

SURFACE ANALYSIS : EXERCISE 1

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EXPERIMENTAL STRUCTURES/ TESTING GEOMETRY

Material : steel

E-21000kN/sq cm

G-8076 kN/sq cm

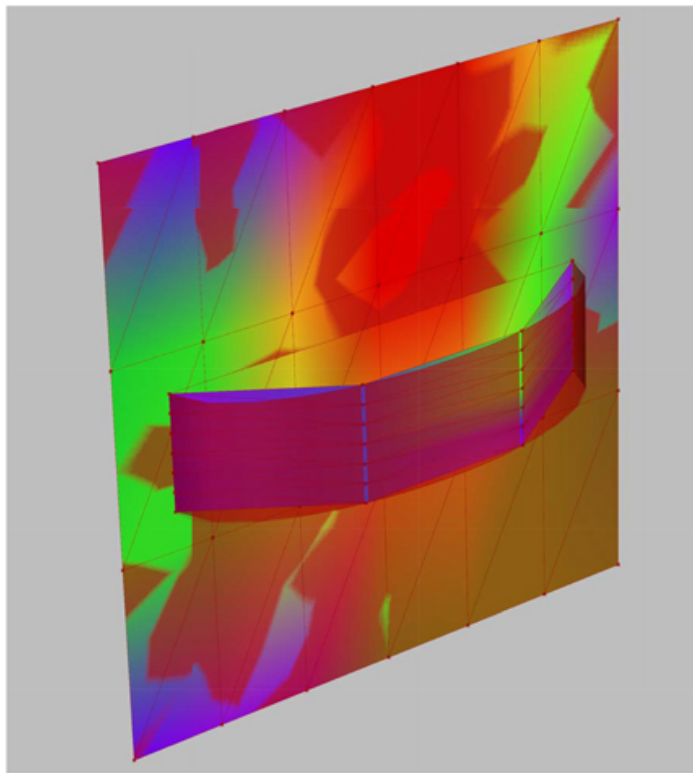
Gamma-78.5kN/cube m.

fy-23.5kN/sq cm

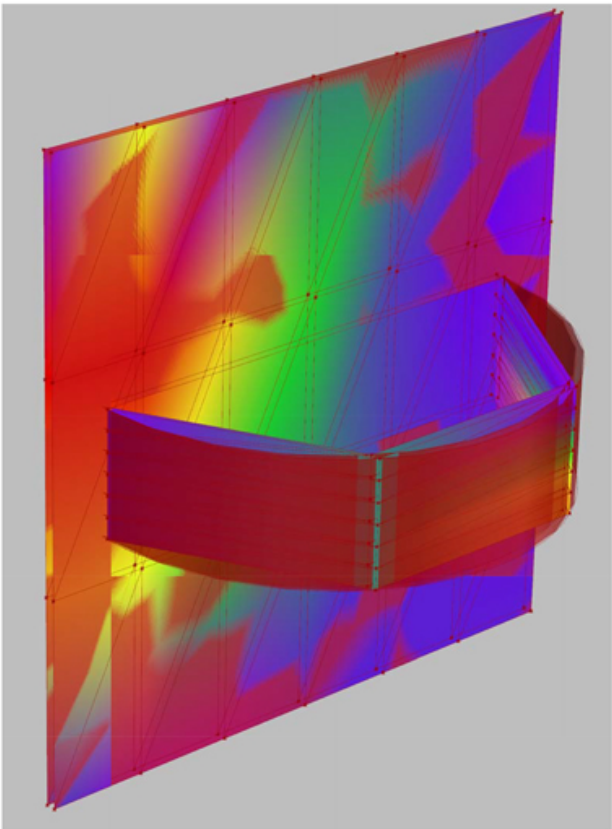
UTILIZATION

DISPLACEMENT

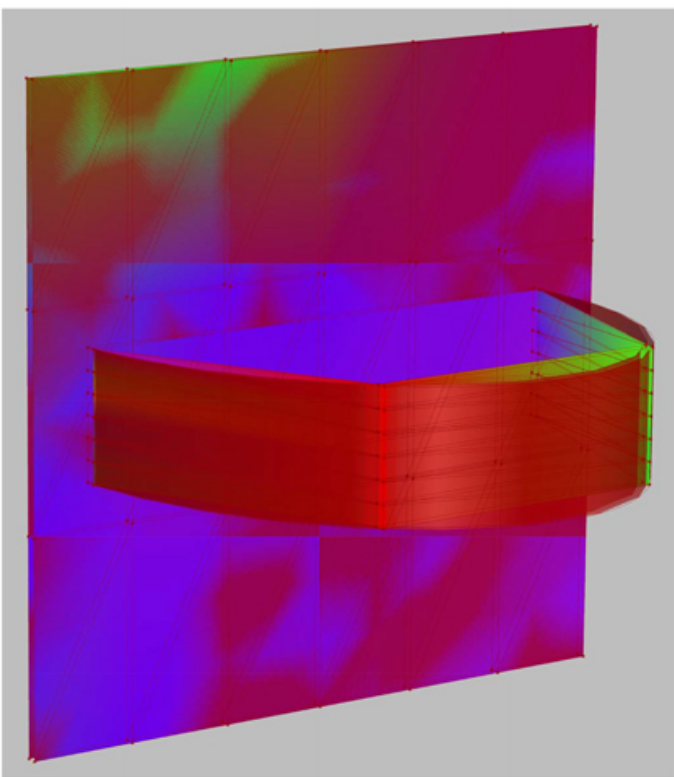
SUPPORT SYSTEM 1



HEIGHT-5CM
MAX DISPLACEMENT-4.1689e+7

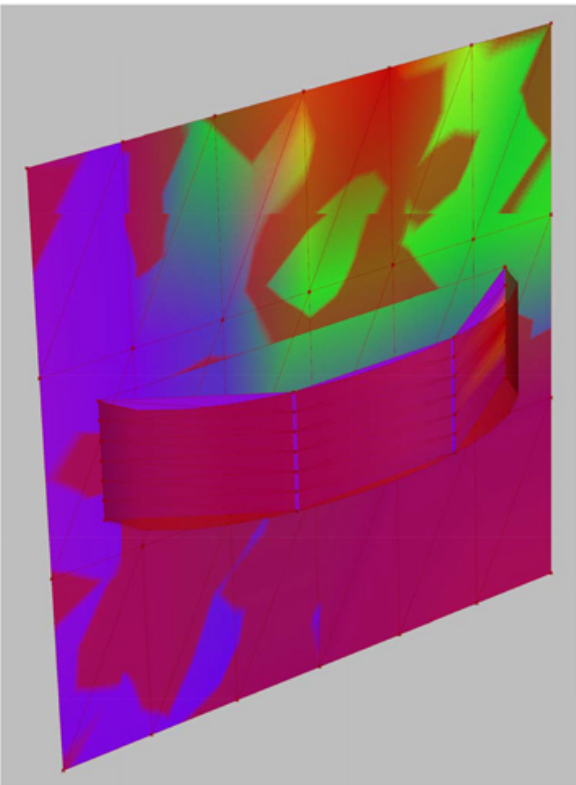


HEIGHT-12cm
MAX DISPLACEMENT-8.7385e+7

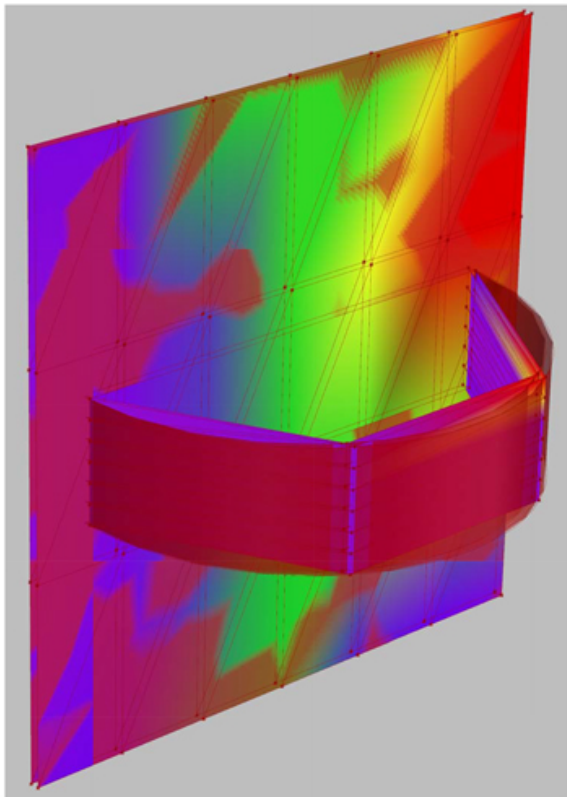


HEIGHT-18cm
MAX DISPLACEMENT-9.1689e+7

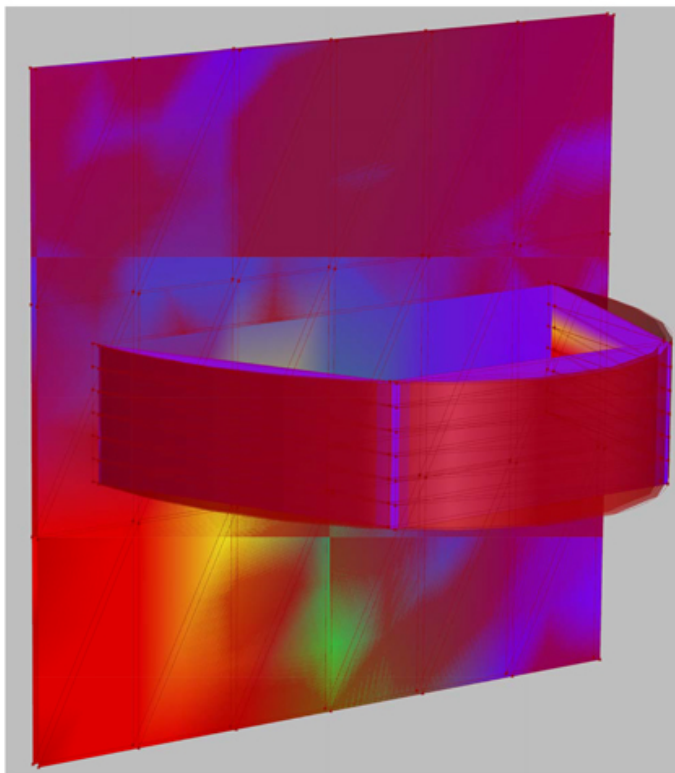
SUPPORT SYSTEM 1



HEIGHT-5CM
MAX DISPLACEMENT-4.1689e+7



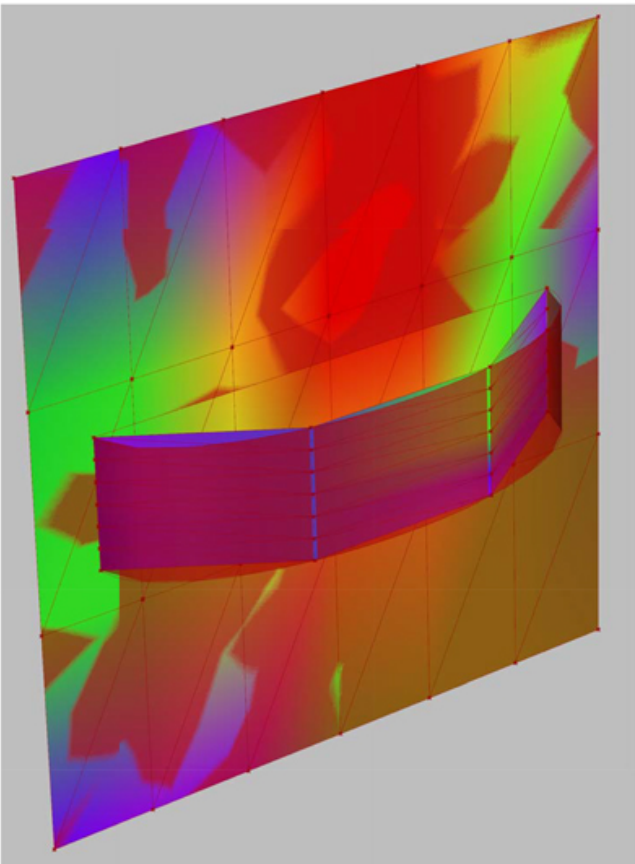
HEIGHT-12cm
MAX DISPLACEMENT-8.7385e+7



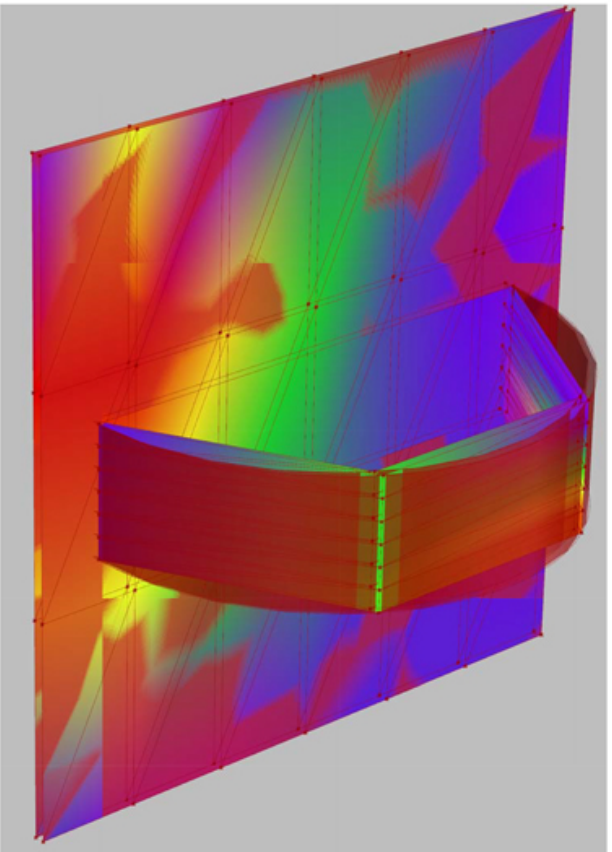
HEIGHT-18cm
MAX DISPLACEMENT-9.1689e+7

SUPPORT SYSTEM 2

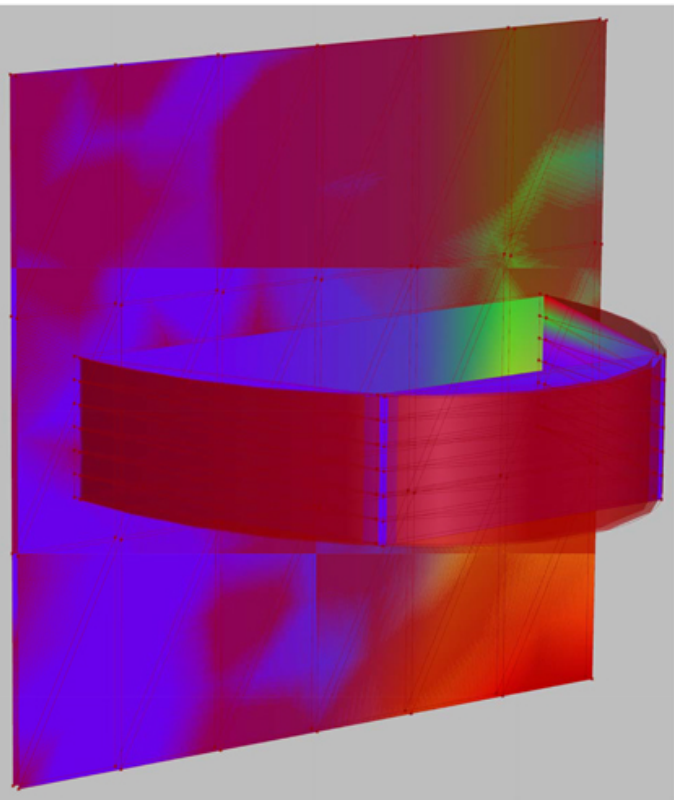
SUPPORT SYSTEM 2



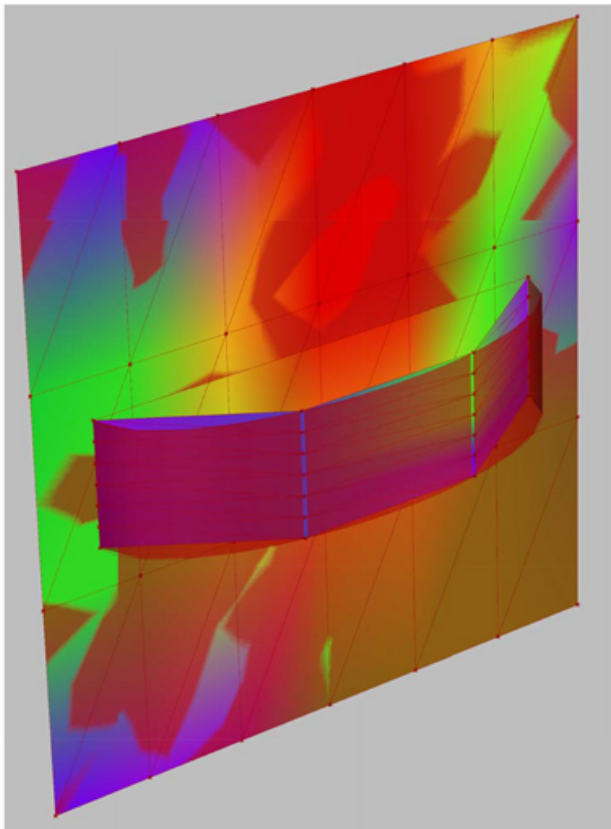
HEIGHT-5CM
MAX DISPLACEMENT-4.1689e+7



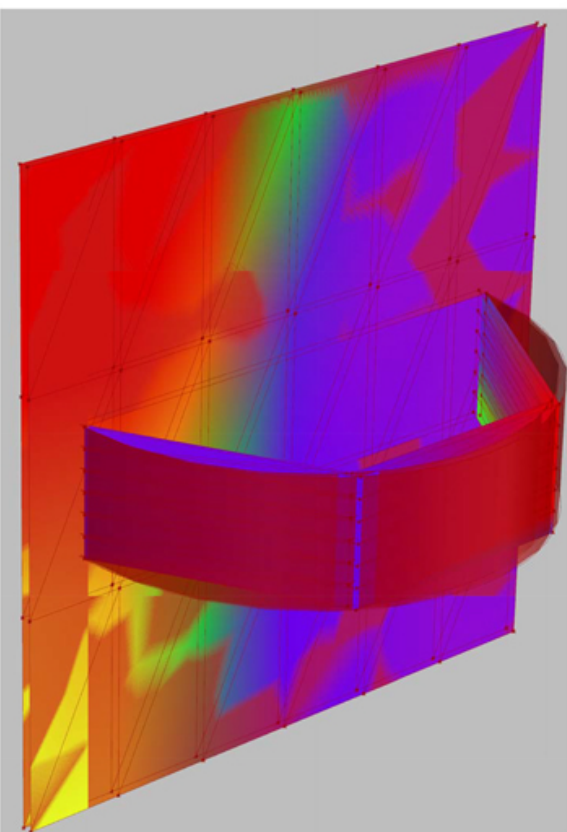
HEIGHT-12cm
MAX DISPLACEMENT-8.7385e+7



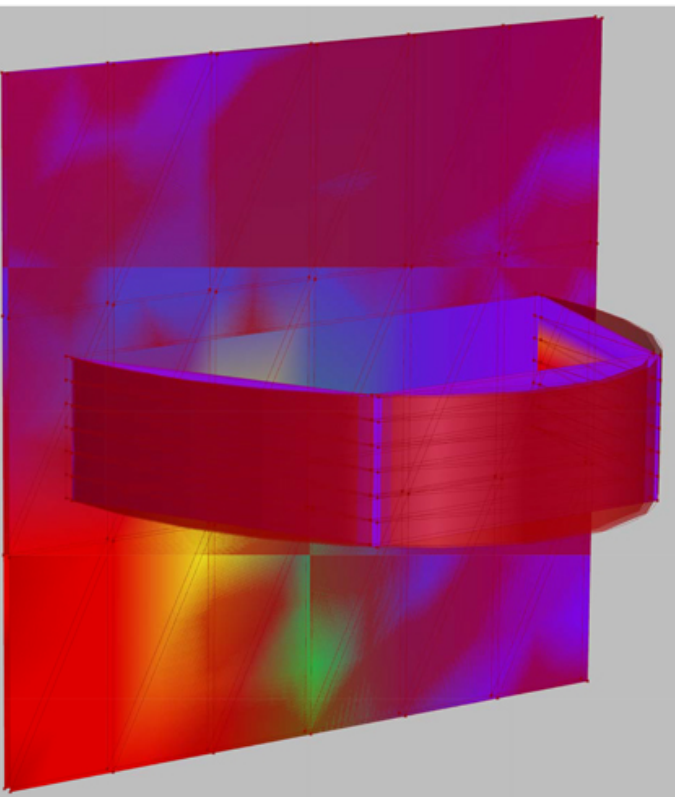
HEIGHT-18cm
MAX DISPLACEMENT-9.1689e+7



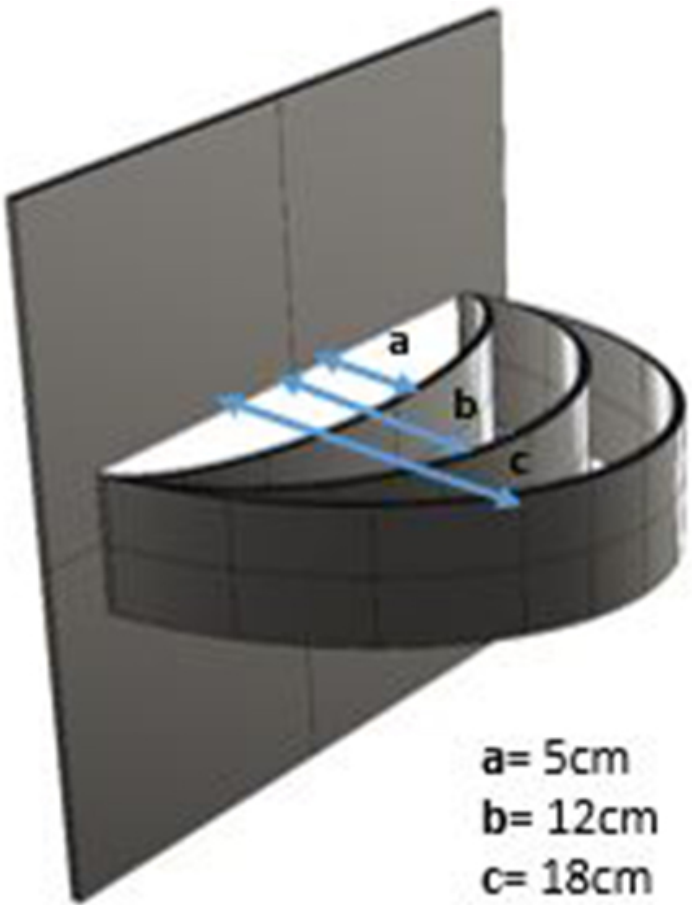
HEIGHT-5CM
MAX DISPLACEMENT-4.1689e+7



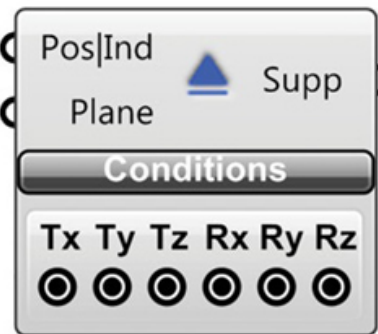
HEIGHT-12cm
MAX DISPLACEMENT-8.7385e+7



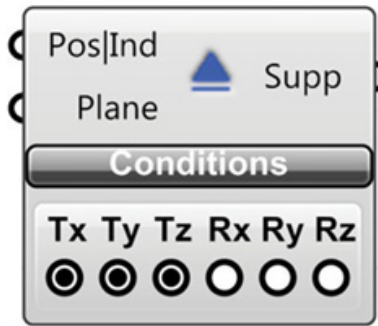
HEIGHT-18cm
MAX DISPLACEMENT-9.1689e+7



a= 5cm
b= 12cm
c= 18cm

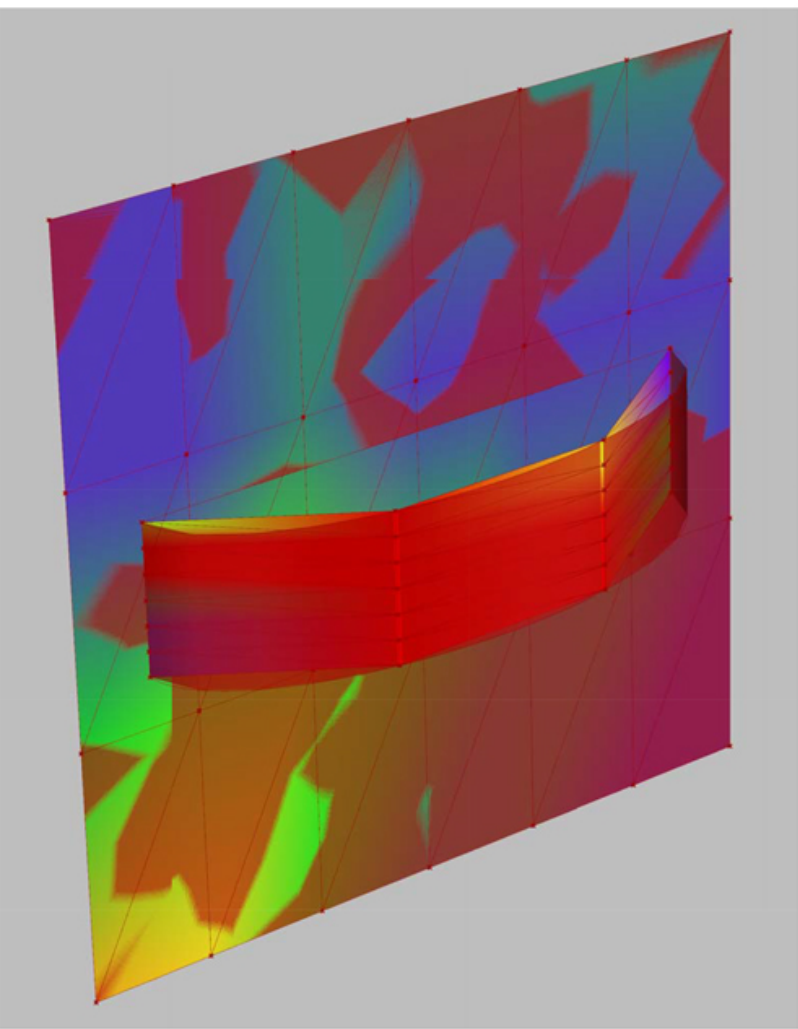


support system 1

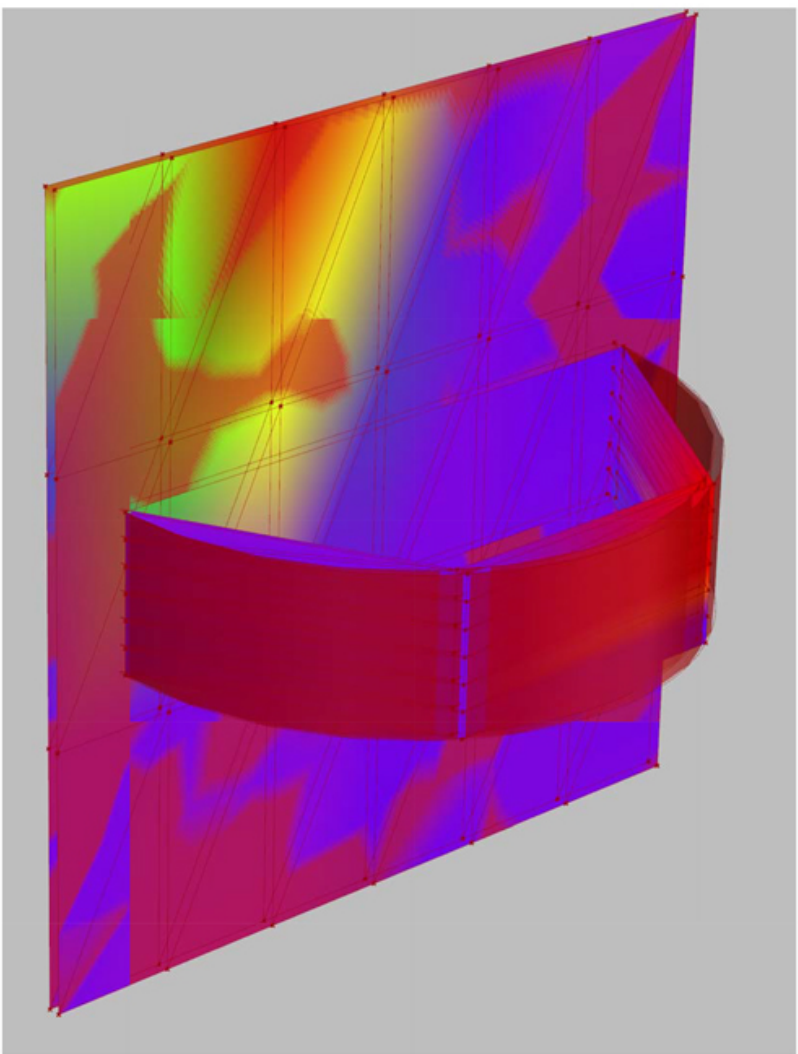


support system 2

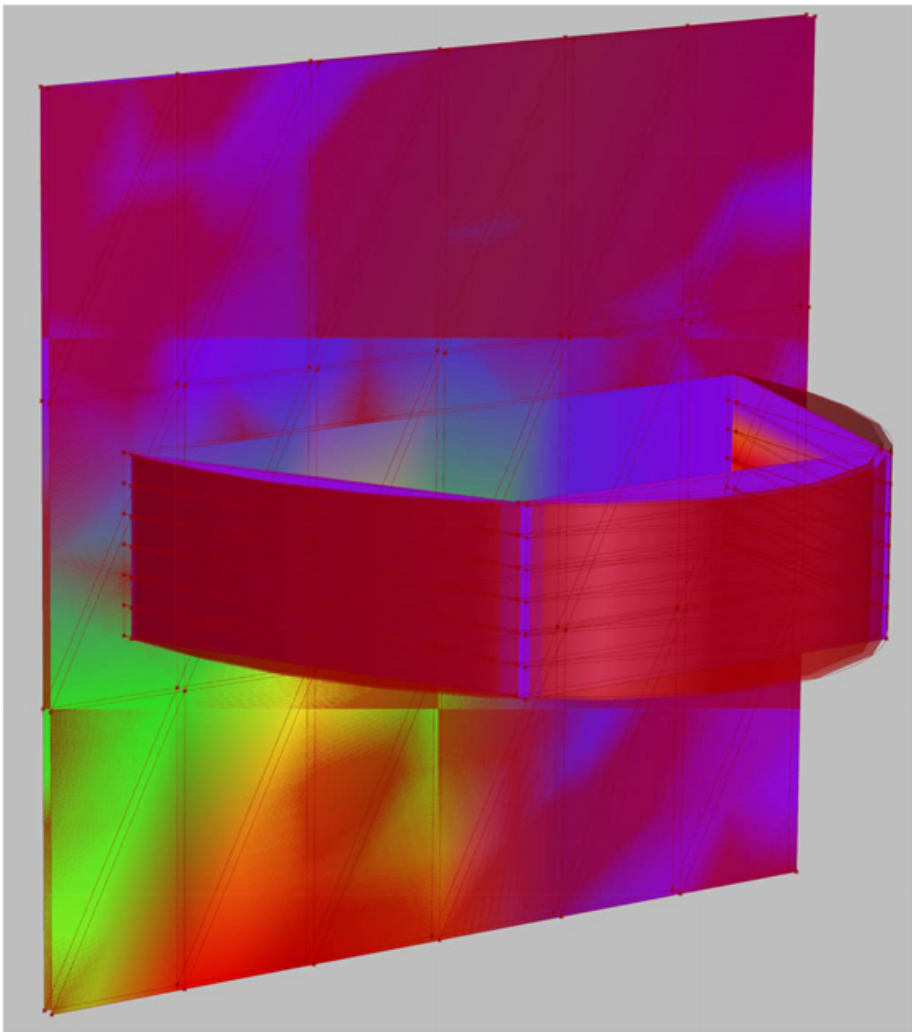
PRINCIPAL STRESS 1



HEIGHT-5CM
MAX DISPLACEMENT-4.1689e+7

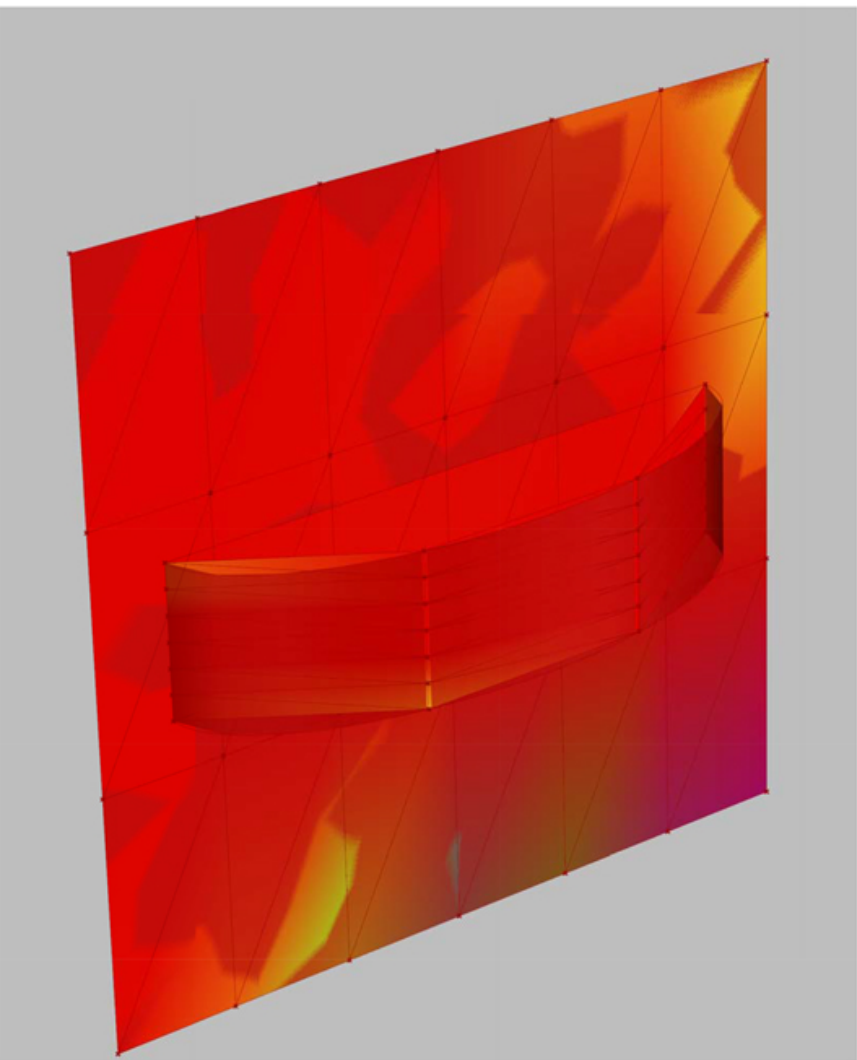


HEIGHT-12cm
MAX DISPLACEMENT-8.7385e+7

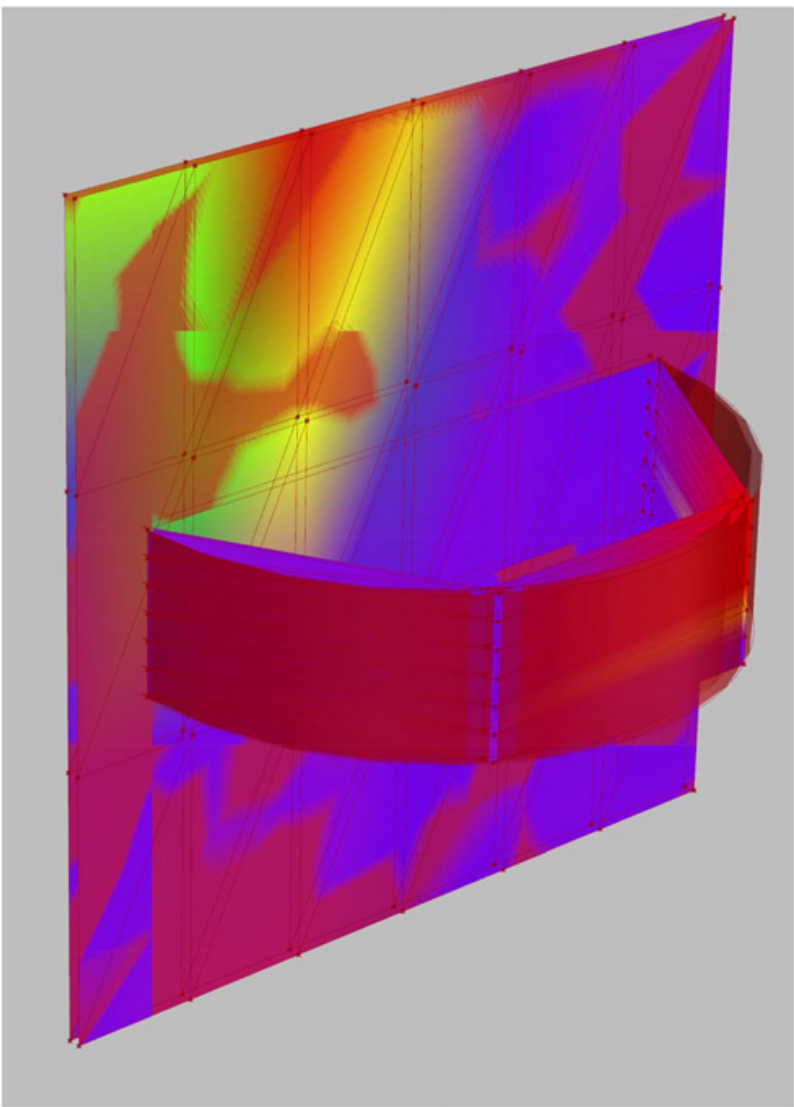


HEIGHT-18cm
MAX DISPLACEMENT-9.1689e+7

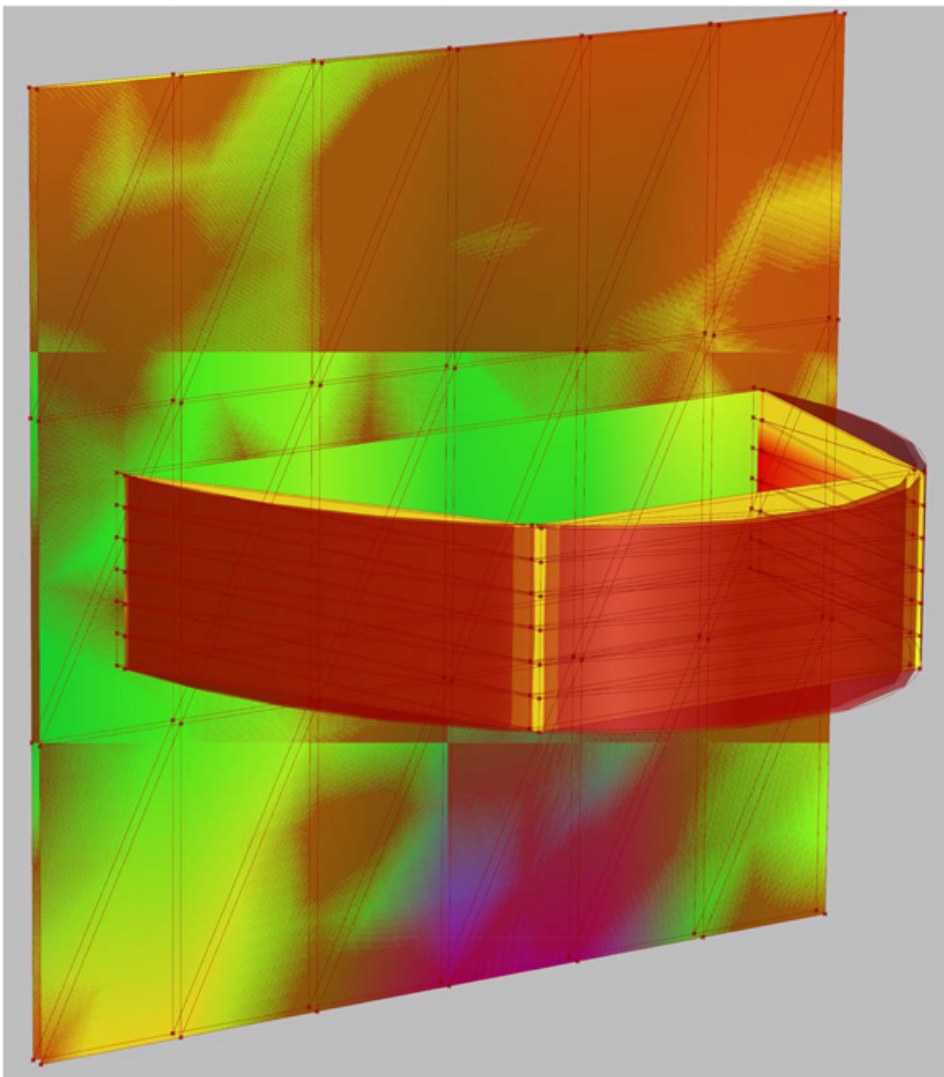
PRINCIPAL STRESS 2



HEIGHT-5CM
MAX DISPLACEMENT-4.1689e+7



HEIGHT-12cm
MAX DISPLACEMENT-8.7385e+7



HEIGHT-18cm
MAX DISPLACEMENT-9.1689e+7