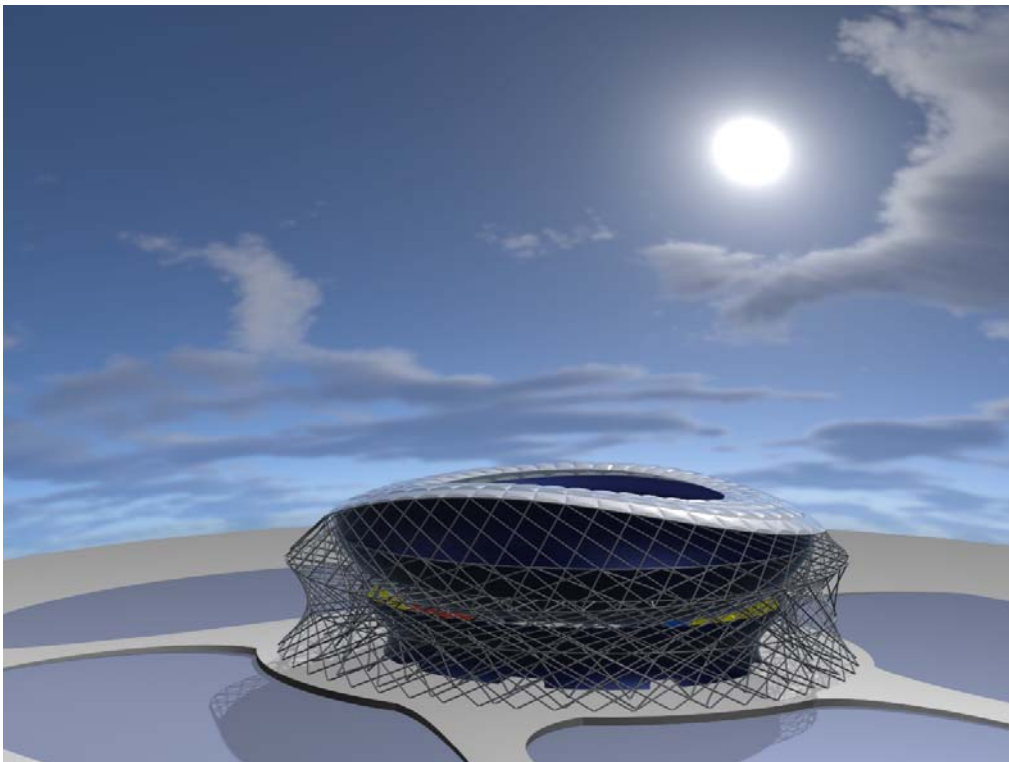


Introduction Example

GH 0.8.0009

2011/4/17



This Grasshopper (GH here after) example is used for GH seminar on April 2nd, 2011/04/15th
AppliCraft Co., Ltd in Japan

All GH definition is written by 0.8.0004 but workd on 0.8.0009

Detail explanation is written in GH definition file with English and Japanese.

If you archive out there must be 10 folders from **“01-SquarePiller Example”** to **“10 SimBlfg Example”**. 01 to 05 is for beginners. 06 to 10 is probably more fun.

After finishing it you have already expertise to model Example models at the end of this document.

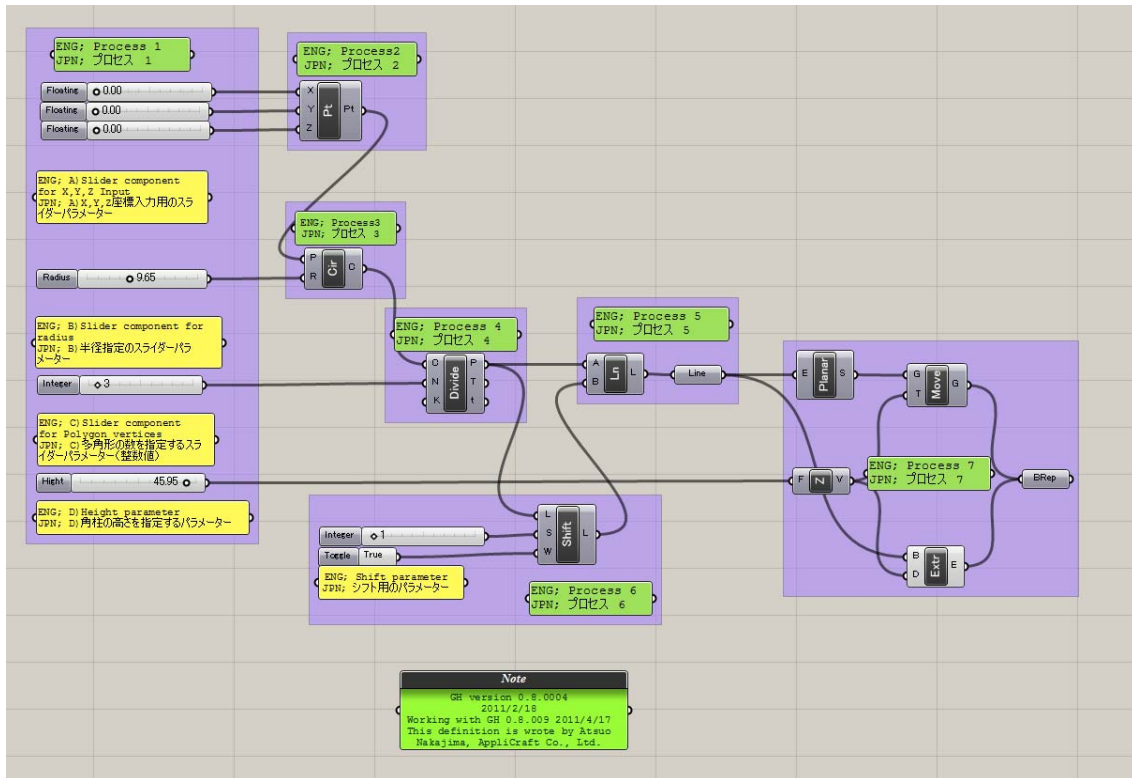
Hope you enjoy!

Atsuo Nakajima/AppliCraft Co., Ltd..

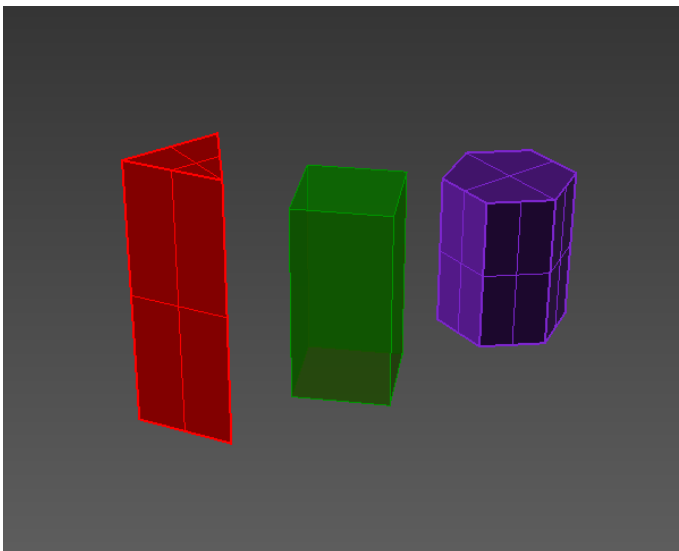
01-SquarePiller example

No .3dm model

SquarePiller .ghx (Grasshopper Version 0.8.0009)

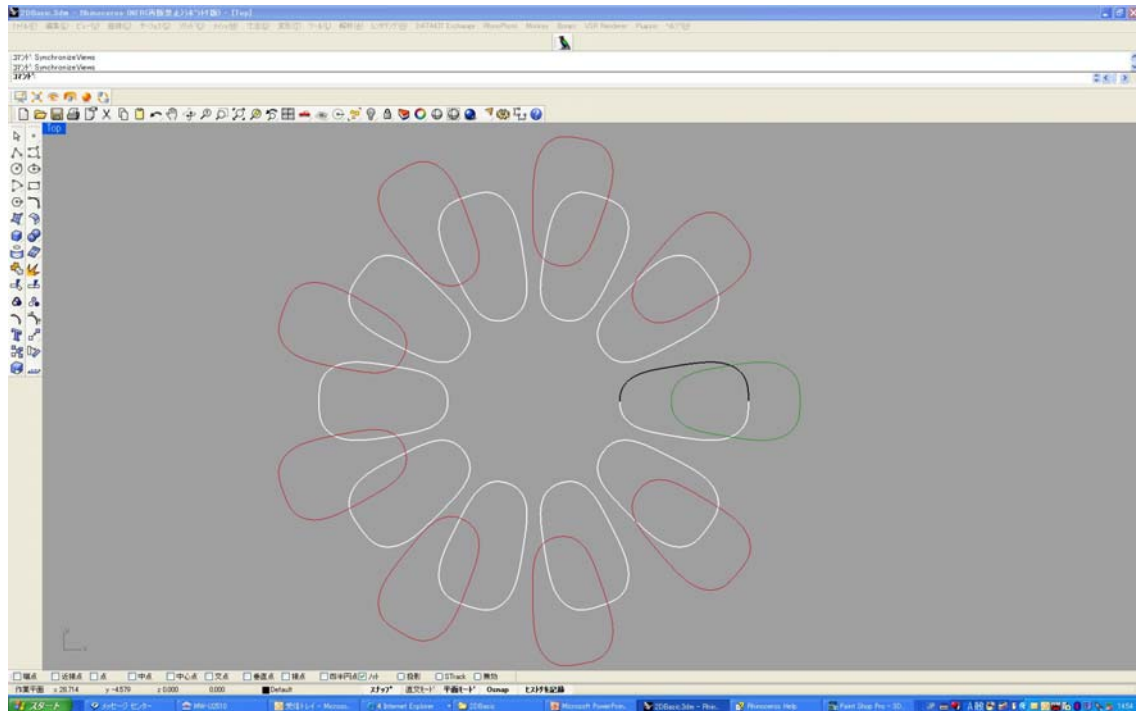


Understand very simple operation to create polygonal Piller



02-2D Basic example

- 3DBasic.3dm
- 2DBasic.ghx (Grasshopper Version 0.8.0009)



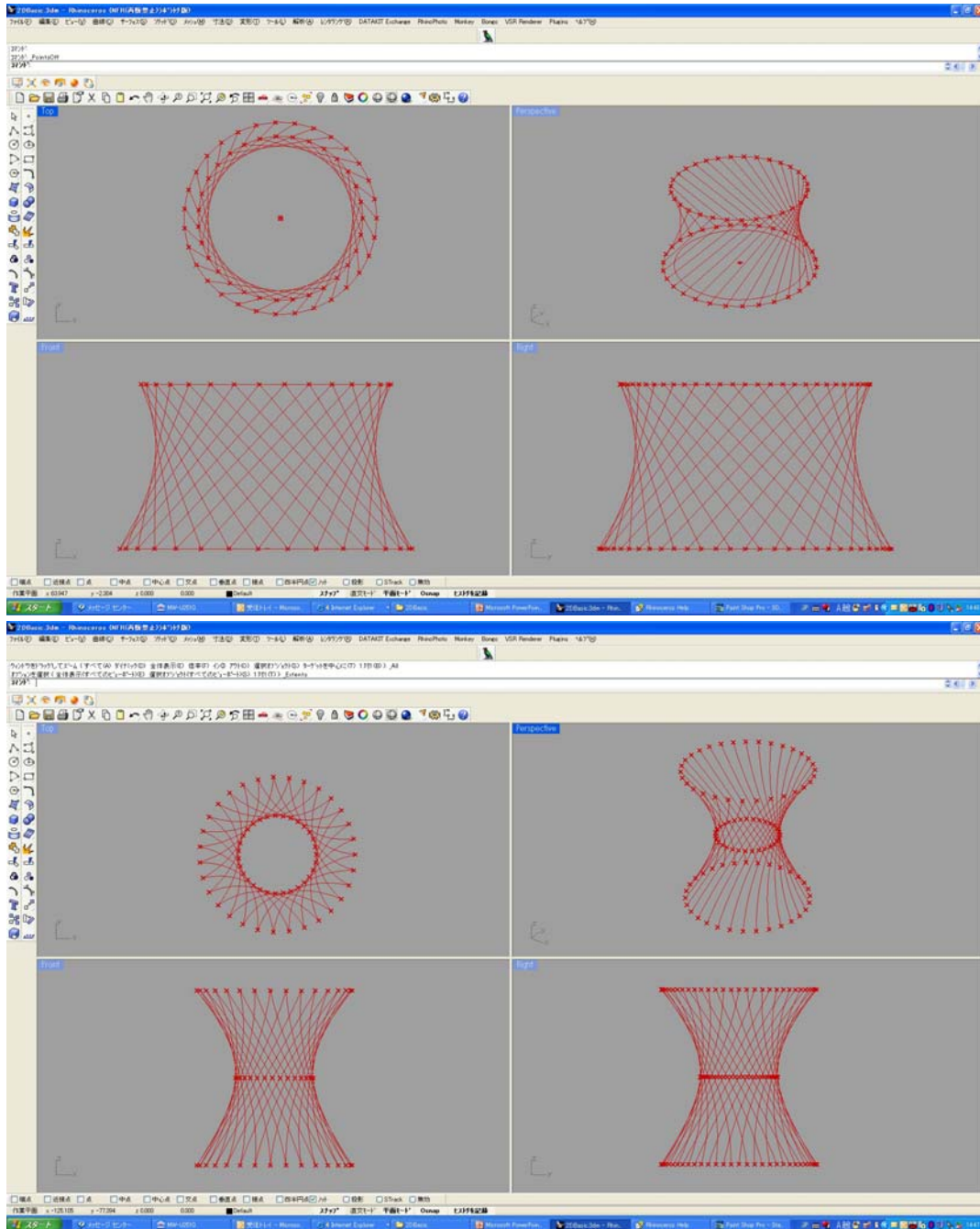
Understand basic 2D operation, rotation, move, angle input and so on.

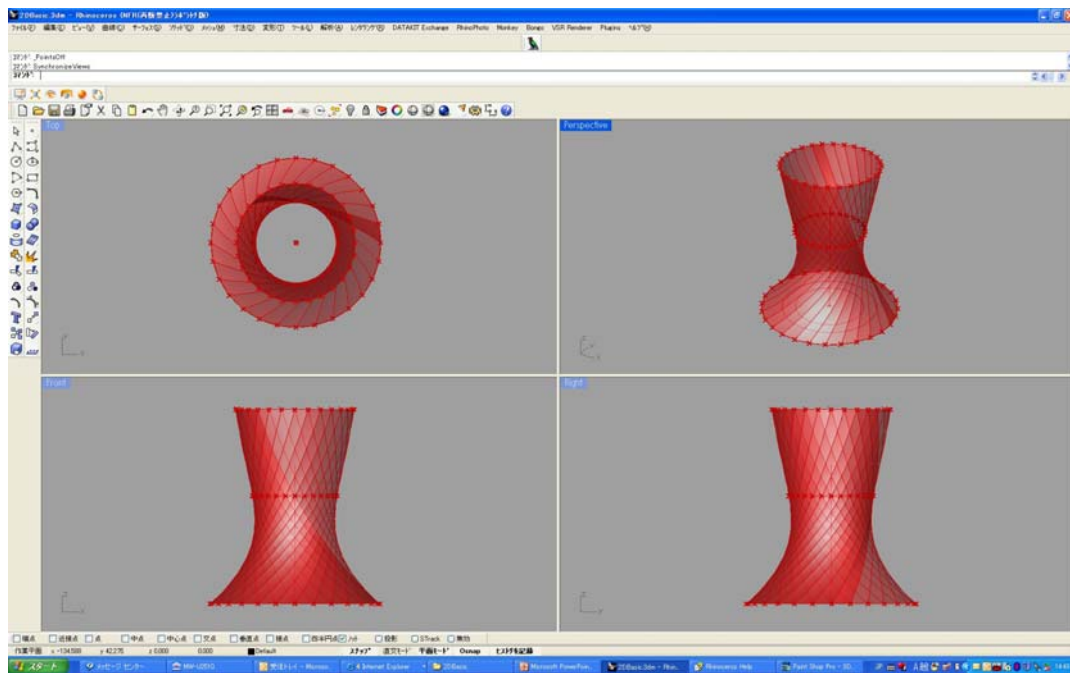
03-3D Basic example

Basic operations in 3D space.

No .3dm

- 3D Basic1.ghx (Grasshopper Version 0.8.0009)
- 3D Basic2.ghx (Grasshopper Version 0.8.0009)





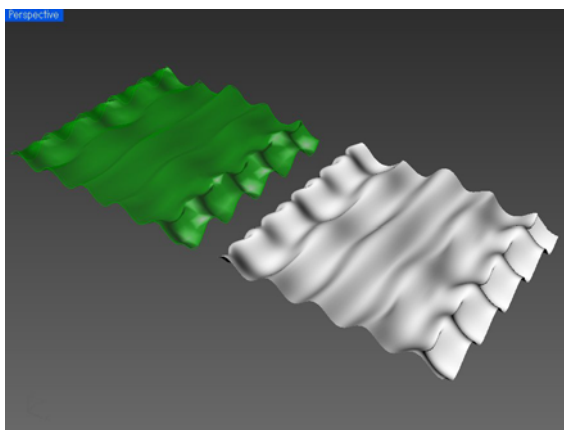
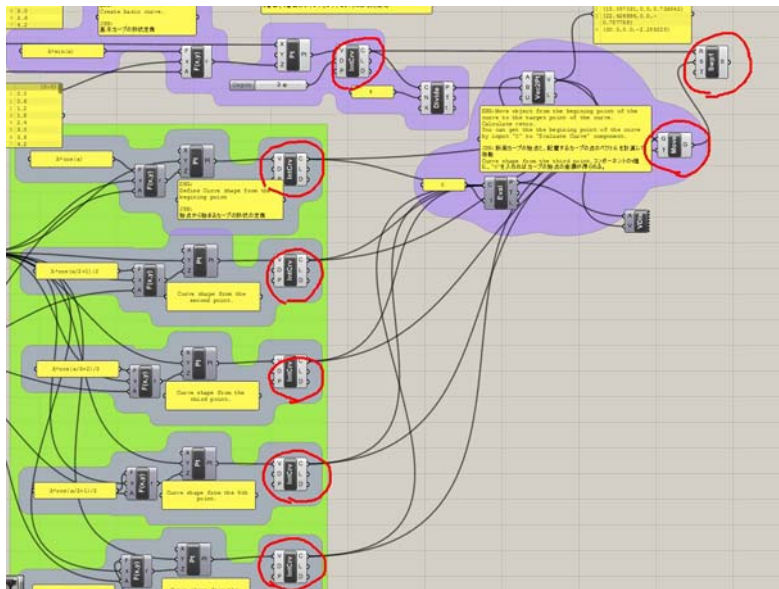
Understand Division of , curves, create 3 points arcs, # points 3 degree curves, create loft surface

04-Function example

Basic use of function components

No .3dm

- 3D Basic1.ghx (Grasshopper Version 0.8.0009)

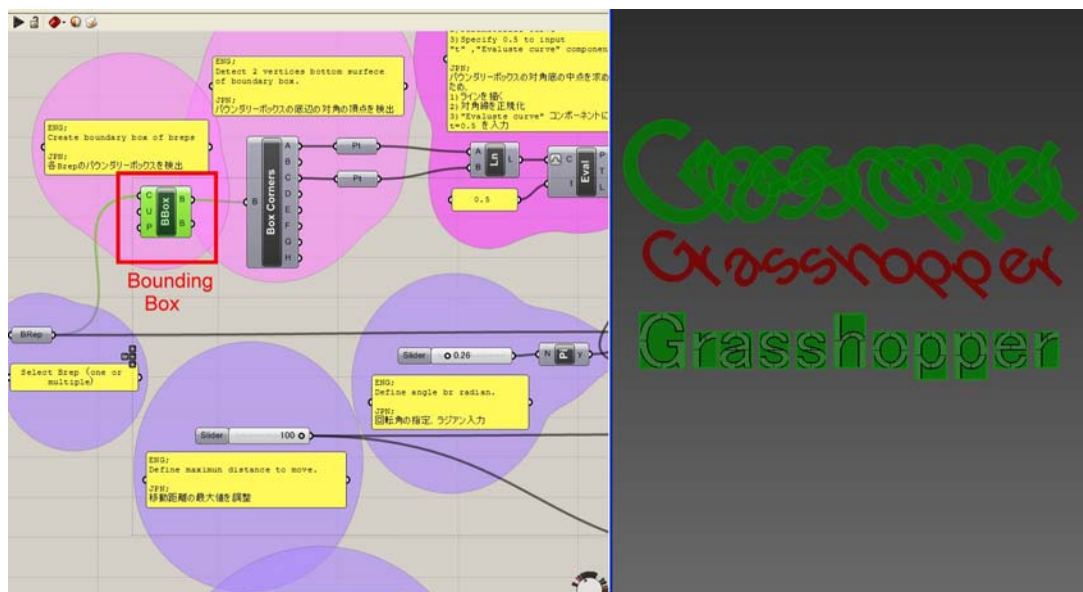
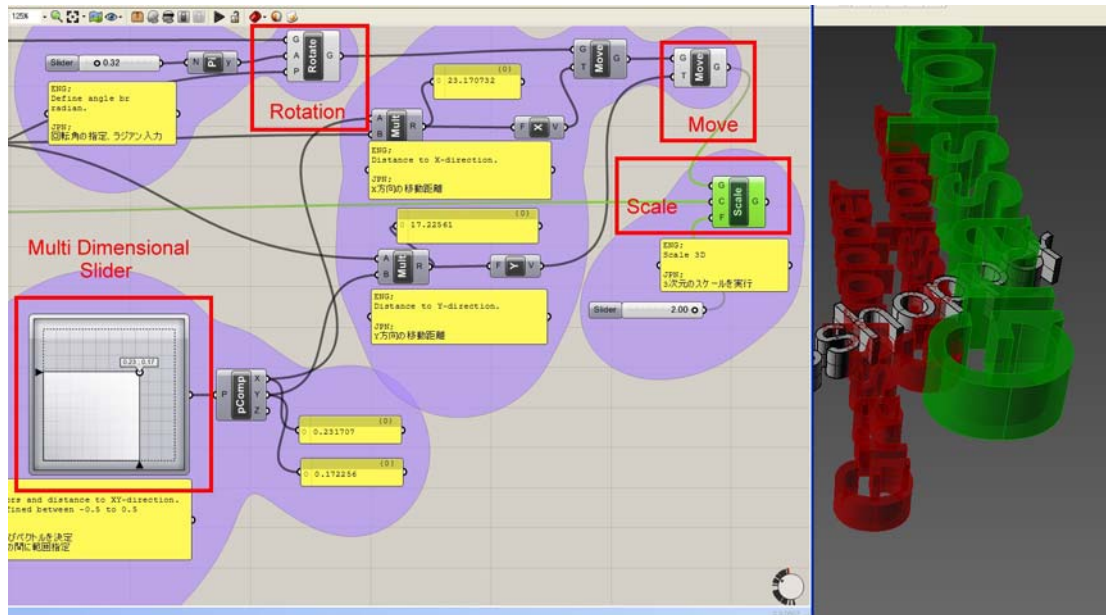


5. 05-Transform example

Example of using “MD Slider” component and transform Breps.

Transform.3dm

Transform.ghx



6.06-UV Division example

Use various usage with UV division.

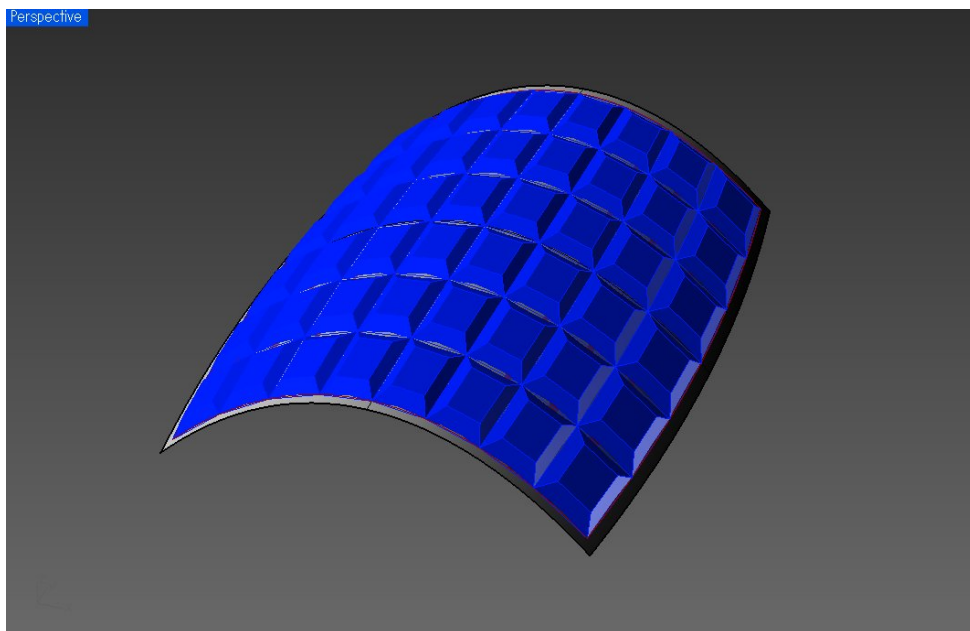
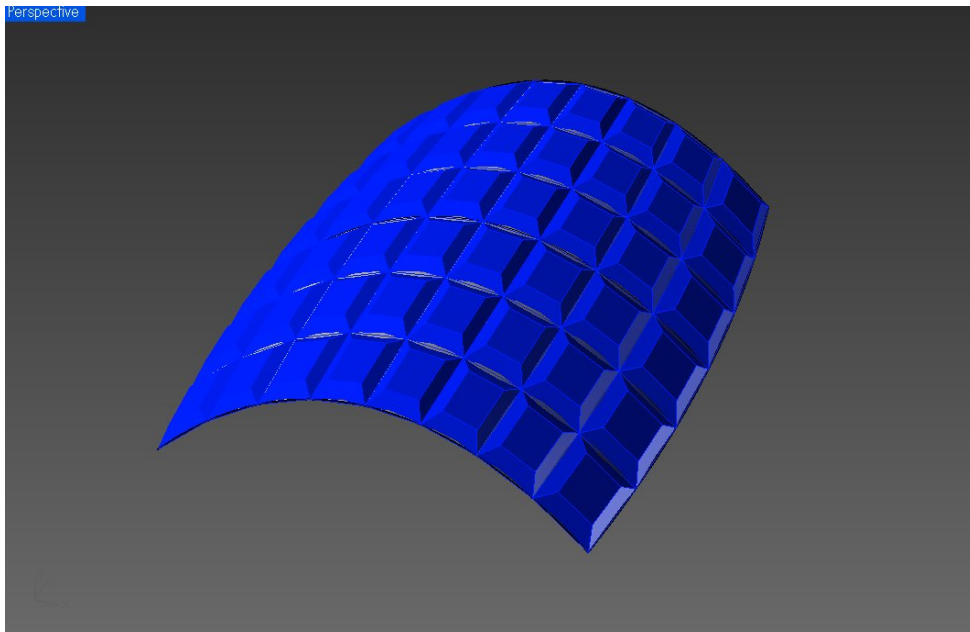
UVSample.3dm

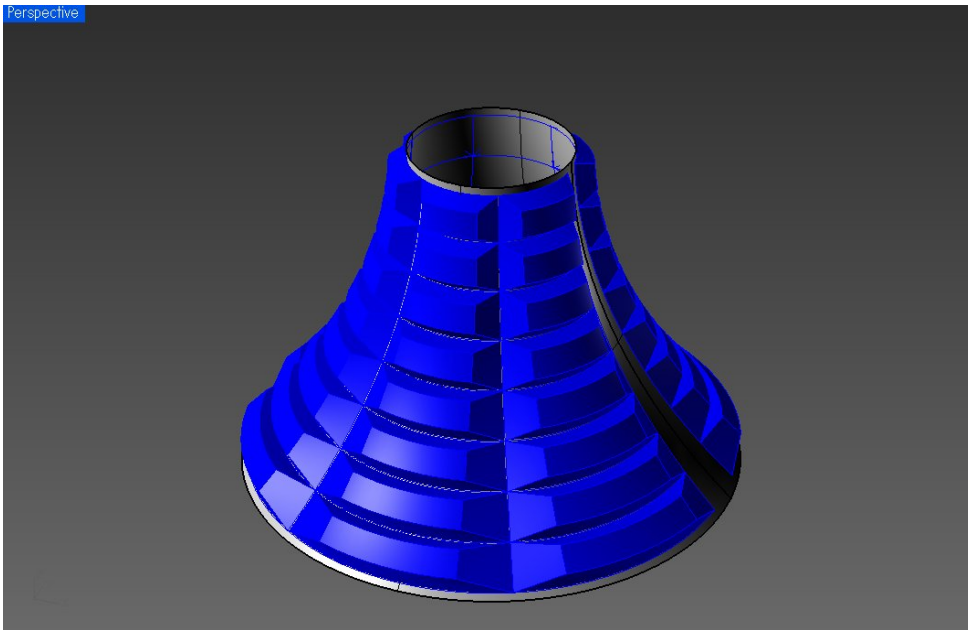
UVSampleA.ghx

UVSampleB.ghx

UVSampleC.ghx

-





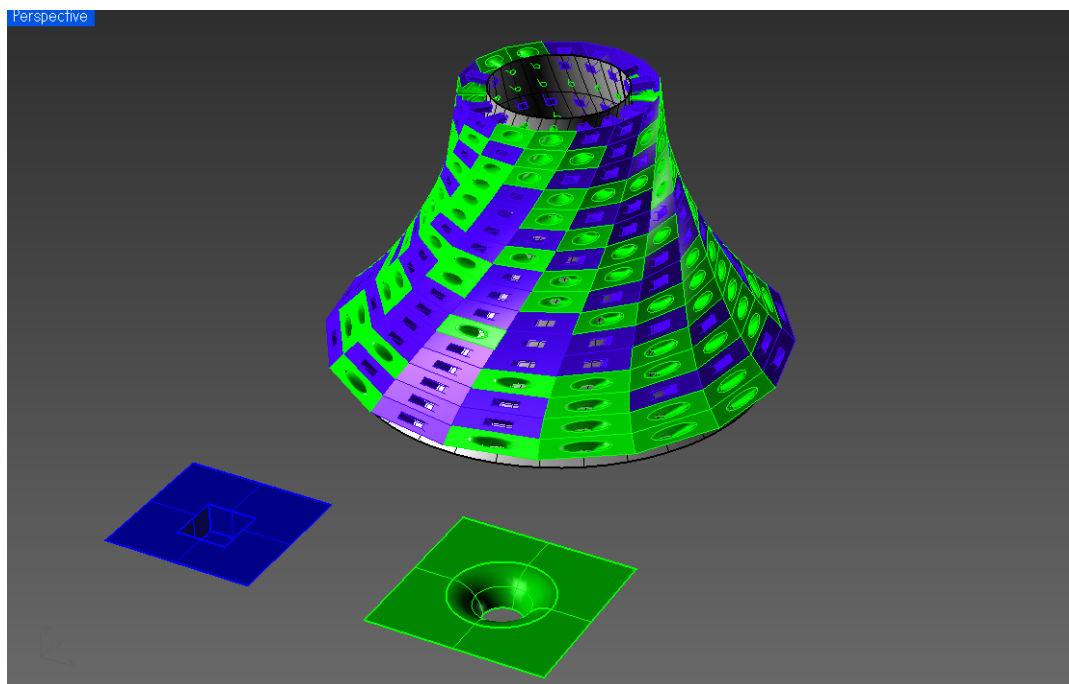
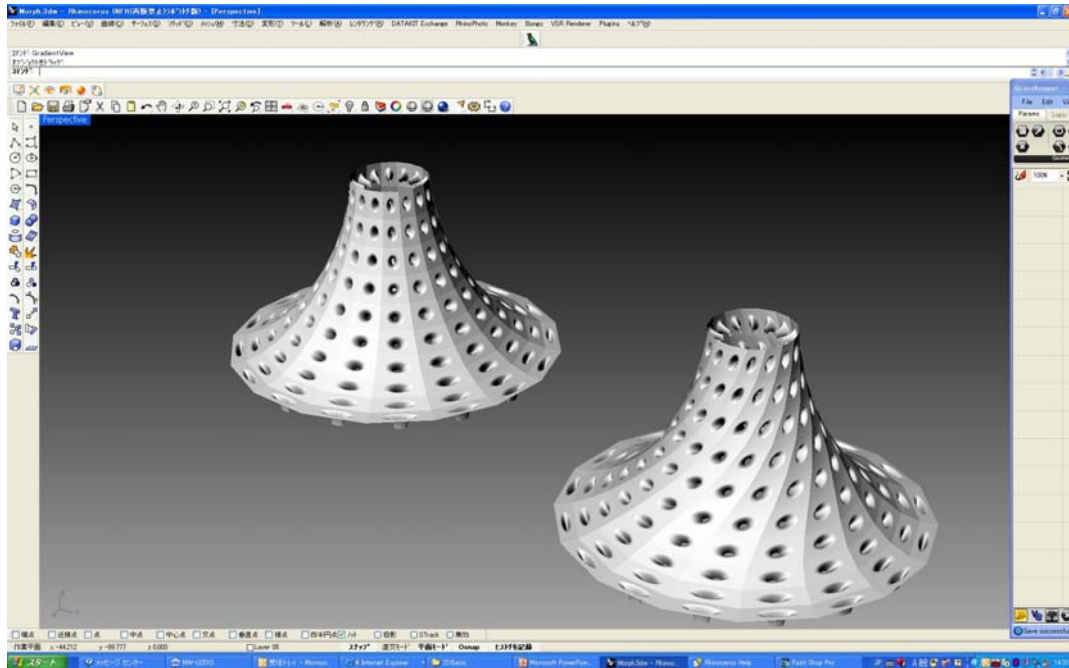
7.07-Morph example

How to use Morphing with UV division, using “Cull” component to assign multiple B-reps to Basic surface with morphing.

MorphSample.3dm

MorphSimple.ghx

MorphRandomn.ghx



8.08-MapSurface example

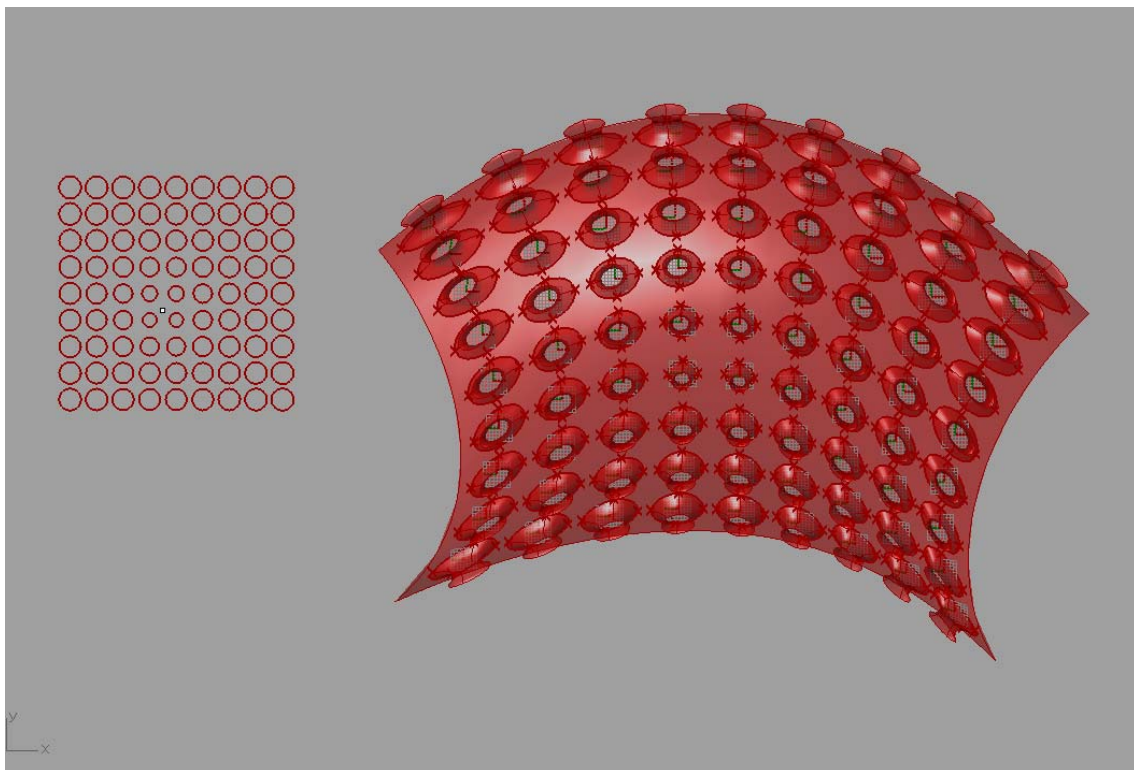
Mapping Surface is one of the good idea to realize 2D drawing to basic surface, then manipulate surface.

With using offset surface and map to offset surface, you can create geometry as you intended.

MapSurface.3dm

MapSurface.ghx

MapSurfaceB.ghx



09-OrientOnSrf example

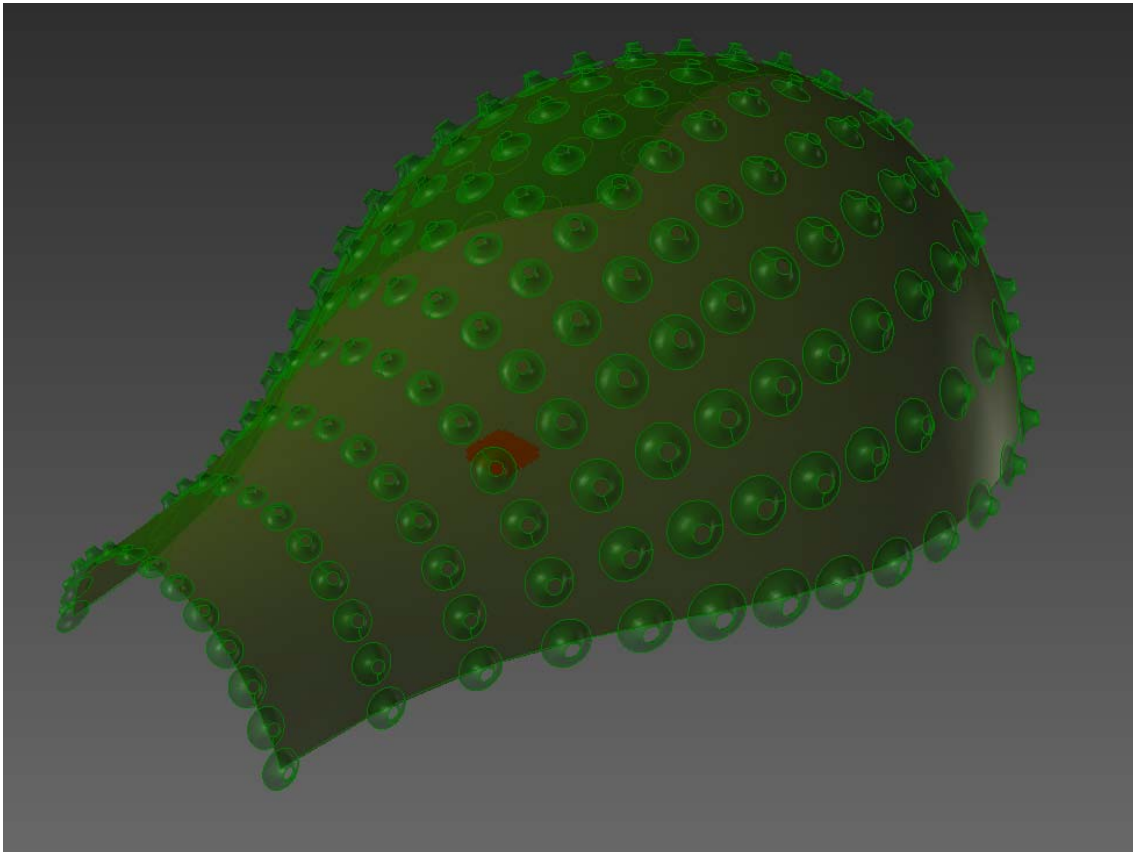
Array B-reps to target surface along to normal direction is useful.

By manipulation UV value to division, you can create geometry as you intended.

OrientOnSrfSimple.ghx

OrientOnSrf.ghx

OrientOnSrfB.ghx

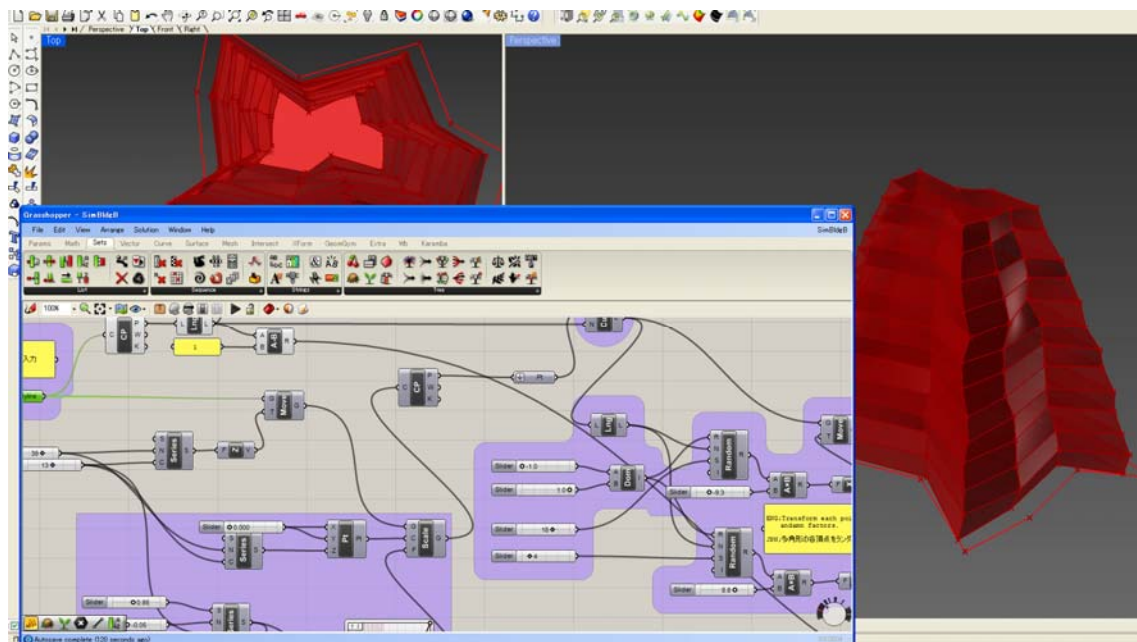


10) 10-SimBldg example

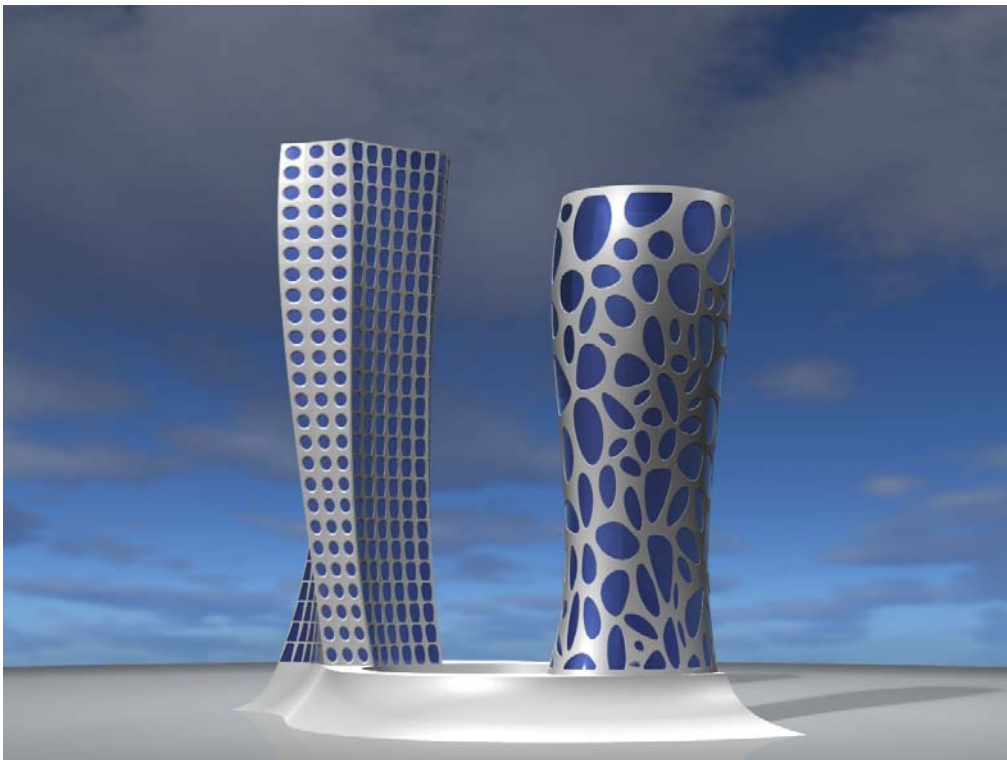
Use randmn number then you can simulate geometry as you intended.

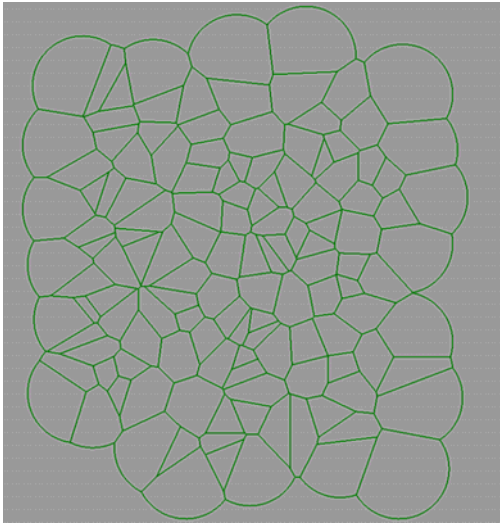
SimBldgA.ghx

SimBldgB.ghx

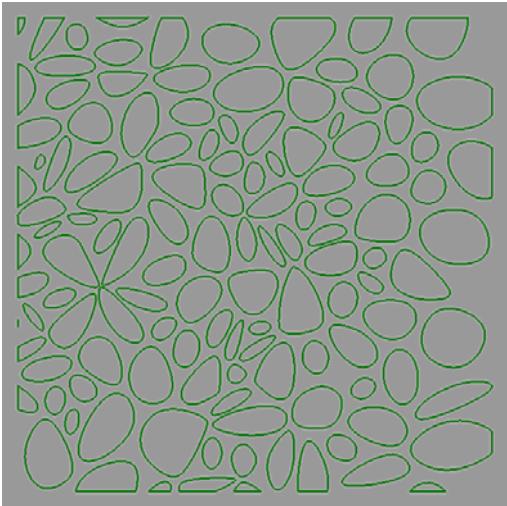


Modeling Example No.1 Twin Towers

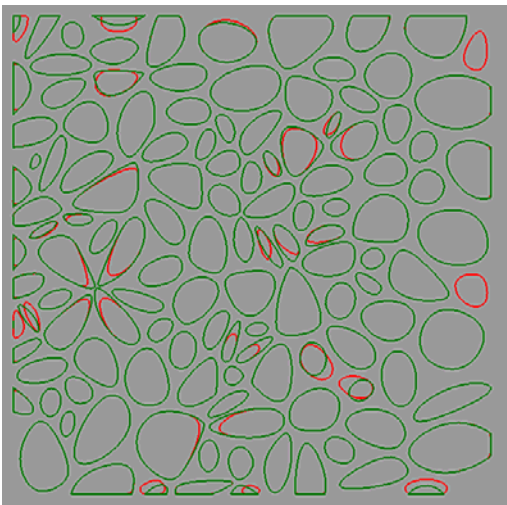




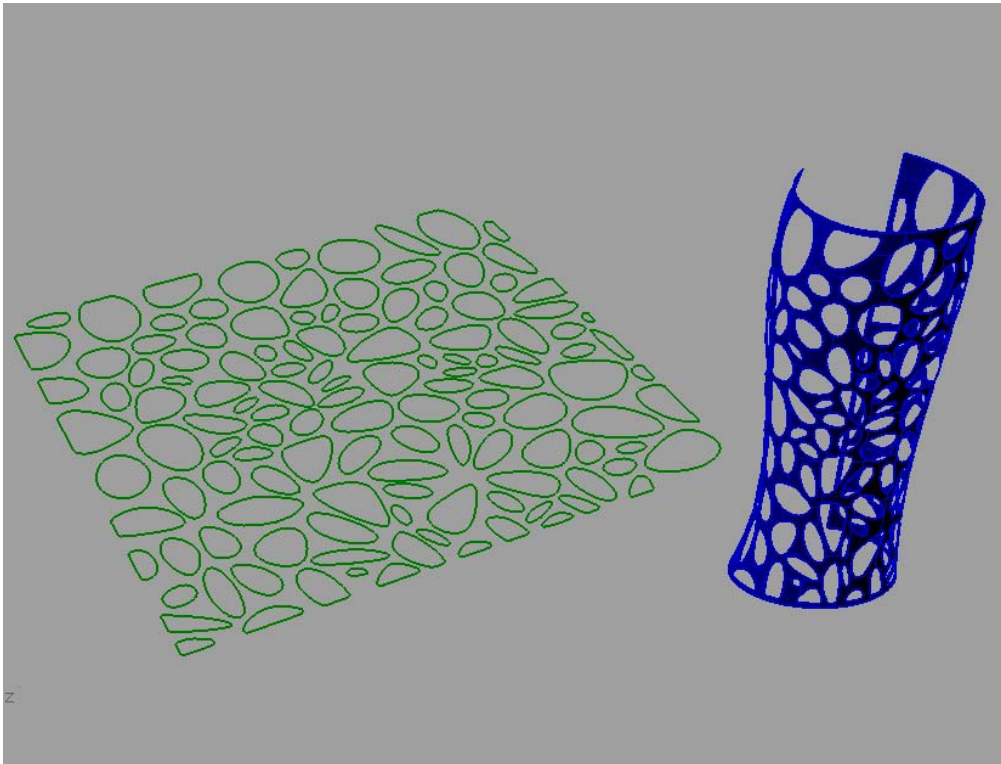
Create Voronoi pattern by GH.



Create periodic curve from Voronoi.

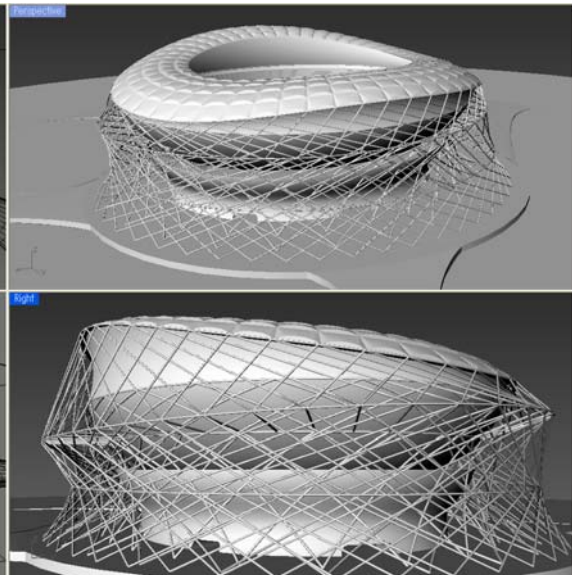
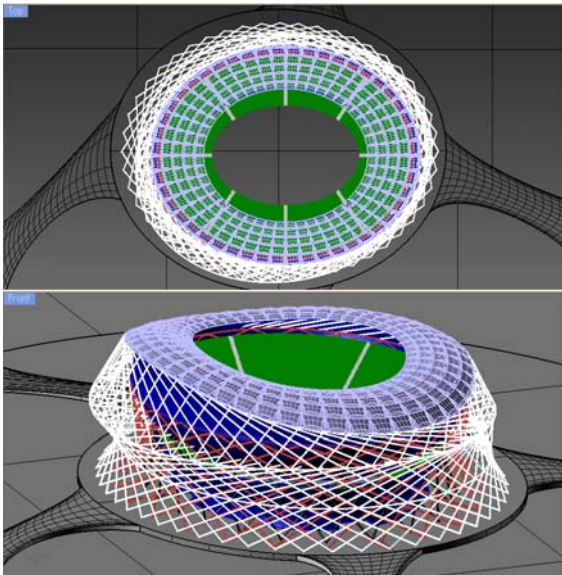
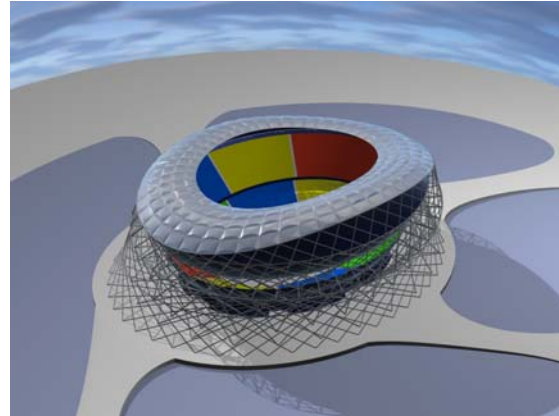
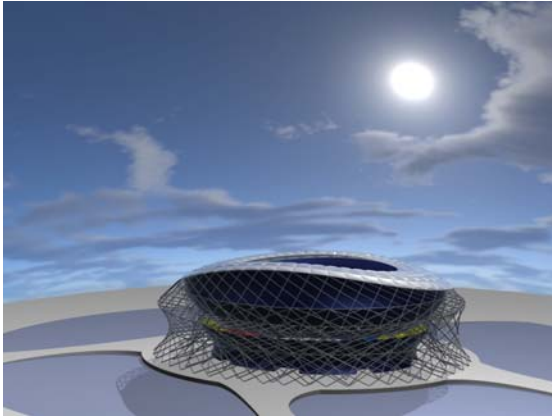


Modify curve shape by Rhino



Use “MapSur” Component on GH or, use ApplyCrv command on Rhino.

GH example No.2 Stadium



Morphing is used for Roof.

Outer beams is created on 4 ovals shape.