

On Friday we discussed sliding, frictional failure and Mohr coulomb, internal friction failure. We focused on when failure would and would not occur according to Mohr's circles and failure envelopes. We determined that if the circle does not intersect or touch the failure envelope then no failure occurs. If the circle intersects with the failure envelope tangentially then you will have failure at each point the lines touch, and you can determine the plane on which failure occurs. We also discussed the differences between frictional sliding failure and Mohr coulomb failure where frictional sliding failure already has a fracture or fault on the plane and Mohr coulomb failure is breaking new rock or creating a new fracture. The last thing we discussed was about the Mohr Coulomb failure scenarios, where you also have to consider tensile strength and cohesion of the material.