

**POWER-SAFE**

**Ladders**

**Reach the Height**



**FIBRE CRAFT INDUSTRIES**



## A Prelude

FIBRE CRAFT INDUSTRIES has a glorious past, studded with remarkable achievements. Today, it is one of the leading companies with a strong share of fiberglass market at home & abroad. The term composite refers to a combination of different materials into a unique new entity. Fiber glass reinforced plastic (FRP/GRP) is a man made composite of glass fibers and resins. In Fiberglass Composites, plastic is a binder just like cement in concrete. Fiberglass composites are stronger and durable than steel offering following salient features.

- Electrically Insulated**
- Attractive Colors**
- Complete Utility**
- Life Protection**
- Elegant Designs**
- Rust Resistant**
- Comfort & Style**
- Excellent Quality**
- Easily Portable**
- Optimum Safety**
- Environment Friendly**
- Long Lasting**

FIBRE CRAFT INDUSTRIES have state of the art production facilities, catering to the most demanding customers' requirements. There are different techniques and equipment for FRP fabrication. In house Pultruded Fiberglass Profiles are used for assembling different type of Fiberglass Ladders.

## MISSION STATEMENT

FIBRE CRAFT INDUSTRIES believes that Constant Rich Research is the key to brilliance, success & peak performance. Naturally, it is Our Mission to remain in Relentless Quest for Excellence. In fact, this Zeal and Spirit keep us in the lead and remain in the fast lane with companies from top slot !!

## POWER-SAFE

### Ladders

#### Reach the Height

Since man evaluated modern means of life centuries ago, he established tools of comforts to enjoy safe living on earth. With the passage of time his desires and needs increased, thus resources expanded and every day activities jumped from land to the heights of sky. To raise himself from ground level to upwards one of the simplest tool since centuries is Ladder. The oldest ladders may have been built from wooden members or something else. But at present, there are countless materials used for its' fabrication. Similarly types and designs of ladders are countless. For every new requirement or activity, a new design or a new type of material is available to fabricate ladders catering to the ultimate safety requirements of it's end user.

When electric power became an obedient servant for the comfort of human life, metallic ladders became life hazards. Wooden ladders do have good electrical insulation properties but in rainy season and high humidity areas, their ability to

absorb moisture does not favour electrical insulation requirement.

Wood is very porous by nature, which is not true of fiberglass reinforced plastic (FRP or GRP). Since there is a bond between the reinforcement and polymer system, FRP can absorb some moisture but it will never absorb as

much as wood. That very small amount of moisture is absorbed by FRP by a wicking action at the surface through exposed fibers or at either of the end rails. This moisture will reduce its electrical insulation to some extent in case of micro measurement but not to that extent that is dangerous for human life. This moisture never reduces its mechanical properties. Moisture absorption is not visible in FRP and electrical insulation test DC voltage can confirm its presence. In case of some confirmation or confusion that a FRP ladder has absorbed considerable moisture,

it should be placed either in a recirculating heating chamber at 50 C -75 C for 4 to 8 hours or left in sunshine for 3 to 4 days. Let it remain outdoors in sunny conditions. Following this the ladder should be recoated with some good quality polyurethane paint. Acrylic modified clear polyurethane lacquer has also very good compatibility with fiberglass. Either PU paint is applied or clear lacquer, it should be ultraviolet (UV) stabilized.

There are numerous brands of polyurethane coatings available in the market.



A Frame Heavy Duty Ladder AH-6



A Frame Medium Duty Ladder AM-6



THE FIBER GLASS PEOPLE

## POWER-SAFE

### Ladders

Reach the Height

This is a Unique Product of Fiberglass, offering a Premium Quality, Highly Reliable Combination of Safety & Service over the years. The Salient / Exclusive features associated with the product are:

- **Electrically Insulated**
  - **Light Weight**
  - **Rust Proof**
  - **Long Life**
  - **Easy Storage**
  - **Durable**
  - **Weather Proof**
  - **Environmental Friendly**
  - **Easy to handle**
  - **Portable**
- *These Varsatile Ladders are available in Sizes of : 3 ft , 4 ft , 6 ft , & 8 ft upto 16 ft as A-frame from 16 ft up to 70 ft as Extendable Ladder.*

## Quality Assurance

FIBRE CRAFT INDUSTRIES also fabricates a lot of electrical insulating materials like Hot sticks, Disconnecting rods, Bushings etc., For domestic and commercial use, a complete high voltage testing laboratory provides facility up to 1,20,000 volts at the moment.

Mechanical Testing Equipment plus a fully computerized testing setup is available for complete simulation in use testing of all sorts of ladders. Aging test of ladders & hot stick is performed on state of the art equipment. Each ladder is tested under strict supervision of qualified engineers at 90,000 volts for each feet for it's electrical insulation. Similarly Mechanical Testing and Qualification tests are performed as per ANS standards for Ladders of each design. Our EXT-32 & EXT-48 Ladders are pre-qualified by WAPDA as per applicable standards.



A Frame  
Both Side Step  
Heavy Ladder

## Quality Policy

" At FIBRE CRAFT INDUSTRIES, we are committed to provide products that qualify national and international standards in addition to performing as per customers' satisfaction.



## LADDER SAFETY STANDARDS

Ladders are designed and built to meet or exceed the application standards and requirements of the American National Standards Institute (ANSI) AND Occupational Safety & Health Administration (OSHA).

The applicable ANSI Codes for Fiberglass ladder are ANSI A14.5. In addition, ANSI Codes have established a Duty Rating to identify the use of a portable ladder in safe conditions. The listed table describes the various types of ladders.

TYPE I	TYPE 1A	TYPE 1AA	TYPE II	TYPE III
Heavy Duty Industrial Capable Of Supporting 250 lbs	Extra Heavy Duty Industrial Capable Of Supporting 300 lbs	Extra Heavy Duty Industrial Capable Of Supporting 375 lbs	Medium Duty Comm. Capable Of Supporting 225 lbs	Light Duty Household Capable Of Supporting 200 lbs

An extensive series of tests and designing requirements determines the Duty Rating for a particular ladder to be labeled with. The total load supported includes the combined weight of the user, clothing, tools and any other material on the ladder. The tests' requirements have been specified with a Safety Factor of Four \* to ensure the ability to meet the Duty Rating. However, ladders must be used properly in order to support the intended load.

It must be kept in mind that even a rigidly constructed ladder can be involved in an accident / mishap if proper caution is not applied. Critical factors in safe use include reading all instructions and labels accompanying the ladder. Such precautionary measures help to avoid accidents and also ensure safety!



### DIFFERENT SERIES OF LADDERS IN REGULAR PRODUCTION

<b>EXT</b>	Extendable Heavy Duty Ladder	length Upto 70 feet
<b>AL</b>	A frame Light Duty Ladder	length Upto 12 feet
<b>AM</b>	A frame Medium Duty Ladder	length Upto 12 feet
<b>AH</b>	A frame Heavy Duty Ladder	length Upto 16 feet
<b>APL</b>	A frame Platform Light Duty Type	length Upto 12 feet
<b>APM</b>	A frame Platform Medium Duty Type	length Upto 12 feet
<b>APH</b>	A frame Platform Heavy Duty Type	length Upto 16 feet
<b>ASH</b>	A frame Heavy Duty ladder both side step	length Upto 16 feet
<b>HL</b>	Hook Ladder Heavy Duty Type	length Upto 40 feet
<b>SWL</b>	Ladder with extension ladder	length Upto 24 feet
<b>ML</b>	Monkey/ Hoop Ladder (industrial utility)	Unlimited in Segments
<b>CFRPL</b>	(used inside/outside the water, chemical & Crude Oil storage Tanks.)	Unlimited in Segments
<b>SL</b>	Straight Ladder	



### DIFFERENT VERSIONS OF LADDERS

**FIBRE CRAFT INDUSTRIES** ladders in standard (STD) version are fabricated in yellow color of FRP profile & all metal parts in their respective natural colors. To meet the requirement of color and shade conscious people, deluxe (DLX) and deluxe extra (DLX-EX) are fabricated on special order. DLX, Deluxe version of ladders have been powder coated in matching color metallic parts. It's price is slightly on higher side as compared to standard (STD) version.

**Delux-Extra (DLX-EX.)** This version is with extreme beauty. All metallic parts of ladder are powder coated and matching colored. FRP side rails of ladder are re coated in matching PU paint for extra beauty in same matching color.

**Key to Nomenclature:** Prefix alphabets describe series and type of ladder, and then digits indicate length of ladder after words alphabets describe version of ladder e.g. EXT 32 DLX type 1 A indicates 32 feet extendable ladder of type heavy duty to take load 300 lbs and deluxe version that means rungs/steps are powder coated in same color as its' FRP channel.

**Note:** **FIBRE CRAFT INDUSTRIES** facilitates its' customers to meet their specific requirements, specially in industry. Its in-house Design & Development Division associates with end users to design and develop specialized ladders as per site requirement. **FIBRE CRAFT INDUSTRIES** fabricate Specialized Ladders for highly corrosive areas, as well.

**\*Reaching New Landmarks on Road to Success...**

The never ending success Story of **FIBRE CRAFT INDUSTRIES** stretches the country, Offering Superb Quality FCI Products to serve different segments of life.

Some of the FCI Products include:

- Domes & Buildings
- Window & Shutters for Railway Carriages
- Industrial (CPI) Fiberglass Tanks
- Lab Tops & Storage Shelves
- Fiber Glass Sheets & Skylights
- Bathroom Doors & Domestic Gates
- Switchgear Parts, Spouts & Bushings
- Cooling Towers, Ducts & Flue Gas Chimneys
- Garden & Street Lights / Poles / Covers / Assembly (Electrical)
- Rowing Boats, Oars, Canoes, Swimming Pools, & Accessories
- Sport Kits, Helmets, Hockey Sticks etc
- Publicity Material / Panels etc
- Polymer Concrete Electrical Junction Boxes etc;
- Mining Treatment Tanks



**A view of SL  
( Straight Ladder)**



**Hook Ladder**



**Extendable  
Heavy Duty  
Ladder  
EXT-32**

# POWER-SAFE Ladders

Reach the Height

- TESTED AT 90,000 VOLTS
- SHOCK PROOF & LIFE SAVING
- FABRICATED AS PER ASTM / OSHA GUIDELINES
- DESIGN APPROVED BY PEPCO ( WAPDA ) MANY THOUSAND LADDERS ARE IN USE WITH PEPCO
- ENVIRONMENT FRIENDLY
- LIGHT WEIGHT AND EASY HANDLING



A Frame  
Light Duty Ladder  
AL-4



A Frame  
Both Side Step  
Heavy Duty Ladder  
ABH-8



A Frame  
Platform Heavy  
Ladder



Monkey Ladder



Customized  
Ladder  
(Safety Work Station)



A Frame Platform  
Medium Duty Ladder  
APM-7



Complete FRP  
( for inside & outer use of  
water storage )



## FIBRE CRAFT INDUSTRIES

Canal Bank, Hanif Park, Harbanspura,  
Lahore-Pakistan

Tel: (92-42) 36544813, 36544840

Fax: (92-42) 36544795

Web Site: [www.fcicomposites.com](http://www.fcicomposites.com)

E-mail : [info@fcicomposites.com](mailto:info@fcicomposites.com)

### Important:

1. Our Specs and designs are subject to change without notice.
2. Information provided is based on our test data and it is correct to the extent of our experience and knowledge but without any legal responsibility.



Straight Ladder  
Heavy Duty

