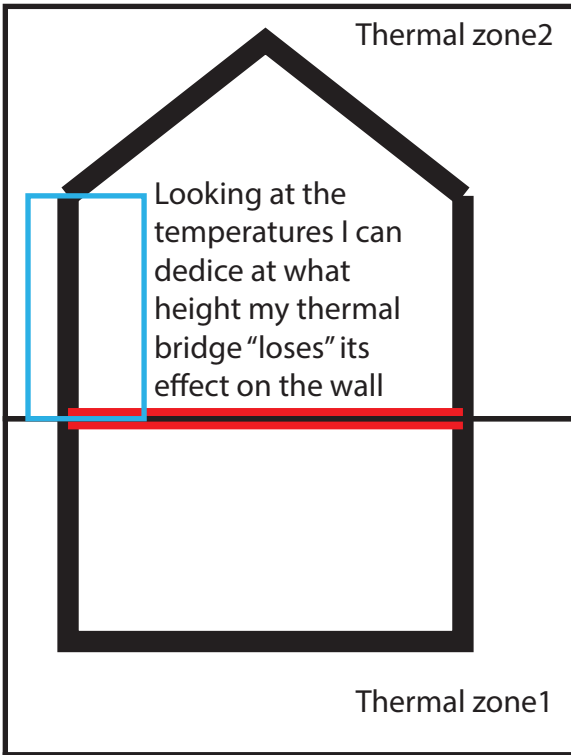
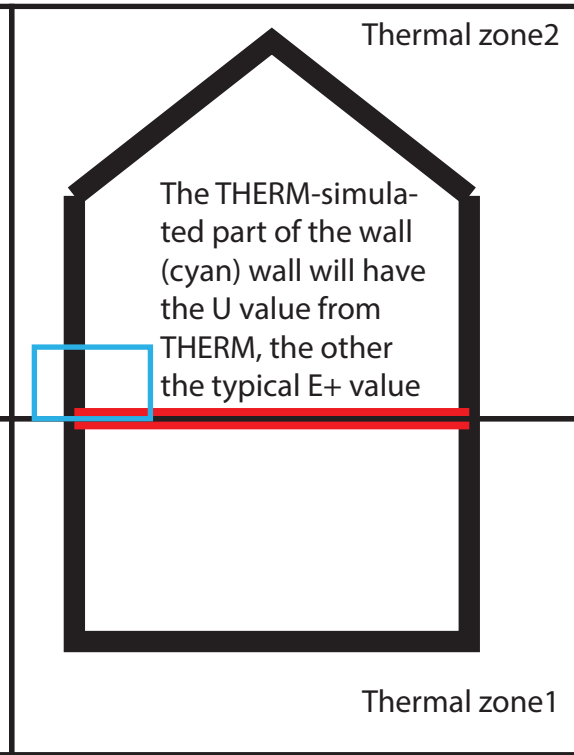
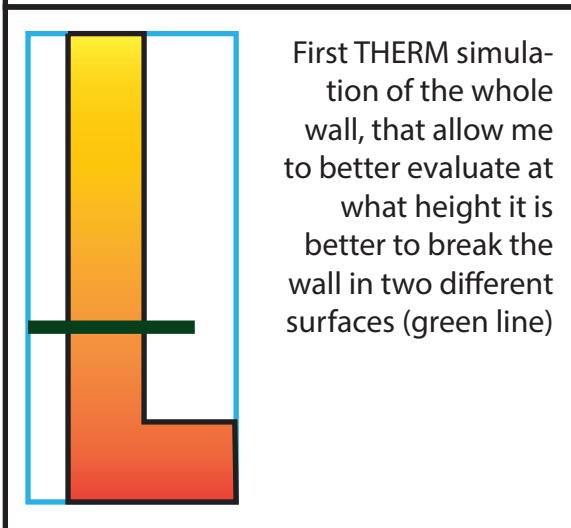
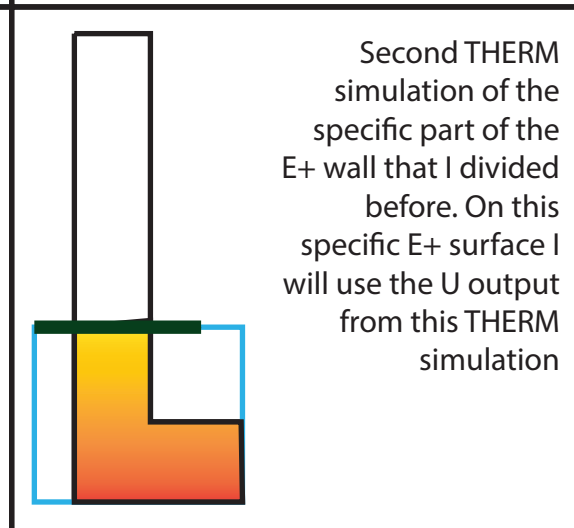
First therm simulation

Second therm simulation