ZEALLFIBER

FRP GRATING & FIBERGLASS MESH EXPERT

FIBERGLASS MESH

Product Catalogue & Technical Specification

Alkali-Resistant Mesh · E-Glass Fabric · Self-Adhesive Tape · Wall Patch & Sanding Screen

Engineered for Construction, EIFS, Drywall & Wall Reinforcement

NANTONG ZEALL NEW MATERIALS CO., LTD.

Add: No.888 Changtai Road, Nantong, China 226000 | Tel: +86 513 6681 9918 | sales@gratingfrp.com

COMPANY OVERVIEW

Who We Are

Founded in 2012, Nantong Zeall New Materials Co., Ltd. (ZEALL FIBER) is a high-tech enterprise specializing in the R&D, production, and export of fiberglass reinforcement materials. Located in Nantong, Jiangsu — one hour from Shanghai — we operate **2 modern production plants totaling 28,000 m²**, equipped with 68 advanced rapier weaving looms, 4 automated coating lines, and a fully accredited QA/QC laboratory. Our annual output exceeds **36 million m²** of fiberglass mesh, serving distributors, contractors, and importers in over 40 countries.

28,000m²	68	36M m²	158
Factory Area	Weaving Looms	Annual Capacity	Employees

Production Capacity

Product Line	Daily Output	Annual
AR Fiberglass Mesh	~80,000 m²	~24M m²
E-Glass Mesh	~30,000 m²	~9M m²
Self-Adhesive Tape	~150,000 rolls	~45M rolls
Wall Patch / Sanding Screen	~20,000 pcs	~6M pcs

Global Presence

Region	Key Markets
Europe	Germany, UK, France, Poland, Spain
North America	USA, Canada, Mexico
Middle East	UAE, Saudi Arabia, Israel
Asia-Pacific	Australia, Japan, South Korea, Vietnam
Africa	South Africa, Egypt, Nigeria

Our Milestones

2012 Founded → **2018** Export Growth → **2020** Expansion → **2022** Automation → **2024** Scale-up → **2025** New Products

Our Competitive Advantages

01 100% Virgin Raw Material

We use only prime C-glass and E-glass roving from certified suppliers. No recycled content, no short fibers — ensuring consistent tensile strength and long-term durability.

02 Advanced Coating Technology

Our proprietary acrylic copolymer coating line ensures uniform impregnation, excellent alkali resistance, and stable weight tolerance of ±3g/m^2.

03 Full In-House QC Lab

Every batch is tested for mesh count, weight, tensile strength, and alkali resistance. SGS/BV/Intertek inspection welcome before shipment.

04 Flexible OEM/ODM

Any width (10cm–2m), length (25–200m), weight (40–300g/m^2), mesh size, and color. Custom labels, packaging, and private branding available.

05 Competitive Pricing

Direct factory pricing without trading-company markup. Vertical integration from yarn to finished roll means better margins for our partners.

06 Reliable Lead Time

Standard orders ship in 15–25 days. Sample orders in 7 days. 7×24 continuous production ensures on-time delivery even for peak season.

ZEALL FIBER Difference: We don't just sell mesh — we provide technical support, application guidance, and after-sales service. Our engineering team helps customers select the right mesh specification for their specific substrate, climate, and project requirements.

ZEALL FIBER vs. Typical Supplier

Parameter	ZEALL FIBER	Typical Small Supplier
Raw Material	100% virgin C-glass/E-glass	May include recycled content
Weight Tolerance	±5%	±10–15%
Tensile Strength	Tested every batch, ≥30 N/50mm	Spot checks only, variable
Alkali Resistance	ZrO_2 ≥14.5%, tested weekly	No zirconia or low grade
Lead Time	15–25 days, 7×24 production	30–45 days, depends on season
Documentation	SGS/BV inspection, full test reports	Self-declared only

ALKALI-RESISTANT MESH — FULL SPECIFICATIONS

AR Fiberglass Mesh (C-Glass, ZrO_2 ≥14.5%)

Code	Mesh (mm)	Weight g/m²	Warp N/50mm	Weft N/50mm	Width m	Length m	Alkali Resist %	Rolls/Pallet	20'GP Rolls	40'HQ Rolls
ZF-4545-60	4x4	60	≥20	≥20	1.0/1.2	50/100	≥50	20	~1,200	~2,800
ZF-55-75	5x5	75	≥30	≥30	1.0/1.2	50/100	≥50	20	~1,000	~2,400
ZF-55-110	5x5	110	≥40	≥40	1.0/1.2	50	≥50	20	~800	~1,900
ZF-55-145	5x5	145	≥50	≥50	1.0/1.2	50	≥50	20	~650	~1,500
ZF-55-160	5x5	160	≥60	≥60	1.0/1.2	50	≥50	20	~600	~1,400
ZF-55-300	5x5	300	≥80	≥80	1.0/1.2	50	≥50	16	~400	~950
ZF-44-160	4x4	160	≥60	≥60	1.0/1.2	50	≥50	20	~600	~1,400
ZF-33-300	3x3	300	≥80	≥80	1.0/1.2	50	≥50	16	~400	~950
ZF-1010-40	10x10	40	≥15	≥15	1.0/1.2	50	≥50	20	~1,500	~3,500

Technical Parameters

Property	Specification
Yarn Type	C-Glass (AR), ZrO_2 ≥14.5%
Coating	Acrylic copolymer emulsion
Weight Tolerance	±5%
Mesh Count Tolerance	±0.5 meshes/cm
Width Tolerance	±5 mm
Moisture Content	≤0.5%

Typical Applications

Weight	Recommended Use
40–75 g/m²	Interior wall, crack repair, drywall joints
110–160 g/m²	EIFS, external render, insulation systems
300 g/m²	Heavy-duty concrete, foundation reinforcement

E-Glass Fiberglass Mesh (Interior / Drywall Grade)

Code	Mesh mm	Weight g/m²	Tensile N/50mm	Width m	Length m	Color	Application
ZF-E55-50	5x5	50	≥20	1.0/1.2	50/100	White	Drywall, interior wall
ZF-E55-65	5x5	65	≥25	1.0/1.2	50/100	White/Green	Plaster, skim coat
ZF-E44-60	4x4	60	≥25	1.0/1.2	50/100	White	Wall crack repair
ZF-E1010-35	10x10	35	≥12	1.0/1.2	50/100	White	Light reinforcement

Self-Adhesive Fiberglass Joint Tape

Code	Width mm	Length m	Mesh mm	Weight g/m²	Adhesive	Core	Application
ZF-T48-20	48	20/90	5x5	60	Acrylic, permanent	3" cardboard	Drywall joint
ZF-T75-20	75	20/90	5x5	60	Acrylic, permanent	3" cardboard	Corner / wide joint
ZF-T100-20	100	20/90	5x5	60	Acrylic, permanent	3" cardboard	Patch / large crack
ZF-T48-20G	48	20/90	4x4	65	Acrylic, green	3" cardboard	Premium drywall

Self-Adhesive Tape Features: Pressure-sensitive acrylic adhesive bonds instantly to gypsum board, concrete, wood, and painted surfaces. PE liner protects adhesive until use. No mixing, no waiting — simply peel and apply. Available in white, green, and custom colors.

WALL PATCH & SANDING SCREEN

Wall Repair Patch (Aluminum + Fiberglass Mesh)

Code	Size	Mesh	Backing	Adhesive	Packaging	Use
ZF-WP22	2"x2" (5x5cm)	fiberglass	Aluminum sheet	Self-adhesive	10pcs/bag	Small hole repair
ZF-WP44	4"x4" (10x10cm)	fiberglass	Aluminum sheet	Self-adhesive	10pcs/bag	Medium hole
ZF-WP66	6"x6" (15x15cm)	fiberglass	Aluminum sheet	Self-adhesive	10pcs/bag	Large hole
ZF-WP88	8"x8" (20x20cm)	fiberglass	Fiberglass mesh	Self-adhesive	10pcs/bag	Extra large patch

Sanding Screen / Drywall Sanding Mesh

Code	Size	Grit	Backing	Abrasive	Packaging	Use
ZF-SSA80	4.5"x9" / 20m roll	80 grit	Fiberglass mesh	Aluminum oxide	10pcs/bag	Coarse sanding
ZF-SSA120	4.5"x9" / 20m roll	120 grit	Fiberglass mesh	Aluminum oxide	10pcs/bag	General purpose
ZF-SSA180	4.5"x9" / 20m roll	180 grit	Fiberglass mesh	Aluminum oxide	10pcs/bag	Fine finishing
ZF-SSA220	4.5"x9" / 20m roll	220 grit	Fiberglass mesh	Aluminum oxide	10pcs/bag	Ultra-fine finish

Why Sanding Screen? Unlike paper sanding sheets, fiberglass sanding screen won't clog, tear, or load up with dust. It cuts faster, lasts 5-10x longer, and works on both drywall, plaster, wood, and concrete. Available in sheets or continuous rolls.

Where to Use Our Fiberglass Mesh

EIFS / External Wall Insulation

Embed 145–160g/m² AR mesh in base coat over EPS/XPS insulation boards. Prevents cracks from thermal movement and substrate settlement. Overlap 100mm at joints.

Drywall / Gypsum Board Joints

Apply 48mm self-adhesive tape over tapered joints and corner beads. Embedded in joint compound. Eliminates nail pops and joint cracks.

Cement Render & Plaster

Use 110–160g/m² AR mesh embedded in render coat. Controls cracking from cement shrinkage. Suitable for new build and renovation.

Wall Crack Repair

Apply 50–60g/m² mesh over existing cracks with joint compound. Bridges hairline cracks and prevents re-cracking. Use self-adhesive tape for quick DIY repair.

Floor & Concrete Reinforcement

Use 300g/m² heavy-duty mesh in concrete overlays, screeds, and underlayment. Reduces plastic shrinkage cracking and improves impact resistance.

Waterproofing Membrane

Embed mesh in waterproof coating for balconies, bathrooms, and terraces. Reinforces membrane against substrate movement and cracking.

Installation Best Practices

Step	Instructions
1. Surface Preparation	Ensure surface is clean, dry, and free of loose material. Fill large holes with appropriate filler.
2. Apply Base Coat	Apply a uniform layer of adhesive / joint compound / render to the substrate.
3. Embed Mesh	Press mesh into wet coat using a trowel or plastering machine. Ensure full contact, no air pockets.
4. Overlap Joints	Overlap adjacent rolls by minimum 100mm (4 inches). Overlap at corners by 200mm.
5. Finish Coat	Apply a thin finish coat over mesh once base coat is tacky. Smooth and level.

Storage: Store horizontally on pallets in dry warehouse. Avoid sunlight, humidity >70% RH, temp >35°C.

Pro Tips: Cut mesh wider than repair area. Use L-shaped piece at corners. Overlap T-junctions 150mm.

MANUFACTURING PROCESS

From Yarn to Finished Roll

1. **Yarn Selection** — Prime C-glass / E-glass roving
2. **Warping** — Precision yarn alignment
3. **Weaving** — Rapier looms, tight mesh control
4. **Coating** — Acrylic emulsion impregnation
5. **Curing** — Temperature-controlled oven
6. **Inspection** — Weight, tensile, alkali test
7. **Packaging** — Roll, label, shrink wrap

Equipment Overview

Equipment	Quantity	Capability
Rapier Weaving Looms	68 sets	Mesh 1x1 to 20x20 mm
Coating Lines	4 lines	Speed 8–15 m/min
Curing Ovens	4 units	80–120°C controlled
Slitting Machines	8 sets	Width 10mm–2m
Winding Machines	12 sets	Length 10–500m

Raw Material Sourcing

Material	Supplier	Spec
C-Glass Roving	Top-3 Chinese mills	ZrO_2 ≥14.5%
E-Glass Roving	Top-3 Chinese mills	Alkali ≤0.5%
Acrylic Emulsion	BASF / local certified	Solid content 48–52%
PE Liner (tape)	Certified supplier	Silicone-coated
Carton / Pallet	Local packaging	Export-grade

3 shifts
Continuous Production

98.5%
On-time Delivery Rate

0.3%
Defect Rate (2024)

10+
Years Export Experience

In-House Testing Laboratory

Test Item	Test Method / Standard	Specification	Frequency	Equipment
Mesh Count	ASTM D5034 / Visual	±0.5 meshes/cm	Every roll	Counting glass
Weight (g/m^2)	ASTM D3774 / Gravimetric	±5% of nominal	Every roll	Precision scale
Tensile Strength	ASTM D5034 / Strip method	Per spec table	Every batch	Universal tester
Alkali Resistance	EN 13496 / $Ca(OH)_2$ soak 28d	≥50% retention	Weekly	Oven + tester
Coating Weight	Gravimetric / Burn-off	20–25% of total	Every batch	Muffle furnace
Width Variation	Tape measure	±5 mm	Every roll	Steel tape
Moisture Content	ASTM D2654 / Oven dry	≤0.5%	Daily	Moisture analyzer
Adhesion (tape)	Peel test / 180°	≥8 N/25mm	Every batch	Peel tester

Third-Party Inspection: We welcome SGS, BV, Intertek, or any appointed inspection agency to verify goods before shipment. Test reports are provided with every order.

Batch Traceability: Every roll carries a unique batch number. Raw material lot, production date, operator, and test results are recorded for full traceability.

Quality Commitments

Item	Details
ISO 9001:2015	Certified quality management system, annual third-party audit
Incoming Material Inspection	Every yarn lot tested before production (weight, tensile, appearance)
In-process Control	Line inspector checks every 2 hours during production run
Pre-shipment Inspection	100% visual check + random weight/tensile test before packing

Packaging Options

Package Type	Details
Inner Wrap	PE bag with product label (code, batch, weight, QC stamp)
Outer Pack	Shrink film (standard) or 5-ply export carton (optional)
Pallet	Standard export pallet, 20 rolls/pallet, stretch-wrapped
Labeling	Customer's private label / barcode / shipping mark available

Container Loading (75g/m², 1m x 50m)	Qty
20'GP	~6,000 m² / ~1,200 rolls
40'GP	~12,000 m² / ~2,400 rolls
40'HQ	~15,000 m² / ~3,000 rolls

Shipping & Delivery

Item	Details
Loading Port	Shanghai Port / Nantong Port, China
Lead Time	Standard: 15–25 days after deposit. Sample: 7 days.
Payment Terms	T/T 30% deposit, 70% before shipment. L/C at sight for large orders.
Trade Terms	FOB, CIF, CFR, EXW, DDP available
MOQ	1,000 m² per specification (1 pallet). Sample orders welcome.

Sample Order Policy

Item	Details
Sample Lead Time	3–7 working days
Sample Cost	Free for standard specs, customer pays freight
Sample Quantity	Up to 50 m per spec

Shipping Marks

Mark	Content
Standard Mark	Customer name, PO number, product code, qty, gross weight
Custom Mark	Logo / shipping mark / barcode available
Documentation	Invoice, packing list, BL, CO, test reports

Frequently Asked Questions

Q1 What's the difference between AR mesh and E-glass mesh?

AR (alkali-resistant) mesh contains zirconium oxide (ZrO_2 ≥14.5%) and is designed for cement-based substrates (render, concrete, EIFS). E-glass mesh has low alkali content and is for interior drywall, plaster, and non-cement applications.

Q2 How do I choose the right weight?

Interior/crack repair: 40–75g/m². EIFS/external render: 110–160g/m². Heavy-duty concrete/floor: 300g/m². When in doubt, send us your application and we'll recommend.

Q3 What's the minimum order quantity?

MOQ is 1,000m² per specification (about one pallet). We accept trial/sample orders for new customers.

Q4 Can you do custom sizes and private label?

Yes. Any width (10cm–2m), length, weight, mesh size, and color. Custom labels, cartons, and private branding are available for orders over 5,000m².

Q5 What certifications do you have?

ISO 9001 quality management, CE marking, and in-house SGS test reports. We can also arrange third-party certification for specific markets.

Q6 How long is the shelf life?

When stored in original packaging, dry and away from direct sunlight, shelf life is 2 years. Adhesive tape should be used within 12 months.

Q7 Can you provide samples for testing?

Yes, free samples (up to 50m per spec) are available within 3–7 days. Customer covers express freight cost.

Q8 What payment terms do you accept?

T/T 30% deposit, 70% before shipment. L/C at sight for orders over USD 50,000. PayPal/Western Union for sample fees.

Q9 Do you provide installation guidance?

Yes. Our technical team provides application notes, installation diagrams, and on-site support for large projects upon request.

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Partner With a Reliable Manufacturer

Company

NANTONG ZEALL NEW MATERIALS CO., LTD.

No.888 Changtai Road

Nantong, Jiangsu, China 226000

Contact

Tel: +86 513 6681 9918

Email: sales@gratingfrp.com

Web: www.gratingfrp.com

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2 plants · 158 staff · 68 looms · 36M m^2 annual capacity · Export to 40+ countries · 15-day lead time