| OpsAuditHub<br>opsauditihub.com | DOC ID: **SAF-0204** | REVISION: **Rev 2.4 (2026)** |
|---|---|---|
| | STANDARD: **NFPA 75, ISO/IEC 27001, ASHRAE TC 9.9, OSHA 29 CFR 1910.303** | AUDIT FREQUENCY: **Monthly Audit** |

# Server Room Environmental Checklist Safety Audit Checklist

**Operational Scope:** This audit protocol establishes mandatory environmental and physical safety controls for mission-critical server rooms and data facilities. Its primary objective is to mitigate thermal, electrical, and suppression hazards to ensure continuous IT infrastructure reliability and full regulatory compliance.

| | |
|---|---|
| **MANDATORY PPE:** | Anti-Static Wrist Strap / ESD Grounding Gear, Safety Glasses with Side Shields (ANSI Z87.1), Nitrile Gloves for Chemical / Battery Handling, Composite Toe Safety Shoes (ASTM F2413) |
| **PREREQUISITES:** | Notify building management and IT operations lead before initiating thermal and fire suppression testing. \| Verify proper access authorization and secure active ESD grounding mats prior to rack inspection. |

## ENVIRONMENTAL CONTROLS & HVAC INTEGRITY

| # | COMPONENT / ITEM | VERIFICATION CRITERIA & ACCEPTANCE STANDARD | SEVERITY | STATUS |
|---|---|---|---|---|
| 1 | **Ambient Temperature & Humidity Levels** | Ambient room temperature is maintained strictly between 64°F and 80°F (18°C–27°C) and relative humidity between 40% and 60% per ASHRAE standards. | **Critical (Immediate Out of Service)** | **[ ] PASS [ ] FAIL [ ] N/A** |
| 2 | **CRAC / CRAH Unit Operation** | Computer Room Air Conditioner units operate without error codes, unusual vibration, or condensate leakage; filters are clean and unobstructed. | **Warning** | **[ ] PASS [ ] FAIL [ ] N/A** |
| 3 | **Under-Floor Airflow & Plenum Clearance** | Raised floor plenums are entirely free of debris, cable blockages, or stored items that impede laminar airflow to server racks. | **Warning** | **[ ] PASS [ ] FAIL [ ] N/A** |

## FIRE SUPPRESSION & LIFE SAFETY SYSTEMS

| # | COMPONENT / ITEM | VERIFICATION CRITERIA & ACCEPTANCE STANDARD | SEVERITY | STATUS |
|---|---|---|---|---|
| 4 | **Gaseous Fire Suppression System Status** | Clean agent suppression system control panel indicates normal operating status with zero system trouble or discharge faults. | **Critical (Immediate Out of Service)** | **[ ] PASS [ ] FAIL [ ] N/A** |
| 5 | **Emergency Power Off (EPO) Switch Guards** | EPO switches are clearly labeled, unobstructed, and protected by physical hinged covers to prevent accidental actuation. | **Critical (Immediate Out of Service)** | **[ ] PASS [ ] FAIL [ ] N/A** |
| 6 | **Early Smoke Detection Apparatus (VESDA)** | Aspiration smoke detection sampling ports are clean, unobstructed, and testing indicators confirm active monitoring. | **Critical (Immediate Out of Service)** | **[ ] PASS [ ] FAIL [ ] N/A** |

## ELECTRICAL DISTRIBUTION & PHYSICAL SECURITY

| # | COMPONENT / ITEM | VERIFICATION CRITERIA & ACCEPTANCE STANDARD | SEVERITY | STATUS |
|---|---|---|---|---|
| 7 | **Server Rack Power Distribution Units (PDUs)** | PDUs show balanced phase loads below 80% capacity; power cords are securely fastened and free of fraying or pinch points. | **Warning** | **[ ] PASS [ ] FAIL [ ] N/A** |
| 8 | **Uninterruptible Power Supply (UPS) Battery Bank** | UPS enclosure is free of acid leaks, swelling, or thermal hot spots; alarm panel indicates normal float charge. | **Critical (Immediate Out of Service)** | **[ ] PASS [ ] FAIL [ ] N/A** |
| 9 | **Access Control & Door Interlocks** | Biometric and badge access logs function correctly; emergency exit doors open freely from the inside without electronic delay. | **Critical (Immediate Out of Service)** | **[ ] PASS [ ] FAIL [ ] N/A** |

| | | |
|---|---|---|
| **Certified Facility Compliance Inspector / Auditor Signature:** _____ | **Date / Time:** _____ | **Badge / Cert #:** _____ |
| **Director of Facility Operations / Safety Manager Sign-off:** _____ | **Review Date:** _____ | **Audit Status:** [ ] Approved [ ] Rectify |

**COMPLIANCE NOTICE:** This document must be archived for a minimum of 12 months in accordance with workplace safety recordkeeping guidelines.

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