ChecklistGuro

HVAC System Performance Checklist - Office Zones

General System Overview

Initial assessment of system operation and environment.

Date of Inspection

Enter date...

Time of Inspection

Ambient Temperature (°C)

Enter a number...

Relative Humidity (%)

Enter a number...

System Operating Mode (Cooling/Heating/Auto/Off)

- [ ] Cooling
- [ ] Heating
- [ ] Auto
- [ ] Off

Overall System Condition (Excellent/Good/Fair/Poor)

- [ ] Excellent
- [ ] Good
- [ ] Fair
- [ ] Poor

General Observations / Notes

Write something...

Zone Location/Area

Set My Current Location

Airflow & Distribution

Checks related to air movement within the office zones.

Supply Air Volume (CFM) - Zone 1

Enter a number...

Return Air Volume (CFM) - Zone 1

Enter a number...

Supply Air Register Position - Zone 1

- [ ] Fully Open
- [ ] 75% Open
- [ ] 50% Open
- [ ] 25% Open
- [ ] Fully Closed

Diffuser Performance - Zone 1

- [ ] Optimal
- [ ] Adequate
- [ ] Poor - Adjust Needed
- [ ] Blocked/Obstructed

Drafts Detected?

- [ ] Near Windows
- [ ] Near Doors
- [ ] Along Walls
- [ ] None Detected

Notes on Airflow Observations

Write something...

Temperature & Humidity

Verification of temperature and humidity levels and their consistency.

Zone Supply Air Temperature (Actual)

Enter a number...

Zone Return Air Temperature (Actual)

Enter a number...

Zone Space Temperature (Actual)

Enter a number...

Zone Humidity (Actual)

Enter a number...

Differential Temperature (Supply - Return)

Enter a number...

Temperature Comfort Level (Subjective)

- [ ] Too Cold
- [ ] Comfortable
- [ ] Too Warm

Humidity Comfort Level (Subjective)

- [ ] Too Dry
- [ ] Comfortable
- [ ] Too Humid

Notes on Temperature/Humidity Performance

Write something...

Equipment Operation (AHUs, FCUs, VAVs)

Detailed inspection of individual HVAC equipment components.

AHU Fan Speed (RPM)

Enter a number...

FCU Supply Air Temperature (°C/°F)

Enter a number...

VAV Box Position (%)

Enter a number...

AHU Belt Condition (if applicable)

- [ ] Excellent
- [ ] Good
- [ ] Fair
- [ ] Poor
- [ ] Not Applicable

FCU Coil Condition

- [ ] Clean
- [ ] Slightly Dirty
- [ ] Dirty
- [ ] Very Dirty

Notes on any unusual noises or vibrations observed from equipment

Write something...

VAV Damper Operation (Open/Closed)

- [ ] Operating as expected
- [ ] Sticking/Restricted
- [ ] Not functioning

Last Filter Change Date (AHU/FCU)

Enter date...

Noise & Vibration

Assessment of noise and vibration levels generated by the system.

Sound Level (dB) near AHU/FCU

Enter a number...

Vibration Frequency (Hz) at equipment mounts

Enter a number...

Observable Vibration?

- [ ] Yes
- [ ] No
- [ ] Unsure

Description of Noise/Vibration (if present)

Write something...

Source of Vibration Identified?

- [ ] Yes
- [ ] No
- [ ] Unsure

Actions Taken/Recommendations for Noise/Vibration Reduction

Write something...

Pipe Vibration Readings (if applicable)

Enter a number...

Energy Efficiency & Consumption

Evaluation of energy usage and potential optimization opportunities.

Total HVAC System Energy Consumption (kWh)

Enter a number...

Average Energy Consumption per Office Zone (kWh)

Enter a number...

Current HVAC Schedule Optimization Strategy

- [ ] Demand Response Program
- [ ] Occupancy-Based Scheduling
- [ ] Fixed Schedule
- [ ] None/Manual Adjustment

Average Supply Air Temperature Setpoint (°F)

Enter a number...

Average Return Air Temperature (°F)

Enter a number...

Energy Efficiency Measures Implemented (select all that apply)

- [ ] LED Lighting Retrofit
- [ ] Variable Frequency Drives (VFDs) on Motors
- [ ] Economizer Cycle Implementation
- [ ] Building Envelope Improvements
- [ ] Demand Control Ventilation (DCV)
- [ ] None

Observations regarding potential energy savings opportunities (e.g., airflow imbalances, equipment inefficiencies)

Write something...

Date of Last Energy Performance Audit

Enter date...

Maintenance & Service Records

Review of maintenance logs and service history to ensure proper upkeep.

Last Preventative Maintenance (PM) Date

Enter date...

Summary of Last PM Performed

Write something...

Filter Replacement Frequency (Months)

Enter a number...

Last Coil Cleaning Date

Enter date...

Description of any Recent Repairs/Service

Write something...

Service Provider

- [ ] Company A
- [ ] Company B
- [ ] Company C
- [ ] Other

Upload Last Service Report (PDF)

Upload File

Control System Performance

Assessment of the building automation system (BAS) and its effectiveness.

BAS System Version Number

Enter a number...

System Operation Mode (Cool, Heat, Auto, Off)

- [ ] Cool
- [ ] Heat
- [ ] Auto
- [ ] Off

Outdoor Air Damper Position (%)

Enter a number...

Return Air Temperature (deg F)

Enter a number...

Schedule Adherence (On-time, Delayed, Off)

- [ ] On-time
- [ ] Delayed
- [ ] Off

Any Alarm Events in the Last 24 Hours? (Describe)

Write something...

Trending Data Available and Accurate?

- [ ] Yes
- [ ] No
- [ ] N/A

Last Control System Software Update Date

Enter date...

Safety Checks

Verification of safety features and compliance with relevant codes.

Carbon Monoxide (CO) Level (ppm)

Enter a number...

Refrigerant Leak Detection System Test Result (Pass/Fail)

Enter a number...

Emergency Shutdown Switch Functionality Test

- [ ] Pass
- [ ] Fail
- [ ] N/A

Fire Damper Operation Check

- [ ] Operates Correctly
- [ ] Requires Maintenance
- [ ] N/A

Proper Ventilation for Mechanical Rooms

- [ ] Adequate
- [ ] Insufficient
- [ ] N/A

Last Safety Inspection Date

Enter date...

Comments/Observations Regarding Safety Concerns

Write something...