

WORKPLACE SAFETY PROTOCOL - ROBOT TESTING AREAS

WORKPLACE SAFETY PROTOCOL - ROBOT

NaviFloor Robotics, Inc.

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1. PURPOSE AND SCOPE

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1. This Workplace Safety Protocol ("Protocol") establishes mandatory safety

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2. This Protocol applies to all employees, contractors, visitors, and third-party

2. DEFINITIONS

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1. "Robot Testing Area" or "RTA": Any designated space within Company f

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2. "Safety Zone": Demarcated areas within RTAs indicated by yellow and bl

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3. "Emergency Stop System" or "E-Stop": The comprehensive emergency sh

3. GENERAL SAFETY REQUIREMENTS

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1. Access Authorization

- a) Only personnel with Level 2 or higher safety clearance may enter RTAs
- b) All entrants must complete the Company's Robot Safety Training Program (RSTP-101)
- c) Visitors must be accompanied by authorized personnel at all times

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2. Personal Protective Equipment (PPE)

- a) ANSI Z87.1-compliant safety glasses
- b) Steel-toed safety boots meeting ASTM F2413-18 standards
- c) High-visibility vests meeting ANSI/ISEA 107-2020 Type R Class 2 requirements
- d) Emergency transponder badges with integrated panic button

4. OPERATIONAL PROCEDURES

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1. Pre-Testing Requirements

- a) Complete safety checklist (Form SAF-RT-001)
- b) Verify E-Stop system functionality
- c) Confirm all sensors and safety barriers are operational
- d) Document robot configuration parameters

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2. Testing Zone Setup

- a) Establish minimum 2-meter safety perimeter
- b) Verify visibility of all warning signage
- c) Confirm proper functioning of overhead warning lights

d) Test all communication systems

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3. Active Testing Protocols

a) Maintain minimum two-person operation team

b) Continuous monitoring of robot telemetry

c) Real-time logging of all test parameters

d) Regular system status announcements

5. EMERGENCY PROCEDURES

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1. Emergency Shutdown Sequence

a) Activate nearest E-Stop

b) Clear all personnel from testing zone

c) Notify Floor Safety Supervisor

d) Document incident details

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2. Accident Response

a) Render immediate assistance as needed

b) Contact emergency services if required

c) Secure affected area

d) Preserve all data logs and system states

6. SPECIFIC HAZARD CONTROLS

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1. Motion Hazards

a) Maximum robot speed limited to 2.0 meters per second

- b) Automatic speed reduction when humans detected within 3 meters
- c) Mandatory use of motion tracking beacons

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2. Electrical Hazards

- a) All charging stations must have GFCI protection
- b) Monthly inspection of power systems
- c) Proper lockout/tagout procedures

7. COMPLIANCE AND ENFORCEMENT

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1. Regular Audits

- a) Weekly safety inspections
- b) Monthly compliance reviews

- c) Quarterly third-party assessments

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2. Violations

- a) Immediate suspension of testing activities

- b) Mandatory incident review

- c) Potential disciplinary action

8. DOCUMENTATION REQUIREMENTS

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1. Required Records

- a) Daily testing logs

- b) Incident reports

- c) Training certifications

d) Maintenance records

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2. Record Retention

a) All safety records maintained for minimum 3 years

b) Electronic backup of all documentation

c) Quarterly audit trails

9. PROTOCOL UPDATES AND REVIEW

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1. This Protocol shall be reviewed and updated annually or upon:

a) Significant changes to robot systems

b) New safety regulations

c) Incident investigations

d) Technology upgrades

10. AUTHORIZATION

This Protocol is authorized and approved by:

Dr. Sarah Chen

CEO & Co-founder

NaviFloor Robotics, Inc.

Richard Torres

Chief Operating Officer

NaviFloor Robotics, Inc.

Date: January 15, 2024

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