I’ve prepared a simulation of a room with TABS (in the ceiling). I have a problem with temperatures that I get in this ceiling. I wonder if it is due to the boundary conditions settings.

Please take a look at the graphical representation of the situation below:



1. Do I understand correctly that “heat transfer coefficient” (Manual TRNSYS17, Volume 5 page 109) is supposed to be set to “less than 0,001kJ/h/m2” regardless of conditions being adiabatic or not?
2. As far as remaining partitions are concerned, should I set “heat transfer coefficient” to “less than 0,001kJ/h/m2”?
3. My room has surface area of 48m2 and volume of 129m3. TABS settings: m\_water=601.2kg/h, T\_Water=18°C. TOFL-TIFL =0.7K



What else can cause water temperature difference to be so low?