LADDERS

LADDER RATINGS

The American National Standards Institute (ANSI) adopted and issued a code of safety requirements for portable ladders. The code, last revised in 1982, sets out the properties and design specifications for wood (A14.1), metal (A14.2) and reinforced plastic (A14.5) ladders. Completed ladders must also be capable of passing a variety of test requirements as set out in the code.

ANSI TYPE *	DUTY RATING **	DESCRIPTION
TYPE 1A	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

* OSHA essentially follows the guidelines set by ANSI. Therefore, industrial users should purchase and properly use Type 1A and Type 1 ladders to be in compliance with OSHA regulations. Type II and Type III are NOT permitted on the job site.

** The Duty Rating means that the ladder is designed to meet these loads with a safety factor of four (4) when set and used properly at 75-1/2° to the horizontal.

LADDER SELECTION

Select the highest duty rating necessary to cover the total amount of the weight that will be applied to the ladder. Safety Equip-



LADDER MATERIALS =

MATERIAL	ADVANTAGES	DISADVANTAGES
WOOD	Low initial cost. Non-conductive. Good strength- to- weight ratio	Heavier and less durable than aluminium or fiberglass.
ALUMINUM	High durability. Weather resistant. Very high strength- to- weight ratio. Light weight.	Highly conductive. Corrodes in some environments.
FIBERGLASS	High durability. Non-conductive. High strength- to -weight ratio. Weath- er resistant.	Higher initial cost. Can be damaged by heat.
LADDER COMPONENTS		LADDER TYPES
PULLEY FLY SECTION		SINGLE STEPLADDER- Has steps on one side and is a self supporting climbing tool for applications at low to medium heights. 3' to 16'. DOUBLE FRONT STEPLADDER - Has steps on both sides and is a self supporting climbing tool for low to medium heights. 3' to 16'.
SIDE RAIL	STEP LOCKING SPREADERS	PLATFORM STEPLADDER - Provides a large platform to work on and is self supporting. TRESTLE LADDERS - May be used alone or with a second trestle ladder to support planking systems. Up to 16'. STRAIGHT LADDERS - A non self supporting
RUNG LOCK	REAR FOOT	single straight ladder section used for mid -range heights. 8' to 20'. EXTENSION LADDERS - A non self support- ing adjustable ladder for mid-range to high work levels. 8' to 40'.
SHOE	FRONT FOOT	For further Information check with your ladder manufacturer or refer to ANSI A14 for additional guidelines.

LADDER SAFETY

 DO inspect your ladder carefullywhen you buy it and before each use. Look for missing, damaged or loose parts. DO make sure that working parts move freely and that there are no missing nuts, bolts, rivets or locks. DO follow label instructions. Start by carefully reading all labels. These instructions are gathered from years of experience and they are offered for your benefit. DO be sure that the ladder feet are on solid ground. DO wear shoes that have soles that do not slip. Make sure they are free of mud, oil, or anything slippery. DO check for frayed or damaged cords when using power tools. Use only cords with grounded outlets. DO climb facing the ladder. Center your body on the steps. Use a firm grip. If possible, have someone hold the ladder for you. DO keep your body centered on the ladder while working. DO hold the ladder with one hand while working with the other, whenever possible. DO keep children away from ladders while working. DO use a ladder only when you are mentally and physically alert. DO scurley tie down the ladder when transporting it on a vehicle. DO store ladders out of reach of children. DO keep ladders protected from excessive heat and the weather. 	 back to the factory for repairs or replace it. DON'T test a ladder by jumping on it. This could damage or weaken the ladder, and you may slip or fall. DON'T use on slippery surfaces or uneven ground. DON'T set up a ladder where it could possibly touch electrical devices or wires. DON'T set up a ladder on a wet or icy surface unless you tie down the legs. DON'T climb down a ladder with your back to the ladder, or carry a load in your arms. DON'T over-reach, lean to one side or stand on one foot. DON'T try to move a ladder while on it by bouncing "walking" the ladder. DON'T position the ladder where it blocks foot traffic or where it could be bumped by a door. DON'T place a ladder on boxes, chairs, furniture, or other things which are movable to try to climb higher. DON'T climb a damaged ladder. DON'T climb a ladder when ill or physically alert. DON'T use a ladder as a pry bar. DON'T use a ladder as a work bench. Hammering, sawing 	
	caustics or other strong chemicals.	
KNOW WHERE THE LAST STEP IS	HOW TO CHOOSE THE RIGHT SIZE	
4TH RUNG FROM THE TOP	HEIGHT TO USE THIS MAX WORKING <u>SUPPORT POINT</u> <u>LENGTH LADDER</u> <u>LENGTH</u> to 9-1/2' Max. 16' 13' From 13-1/2" to 17-1/2' 24' 21'	
	From 21-1/2' to 25' 32' 29'	
	From 28' to 31' 40' 35'	
LEVEL	THE PROPER WAY TO SET UP A LADDER	
	HEIGHT TOHORIZONTAL DISTANCEGUTTER ORFROM SUPPORT TO LADDERSUPPORTBASE9-1/2'2-1/2'	
	13-1/2' 3-1/2' 17-1/2' 4-1/2'	
	21-1/2' 5-1/2'	
	25' 6-1/2'	
- 19	28' 7'	

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28'

31'

7'

8'