Chhatrapati Shivaji International Airport in Mumbai

Location: Mumbai, India
Project Completion: 2014
Site Area: 105 hectares
Project Area: 450,000 m2
Number of Stories: 4
Building Height: 45 m
Market: Aviation, Transportation
Service: Architecture, MEP, Structural + Civil Engineering

Designed by Skidmore, Owings & Merrill (SOM), Mumbai’s new Terminal 2 building opened in 2014 to accommodate the city’s growing influx of visitors. A gigantic roof canopy references the form of vernacular Indian pavilions and is the centerpiece of the design. In total, 30 mushrooming columns connect to the canopy overhead, with patterns inspired in part by India’s national bird, the peacock. SOM also sought to respect the traditions of local cultures—curbside drop-off zones are “designed for large parties of accompanying well-wishers to accommodate traditional Indian arrival and departure ceremonies.”
A. Making Unit

01_Draw Unit Curve in Rhino
02_Set curves in Grasshopper
A. Making Unit

03. Connect the end points of each curves and make faces using the boundary surface.

04. Move the points you want to move in the z-axis direction.
A. Making Unit

05_ Split the face to take only the necessary parts.

06_ Make a face with Sweep2.
A. Making Unit

07_ create an axis in the direction that want to mirror to the Plane 3Points and mirror it
08_Complete the unit.
B. Designing Main Unit Structure

01_ Draw Main Unit Surface in Rhino
B. Designing Main Unit Structure

02_ Set a surface in Grasshopper
B. Designing Main Unit Structure

03_ U and V are given to divide the surface.
04_ Isotrim is used to cut the separated surfaces one by one.
B. Designing Main Unit Structure

05. Create a Surface Box on each cut surface.
B. Designing Main Unit Structure

06_Use MorphBox to apply the Unit that I made in “step A” to the entire surface.
B. Designing Main Unit Structure

07_Brep-Join structures and Bake.
Iterations

01

02

03