Comfort. Under control.

Shake Shack (Lee's Summit) - Commissioning

CheckList Information

Name :	FPT - PACKAGED RTU (DINING)	**Status :**	NotSubmitted
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		

CheckList Item Details

THERMOSTAT PROGRAMMING AND CALIBRATION	
Occupied Time	8:30 AM
Occupied Heat setpoint - Cooling Setpoint - Dehumidification Setpoint	68 / 72 / No dehumidification
Unoccupied Time	10:30 PM
Unoccupied Heat Setpoint - Cooling Setpoint - Dehumidification Setpoint	60 / 80 / No Dehumidification
Space Sensor (TSTAT) Temp and RH reading / Commissioning Agent Space Temp and RH reading	74 space Avg Thermostat Reading: 70.7 (Window Sensor CxA reading) 71 (Dining Corridor Sensor CxA reading): Sensors are out of calibration by +3.5 degrees
Sensor Calibration Is within +/- 1 degree	Fail
CONTROL WIRING VALIDATION	
Economizer Dry Bulb sensor wired	Pass
Economizer Dry Bulb sensor operational	Pass
Occupied stat wired correctly	Pass
Thermostat Wired correctly (R,C,Y1,Y2,W1,W2)	Pass
Humidity Sensor Wired correctly	No dehumidification specified for RTU's at this location
CALIBRATION & PROGRAMMING	
Local Weather Data Temperature	63 degree
RTU-Honeywell setpoint: Economizer DB StPt, Reading Accuracy (+/- 2 degrees / 10 minute time to calibrate to actual reading)	Occupied : (Pass) Control :(Pass) 55 degree, Sensor is +1.4 degree from reading
Comment	

RTU-Honeywell setpoint: MAT StPt, Reading Accuracy (+/- 2 degrees / 10 minute time to calibrate to actual reading) Comment	Occupied : (Pass) Control :(Pass) 53 degree, Sensor is within + 2 degrees (full cool)
RTU-Honeywell setpoint: MAT Low StPt	45 degree
RTU-Honeywell setpoint: Low T Lockout	32 degree
Ventilation Mode Sequence Comment	Occupied : (Pass) Control :(Pass) Fan Low speed, OA damper to low speed TAB position, Space temp satisfied
Unoccupied - Fan Auto Comment	Unoccupied : (Pass) Control :(Pass) Fan off, OA damper shut, Space temp satisified
Stage 1 Heat Sequence Comment	Occupied : (Pass) Control :(Pass) Fan high speed, OA damper to high speed TAB position, Stage 1 heat energized (W1: 22.7v), Thermostat Display "Heat on"
Stage 2 Heat Sequence Comment	Occupied : (Pass) Control :(Pass) Fan high speed, OA damper to high speed TAB position, Stage 2 heat energized (W1: 22.1v, W2: 22.1v), Thermostat Display "Heat on 2"
Heat Sequence (Unoccupied) Comment	Unoccupied : (Pass) Control :(Pass) Fan high speed, OA damper opens when heat cycles on (needs to stay closed)
Stage 1 Cooling Sequence Comment	Occupied : (Pass) Control :(Pass) Fan low speed, OA damper to low speed TAB position, Stage 1 cool energized (Y1:23.4 v), Thermostat Display "Cool On"
Stage 2 Cooling Sequence Comment	Occupied : (Pass) Control :(Pass) Fan high speed, OA damper to high speed TAB position, Stage 2 cool energized (Y1:23.1v, Y2: 23.1v), Thermostat Display "2 Cool On"
Cooling Sequence (Unoccupied) Comment	Unoccupied : (Pass) Control :(Pass) Fan speed, OA damper opens when cooling cycles on (needs to stay closed)
Stage 1 cooling Temperature Comment	Occupied : (Pass) Control :(Pass) 56 deg [mix air 69 deg]
Stage 2 cooling Temperature Comment	Occupied : (Pass) Control :(Pass) 44 deg [mix air 69 deg] (MAT low temp alarm)

Stage 1 Heating Temperature Comment	Occupied : (Pass) Control :(Pass) 113 deg (approx 41 deg T-Rise)
Stage 2 Heating Temperature Comment	Occupied : (Pass) Control :(Pass) 132 deg (approx 60 deg T-Rise)
OUTDOOR AIR / RELIEF DAMPER	
Open Free cooling and confirm OA damper opens 100% RA air damper closes 0% and relief fan energizes Comment	Occupied : (Pass) Control :(Pass) OA damper opened 100%, Relief damper failed to energize
Record the space pressure with RTU in free cooling	
OCCUPANCY VALIDATION	
Place the thermostat in "unoccupied" - Does the OA damper close fully Comment	Unoccupied : (Pass) Control :(Pass)
Stage cooling and Heating in "unoccupied" - Does the unit properly stage and does the OA damper remain closed Comment	Unoccupied : (Pass) Control :(Pass) OA damper opens on cooling and heating being energized
Place the thermostat in "Occupied" - Does the OA damper open to the TAB minimum position in High speed Comment	Occupied : (Pass) Control :(Pass)
Place the thermostat in "Occupied" - Does the OA damper open to the TAB minimum position in Stage 1 cooling, Low speed	Yes