



An Eco-friendly  
manufacturing technique

**RELX**  
COMPOSITES

PULTRUDED  
COMPOSITE PRODUCTS

## INTRODUCTION

Reliance Composite Solutions, a leader in the field of composites in India, provides high-quality engineered advanced composite solutions under the brand RelX™. We manufacture glass reinforced polymer (GRP) and other fibre reinforced polymer (FRP) composites for applications across a wide range of market segments such as Mass Transport, Infrastructure, Industrial, Telecommunications & Power Transmission and Renewable Energy. Our operations include design, manufacturing, commissioning and executing state-of-the-art, tailor-made composite solutions.

Our composites are made at one of the world's most integrated production sites in Vadodara, Gujarat. This allows us to become a one-stop shop for all advanced composite materials needs across the value chain.

RelX™ composite materials encourage infinite possibilities of creation. They are strong, lightweight, resistant to corrosion, resistant to flammability, smoke & toxicity. Therefore, RelX™ composites are proven to offer a distinct edge over conventional materials such as steel, aluminium, wood, etc. and are considered as future-oriented advanced materials.





RelX™ delivers standard as well as customized solutions that are ideal replacements for conventional materials, particularly those prone to corrosion.

We manufacture a wide range of pultruded composite products and components for use in diverse end-applications.

- Pultruded/Moulded Gratings
- Pultruded Structural Framing Material
- Pultruded Deckings
- Pultruded Stairways & Handrails
- Safety Cage Ladders
- FanStacks
- FRP Headers & Supports
- Louvre Systems
- Industrial Cable Management System
- Handrails and Ladder Systems



## RELX™ PULTRUDED PRODUCT RANGE:

### **Pultruded/Moulded Gratings**

With a combination of technical excellence and manufacturing power, RelX™ produces pultruded gratings that are corrosion and fire resistant, slip and impact resistant and non-conductive with superior ergonomics and high strength-to-weight ratio.

### **Pultruded Structural Framing Material**

As a leading manufacturer of pultruded products, with the advantage of being backward integrated to basic raw material, RelX™ offers engineered and pre-fabricated cooling tower structural framing materials. On projects from the concept stage, we create mock-ups for cooling tower framing materials and other structural accessories. Our products provide the benefit of ease of assembly and exceptional strength, thus providing high performance and longer life.

### **Pultruded Deckings**

RelX™ manufactures a range of deck profiles from multiple materials from standard polyester to specialized resin systems depending on the application. Some types are used in light use traffic situations such as cooling tower fan decks whereas others are used in heavier, load bearing applications.



### **Pultruded Stairways & Handrails**

RelX™ composite stairways and handrails systems offer long life and low maintenance solutions. With inherent corrosion resistance and due to ease of fabrication, these products are an obvious choice over traditional materials. Multiple benefits including long life and low maintenance make the life cycle costs of our products significantly lower than that of traditional materials.

### **Safety Cage Ladders**

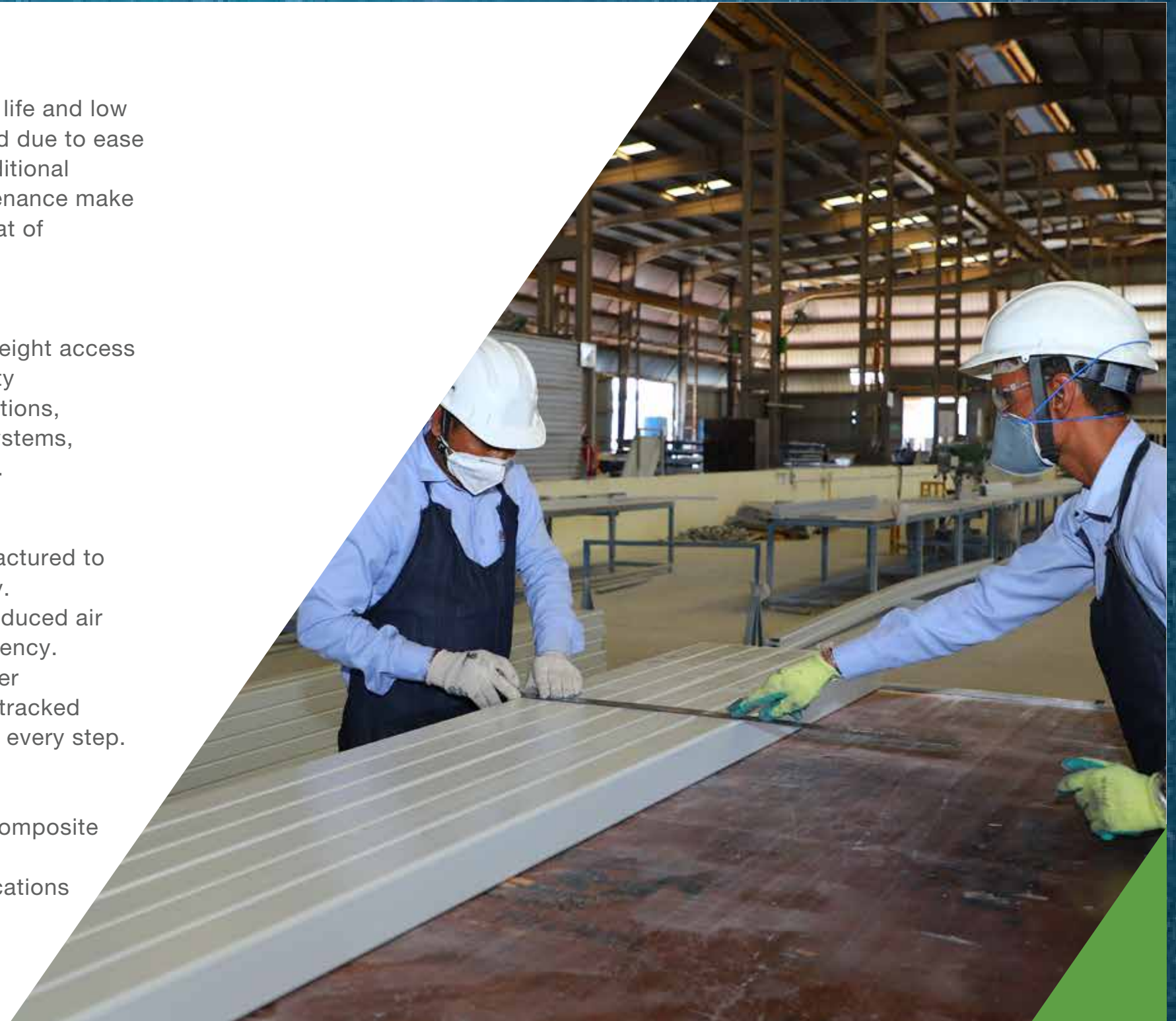
Our FRP ladders provide a safe and long-lasting solution to height access issues in areas susceptible to corrosion, electrical conductivity and slippery surfaces. We supply ladders in various configurations, including those with retractable arms, fall arrest cages and systems, side access, folding temporary access and extension ladders.

### **FanStacks**

RelX™ fanstacks have engineered laminate schedules manufactured to precise standards to ensure consistency and excellent quality. Each stack has a belled inlet and conical, diverging exit for reduced air pressure drop losses and pressure recovery for high fan efficiency. As part of our ISO quality system and to provide high customer satisfaction, each part is given a unique serial number and is tracked throughout the manufacturing process, with quality checks at every step.

### **FRP Headers & Supports**

Reliance's corrosion resistant fibreglass reinforced polymer composite pipes/headers meet the demanding needs of the industry to transport corrosive and non-corrosive fluids for various applications including Oil, Gas, Petrochemical, Power Generation, Desalination, Municipal and General Industries.



### **Louvre Systems**

Louvres are an assembly of sloping overlapping blades of either fixed or adjustable design to admit air or light in varying degrees whilst excluding rain, wind and snow. At RelX™, we have incorporated our knowledge of the latest design and manufacturing techniques to produce aesthetic looking composite louvres with high performance characteristics. They provide a high rate of air transfer and are available in different designs to meet the most demanding situations.

### **Industrial Cable Management System**

An industrial cable management system is a unit or assembly of sections and associated fittings forming a rigid structural system used to securely fasten or support cables and raceways. In this system, cable ladders and cable trays are used to contain and distribute cables.

### **Handrails and Ladder Systems**

RelX™ composite handrails and ladder systems offer long life and low maintenance solutions. With inherent corrosion resistance, these products are an obvious choice over traditional materials. Easy to transport, fabricate and install at site; combined with long life & low maintenance; their life cycle costs are significantly lower than that of traditional materials. Our products comply with customer specifications as well as national and international standards to provide world class products and services.





Our state-of-the-art facility boasts of a fully equipped test centre to support the needs of our customers and partners. Comprehensive mechanical testing and product performance testing capabilities are supplemented with the most sophisticated material analysis equipment.

## TESTING CAPABILITIES

This testing aids the development of new products while helping maintain the quality of existing products. Our modern testing laboratory has more than 22 varieties of testing machines and equipments.

Chemical Analysis

Weathering

Physical Testing

Corrosion Resistance

Mechanical Testing

Fire Testing

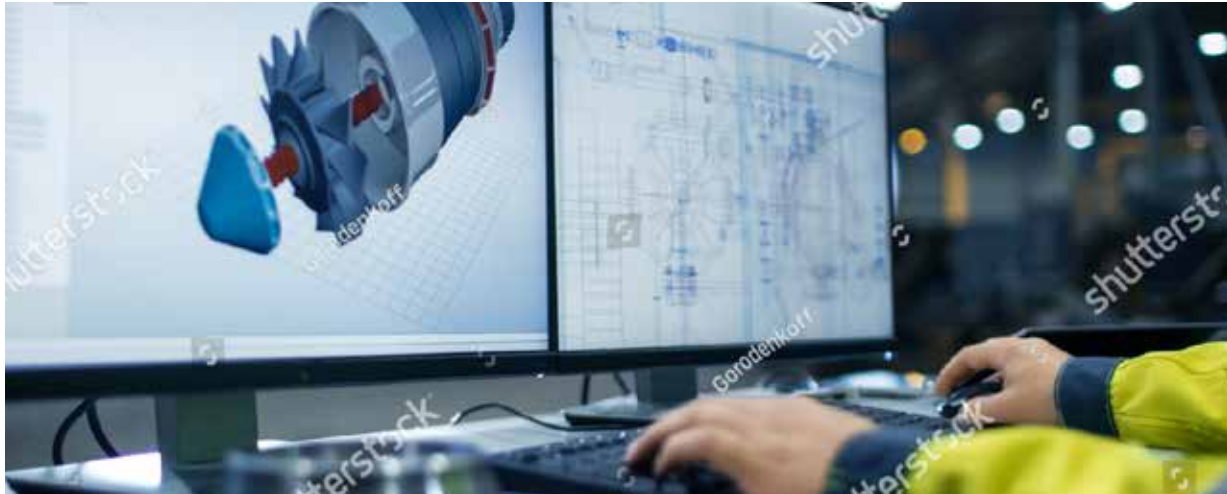
## DESIGN AND ANALYSIS FACILITY:

A state-of-the-art design studio for designing as well as analysis to serve customer needs is available with the following facilities:

- Advanced software packages for industrial design
- Talented and experienced team of design engineers
- Optimization of product & structure designs, using 3D modeling and finite element analysis
- Complete range of manufacturing processes and raw material production to ensure correct product specification
- Accurate translation of optimized designs into reality
- Transfer of optimized designs to CNC machines to ensure accurate reproduction of parts

## ADVANTAGES OF FRP OVER TRADITIONAL MATERIALS:

- ▶ Corrosion Resistant
- ▶ Slip Resistant
- ▶ Lightweight
- ▶ Durable
- ▶ Fire Retardant
- ▶ Termite proof







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