OpsAuditHub opsauditihub.com	DOC ID: **SAF-0020**	REVISION: **Rev 2.4 (2026)**
	STANDARD: **OSHA 29 CFR 1910.176 & ANSI/RMI MH16.1**	AUDIT FREQUENCY: **Monthly Audit**

Pallet Rack Inspection Sop Template

Operational Scope: This Standard Operating Procedure establishes the mandatory inspection methodology for all structural pallet rack systems within OpsAuditHub facilities. Its objective is to mitigate catastrophic collapse hazards and ensure rigorous compliance with federal and industry storage safety standards.

MANDATORY PPE:	Hard Hat (ANSI Z89.1), Steel-Toe Safety Boots (ASTM F2413), High-Visibility Reflective Vest, Safety Glasses with Side Shields, Cut-Resistant Leather Gloves
PREREQUISITES:	Verify inspection zone is clear of active forklift traffic and pedestrians. | Ensure adequate overhead illumination (minimum 30 foot-candles) along aisleways. | Review previous month's corrective action log for recurrent damage zones.

UPRIGHT FRAMES AND COLUMN INSPECTION

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
1	**Upright Column Plumbness**	Out-of-plumb ratio must not exceed 1/2 inch per 10 feet of upright height. Greater deviation requires immediate engineering assessment.	**Critical (Immediate Out of Service)**	[ ] PASS [ ] FAIL [ ] N/A
2	**Column Impact Damage and Dents**	Inspect front and rear columns for forklift impact. Dents exceeding 1 inch depth on face or 1/2 inch on side flanges require unloading and replacement.	**Critical (Immediate Out of Service)**	[ ] PASS [ ] FAIL [ ] N/A
3	**Base Plates and Floor Anchors**	Verify all base plates are fully welded to columns and securely anchored to concrete with intact, non-sheared expansion anchor bolts.	**Critical (Immediate Out of Service)**	[ ] PASS [ ] FAIL [ ] N/A
4	**Horizontal and Diagonal Bracing**	Check lacing and struts for buckling, twisting, missing fasteners, or weld failures. All members must be rigid and structurally intact.	**Warning**	[ ] PASS [ ] FAIL [ ] N/A

BEAM AND CONNECTOR INSPECTION

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
5	**Beam Deflection Under Load**	Measure loaded beam deflection. Maximum allowable vertical deflection is span length divided by 180 (L/180) under full working load.	**Warning**	[ ] PASS [ ] FAIL [ ] N/A
6	**Beam Connector Safety Locks**	Verify 100% of beam end connectors feature functional safety pins or gravity locks preventing accidental upward dislodgement.	**Critical (Immediate Out of Service)**	[ ] PASS [ ] FAIL [ ] N/A
7	**Beam Cracking and Torsion**	Inspect structural welds connecting beam sections to end plates. Look for hairline cracks, tearing, or permanent twisting.	**Critical (Immediate Out of Service)**	[ ] PASS [ ] FAIL [ ] N/A

LOAD CAPACITY AND ENVIRONMENTAL CONTROLS

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
8	**Maximum Capacity Load Plaques**	Confirm rack load warning plaques are conspicuously displayed, legible, and accurately reflect current bay/beam weight limits.	**Standard**	[ ] PASS [ ] FAIL [ ] N/A
9	**Flue Space and Clearance**	Ensure minimum 6-inch transverse and 3-inch longitudinal flue spaces are maintained between pallets for sprinkler penetration and clearance.	**Standard**	[ ] PASS [ ] FAIL [ ] N/A
10	**Pallet Condition and Overhang**	Inspect stored pallets for broken boards or protruding overhang exceeding 3 inches past the rear or front beams.	**Warning**	[ ] PASS [ ] FAIL [ ] N/A

Certified Rack Inspector / Operations Auditor Signature: _____	**Date / Time:** _____	**Badge / Cert #:** _____
Site Safety Supervisor / Facility Manager Sign-off: _____	**Review Date:** _____	**Audit Status:** [ ] Approved [ ] Rectify

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