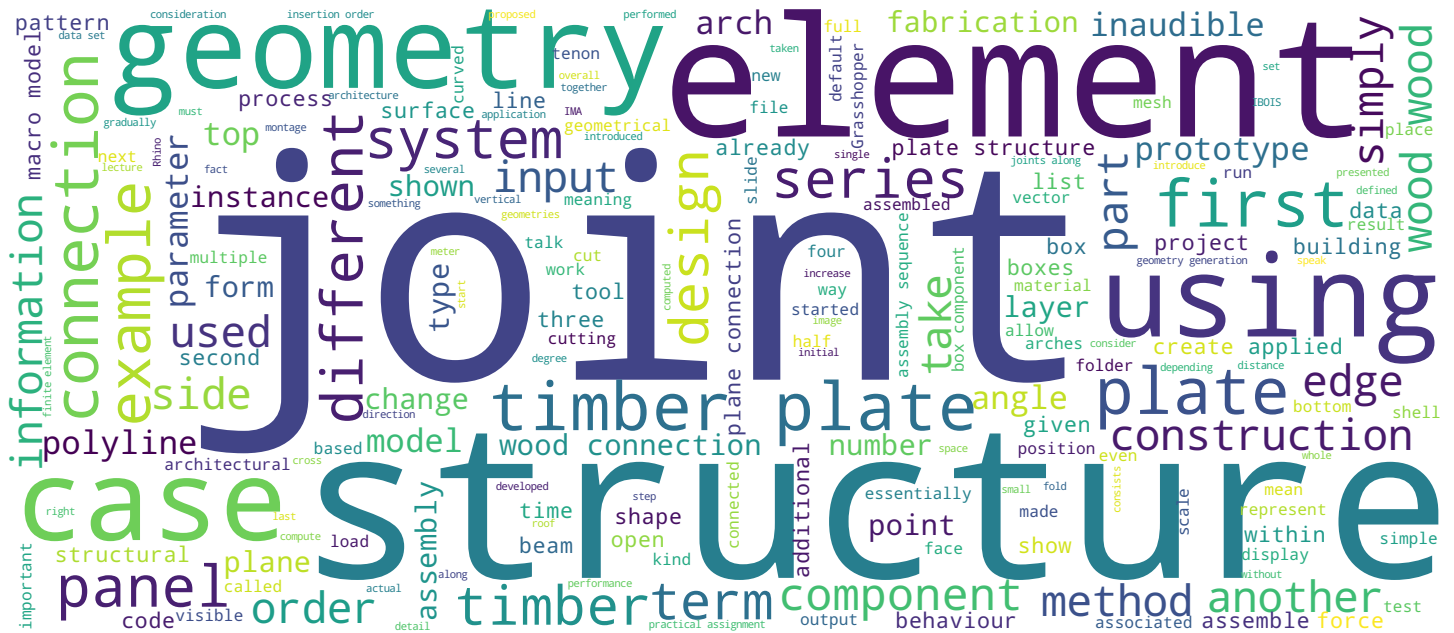
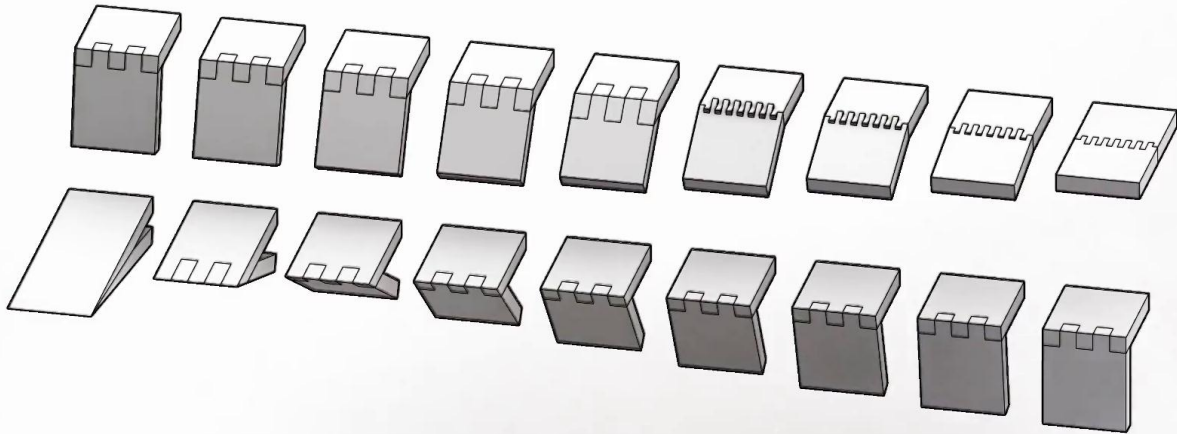




## CNC Fabrication





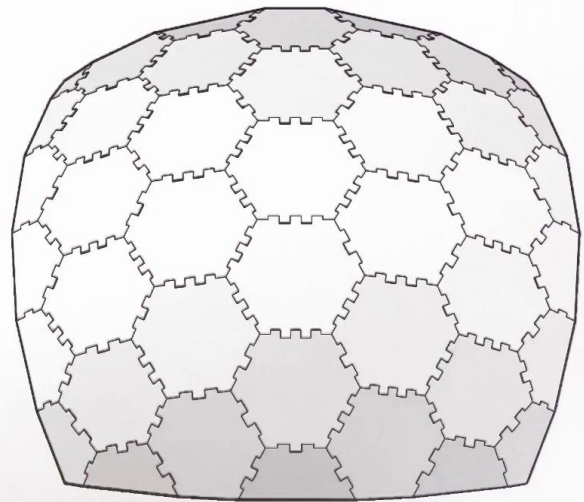
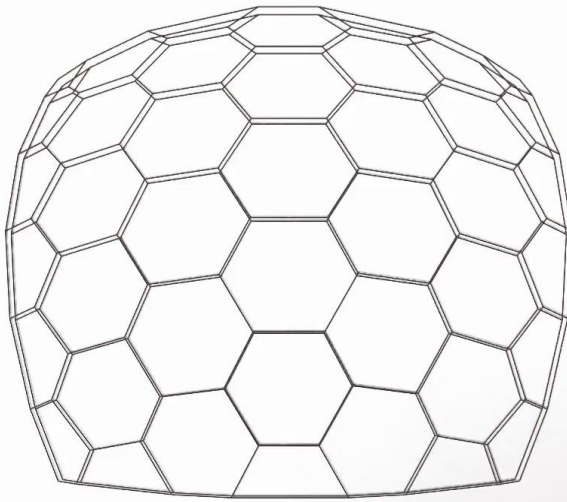
In this lecture, we're going to speak about geometry generation of timber plates in terms of practical assignments. In the whole structure that is visible here, you can see that it is a structure that was presented before, and we are going to speak about geometry generation and different types of joints in terms of giving you the practical examples. So in the first case, we are going to talk about the in plane connections, and how do they adapt depending on an angle. In one angle you can see that you can only do the in plane connections. And when the connection changes, you can do out of plane connections within some limit of fabrication.

Notes

Summary



■ Advanced Timber Plate Structural Design



These joints can be applied for planarized structures like this. That will be another example that we're going to see.

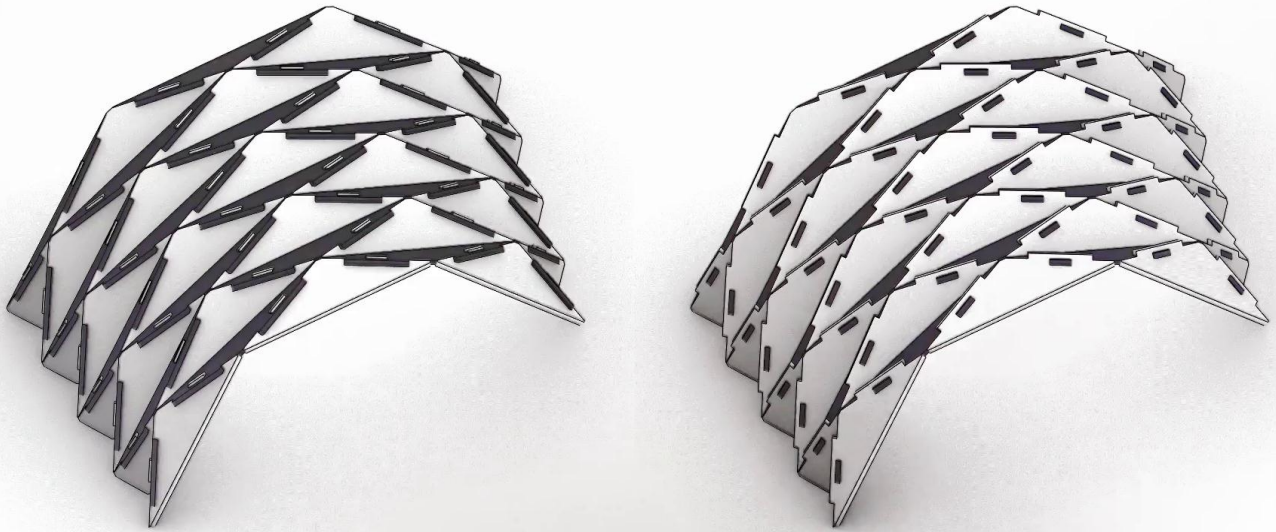
Notes

Summary



0m 45s

■ Advanced Timber Plate Structural Design



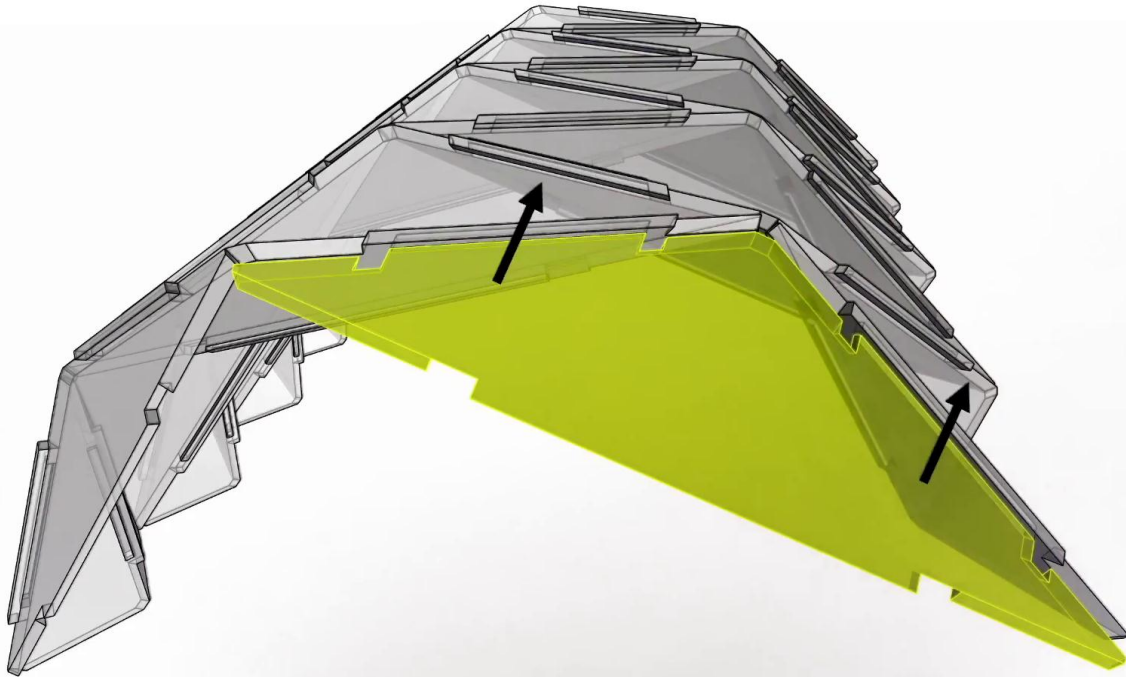
Also, we're going to talk about timber plate systems when we need to consider the insertion order of those joints. What do I mean by this? For example, we have these two images that seem to be completely good, completely valid in terms of the assembly order. However, in both cases, you have joints oriented orthogonally to an edge.

Notes

Summary



■ Advanced Timber Plate Structural Design



This example cannot be, actually, fabricated and assembled because you need to assemble the plate using one insertion order if you are using joints along the edge. You can see those joints along this one continuous edge, and these joints must be oriented on one vector and another vector and both vectors actually are the same. After you have this orientation of this joint and this joint, you can assemble this full element using one insertion direction.

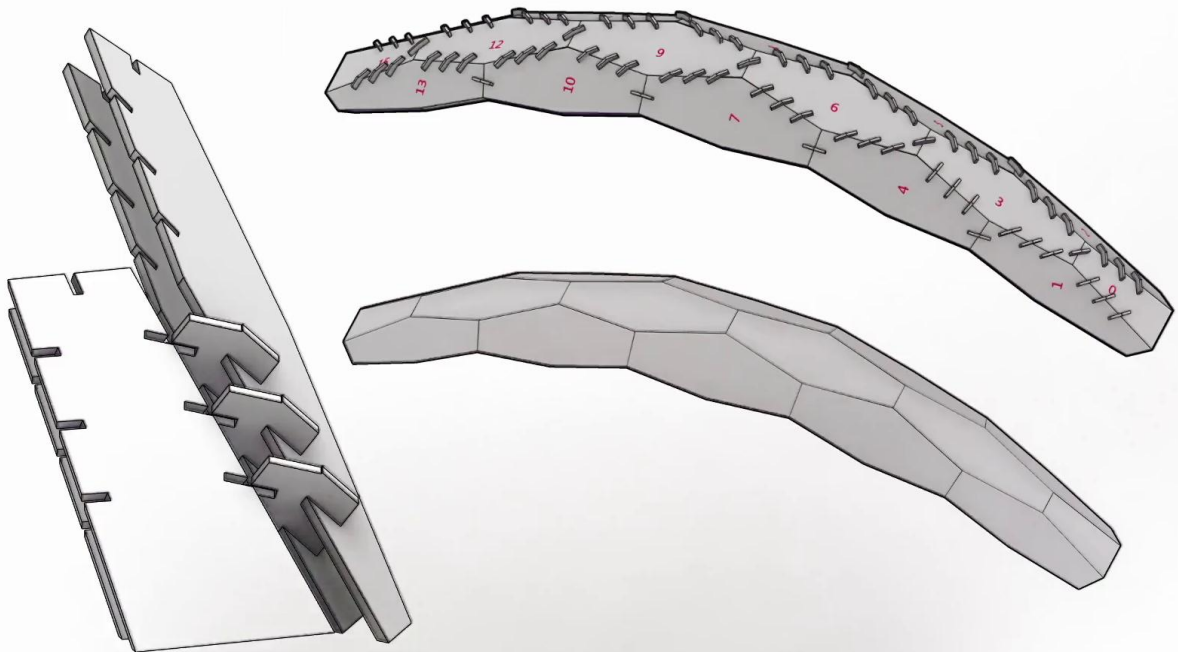
Notes

Summary



1m 16s

■ Advanced Timber Plate Structural Design



We're also going to look in other type of joints, such as Out-of-Plane Miter joint. And finally, we're going to summarize the practical assignment using the cross joint. When half of the element is removed from one element and half from another, all elements will be indexed in terms of panels, in terms of connecting elements and joints, so that you can even make this model physically in real life.

Notes

Summary



1m 52s



# TUTORIAL

So let's get started. Let's get started on the example. Let's open Rhino and let's open the starting example points of Grasshopper

Notes

Summary

