CAL MARITIME

2019

Ladder Safety Program

INJURY ILLNESS PREVENTION PROGRAM

Ladder Safety Program

*This sheet should be completed each time the **Ladder Safety Program** is reviewed and/or modified. The Director of Safety and Risk Management is responsible for the review and update this document annually or more frequently as determined or needed per CSU Chancellor's Executive Order 1039 Occupational Health and Safety Policy, 1069 Risk Management as well as Cal Maritime A&F Policy 09-004 IIPP.*

Version	Date Approved	Author	Revision Notes:
1.0	04/01/2018	Marianne Spotorno, CSP Dir. Safety & Risk Management	New Program Document
2.0	08/01/2019	Marianne Spotorno, CSP Dir. Safety & Risk Management	• Campus Emergency Response update. • TSGB component update

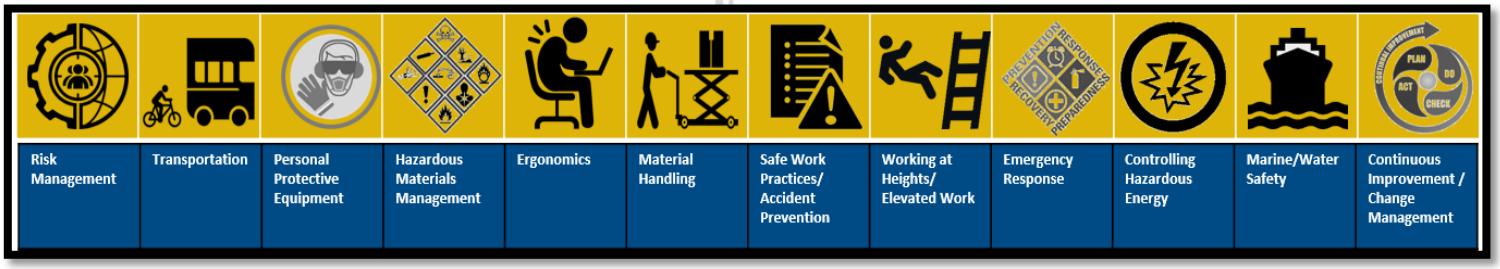


Table of Contents

1.0 Purpose & Scope

The purpose of the Injury Illness Prevention Program (IIPP) is to outline Cal Maritime's environmental health and safety requirements, expectations, and responsibilities in order to achieve effective campus safety performance through Integrated Safety Management (ISM). The **Ladder Safety Program** is a subject specific component the supports the overall University IIPP.

The use of ladders presents significant workplace hazards. The California Bureau of Labor Statistics states that in 2005, 12 people in California died from falls from ladders. Unsafe ladder use, such as using the wrong kind of ladder or upsetting the ladder's balance by leaning too far from its center of gravity, has resulted in injuries to University employees, as well as Cal/OSHA citations and fines being assessed to CSU and UC campuses.

The Department of Safety & Risk Management has developed this program to support the California State University Maritime Academy (Cal Maritime) as a means to describe all aspects of ladder safety including a ladder safe-use policy, personnel accountability, hazard assessment and proper ladder selection, safe work practices, training requirements and record keeping.

This program applies to any use of ladders three (3) feet in height/length or greater by employees of the University as part of their normal work activities. This includes temporary employees and graduate students performing research related activities in field stations and remote research facilities

This Manual applies to all Cal Maritime operations, maintenance and construction activities under the supervision of Cal Maritime personnel. For activities associated with the Training Ship Golden Bear (TSGB) refer to the Vessel Operating Manual (VOM) and/or Shoreside Administrative Manual (SAM). The TSGB is a subject specific component that supports the overall University IIPP.

1.1 Regulatory Standards Reference

CalOSHA : http://www.dir.ca.gov/title8/1629.html — Stairways and Ladders
http://www.dir.ca.gov/title8/1675.html — Ladders, General
http://www.dir.ca.gov/title8/1678.html — Extension Ladders
http://www.dir.ca.gov/title8/3276.html — Use of Ladders
http://www.dir.ca.gov/title8/3277.html — Fixed ladders
http://www.dir.ca.gov/title8/3278.html — Portable Wood Ladders
http://www.dir.ca.gov/title8/3279.html — Portable Metal Ladders
http://www.dir.ca.gov/title8/3280.html — Portable Reinforced Plastic Ladders
http://www.dir.ca.gov/title8/3287.html —Window Cleaning

1.2 CSU-System & Cal Maritime Specific Reference

- EO # 1039 Occupational Safety & Health/ Injury Illness Prevention Program
- A&F # 09-004 Injury Illness Prevention Program

1.3 Other Resources

- American Ladder Institute – www.laddersafety.org

2.0 Administrative Duties & Responsibilities

It is the policy of the Cal Maritime to maintain a safe and healthy work environment for each employee (including student and contract employees), and to comply with all applicable occupational health and safety regulations. This Injury and Illness Prevention Program (IIPP) is intended to establish a framework for identifying and correcting workplace hazards within the department, while addressing legal requirements for a formal, written IIPP.

To assist Cal Maritime in providing a safe, compliant, environmentally sound, and more sustainable operation, each department or operational unit is expected to review, understand, and follow the guidance provided in the Injury Illness Prevention Program components and the and the function of the integrated campus safety management system (ICSMS) as related to operations under their control.

In a proactive behavior based environmental health and safety model that entire campus community participation reflects a process that embraces the ability to;

- Eliminate adverse conditions which may result in injury or illness,
- Recommend the establishment of programs to raise safety consciousness in the community, and
- Achieve and maintain a beneficial relationship through continuing communication on issues relating to environmental health and occupational safety.

2.1 Employees (Including Student workers)

It is the responsibility of all faculty and staff to proactively participate and subsequently comply with all applicable health and safety regulations, Cal Maritime policies, and established safe work practices. This includes, but is not limited to:

- Observing health and safety-related signs, posters, warning signals and directions.
- Learning about the potential hazards of assigned tasks and work areas.
- Taking part in appropriate health and safety training.
- Following all safe operating procedures and precautions.
- Participating in workplace safety inspections
- Using proper personal protective equipment.
- Inform coworkers and supervisors of defective equipment and other workplace hazards without fear of reprisal.
- Reviewing the building emergency plan and assembly area.
- Reporting unsafe conditions immediately to a supervisor, and stopping work if an imminent hazard is presented.

2.2 Department of Safety and Risk Management (SRM)

The Director of Safety and Risk Management (SRM), as delegated by the University President, is responsible for the implementation and administrative management for Cal Maritime's Injury Illness Prevention Program (IIPP) that meets the requirements of California Code of Regulations (CCR), Title 8, section 3203) as well as other applicable California and Federal Occupational Safety and Health (Cal-OSHA) requirements.
Further responsibilities are outlined below:

- Provide advice and guidance to all university personnel concerning IIPP compliance requirements;
- Provide centralized monitoring of campus activities related to implementation of campus IIPP;
- Ensure scheduled periodic safety inspections are performed in compliance with regulatory requirements and assist management staff in identifying unsafe or unhealthful conditions;
- Ensure safety and health training programs comply with regulatory requirements and university policy;
- Oversee the maintenance of safety and health records consistent with the requirements of this document and regulatory mandates;
- Ensure program audits, both scheduled and as required by a process, equipment or personnel change, or by a safety program mandate, are performed;

- Interpret existing or pending safety and health legislation and recommend appropriate compliance strategies to university personnel;
- Maintain centralized environmental and employee monitoring records, allowing employee access as directed by law.
- Conduct at least an annual review of this document and make the current revision available on the SRM web site.

2.3 Deans, Directors, Department or Operating Unit Management

Campus Department or Operating Unit Head leadership have an integral campus role and shall have a thorough understanding of Injury Illness Prevention Program components and the function of the integrated campus safety management system (ICSMS) as related to operations under their control.

- The Department Head has primary authority and responsibility to ensure the health and safety of the department's faculty, staff and students through the implementation of the Injury Illness Prevention Program components. This is accomplished by communicating the Cal Maritime's campus emphasis on health and safety, analyzing work procedures for hazard identification and correction, ensuring regular workplace inspections, providing health and safety training, and encouraging prompt employee reporting of health and safety concerns without fear of reprisal.
- Specific areas include employee and student (both student employees and students in academic programs) education and training, identification and correction of unsafe conditions, and record keeping. It is recognized that a substantial amount of responsibility falls at this level.
- Colleges and Departments are encouraged to designate an individual as the College or department safety coordinator, to assist with specific operational environmental health and safety process management components.

2.4 Supervisors and Principal Investigators

Supervisors play a key role in the implementation of the Cal Maritime's Injury Illness Prevention Program components. Supervisors may be Management, Senior Research Associates, Department Chairs, Principal Investigators, or others who oversee a project and/or staff. They are responsible for but not limited to:

- Communicating to their staff and students about Cal Maritime campus's emphasis on health and safety.
- Ensuring periodic, documented inspection of workspaces under their authority.
- Promptly correcting identified hazards.
- Modeling and enforcing safe and healthful work practices.
- Providing appropriate safety training and personal protective equipment.
- Implementing measures to eliminate or control workplace hazards.
- Stopping any employee's work that poses an imminent hazard to either the employee or any other individual.
- Encouraging employees to report health and safety issues without fear of reprisal.

2.5 Academic Programming Faculty and Advisors

It is the responsibility of Faculty, Academic Programming Advisors other Cal Maritime related activities and student clubs to:

- Develop procedures to ensure effective compliance and support of the Injury and Illness Prevention Program components as it relates to operations under their control. Specific areas of responsibility include student education and training, identification and correction of unsafe conditions, and incident reporting.
- Develop and maintain written classroom, laboratory, and activity procedures which conform to regulatory, campus and departmental guidelines.
- Instruct students in the recognition, avoidance, and response to unsafe conditions, including hazards associated with non-routine tasks and emergency operations
- Permit only those persons qualified by education and training to operate potentially hazardous equipment or use hazardous materials, unless under close supervision.
-
- Supervise students in the performance of activities.

2.6 Students- Cadets

Students are expected to always adhere to safety practices presented by faculty, technical staff, student assistants, graduate assistants or other authorized individuals. They must also report potentially hazardous conditions that become known to them. These reports should be made to their supervisors, faculty advisers, Department of Safety and Risk Management, or other responsible parties.

2.7 Ladder Users

- Is trained on and applies "Safe-Work Rules" for users as outlined in this program.
- Always selects and uses a hand and power tools in a safe manner.
- Visual inspect prior to use.
- Alerts Owner Department Management when hand and/or power tools need repair/replacement.
- Assesses work to determine if fall protection should be worn and seeks alternative access methods instead of hand and/or power tools if need be.
- Proactively use Stop Work Authority when they feel there is an unsafe condition present by means of communicating with Department Management and SRM to work collaboratively to resolve and improve identified or perceived condition.

3.0 Process Management

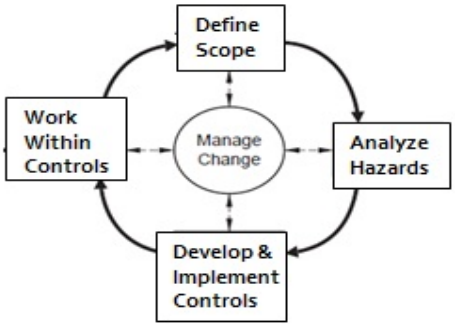
3.1 Hazard Identification, Risk Assessment & Control (HIRAC)

3.1.1 Integrated Safety Management (ISM)

Cal Maritime is committed to having all campus-related work performed safely and in a manner that strives for the highest degree of protection for the Campus Community. To achieve these goals, Cal Maritime implements, the principles of safety through an Integrated Campus Safety Management System (ICSMS).

Simply put, ICSMS applies a plan-do-check-act approach to campus safety management. Five core activities represent the plan-do-check-act approach, and comprise the underlying process for any construction work activity. The five core activities are:

1) Define the Scope of Work
2) Analyze the Hazards
3) Develop and Implement Hazard Controls
4) Perform Work Within Controls
5) Provide Feedback and Manage Change



The identification and analysis of workplace hazards is part of the pre-work planning process. The goal of this core activity is to ensure that the hazards associated with construction work activities are clearly understood and appropriately managed. All new campus work activities, changes to existing work or introduction of new equipment or processes (which introduce new hazards or increase the hazard level) need to be reviewed to analyze hazards, identify safety standards/requirements, and establish appropriate controls. Safety conditions and requirements need to be formally established and in place before construction work is initiated.

The campus Job Hazards Analysis (JHA) process is the principle method for achieving this.

3.1.2 Hazard Identification, Risk Assessment &Determining Control Table (HIRAC)

The EHS Hazard Identification, Risk Assessment and Determining Control Table (HIRAC) process is used to identify, assess and risk-rank Cal Maritime campus-related activities in order to ensure that Cal Maritime Campus Safety programs, activities and work controls are appropriately addressing construction risks. The initial HIRAC assessment and risk-ranking of campus-related activities was conducted during the third quarter, AY 2016-2017. The HIRAC assessment will be reviewed annually, when new campus-related activities are introduced that create or modify assessed risks, and when worksite observations or accident/incident experience identify previously unrecognized or incorrectly categorized risks.

3.1.3 Application of Hierarchy of Controls

In developing hazard controls and preparing the Job Hazard Analysis submittal, the campus shall select means and methods to mitigate worker exposure to workplace hazards using the Hierarchy of Controls as specified in the American National Standards Institute (ANSI) Z10-2005 Occupational Health and Safety Management Systems.
The campus shall make a good faith effort to analyze each hazard and identify the appropriate control(s) using the following hierarchy:

- Elimination or substitution of the hazards where feasible and appropriate;
- Use of engineering controls where feasible and appropriate;
- Application of work practices and administrative controls that limit worker exposures; and
- Provision and use of personal protective equipment

3.1.4 Job Hazards Analysis (JHA)

For the purposes of this section Job Hazard Analysis (JHA) and Job Safety Analysis (JSA) can be used synonymously. A JHA/JSA can be incorporated into a Pre Task Plan, provided there is a section for employees to review, comment and sign. Core components of the scope of work and relative hazards can be electronically completed ahead of time, provided there is room for current site conditions are able to be readily added as applicable. When the scope or conditions change, the change in work plan should be noted in a different colored pen with employee's initially that they have been briefed on the change.
The Department of Safety and Risk Management will work with individual Departments to develop a master Campus JHA library.

- Each employee scheduled to work in the activities identified below shall receive safety training in those activities prior to working on them.
- Subcontractors shall submit a Job Hazards Analysis (JHA) for those construction activities meeting the requirements for performing JHA (see below). The JHA shall be reviewed and authorized to proceed by the Cal Maritime Department of Safety and Risk Management before work commences.
- Subcontractor shall be responsible for submitting a JHA and work procedures to Cal Maritime Department of Safety and Risk Management for review a minimum of seven days prior to the start of work for most work activities.

3.1.4.1 JHA Requirements

A JHA shall be written based on the following conditions:

- Jobs with the highest injury or illness rates
- Jobs with the potential to cause severe or disabling injuries or illness, even if there is no history of previous accidents
- Jobs in which one simple human error could lead to a severe accident or injury
- Jobs that are new to your operation or have undergone changes in processes and procedures
- Jobs complex enough to require written instructions.

If not otherwise specified in a particular project specification, the JHA shall be performed in accordance with the OSHA 3071.

JHA processes. In general the JHA will include:

- Description of work phase or activity
- Identification of potential hazards associated with the activity
- Address further hazards revealed by supplemental site information (e.g., site characterization data, as-built drawings) provided by the subcontractors construction manager.
- A list of the Subcontractor's planned controls to mitigate the identified hazards
- Identification of specialized training required
- Identification of special permits required
- Name of the Subcontractor's Competent Person(s) responsible for inspecting the activity and ensuring that all proposed safety measures are followed.

3.2 Hazard Assessment

⚠ *Note: Each Work Activity will have its own JHA and/or Pre-Task Plan, refer to the JHA Library for more details.*

GENERAL HAZARD IDENTIFICATION & CONTROL MEASURES FOR EQUIPMENT USE			
TASK	**HAZARD**		**HAZARD CONTROLS & PROTECTION MEASURES**
CLIMBING/ LADDER USE	Falling, Electrical Conductivity		The construction, installation, and use of ladders shall conform to ANSI A14.1, ANSI A14.2, ANSI A14.3, and ANSI A14.4, as applicable. **Length of ladders.** 1. All portable ladders shall be of sufficient length and shall be placed so that workers will not stretch or assume a hazardous position. 2. Portable ladders, used as temporary access, shall extend at least 3 ft (0.9 m) above the upper landing surface. The length of portable stepladders shall not exceed 20 ft (6 m). **Width of ladders.** 1. The minimum clear distance between the sides of individual rung/step ladders shall be 16 in (40.6 cm). 2. The minimum clear distance between side rails for all portable ladders shall be 12 in (30.4 cm). **Spacing of rungs, cleats, and steps on ladders.** 1. On portable ladders, spacing of rungs shall be 8 in (20.3 cm)- 14 in (35.5 cm) on center and uniform. 2. On step stools, spacing shall be not less than 8 in (20.3 cm) or more than 12 in (30.4 cm) apart, as measured from their centerlines. 3. On extension trestle ladders, spacing on the base section shall be not less than 8 in (20.3 cm) or more than 18 in (45.7cm) apart, as measured from their centerlines. On the extension section, spacing shall not be less than 6 in (15.2 cm) or more than 12 in (30.4 cm) apart, as measured from their centerlines. 4. Ladders shall be surfaced so as to prevent injury to a worker from punctures or lacerations and to prevent snagging of clothing. 5. Wooden ladders **shall not** be coated with any opaque covering, except for identification or warning labels that may be placed on only one face of a side rail. ⚓ A metal spreader bar or locking device shall be provided on each stepladder to hold the front and back sections in an open position
			Set-up of ladders. 1. Ladders **shall not** be placed in passageways, doorways, drives, or any locations where they may be displaced by any other work unless protected by barricades or guards. 2. Portable ladders shall be used at such a pitch that the horizontal distance from the top support to the foot of the ladder will not be greater than ¼ the vertical distance between these points. 3. Wooden job-made ladders, with spliced rails, shall be used at an angle such that the horizontal distance is 1/8 the length of the ladder. 4. Ladders shall be secured by top, bottom, and intermediate fastenings, as necessary to hold them rigidly in place and to support the loads that will be imposed upon them. 5. The steps or rungs of all ladders shall be set to provide at least 7 in (17.7 cm) toe space from the inside edge of the rung to the nearest interference. 6. The top of a non-self-supporting ladder shall be placed with the two rails supported equally, unless the ladder is equipped with a single support attachment. Step-across distance. The step-across distance from the nearest edge of ladder to the nearest edge of equipment or structure shall be not more than 12 in (30.5 cm) or less than 2- 1/2 in (6.4 cm)
			Use of ladders. 1. Ladders shall be restricted to their intended use. 2. Ladders shall be inspected for visible defects on a daily basis and after any occurrence that could affect their safe use. Broken or damaged ladders shall be immediately tagged "**DO**

			NOT USE," or with similar wording, and withdrawn from service until restored to a condition meeting their original design. 3. Ladders **shall not** be moved, shifted, or extended while occupied. 4. Ladders **shall not** be climbed by more than one person at a time, unless it is designed to be climbed by more than one person. 5. Portable ladders used as means of access to ascend and descend to a work location do not require fall protection, however only light work for short periods of time shall be performed on portable ladders. 6. **No** work requiring lifting of heavy materials or substantial exertion shall be done from ladders. 7. When ladders are the only means of access to or from a working area for 25 or more workers, or when a ladder is to serve simultaneous two-way traffic, double cleated ladders shall be used. 8. Portable ladders shall have slip-resistant feet. 9. The top or top step of a stepladder, **shall not** be used, as a step unless it has been designed to be so used by the manufacturer. 10. Ensure latches are in place before climbing an extension ladder. 11. Keep loose tools off the steps and top platform. Job made ladders will be made in accordance with ANSI A14.4. 12. Single-rail ladders **shall not** be used. 13. Three-legged ladders may be used for specific tasks, if evaluate by the SRM. The use of ladder climbing devices shall be in accordance with 21.I. Articulated ladders are allowed if they meet ANSI A14.2 standard. Any ladder accessory, including but not limited to, ladder levelers, ladder stabilizers or stand-off devices, ladder jacks or ladder straps or hooks, that may be installed or used in conjunction with ladders must be installed and used per manufacturer's instructions.

TRAINING REQUIREMENTS

DO NOT use this equipment unless an instructor or shop supervisor has instructed you in the safe use and operation and has authorized you to operate this equipment.

✓ IIPP	✓ Dept. Specific	✓ Operators/Owner's Manual	✓ Other:

PERSONAL PROTECIVE EQUIPMENT

 Eye Protection	 **Foot Protection**	 **Hand Protection**	 **Hearing Protection**	 **Body Protection**	 **Head Protection**	 **Respiratory Protection**	 **Fall Protection**	 **Face Shield**	 **OTHER**
When exposed to eye or face hazards from flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation...	When working in areas where there is a danger of foot injuries due to falling or rolling objects, or objects piercing the sole, or will protect the affected	When hands are exposed to hazards such as those from skin absorption of harmful substances; severe cuts or lacerations; severe abrasions; punctures; chemical burns	When exposed to a time weighted average noise level of 85 dBA or higher over an 8 hour work shift.	When exposure to: Intense heat, hot metals, other hot liquids Impacts from materials that can cut, burn Hazardous chemicals Or potentially infectious materials	Where there is a potential for injury to the head from falling objects and/or when there is a risk of impact to head	May be required if removal of contaminants from the air does not fall below permissible exposure level.	When there is a risk of falling from a height greater than 4ft GSO 6ft CSO 6ft MSO When working in confined space	Face shield can be used over the glasses if there is a presence of a lot of flying debris.	

3.3 General Requirements

The Department owning ladders designates the "**Ladder Program Administrator(s)**" responsible for the following actions:

- Assures that ladders purchased/used in the department are code-compliant and appropriate for the needed safe-work tasks.
- Consults with the Department of Safety and Risk Management (SRM) as needed to assess proper ladder use and procurement specifications.
- Coordinates with SRM to provide ladder safety training, or provides ladder training themselves (by JSA or other presentation), to all department personnel who use ladders. In either case, training must detail the contents of this program including ladder user's safe-work rules, inspections, etc.
- Periodically audits departmental compliance with the Program.
- Conducts ladder inspections as part of the "shop safety inspection" process.
- Implements the following ladder inspection/tracking requirements:
    1. Develops ladder-identification system and uniquely numbers each ladder owned by the department for inventory/tracking purposes.
    2. Inspects ladders for damage and documents inspections per inspection form/criteria in program.
    3. Locks or tags damaged ladders to insure they will not be used until repaired.
    4. Renders damaged ladders that cannot be repaired unusable by cutting them into pieces or other destructive means, and then assures proper disposal of them.
    5. Assures that any wooden ladders in use are not painted with any color other than clear wood sealer to allow detailed inspection of wood grain and quality. Wood ladders that are painted or not clear-finished with the wood grain visible for inspection must be destroyed.
    6. If not already done so by the manufacturer, mark portable metal ladders with the words:

"CAUTION DO NOT USE AROUND ELECTRICAL EQUIPMENT"

3.3.1 Ladder Safe Work Practices

- Select a ladder that is the proper length and "duty rating" for the intended work.

***Note**: A leaning-ladder must extend at least 36" above the edge of a roof/mezzanine when properly installed. A step ladder must be tall enough so that you don't have to stand on the top or top two rungs of the ladder to access your work.*

- **Do not** use electrically conductive (e.g. aluminum) ladders for electrical work or near live electrical parts.
- Inspect the ladder for broken of defective parts prior to each use.
- Remove damaged or defective ladders from use and notify department management of the problem ladder.
- **Do not** place ladders where they can be accidentally struck or displaced.
- If the ladder is used in an area where anyone could walk under it, the area must be cordoned off with a visual barrier such as yellow caution tape to alert pedestrians to the hazard of something falling from the ladder.
- Ladders must not be placed in passageways, doorways, driveways, or any location where they may be displaced by activities being conducted on any other work, unless protected by barricades or guards.
- For leaning or extension ladders, tie, block, or otherwise secure while in use.
- **Do not** splice ladders together.
- Always face the ladder while ascending and descending.
- **Do not** stand on the top two rungs of a single ladder or an extension ladder;
- **Do not** stand on the top cap and top two steps of a step ladder.
- **Do not** stand on the top three rungs of ladders unless there are members of an adjacent structure that provide a firm handhold, or the ladder user is protected by a personal fall protection system (e.g., positioning device or

fall restraint system) tied off to a CalOSHA certified fall protection anchor.

- If working outside of the ladder's footprint, or when standing on the upper-most parts of the ladder as noted above, use an appropriate fall protection system as described in the SRM Safety Topic Guide "Fall Protection Equipment and Inspection".
- **Do not** place planks on the top cap or any other part of a ladder.
- **Do not** use the X-bracing or other structures on the rear section of a stepladder for climbing unless the ladder is designed to be climbed from both sides. (See Extension Trestle Ladders and similar.)
- Make sure that a stepladder is properly set up and that the spreader is locked in place before use.
- **Do not** use the stepladder as a lean-to ladder.
- Always use a tool belt and other 'hands-free' carrying devices when ascending and descending a ladder.
- When working aloft, secure tools and supplies so they cannot fall from the ladder.

3.3.2 Ladder Selection

Ladders are designed and constructed to safely hold up to a specified amount of weight. Ladders come in five (5) different Duty Ratings identified by their "Type". The Duty Rating is defined as the maximum safe load capacity of the ladder. A person's fully-clothed weight plus the weight of any tools and materials that are carried onto the ladder must be less than the duty rating.

- Cal Maritime requires at minimum the strength of a "Type II" ladder for any work activities where ladders are used for elevated work projects where the user is not handling large or heavy objects during ladder usage.
- All Maintenance/Trades are recommended to use "Type I" or stronger ladders for their work activities. Owner Departments that have maintenance/trades activities are required to purchase and use "Type I, Type IA or Type IAA" ladders based upon the required strength for safe work by their workforce.
- Research and other Academic Departments not performing maintenance/trades type activities may optionally inventory and use Type I or Type II ladders. Purchas and use of "Type III" ladders should be avoided as their duty rating is too light making them more likely to fail before the end of their useful life expectancy, with a strong potential for injury resulting from their use.

3.3.3 Duty Ratings

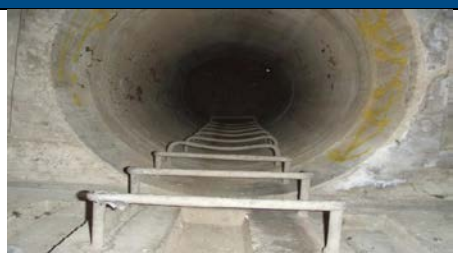
Duty Ratings are described in terms of pounds, such as a "300lb. Duty-Rated Type IA" ladder which is designed for extra heavy-duty professional use where the total weight on the ladder does not exceed 300 pounds.

Ladders are also built to handle the demands of various applications. For example, a ladder used frequently on a construction site by larger/heavier workers should typically be stronger and possess a corresponding higher duty rating than one used by a smaller/lighter-weight person for infrequent "light" overhead work.

The American National Standards Institute (ANSI) has established the "Duty Rating" that is used by Cal/OSHA. This rating identifies which portable ladder is intended for the conditions under which the ladder can be safely used. The Duty Rating system is summarized below, and may be further researched at the following link: http://www.cisco-eagle.com/catalog/t-Article-LadderSafe1.aspx

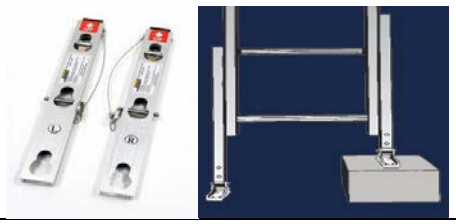
Ladder Duty Rating or "Type"	Capable of Supporting	Rated Use
TYPE IAA	375 lbs.	Special Duty
TYPE IA	300 lbs.	Extra Heavy Duty Industrial
TYPE I	250 lbs.	Heavy Duty Industrial
TYPE II	225 lbs.	Medium Duty Commercial
TYPE III	200 lbs.	Light Duty Household

3.4 Ladder Design & Use

Articulating, Combination, Multi Position, or Sectional Ladder	Extension Ladder	Extension Trestle Ladder
		
An articulating ladder is a non-self-supporting or self-supporting portable ladder, adjustable or non-adjustable in length. It consists of two or more sections of ladder that may be combined to function a single ladder. The overall length of the assembled sections designates its size. They can be used to access areas above uneven surfaces.	An extension ladder is a non-self-supporting portable ladder, adjustable in length. It consists of two (2) or more sections that travel in guides or brackets, which are arranged to permit length adjustment. An extension ladder's size is designated by the sum of the lengths of the sections measured along the side rails. ***It cannot exceed 44 feet.*** They can be used to access varying heights	A stepladder that is a self-supporting portable ladder with an extension. They are available in "twin front" or "double front" design so they can be climbed from both sides They can be used for operations in theater and stage work or to get equipment above drop ceilings.
Fixed Ladder	**Individual Rung Fixed Ladders**	**Platform Step Ladder, Single Entry Work Platform**
		 
A fixed ladder is a ladder permanently attached to a structure, building or equipment. The type of ladder shown is used to access the top of facilities for maintenance purposes.	A type of fixed ladder that does not have side rails. Each rung is permanently attached to the surface of the wall, machine, or piece of equipment. These ladders are used to access and egress facilities such as manholes and crawl spaces.	A step ladder with a small horizontal platform at the top. These can be used to work safely at elevated locations requiring the use of both hands.

Single Ladder	Specialty Ladders	Step Ladder
		
A single ladder is a non-self-supporting portable ladder, similar to an extension ladder, non- adjustable in length, which consists of only one section. Its size is designated by the overall length of the side rail and cannot exceed 30 feet. These can be used to access heights within the limit of their height	Any type of ladder that is constructed for specific use on unique devices used for research or any other purpose. ***Example:*** The ladder shown is a shelf ladder that is attached to or used to access shelves. Another type of "specialty ladder" is a rolling "Library Ladder" set on rails attached to shelving	A stepladder (also known as an "A" Frame ladder) is a self-supporting portable ladder. They are non-adjustable in length, have flat steps and a hinged back. They are measured along the front edge of the side rails. They are available in "twin front" or "double front" designs so they can be climbed from both sides. These may be used to access heights within the limit of their height
Step To Straight Ladder	**Tripod Industrial Ladder**	**Tripod Orchard Ladder**
		
This type of ladder can convert quickly from a stepladder to a push-up extension ladder. They are equipped with rung locks, utility-style safety shoes, and a standard pole grip. They can be used as either a self-supporting or non-self-supporting ladder	Tripod Step Ladders are designed to be used in construction and maintenance activities where a 4- leg step ladder would have limited access or require the ladder user to work off to one-side of the ladder. These should be purchased/used for maintenance and construction work where a single pole leg can be placed amongst equipment or other obstructions and allow a safe-work for the ladder user to face the work area not having to work off to one side.	Tripod orchard ladders are designed to be used on soft and uneven terrain; therefore they lack spreaders, locking devices, steel points and safety shoes. These should only be purchased and/or used for outdoor work in pruning and accessing tree canopies.

3.5 Ladder Accessories

Cable Hook & V-Ring Assembly	Fixed Ladder Cage	Caster Brackets
		
Used to secure the top of a single ladder or extension ladder to a pole, pipe or other 'rounded' vertical support structure	Ladder cages provide fall protection and are required by code on fixed ladders over 20 feet high. The base of the cage must be at 7' above the base surface.	Weight sensitive brackets with casters that allow a ladder to be rolled on a floor when there is no load on the ladder
Ladder Cinch	**Ladder Jack**	**Levelers**
		
Used as a quick tie down for use on poles or similar structures	Attaches to rungs of non-self- supporting ladders to allow the use of ladders as supports for scaffold planks. Fall protection is required	Two base attachments that are used to level the ladder on a sloped support surface
Pail Shelf	**Paint Can hangers**	**Removable Work Platform**
		
A pail shelf attaches to an existing shelf to provide relatively stable locations for tools and pails or bucket	Are designed to be easily attached and removed from a ladder in order to hang a bucket. There are load limits, as determined by the manufacturer, for both the ladder rail and the hanger. They can be used to temporarily hang other supplies or tools as long as they are within the load limits of the ladder and hanging bracket.	Kicks out of the way easily for climbing and is used as a platform to stand on.
Stabilizer	**Multipurpose Tray**	
		
Attaches to the ladder rungs or rails to stand the ladder off from a surface or stabilize the ladder around an obstruction such as a pipe, a gutter or a window.	Made for straight or stepladders. The texture is intended to provide a place to put small parts such as bolts, nuts, wire-nuts and small tools in addition to pails.	

3.6 Fall Protection Requirements

*Ladders may be used **WITHOUT** the user wearing a personal harness tied off to a CalOSHA certified fall protection anchor, when a leaning or extension ladder can be tied-off and stabilized to a permanent structure, or a step ladder is used on a level firm surface, and then work is done within the following specific activities*:

1. When using the ladder to gain access from one level to another without carrying anything in your hands.
2. When using a ladder for access to a work area where work is conducted while standing on the ladder, provided the user can ascend and descend using both their hands during the entire up/down movement on the ladder.
3. When working aloft on the ladder provided both of the user's feet are stationary on one rung and the work area requiring two-handed work is within the ladder's 'foot print' (i.e. no reaching beyond the base legs of the ladder with both hands).
4. When the user can use three-point contact (both their feet plus one hand) for stability when reaching and working outside the ladder's 'foot print' using only one 'free' hand.
5. When the ladder user's feet are below the top two rungs of a leaning single/extension-ladder, or are below the top two steps and top cap of a step ladder.
6. When doing elevated 'fine two-handed work' within the 'foot print' of the ladder, where a user is using both hands to conduct light-weight work without the use of power tools. (Example: Twisting a wire nut on two to three 12-gage or smaller wires, hammering a nail into wood, or unscrewing a light bulb and installing a replacement light bulb.)
7. When using a small cordless power tool such as a ¼" bit (or smaller) hand-drill that is not likely to cause imbalance should the power tool bind during use.
8. When using a corded power tool within the 'foot print' of the ladder using only one hand to control the tool, and otherwise having 3-point contact on the ladder.

Fall protection must be used in all other ladder-use situations unless the Owner Department can demonstrate that the planned work activities are equivalently safe to the above noted requirements. Alternatives to using fall protection include temporary scaffolding with appropriate railings, the use of a "Lift Pod", the use of Genie lifts or bucket trucks, etc., and should be considered before using ladders in such situations.

3.7 Housekeeping

- Clear debris and equipment that could cause a slip, trip, or fall from working areas around the ladder.
- Prevent equipment and supplies from falling on other people.
- Set up ground cloths if needed.
- Cordon off work areas using yellow caution tape to keep casual passersby out of your work area.

4.0 Training Requirements

Effective dissemination of safety information lies at the very heart of a successful Injury and Illness Prevention Program. It is essential to provide training for employees concerning general safe work practices as well as specific instruction with respect to hazards unique to each employee's job assignment.

Training content is determined by the Department of Safety and Risk Management, as well as Department Management which is based upon observed hazards, type of equipment, Department need, and work requirements.

- Providing training from within the department as a part of academic programming, or
- Training provided by CSU-System, or
- Training provided by Cal Maritime SRM, or
- A training provider outside the University.

Note: All outside trainer venders are to be reviewed and content approved by SRM. The Department of Safety and Risk Management, in conjunction with various departments have developed training programs designed to meet general safe work practice requirements. These programs are elements of larger programs which service broad campus needs.

Employees expected to utilize ladders as part of their job duties must be adequately trained prior to using such tools or equipment.

- Employees should be trained in the following areas:
- Be able to recognize hazards associated with different types of tools and equipment; and the safety precautions necessary for use.
- The PPE required to be worn during the use of tools.
- The proper use of equipment
- Be able to recognize defects in tools, which may render them out of service.
- When applicable, provide access to the manufacturer specifications and manual's for specific equipment to be used.
- Department-developed standard operating procedures (SOPs) outlining specific safety precautions for certain tools or activities.

Retraining may be necessary to maintain employee knowledge of working with tools or if a near-miss or injury has occurred.

Training is to be documented and kept in a readily accessible location by the Department designee for access reference as needed by Department Management, Department of Safety & Risk Management, or regulatory agency (e.g. CalOSHA). Submit the completed training roster of attendees to the Department of Safety & Risk Management.

Program Administrators are trained on their roles and responsibilities in the management/maintenance of the requirements and inspections outlined in this program.

Refer to Cal/OSHA Safety & Health Training and Instruction Requirements as outlined in Appendix C of the Injury Illness Prevention Program.

5.0 Document Control & Recordkeeping

Essential records, including those legally required for Workers' Compensation, insurance audits and government inspections will be maintained for as long as required. Individual Departments and/or Colleges will also keep records of steps taken to establish and maintain the Injury and Illness Prevention Program.
They must include:

- Records of scheduled and periodic inspections to identify unsafe conditions and work practices. The documentation includes the name of the person(s) conducting the inspection, the unsafe conditions and work practices identified, and the corrective action(s) taken. These records will be maintained for at least three years.
- Documentation of health and safety training for each employee. Specifically, employee name or other identifier, training dates, type(s) of training and the name of the training provider will be included. Records will be retained for at least three years. Standard forms for maintaining this information can be obtained from the Department of Safety and Risk Management.

Training records will be kept in each department and copies will be forwarded to the Department of Safety and Risk Management.

Departments must maintain the following records as part of the hand and portable power tool safety program.

- Employee training records
- Specialized SOPs
- Manufacturer specifications/manuals
- Maintenance/service records

Record	Timeframe/Frequency	Location of Record	Retention Period*
Ladder Safety Training-General	Initial, Annual Refresher for affected employees.	Document on Employee's Safety Training Checklist	3-Years
Ladder Safety Training-General	Post incident and/or process management change for affected employees.	Document on Employee's Safety Training Checklist	3-Years
Ladder Safety Training-Equipment Specific	Initial, Annual Refresher for affected employees.	Document on Employee's Safety Training Checklist	3-Years
Ladder Safety Training-Equipment Specific	Post incident and/or process management change for affected employees.	Document on Employee's Safety Training Checklist	3-Years

*Refer to the Injury Illness Prevention Program Document Retention Table and/or California State University Systemwide for more information.

Appendix A: Definitions

General

ANSI:	American National Standards Institute
Authorized person:	Means a person approved or assigned by the employer to perform a specific type of duty or duties or to be at a specific location or locations at the jobsite.
Competent person:	A competent person is a person who is **capable** of identifying existing and predictable hazards in the surroundings or working conditions that are unsanitary, hazardous, or dangerous to employees. The competent person has the **authority** to impose prompt corrective measures to eliminate these hazards. *Examples:* • **Excavation** - Inspectors 1541 • **Fall Protection** Plan implementers & supervisors 1671.1 • **Lift Slab Construction** 1522.1
Confined Space:	Is a space that (1) is large enough and so configured that an employee can enter bodily, (2) has limited or restricted means for entry or exit (e.g., tanks, vessels, vaults, shafts, pits), and (3) is not designed for continuous occupancy.
Construction Manager:	Is the Cal Maritime employee responsible for the supervision and field management of day-to-day needs of a construction project. It may be a project superintendent, a craft supervisor, or a lead person.
Construction work:	For purposes of this section, "Construction work" means work for construction, alteration, and/or repair, including painting and decorating. Construction: is any combination of engineering, procurement, erection, installation, assembly, demolition, or fabrication used to create a new facility, or to alter, add to, rehabilitate, dismantle, or remove an existing facility. It also includes the alteration and repair (including dredging, excavating, and painting) of buildings, structures, or other real property, as well as any construction and excavation activities conducted as part of environmental remediation efforts.
Controlled Access Zone (CAZ)	Means an area in which certain work (e.g., overhand bricklaying) may take place without the use of guardrail systems, personal fall arrest systems, or safety net systems and access to the zone is controlled
Imminent Danger:	Is any condition or practice that could reasonably be expected to cause death or serious physical harm (permanent or prolonged impairment of the body or temporary disablement requiring hospitalization) to employees or the public unless immediate actions are taken.
Project Manager:	Is the Cal Maritime employee representative with overall responsibility for a project. This person ensures subcontractor compliance with subcontract documents, including performance, schedule, budget, and safety.
Shall:	Means mandatory
Should:	Means recommended
Subcontractor:	Is a firm that has sole contractual responsibility for execution of the construction work related to a project, and for compliance with all safety, health, and environmental codes, standards, and regulations.
Qualified Person:	A qualified person is a person **designated** by the employer; and by reason of **training**, experience, or instruction has demonstrated the ability to perform safely all assigned duties; &, when required is properly licensed in accordance with federal, state, or local laws and regulations. Examples: • Mobile Crane & Tower **Crane** Operators 5006.1(a) • **Scaffold** Erection & Dismantling Supervisors 1637(k)(1) • **Demolition** 1736 • **Personal Fall Arrest** System supervisors 1670(b)

Definitions (cont.)

Ladder Specific

"A" Frame ladder	Also Known as a "Step Ladder"
Angle of Inclination:	The preferred pitch for portable non self-supporting ladders
Articulating Ladder:	Also known as a "Combination Ladder", "Sectional Ladder" or "Multi-position ladder". This is a portable ladder capable of being used either as a stepladder, a single ladder or an extension ladder. It may also be capable of being used as a trestle ladder or a stairwell ladder.
Cage:	A cage is a guard that may be referred to as a cage or basket guard, which is an enclosure that is fastened to the side rails of a fixed ladder or to the structure to encircle the climbing space of the ladder for the safety of the person who must climb the ladder.
Cleats:	Ladder crosspieces of rectangular cross section placed on edge upon which a person may step while ascending or descending. Also known as ladder "rungs".
Combination Ladder:	Another name for "Articulating Ladder". See definition above.
Double Front or Twin Front Ladder:	a self-standing ladder that is designed to allow both sides of the ladder to be climbed safely.
Feet:	The component of the ladder that is in contact with the lower supporting surface.
Fixed Ladder:	a ladder that is permanently attached to a structure, building, or equipment.
Grab bars:	Are individual handholds placed adjacent to or as an extension above ladders for the purpose of providing safe hand-hold above the "top" of the ladder.
Individual-Rung Ladder	a fixed ladder, each rung of which is individually attached to a structure, building or equipment
Ladder Stand	a mobile fixed sized self-supporting ladder consisting of a wide, flat tread ladder in the form of stairs. The assembly may include handrails but does not include a platform.
Multi-Position Ladder	Another name for an "Articulating Ladder". See definition above.
Rungs	Ladder crosspieces upon which a person may step while ascending or descending. Rungs are usually "round" in cross-section while "cleats" are usually rectangular in cross-section. See definition of "Cleats" above.
Sectional Ladder	Another name for "Articulating Ladder". See definition above.
Sections	(as related to a "Sectional Ladder")
Bottom or base section	The lowest section of a non-self-supporting portable ladder
Top or Fly section	The uppermost section of a non-self-supporting portable ladder.
Middle or Intermediate section	The section between the top (fly) and bottom (base) sections of a non-self-supporting portable ladder.
Single Ladder	A non-self-supporting portable ladder, nonadjustable in length, consisting of one section.
Side Rails	The side members joined at intervals by rungs, steps, cleats or rear braces.
Step Stool (ladder type)	a self-supporting, foldable, portable ladder, non-adjustable in length, 32 inches or less in size, with flat steps and without a pail shelf designed so that the ladder top cap as well as all steps can be climbed upon. The side rails may continue above the top cap.
Step Ladder	A self-supporting portable ladder, non-adjustable in length, with flat steps and a hinged base. Also known as an "A"-Frame ladder.
Top Cap	The uppermost horizontal member of a portable step ladder or step stool.
Working Load	The maximum applied load, including the weight of the user, materials, and tools, which the ladder is to support for the intended use.

Appendix B: Job Hazard Analysis Template- Sample

SAFETY GUIDELINES		
IMAGE	**SCOPE OF WORK/EQUIPMENT USE**	**DEPARTMENT:**
		HAZARD POTENTIAL EVALUATION
		☐Struck By ☐Struck Against ☐Slip/Trip/Fall ☐Caught In/Between ☐Material Handling ☐Equipment Operating ☐Weather Conditions ☐Hazardous Substance ☐Electrical Hazards ☐Obstruction
		SRM-HIRAC 1 2 3 4

TRAINING REQUIREMENTS

DO NOT use equipment unless an instructor or shop supervisor has instructed you in the safe use and operation and has authorized you to operate this equipment.

❑ IIPP ❑ Dept. Specific ❑ Operators/Owner's Manual ❑ Other:

PERSONAL PROTECIVE EQUIPMENT

 Eye Protection	 Foot Protection	 Hand Protection	 Hearing Protection	 Body Protection	 Head Protection	 Respiratory Protection	 Fall Protection	 Face Shield	 OTHER
When exposed to eye or face hazards from flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation...	When working in areas where there is a danger of foot injuries due to falling or rolling objects, or objects piercing the sole, or will protect the affected	When hands are exposed to hazards such as those from skin absorption of harmful substances; severe cuts or lacerations; severe abrasions; punctures; chemical burns	When exposed to a time weighted average noise level of 85 dBA or higher over an 8 hour work shift.	When exposure to: Intense heat, hot metals, other hot liquids Impacts from materials that can cut, burn Hazardous chemicals Or potentially infectious materials	Where there is a potential for injury to the head from falling objects and/or when there is a risk of impact to head	May be required if removal of contaminants from the air does not fall below permissible exposure level.	When there is a risk of falling from a height greater than 4ft GSO 6ft CSO 6ft MSO When working in confined space	Face shield can be used over the glasses if there is a presence of a lot of flying debris.	

KEY HAZARD SUMMARY		HAZARD CONTROLS & PROTECTION MEASURES

IF CONDITIONS CHANGE: STOP WORK IMMEDIATELY-REVIEW WITH SUPERVISOR-DOCUMENT HAZARD-REVIEW WITH SRM

SAFE OPERATING PROCEEDURES				
	STEPS/TASKS	HAZARD POTENTIAL		HAZARD CONTROLS & PROTECTION MEASURES
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

NOTES

IF CONDITIONS CHANGE: STOP WORK IMMEDIATELY-REVIEW WITH SUPERVISOR-DOCUMENT HAZARD-REVIEW WITH SRM

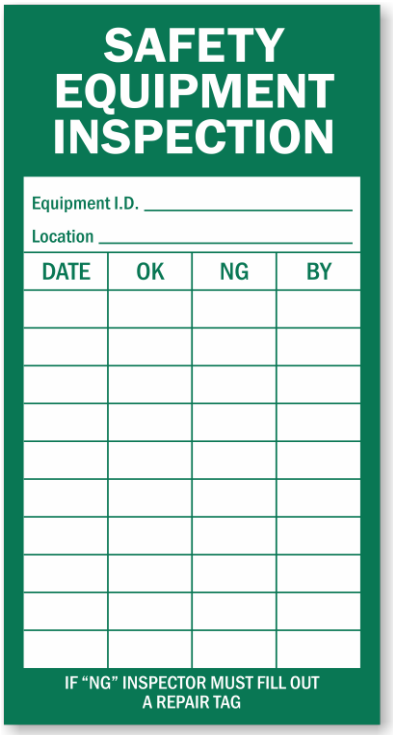
EMERGENCY RESPONSE			EVACAUTION ASSEMBLY POINT
1	First Aid Kit		
2	AED		
3	Emergency phone	Campus Police- 707-654-1111 or 911	

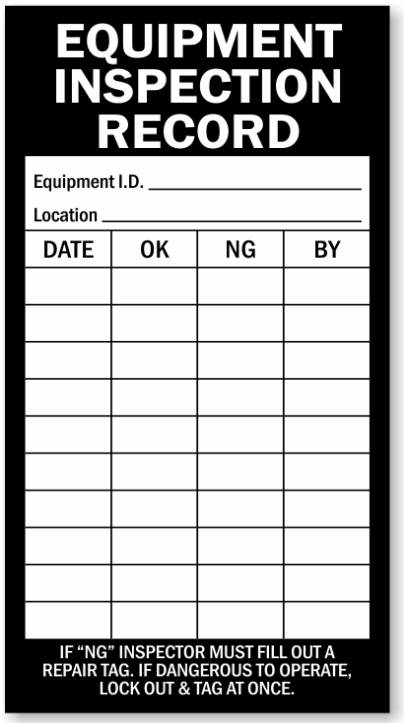
REMINDER: IMMEDIATELY REPORT ALL INCIDENTS, REGARDLESS OF SEVERITY, TO YOUR SUPERVISOR AND THE DEPARTMENT OF SAFETY & RISK MANAGEMENT.

HOUSEKEEPING & SECURITY		SHOP SUPERVISOR MUST BE PRESENT WHEN SHOP IS OCCUPIED
1	Is the work area/site Clean?	Ensure work area is clean daily and that any hazardous materials are properly disposed of daily
2	Is the work area/site Secure?	Ensure lights are turned off and building is locked upon exiting work for the day.
3		

Appendix C: Tool Inspection Sample Forms

Sample Tags





Labels and Color Coding

SAFETY ASSURED INSPECTION CODING		
MONTH	**MONTH TESTED**	**COLOR OF TAPE(S) TO APPLY TO CORD**
1	January	White
2	February	White + Yellow
3	March	White + Blue
4	April	Green
5	May	Green + Yellow
6	June	Green + Blue
7	July	Red
8	August	Red + Yellow
9	September	Red + Blue
10	October	Orange
11	November	Orange + Yellow
12	December	Orange + Blue
Repair/Damaged		Brown

Ladder Inspection Form

Provided by Werner Co.

Company Name: _____
Please Print

Ladder Reference Number: _____ Dept. _____

Inspector _____ Date. _____

☐ **Stepladder** Size _____ ft.

☐ Fiberglass ☐ Aluminum ☐ Wood

Circle Areas of Damage

		Yes	No
Steps:	Loose, Cracked, Bent or Missing	☐	☐
Rails:	Cracked, Bent, Split or Frayed	☐	☐
	Rail Shields	☐	☐
Labels:	Missing or Not Readable	☐	☐
Pail Shelf:	Loose, Bent, Missing or Broken	☐	☐
Top:	Cracked, Loose or Missing	☐	☐
Spreader:	Loose, Bent or Broken	☐	☐
General:	Rust, Corrosion or Loose	☐	☐
Other:	Bracing, Shoes, Rivets	☐	☐

Actions: ☐ Ladder tagged as damaged & removed from use
☐ Ladder is in good condition

☐ **Extension Ladder** Size _____ ft.

☐ Fiberglass ☐ Aluminum

Circle Areas of Damage

		Yes	No
Rungs:	Loose, Cracked, Bent or Missing	☐	☐
Rails:	Cracked, Bent, Split or Frayed	☐	☐
Labels:	Missing or Not Readable	☐	☐
Rung Locks:	Loose, Bent, Missing or Broken	☐	☐
Hardware:	Missing, Loose or Broken	☐	☐
Shoes:	Worn, Broken or Missing	☐	☐
Rope/Pulley:	Loose, Bent or Broken	☐	☐
Other:	Bracing Rivets	☐	☐
General:	Rust, Corrosion or Loose	☐	☐

Actions: ☐ Ladder tagged as damaged & removed from use
☐ Ladder is in good condition

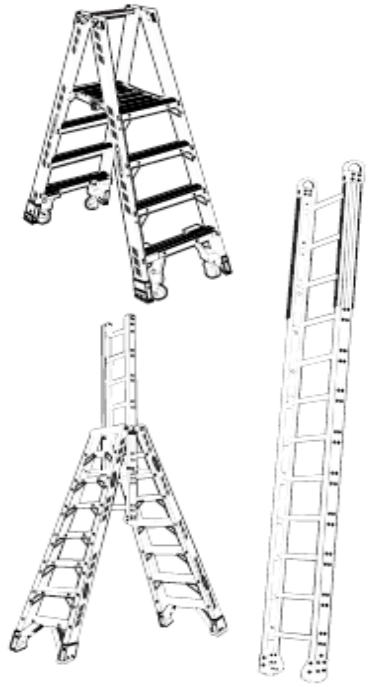
Ladder Inspection Form

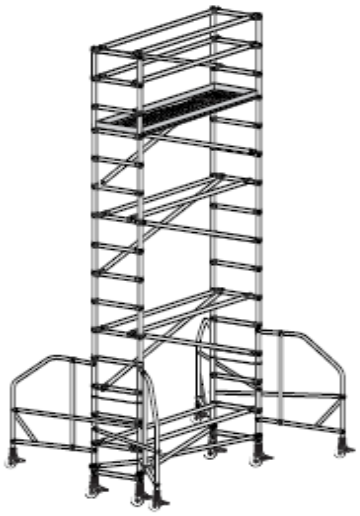
Provided by Werner Co.

☐ **Specialty Ladder**

☐ Fiberglass ☐ Aluminum ☐ Wood

Model Number: _____





Mark all that apply		Yes	No
Steps/Rungs:	Loose, Cracked Bent or Missing	☐	☐
Rails:	Cracked, Bent, Split or Frayed	☐	☐
Labels:	Missing or Not Readable	☐	☐
Hardware:	Missing, Loose or Broken	☐	☐
Fasteners:	Rust, Corrosion, Loose or Missing	☐	☐
Top:	Cracked, Loose, or Missing	☐	☐
Spreader:	Loose, Bent or Broken	☐	☐
Outriggers:	Missing, Rust, Corrosion or Loose for scaffolding	☐	☐
General:	Rust, Corrosion or Loose	☐	☐
Hinges:	Loose, Bent or Missing	☐	☐
Locks:	Loose, Bent, Broken or Missing	☐	☐
Bracing Front,Rear:	Loose, Bent, Broken or Missing	☐	☐
Rivets:	Rust, Corrosion, Loose, Missing	☐	☐
Shoes:	Worn, Broken or Missing	☐	☐
Platform:	Loose, Bent, Broken or Missing	☐	☐
Rail Shield:	Missing or Loose	☐	☐
Shoulder Bolt:	Rust, Corrosion or Loose	☐	☐
Casters:	Rust, Corrosion or Loose for scaffolding	☐	☐

Actions: ☐ Ladder tagged as damaged & removed from use

☐ Ladder is in good condition

Appendix D: Equipment Inventory

Equipment Inventory

Department **Instructions:** An initial inventory of Equipment owned/operated by each department must be conducted to identify all equipment impacted by this program. This must be done by physical inspection. At Cal Maritime this survey may be conducted by a responsible person in a department, the department's Designated Safety Coordinator (DSC) or their designee and documented on this form. Update this inventory list as equipment is purchased or retired from service, and at least annually

#	Type	Size	Make/Model	Manufacture Date	Serial Number/ID #	Location
EX.	A-Frame Portable	6-feet	Werner Fiberglass	2017		Facilities Shop
1						
2						
3						
4						
5						
6						
7						
8						
9						
7						
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16						
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19						
20						

Retain Original at Department Level & Submit Copy to Risk Management

Appendix E: Job Hazard Analysis Library

Document #	Document Title	Date	Comments
09-03001-001	Job Hazard Analysis Manual- Hand & Power Tools	TBD	New Document
09-03001-002			
09-03001-003			
09-03001-004			
09-03001-005			
09-03001-006			
09-03001-007			
09-03001-008			
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09-03001-046			
09-03001-047			
09-03001-048			
09-03001-049			
09-03001-050			

Appendix F: Emergency Response

To download and/or print poster refer to SRM website: Campus Emergency Poster , Campus Emergency Response Guide

CAL MARITIME

911

EMERGENCY PROCEDURES

Evacuation

- Do not use elevators, use nearest stairs and exit.
- Follow directions given by the building monitors or Campus Officials
- Go to designated evacuation point and do not return to building until instructed to do so.
- Assist persons with mobility needs.

Fire

- Evacuate the building and notify occupants as you leave.
- Do not return until authorized by emergency personnel
- Do not use elevators
- Fire Extinguisher Instructions if trained:
- P- Pull pin
- A- Aim at the base of fire
- S-Squeeze handle
- S-Sweep from side to side

Hazardous Spill

- For spills not involving immediate danger, that are confined; contain and notify the Department of Safety & Risk Management (SRM) at 707-654-1076.
- For uncontained spill, contact Cal Maritime Police Department & SRM
- If immediate hazard or emergency exists, dial 911.
- Move away or evacuate the area.

Medical

- For all medical emergencies dial 911
- Be ready to describe natures and severity of the medical emergency.
- Provide the Campus location.
- Keep the victim calm and comfortable.
- Provide basic first aid/CPR/AED if trained.
- Report all work related injuries immediately to: Department of Safety & Risk Management and to Human Resources

Earthquake

- Drop, Cover, Hold under a table or desk or against an interior wall until the shaking has stopped.
- After shaking has stopped check yourself and others for injuries.
- Evacuate the building.
- Move towards the safest location away from building, tree's, power lines.
- Follow the instruction of the building monitors or Campus officials and be prepared for aftershocks

Bomb Threat

- Report all threatening calls to Cal Maritime Police Department
- Ask Caller: When the bomb is going to explode.
- Where the bomb is located?
- What does the bomb look like?
- Why did you place the bomb?
- If suspicious object is found: Do not handle and dial 911 immediately

Shelter in Place

- Stay in building; close and lock doors and windows.
- Move away from windows
- Do not use elevators
- Remain in shelter area until emergency personnel announce that it is safe

Active Shooter

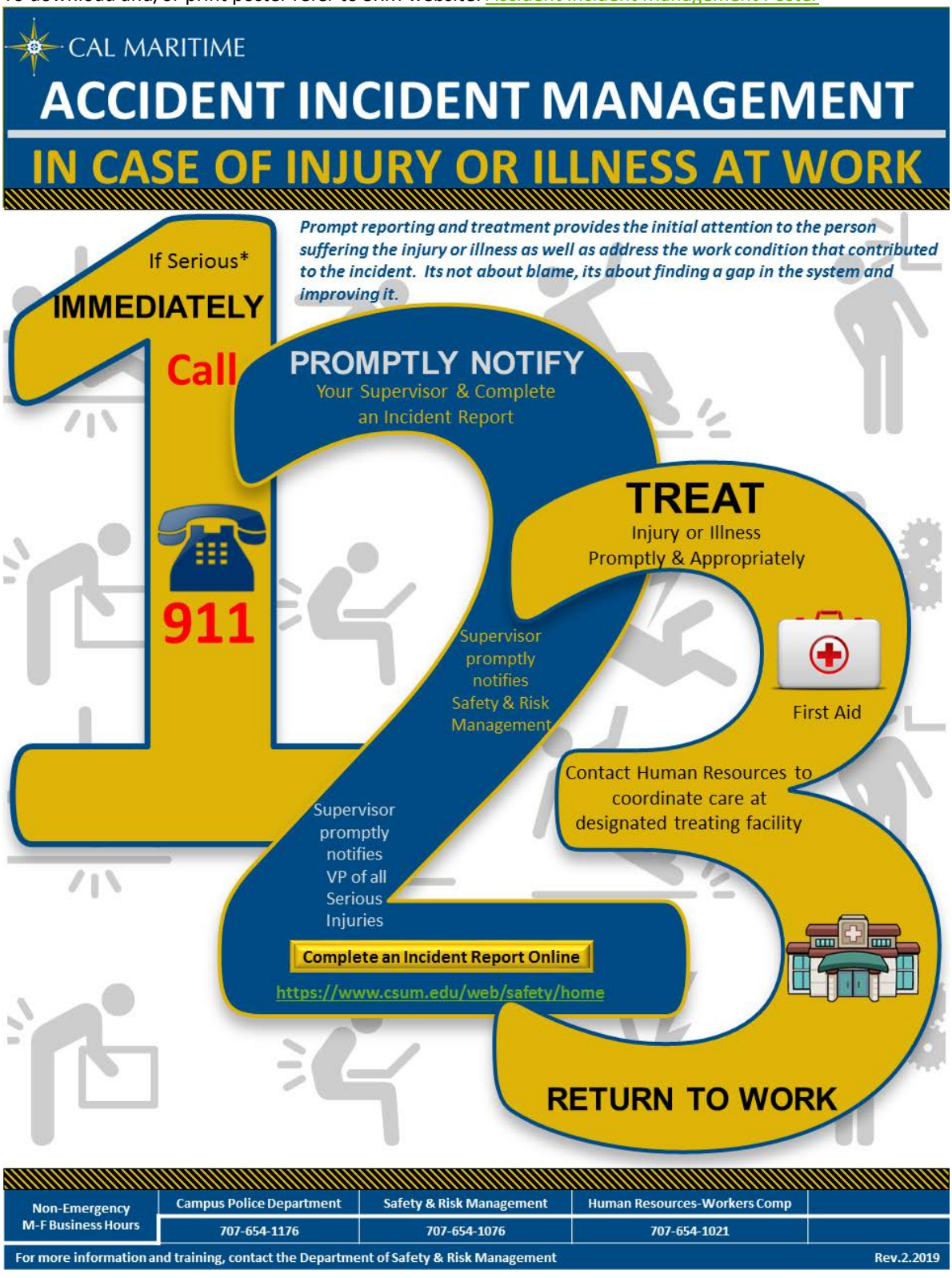
- **RUN**: leave your belongings behind. If there is an escape path attempt to evacuate. Help others if possible
- **HIDE:** If you cannot get out safely. Hide. Lock or barricade doors. Silence your cell phone and stay quiet.
- **FIGHT:** as a last resort, and if you life is in danger, you may attempt to incapacitate the shooter. Work in unison with others.

Non-Emergency M-F Business Hours	Campus Police Department	Safety & Risk Management	Facilities & Maintenance	Human Resources
	707-654-1176	707-654-1076	707-654-1120	707-654-1139

For more information and training, contact the Cal Maritime Police Department or the Department of Safety & Risk Management Rev.2019

Appendix G: Accident Incident Management

To download and/or print poster refer to SRM website: Accident Incident Management Poster



Appendix H: Training Log

TRAINING SIGN IN SHEET

Subject			**Date**	
Instructor Name				
Department				
Course Level	❑ Awareness	❑ Competent Person	❑ Certified Person	❑ Other
Frequency	❑ Initial	❑ Annual-Refresher	❑ Process Change	❑ Post Incident

The attendees listed have satisfactorily participated and been tested per Regulation/University training requirements.

	PRINT NAME	STATUS (Staff, Faculty, Student)	SIGNATURE
1			
2			
3			
4			
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Retain Original at Department Level & Submit Copy to Risk Management