# Dynamo

## Projected horizontal area

* Converts elements to geometry
* Splits geometry into faces and extract edges
* Project lines onto surface -> giant circle and structures them by face
* *Filter that groups the edges without null value (because of same start and end point after projection)*
* Join curves from 1 face to surface and thicken it to a solid
* Combine solids so overlapping areas are only counted once
  + If they don’t touch eachother, multiple solids are created in a list
* Create intersection surface(s) between solid and projection surface
* Calculatie area of intersection surface(s)

## Select green roof elements

* Get list of materials for each element
* Check if it contains name of greenroof material
* Filter it to return all elements that contain the material