
      4. 80 x 80 x 80