

# Ladder **SAFETY** & Innovation



**Little  
Giant<sup>®</sup>**  
**Ladder Systems**

**CLIMB ON**

# Ladder Safety 101

# By the Numbers

## All Falls

- US DOL – Falls are the leading cause of Occupational Death
- 35% of Total Deaths in Construction
- Typically 700-800 fall fatalities a year.

## Falls off of Ladders

- 2,000 – number of people that go to the hospital **every day** due to a ladder related incident
- 100 – number of workers that are long term or permanently disabled **every day** from ladder related incident
- 1 – number of people that die **every day** from a ladder related accident
- 724,000 ladder related injuries per year
- 350 fatalities per year

# Types of ladder



**Step Ladder**



**Multi-purpose**



**Extension Ladder**

# Material & Rating



**Wood**



**Aluminum**



**Fiberglass**



Light Duty  
Household  
use  
Type III



Medium Duty  
Painter &  
Handyman  
Type II



Heavy  
Duty  
Industrial  
Type I



Extra Heavy  
Duty  
Industrial  
Type IA



Special Duty  
Rugged  
Professional  
Type IAA



*American National Standards Institute*

**How much \$ to change a light bulb?**





# **#1 – Choose The Right Ladder for the Job.**



# Ladder Safety 101 Step Ladder

Reference OSHA 1910.1053, OSHA 1926.1053 ANS  
and American Ladder Institute

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- Inspect before each use; tag out damaged ladders
- Must be used on level surface.
- Never stand on the top rung or top cap of a step ladder
- Never lean a step ladder against a structure and use as an extension ladder – Use a 90 degree ladder instead
- Do not set up in front of closed doors or in high traffic areas without taking proper measures
- Face the ladder when moving up or down
- Three Points of Contact
- When carrying a ladder, the front end is higher than the back end.
- Middle of the body stays between the side rails.



What do you  
see in the  
real world?





# Ladder Safety 101 Extension Ladders

Reference OSHA 1910.1053, OSHA 1926.1053 ANSI A14.1, A14.2-1982  
and American Ladder Institute

- Do not over reach!
- Never step on the top three rungs.
- Ladder must extend three feet over roof in order to access.
- Inspect before each use; tag out damaged ladders
- Maintain a 75.5 degree angle for Extension ladders or 1 foot out from wall for every 4 feet of working height
- Do not set up in front of closed doors or in high traffic areas without taking proper measures
- Set up on level ground, use leg levelers
- Face the ladder when moving up or down – “three points of contact”
- When carrying a ladder, the front end is higher than the back end.
- Middle of the body stays between the side rails.



What do you  
see in the  
real world?



**AND THIS IS WHY WOMEN  
LIVE LONGER THAN MEN**



more awesome pictures at [THEMETAPICTURE.COM](http://THEMETAPICTURE.COM)  
**GOOGLE LIFT**













# MEMORIZE THIS - Every Presentation of Every Ladder Starts with this: 3 major causes of Ladder Accidents



**1. Strains and sprains** from handling heavy ladders- Most common injury, less serious but most expensive



**2. Using the wrong ladder** for the job – More serious



**3. Falls due to overreaching –** Most serious accidents leading to permanent disability or death

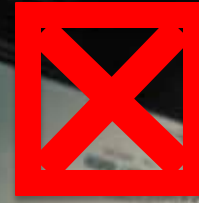
## 2. Using the Wrong Ladder



### Examples

- Standing on the top of 6 ft. Step Ladder vs. using an 8 ft. (Using the wrong size ladder).
- Using a Step ladder as an extension ladder

### 3. Over



Falls due to  
overreaching –

- Most serious accidents leading to permanent disability or death





1. **Preventing Strains and Sprains** - Our Select Step ladder has wheels to make moving them around the facility easier.
2. **Using the Wrong Ladder** – The three sizes of step ladders that are used most often are 6', 8', and 10' models. The Select Step is 6', 7', 8', 9', and 10' all in one model.
3. **Overreaching** – With a standard step ladder, the higher you get the further you get away from your work. The Select Step can be used in a 90 degree position which allows you to face your work and keep your belt buckle between the rails.















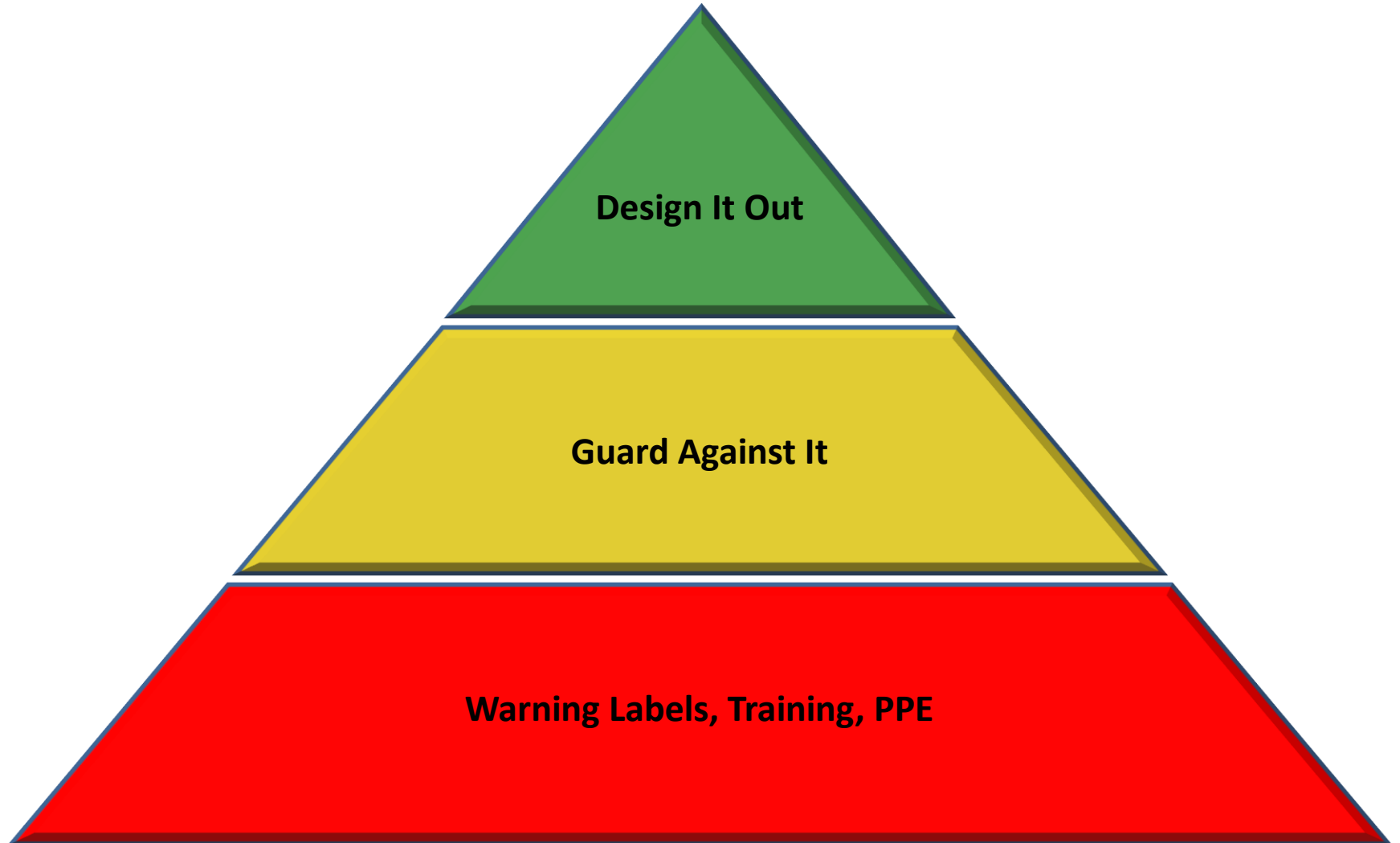




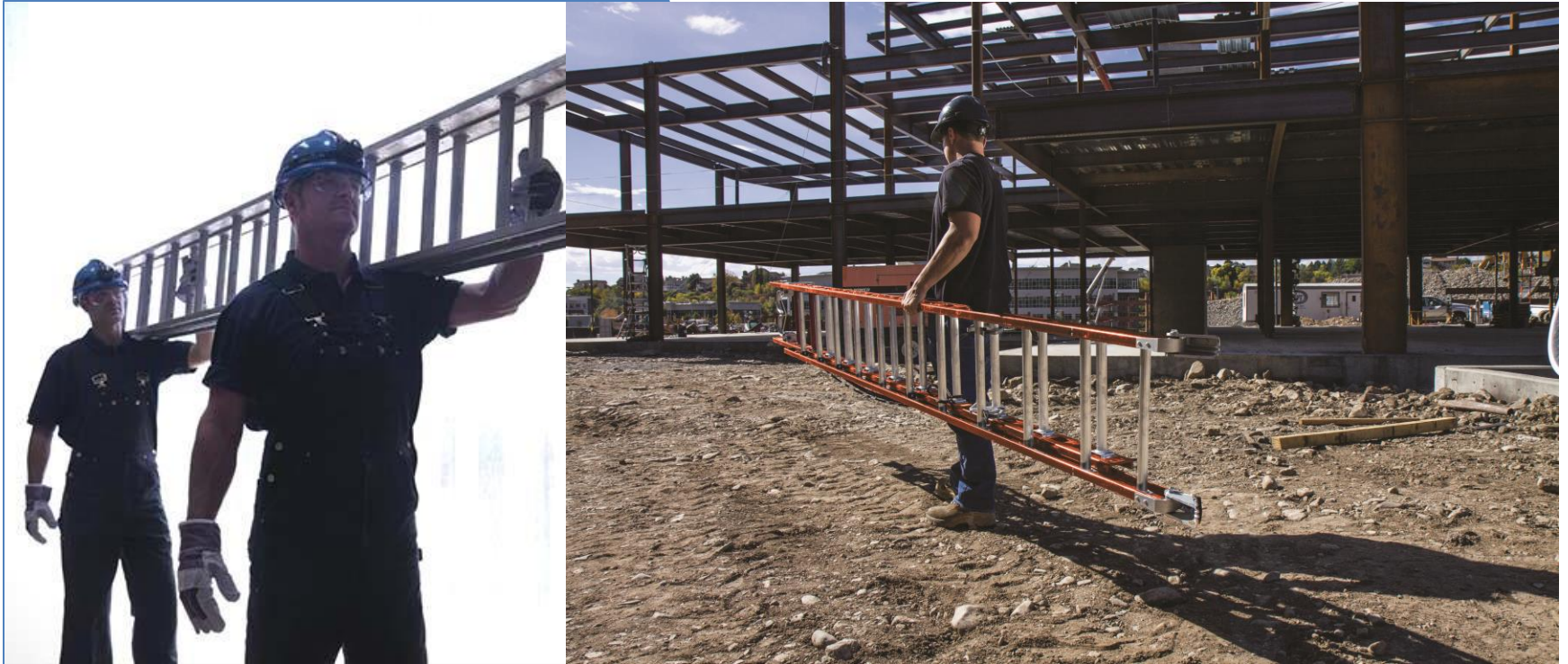
# GRANDPA'S LADDER



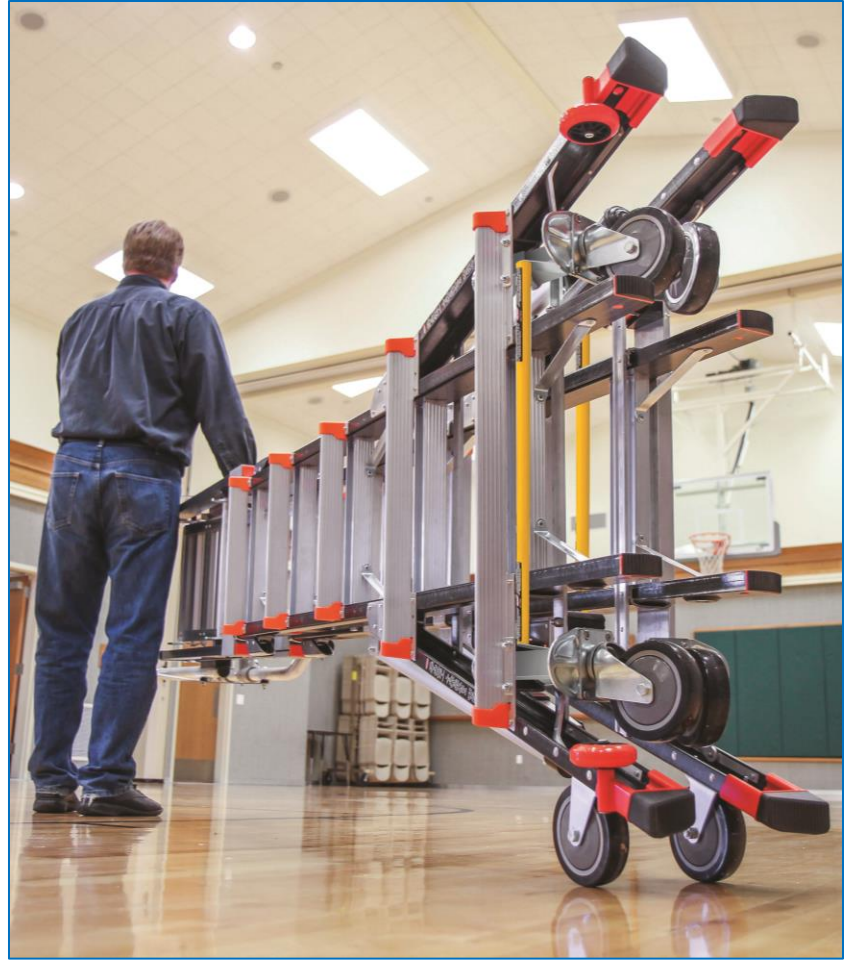
# Hierarchy of Control



# Problem #1









# Problem #2

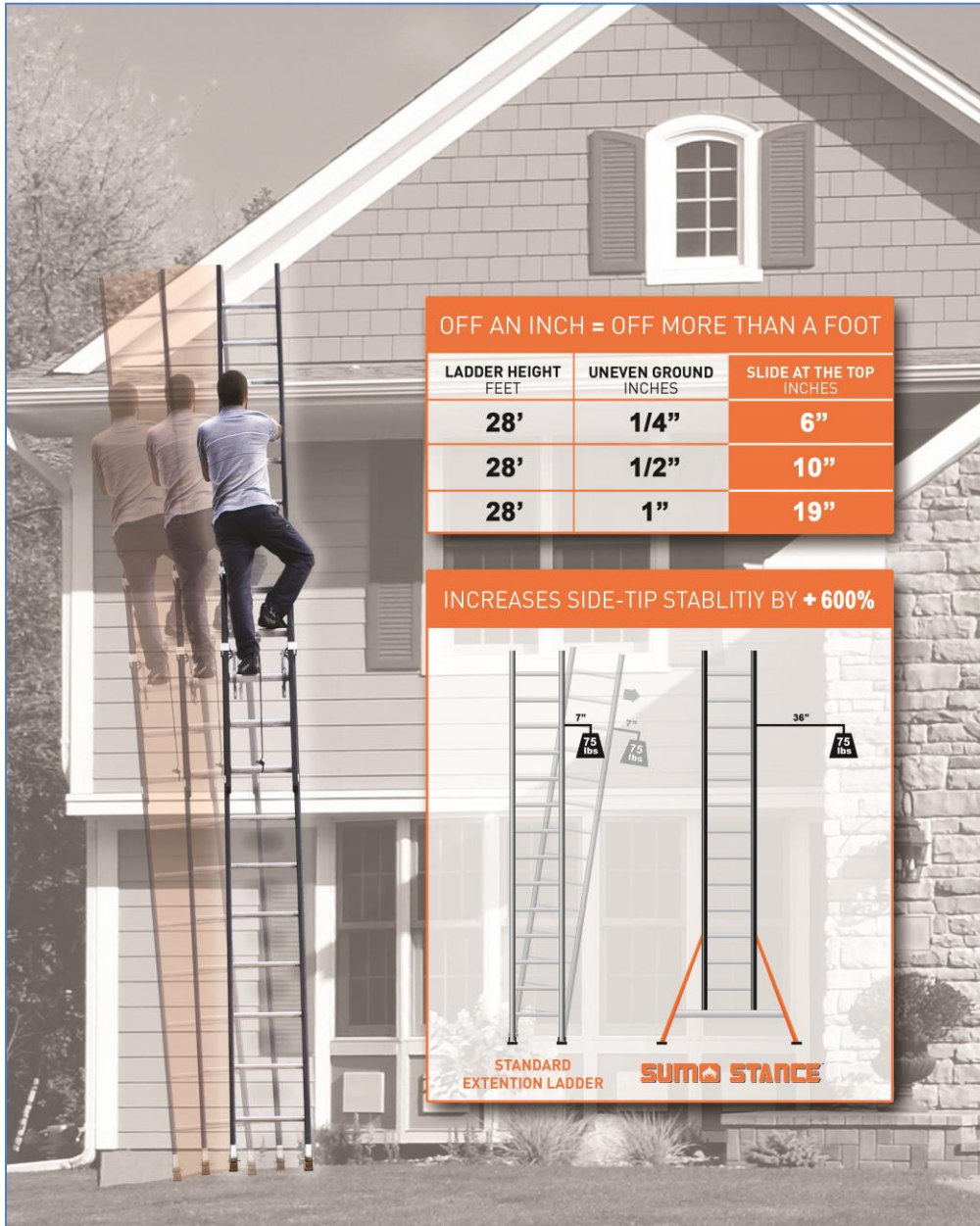






# Problem #3

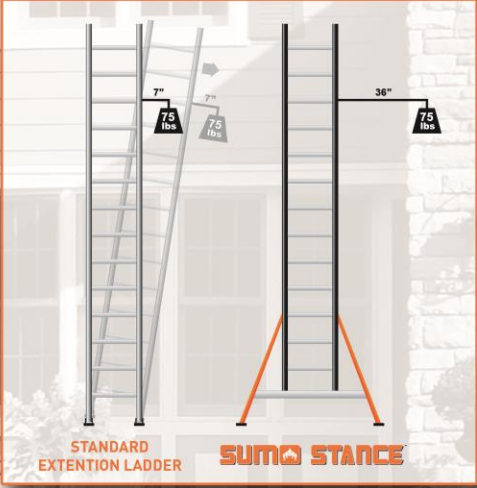




OFF AN INCH = OFF MORE THAN A FOOT

LADDER HEIGHT FEET	UNEVEN GROUND INCHES	SLIDE AT THE TOP INCHES
28'	1/4"	6"
28'	1/2"	10"
28'	1"	19"

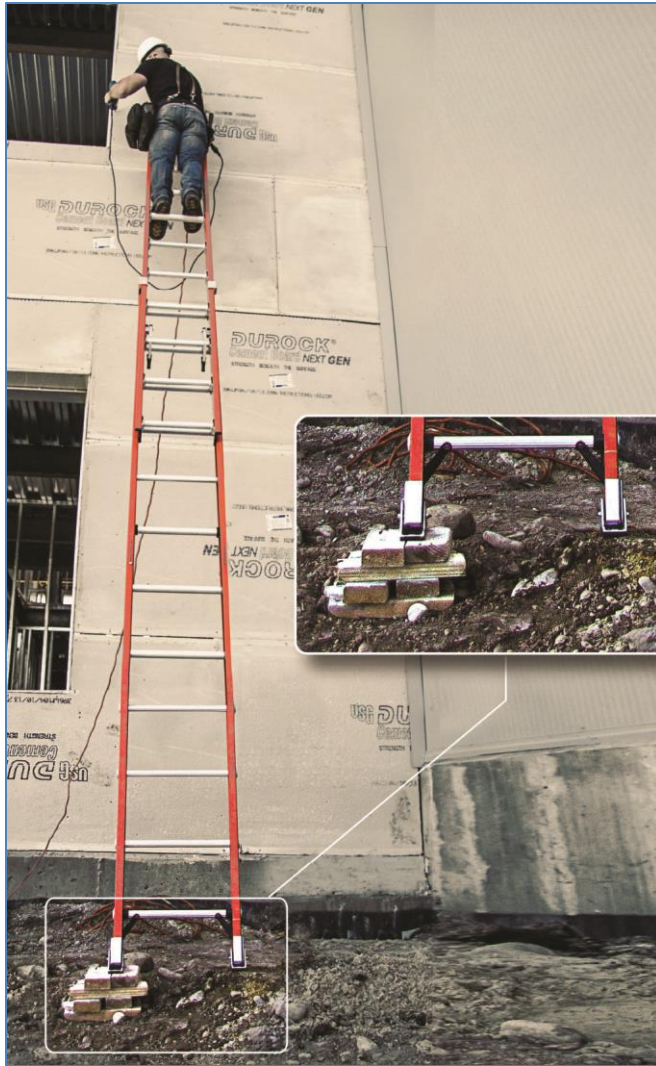
INCREASES SIDE-TIP STABILITY BY +600%



STANDARD  
EXTENSION LADDER

SUMOSTANCE







### Other Safety Features:

1. What does the top step of a standard step ladder do?  
It's a sticker holder.



2. Air Deck – 3 Point of Contact







How could this worker do this job without the cage?

- No harness
- Both Hands Available
- No Aerial Lift
- No Scaffolding













**PREVENTING INJURIES,  
SAVING LIVES™**





**Thank you!**