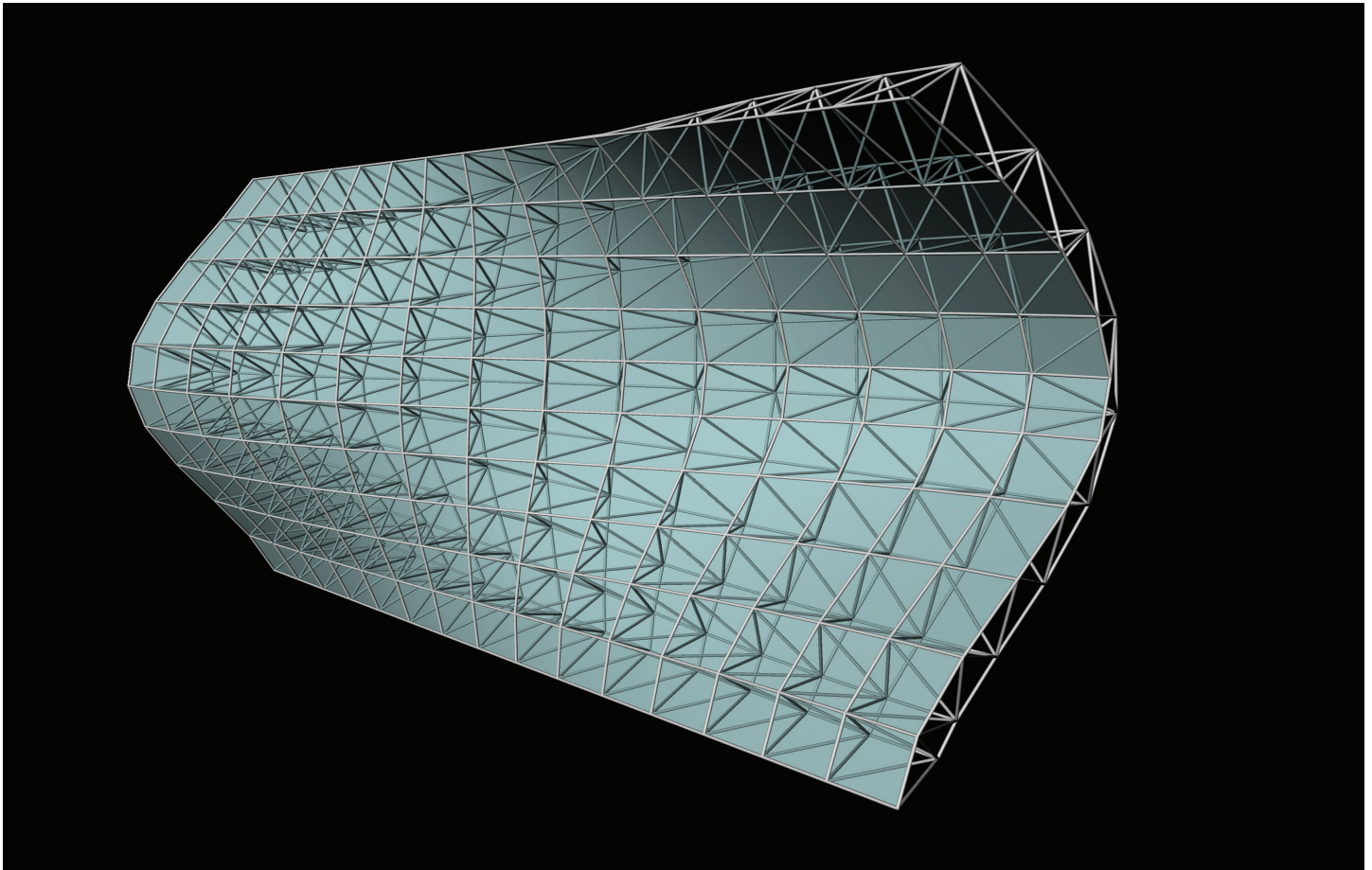
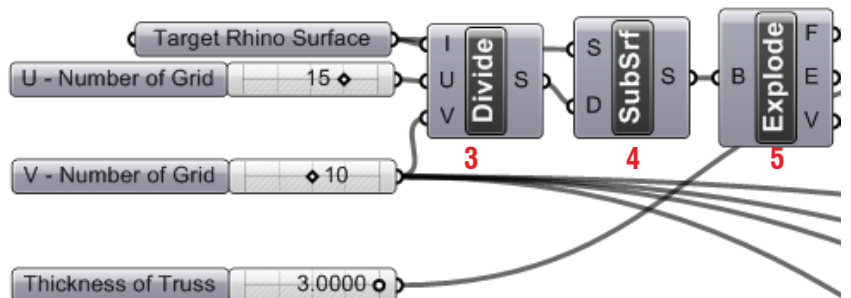
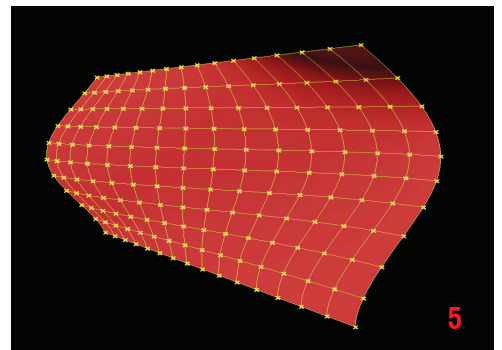


## 6\_1 FOUR POINTS TRUSS



### Step1 : Surface Dividing

1. **Brep** (Params/Geometry/Brep)
  - Draw any Surface on Rhino Scene
  - "Target Rhino Surface" : Right click and Set one Brep
2. **Slider** (Params/Special/Number Slider) x 3
  - "U-Number of Grid": Integers, Lower limit=0, Upper limit=20, Value=15
  - "V-Number of Grid": Integers, Lower limit=0, Upper limit=20, Value=10
  - "Thickness of Truss": Floating point, Lower limit=0, Upper limit=3.0, Value=3.0
3. **Divide** (Scalar/Domain/Divide Domain<sup>2</sup>)
  - I : *Brep* ("Target Rhino Surface")
  - U : *Slider* ("U-Number of Grid")
  - V : *Slider* ("V-Number of Grid")
4. **SubSrf** (Surface/Util/Isotrim)
  - S : *Brep* ("Target Rhino Surface")
  - D : *Divide*(S)
5. **Explode** (Surface/Analysis/Brep Components)
  - S : *SubSrf* (S)



**Step2 : Front and Mid Frame Lines**

6. **ReB** (Curve/Util/Rebuild) -> **Front Frame Lines**

- C : Explode (E)
- D : Integer = 1

7. **Offset** (Surface/Freeform/Offset)

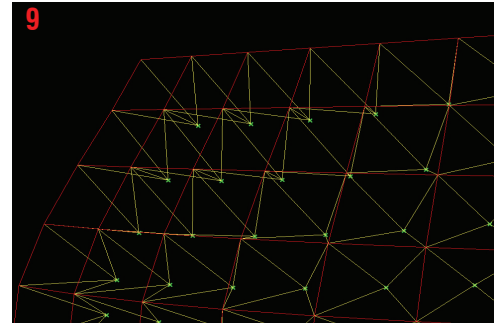
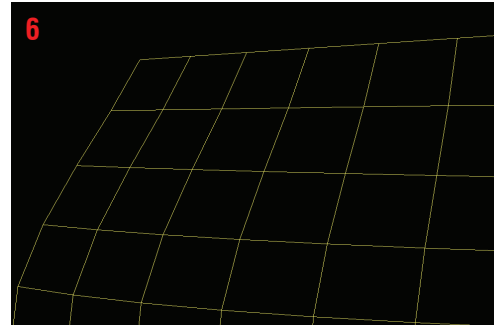
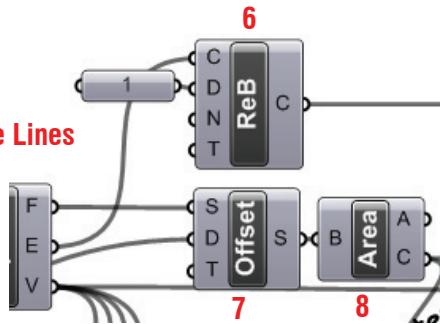
- S : Explode (F)
- D : Slider ("Thickness of Truss")

8. **Area** (Surface/Analysis/Brep Area)

- B : Offset (S)

9. **Ln** (Curve/Primitive/Line) -> **Mid Frame Lines**

- A : Area (C)
- B : Explode (V)



**Step3 : Back Frame Lines and Panels**

10. **Point** (Params/Geometry/Point)

- "Back Point Grid" : Area (C) -> Flatten!

11. **CullIN** (Logic/Sets/Cull Nth)

- L : Point ("Back Point Grid")
- N : Slider ("V-Number of Grid")

12. **Shift** (Logic/List/Shift List)

- L : Point ("Back Point Grid")
- S : Integer = 1

13. **CullIN** (Logic/Sets/Cull Nth)

- L : Shift (L)
- N : Slider ("V-Number of Grid")

14. **Ln** (Curve/Primitive/Line)

- A : CullIN (L)
- B : CullIN (L)

15. **Shift** (Logic/List/Shift List)

- L : Point ("Back Point Grid")
- S : Slider ("V-Number of Grid")

16. **Mult** (Scalar/Operator/Multiplication)

- A : Slider ("V-Number of Grid")
- B : Integer = -1

17. **Shift** (Logic/List/Shift List)

- L : Point ("Back Point Grid")
- S : Mult (R)

18. **Ln** (Curve/Primitive/Line) -> **Back Frame Lines**

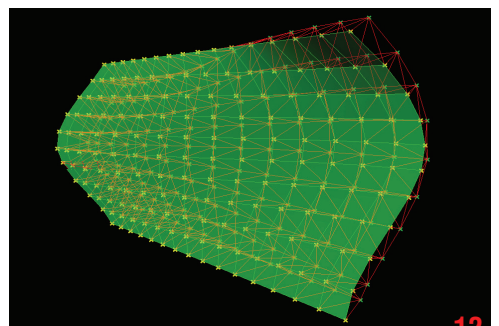
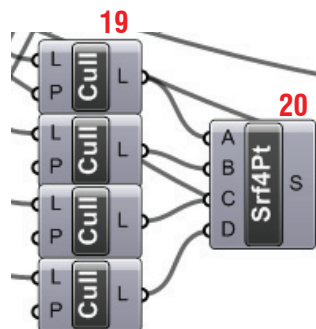
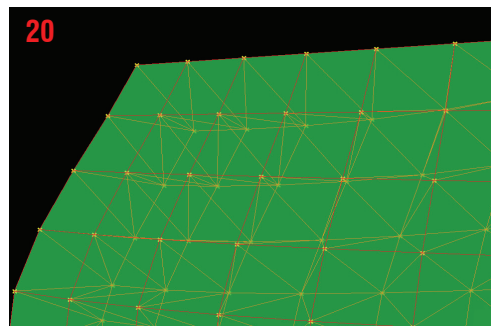
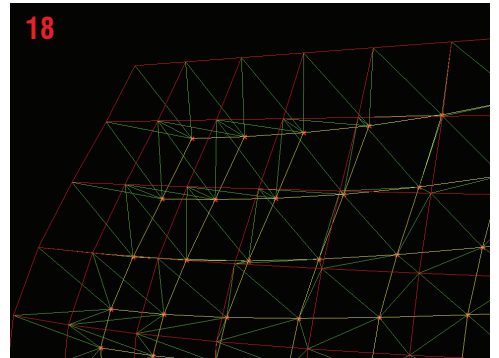
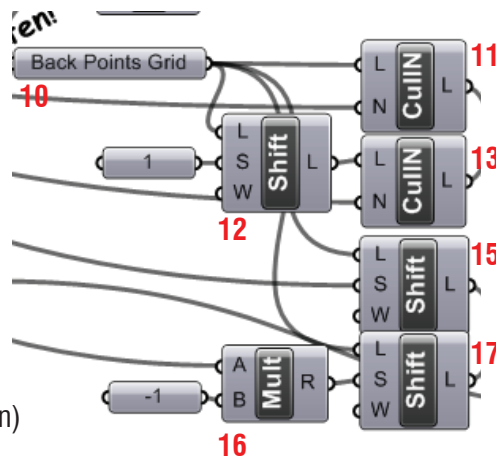
- A : Shift (L)
- B : Shift (L)

19. **Cull** (Logic/Sets/Cull Pattern) x 4

- L : Explode (V)
- P : Right click and Manage Boolean collection for First one : True/False/False/False for Second one : False/True/False/False for Third one : False/False/True/False for Fourth one : False/False/False/True

20. **Srf4Pt** (Surface/Freeform/4Point Surface) -> **Panel Surface**

- A,B,C,D : each Cull (L)



Appendix

- Definition Map and Diagram

