

APPENDIX #1

Humidity Problems in Grand Serail

- Actions to be done for solving humidity Problem in Zone A Basement (B031 to B042):

1. Exhaust Fan EF-2 on roof is to be repaired and turned on
2. Coils for FA-AHU 7 and fan coil units serving rooms (B031 to B042) to be cleaned and checked.
3. Exhaust for additional showers in room B053 to be investigated. Humidity transfer from B053 to adjacent zone to be checked.
4. Perform exhaust and fresh air balancing for zone A.
5. Optional actions for increasing Fresh air and exhaust in the Humid Zone:

Option 1: Exhaust and fresh air for rooms to be increased by 25% and increasing fan static pressure and keeping the duct sizes

Option 2: Install new fresh air and exhaust ducts in order to double the Air Change rate in humid rooms

New fans to be discharged at parking level. (False ceiling to be repaired in duct passage areas)

Option 3: Inline dehumidifier (2965 cfm) to be installed on FA-AHU-7 fresh air supply duct. Operationally integrated with relative humidity sensor in rooms.

- Actions to be done for solving humidity Problem in Zone A Ground Floor (0009A):

1. Exhaust Fans EF-12 on roof is to be checked if operational and turned on
2. Perform exhaust air balancing for Exhaust Fan EF-12 and check if furthest exhaust register is extracting the designed CFM.