Evaporative Cooler efficiency adjustment procedure

- Run CELL in manual to saturate media for 15 min if dry, then start FAN in manual to saturate further, if system has already been running CELL is ready to be tested and there is no need to saturate it, you can skip this part
- 2) Check on the Cell saturation upstream and downstream of the air flow, media should feel wet to the touch downstream of the air flow
- 3) Set Fan and Cell Switch to auto.
- 4) Open Doors 100%. Door Close switch to OFF, Door Open switch to MAN.
- 5) From FAN SPEED CONTROL SCREEN Set VFD cooling speed to 100%.
- 6) From OSA CONTROL SCREEN, Adjust outside air control differential to 0.
- 7) Adjust high deviation to 25 deg F, so the system will not shut down on high temp alarm.
- 8) Start system with start switch (red button).
- 9) Adjust TEMP SP until "START" and TEMP SP Match.
- 10) After 10-15 min observe plenum temperature
- 11) If Plenum temperature is same as TEMP SP the CELL EFFICIENCY is adjusted correctly.
- 12) If Plenum temp is greater than TEMP SP; adjust CELL EFFICIENCY down and repeat from step 9.
- 13) If Plenum temp is less than plenum TEMP SP; adjust CELL EFFICIENCY up and repeat from step 9.

CELL_EFF; Cell Efficiency adjustment is located in E2 Maintenance.



START; temperature OSA needs to equal for the system to begin Cooling Mode.

Note:

- If the efficiency falls below 85% we may need to re-evaluate water supply to media; pump may be undesized, feed line too small, not enough water feeders on top of the media, plugged water distribution line.
- Should have a 200 mesh filter on the discharge of the pump to prevent dirt from flowing into the media.
- Repeat Cell Efficiency procedure if any maintenance was performed on E-Cooler.