Pease's Quals question 2012

When troubleshooting electrical equipment containing voltages 100 to 300 we are advised to stand on an insulating sheet. Why?

BUT when the equipment has voltages about 50,000V we are advised to be sure we are grounded. Why?

How much energy do we store when we are charged to 50,000V?

Estimate your capacitance. Either isolated or standing on a 1cm thick insulator.

How would you measure your capacitance?