INTRODUCTION

This Stepladder Safety Program is designed to ensure that employees have safe stepladders and the knowledge to inspect them, use them safely, maintain them, and manage them if they are compromised. Documents referenced in this program are available on the MIIA webpage.

FIVE RULES OF LADDER SAFETY[1]

RULE 1: Select the Right Ladder for The Job

- There are many types of ladders available, each intended for a specific purpose.
- Determine the height and weight capacity needed and select the ladder based on that need. Check the duty rating on the label of the ladder to determine its capacity.
- Check to see if the work involves possible contact with sources of electrical current, as an aluminum ladder is unsuitable.
- Choose the type with a greater load rating than your combined weight and any items you may carry on the ladder. See page 5 for instructions on determining the load of the ladder in conjunction with you and your tools.

RULE 2: Inspect the Ladder and Mitigate Ladder Conditions Before You Use It (See the program document *MIIA Ladder Safety Inspection Procedure* for instructions.)

- The frequency that OSHA requires you to inspect a ladder:
    - Before initial use in each work shift.
    - More frequently as necessary to identify any visible defects that could cause employee injury.
- Use the *MIIA Stepladder Safety Inspection Checklist* to inspect the ladder and document the inspection. See your supervisor if you need an inspection form for a different type of ladder.
- If the ladder has any defect, it must be repaired or replaced. **Never** use a defective ladder. See the *MIIA Ladder Safety Inspection Procedure* for *Follow-Up to Inspection Results* for guidelines on attaching tags to damaged ladders, removing ladders from service for repair or disposal, and notifying your supervisor.

[1] Sources: Duke University, *Five Rules for Ladder Safety*, and New Mexico State University, *Basic Rules of Ladder Safety,*

RULE 3: Set Up the Ladder with Care

- No matter how safe the ladder is, it poses a risk if placed in a dangerous location.
- Avoid positioning the ladder in front of a door whenever possible. If you must locate it in front of a door, lock or block any nearby door that opens toward you. Use a barricade around the ladder or work area to keep any traffic away from it and from going under it.
- Check to be sure the area around the base is uncluttered. Clear away any debris.
- Set the ladder on a solid, level surface free from slippery substances.
- Open stepladders fully, with the base one foot away from the wall or other vertical surface for every four feet of height to the point of support. Ensure spreaders or other locking devices are in place.
- Weigh your supplies and equipment to ensure you do not exceed the duty rating.

RULE 4: Climb and Descend Ladders Cautiously

- Carry small tools in a tool belt (not too heavy to throw off balance), or raise and lower tools and supplies with a hand line or hoist, or have someone hand them to you.
- Always face the front of the ladder and use both hands to climb and descend using the ladder rungs (not rails).
- Always keep three limbs (points of contact) on the ladder: two hands and one foot or one hand and two feet.

RULE 5: Use Common Sense When Working on A Ladder

- Use the ladder as designed.
- Allow only one person on the ladder at a time.
- Keep your belt buckle (center of your body) between the side rails to maintain stability and prevent reaching too far to either side or the rear.
- Be careful to keep your balance by **not** overreaching, pulling, leaning, stretching, or making sudden moves while on the ladder.
- Climb no higher than the second step from the top cap. The top step and cap of the ladder are **not** designed to be stepped on.
- Only reposition the ladder when you are **not** on it.

SELECTION AND USE

Note: The following information applies to all types of ladders.

How do I determine the amount of weight my ladder can support?
Check the ladder's duty rating.

What is a duty rating? It indicates the maximum weight capacity a ladder can safely carry. Safety standards require a Duty Rating sticker on the side of every ladder.

Where can I find the ladder's duty rating? It is on the specifications label on the side of the ladder.

What categories of Ladder Duty Ratings are there? There are five:

Type l (includes three types): these are most widely used for professional services by contractors, public utilities, and construction workers. Regardless of the material construction of the ladder, Type 1 ladders are built in lengths from 3 to 20 feet. This rating is broken down into three subcategories:

- Type 1 step ladders are built for occupant loads up to 250 lbs.
- Type 1A step ladders are built for occupant loads up to 300 lbs.
- Type 1AA step ladders are built for occupant loads up to 375 lbs.

Type II: Type 11 ladders are also 3 to 20 feet long and are used by workers in more commercial applications, such as painters, maintenance workers, and electricians. They can hold a maximum weight of 225 lbs. Type II ladders are manufactured in wood, fiberglass, and aluminum and are commonly used for medium-duty use.

Type III: Type III ladders are typically household ladders. They can only handle a load capacity of 200 lbs. and are primarily used for light-duty use. They are usually manufactured in lengths between 3 and 6 feet.

Summary of duty ratings and load capacities:

TYPE:	TYPE IAA	TYPE IA	TYPE I	TYPE II	TYPE III
LOAD CAPACITY:	375 pounds	300 pounds	250 pounds	225 pounds	200 pounds
RELATED USE:	Special Duty Professional Use	Extra Heavy Duty Industrial Use	Heavy Duty Industrial Use	Medium Duty Commercial Use	Light Duty Household Use
					

DUTY RATINGS, CONTINUED

Note: The following information applies to all types of ladders.

How do I determine the total amount of weight my ladder will support?

Add your weight, plus:

- the weight of your clothing and protective equipment, plus
- the weight of tools and supplies you are carrying, plus
- the weight of tools and supplies stored on the ladder.

Will a taller ladder carry more weight? Do not assume that a longer ladder has a higher weight capacity. There is no relationship between ladder length and weight capacity.

MAINTENANCE

How do I maintain ladders?

- Thoroughly inspect the ladder (see the section below for details) using the *MIIA Stepladder Safety—Inspection Checklist* forms on what to look for (e.g., working parts, bolts, rivets, step-to-side rail connections, condition of the anti-slip feet, etc.).
- Clean the climbing and gripping surfaces if they have slippery materials on them, such as oil or grease.
- Be aware of the following conditions to determine if it needs to be taken out of service:
    - Ladders exposed to excessive heat, as in the case of fire, may have reduced strength.
    - Ladders exposed to corrosive substances may experience chemical corrosion and a resulting reduction in strength.
    - Ladders sustaining physical damage or impacts.

How do I properly store the ladder when not in use?

- Ensure storage racks have enough supporting points to avoid sagging (which can result in warping the ladder).
- Ensure other materials are **not** placed on the ladder while it is in storage.