WHAT IS MICRO ARMOR FIBER™?

In 2010, Christian A. Peterson III, Barry Skolnick and Roman Krawczyk founded CertiCable, Inc. to support the marketplace with finished cable solutions.

As armored fiber optics applications grew, it became apparent that a solution featuring a smaller Outer Diameter was long overdue.

The team went to work on developing an alternative product to the existing Aluminum Interlocking Armor (AIA).

In 2012, plans went underway to bring Micro Armor Fiber™ to market. This would be a fiber optic cable with the world’s smallest armored casing.

By developing and designing a stainless steel coiled solution, the company achieved their goals and created this breakthrough fiber optic cable design, with unmatched durability, strength and a tighter bend radius than any previous armored cables.
In 2013, TiniFiber® was established as the “Martini” of fiber optic cables and offered the best solutions for cabling due to its size, strength and significantly lower weight resulting in reduced manpower and installation costs. Additionally, Micro Armor Fiber™ became an excellent source and reliable solution for patch cords and indoor/outdoor usage.

On Nov. 10th, 2015 Tinifiber by Certicable was awarded the U.S. Patent for Armored Flexible Fiber Optic Cable.
Micro Armor Fiber is a revolutionary U.S. patented, UL Listed and award winning innovation which incorporates a tightly wrapped stainless steel coil around the fiber jacket, designed to provide the lightest, strongest and most flexible solution on the market.

Micro Armor Fiber can be used wherever conventional indoor/outdoor fiber optic cables are used.

TiniFiber’s outer jackets are made to meet all required specifications and external conditions including Riser, Plenum, Indoor/Outdoor, LSZH, Direct Burial, Industrial and Harsh Environments.
WHAT IS MICRO ARMOR FIBER™?

TiniFiber is available with all standard connectors and can be pre-terminated to any specification.

Micro Armor Fiber future proofs projects by adding unmatched durability in the smallest OD from 1 to 144 fiber strands which includes Multimode OM1, OM3, OM4 and Singlemode OS2.

It can be used in any channel from Telco, CATV, WAN, LAN, SAN, Broadcast, Data Centers, DAS, PONS/GPONS, Security, Pro AV, Staging/Rental, CEDIA, and FTTH/FTTD.

It is used in Data Centers, Network Communications and Security Solutions that pose challenges regarding tight spaces, small conduits and pathways.
WHY MICRO ARMOR FIBER?

✓ MICRO ARMOR FIBER™ BY TINIFIBER® IS A BREAKTHROUGH INNOVATION.
✓ SMALLEST OUTER DIAMETER (OD) ARMORED CABLE IN THE INDUSTRY.
✓ 65% SMALLER & 75% LIGHTER THAN ALUMINUM INTERLOCKING ARMOR (AIA).
✓ TINIFIBER PROVIDES THE BEST COST/VALUE PROPOSITION.
✓ SIGNIFICANTLY REDUCES LABOR & INSTALLATION COSTS.
✓ SLASHES SHIPPING AND WAREHOUSING COSTS.
✓ FASTER INSTALLATION & PROJECT TURNAROUND.
✓ EXTREME FLEXIBILITY FOR TIGHT PATHWAYS, RISERS AND BENDS
✓ REDUCES CABLE CONGESTION AT A 1:5 RATIO FOR COMPARABLE STRAND AIA
✓ IMPROVE INFRASTRUCTURE SPACE MANAGEMENT
✓ EXCEEDS INDUSTRY SAFETY & PERFORMANCE STANDARDS
Micro Armor Fiber™ is the “end to end” solution that provides durable high quality fiber optic connections, with an unmatched bend radius to ensure the optimal performance of network infrastructures.

A NETWORK CAN BE SEVERELY UNDERMINED WHEN THE FIBER OPTIC CABLES USED FOR CONNECTING COMMUNICATIONS EQUIPMENT FAIL TO PERFORM.

IMPLEMENTING MICRO ARMOR FIBER INTO YOUR DATA CENTER INFRASTRUCTURE ALLOWS FOR A REDUCTION IN CABLE MASS, IMPACTS AIRFLOW MANAGEMENT AND OPTIMIZES SPACE FOR FUTURE UPGRADES.

Space constraints through conduits, support systems and data cabinets. Micro Armor Fiber™ provides the industry’s smallest outer diameter (OD) armor that makes routing and installation easier through the most challenging spaces.
TiniFiber Duplex Patch Cords – Single Tube for transmitting (TX) and receiving (RX). TiniFiber protects the glass fiber, adds strength with Micro Armor Fiber and is half the size of conventional patch cords.

Conventional Patch Cords: Duplex Patch (2) separate tubes for transmitting (TX) and receiving (RX). 2X larger than TiniFiber.
MICRO ARMOR FIBER™ is approximately 65% smaller and 75% lighter than (AIA) aluminum interlocking armor.

TINIFIBER OS2 - 12 STRAND MICRO ARMOR FIBER™

COMPETITOR’S ALUMINUM INTERLOCKING ARMOR

TINIFIBER OM3 - 12 STRAND MICRO ARMOR FIBER™
TINIFIBER REDUCES SHIPPING COSTS

Based on a Simulation Transport 20,000 Ft. of 6 Strand OM3 Armored Fiber

TiniFiber® - Micro Armor Fiber™

- Fiber Count: 6 Strand OM3
- (OD) Diameter: 5.5 mm
- Small Reel: 5,000 Ft.
- Weight per Reel: 220 lbs.
- 4 Reels Required - Total Weight: 960 lbs.
- Shipping* 2 pallets (4 small reels) - $470.00
- Warehousing¹ 2 pallets for 1 month - $50.00

$520.00 Total Cost

Aluminum Interlocking Armor (AIA)

- Fiber Count: 6 Strand OM3
- (OD) Diameter: 13.90 mm
- Large Reel: 1,500 Ft.
- Weight per Reel: 200 lbs.
- 14 Reels Required - Total Weight: 2,667 lbs.
- Shipping* 7 pallets (14 large reels) - $1,410.00
- Warehousing¹ 7 pallets for 1 month - $125.00

$1,535.00 Total Cost

Saved over $1000 for the Same Amount of Fiber
Transport cost are 66% lower with TiniFiber® Micro Armor Fiber™

* Cost shown for Shipping / Trucking of pallet as approximate average from New York to California.

¹ Warehousing prices based on $25/pallet per month, average cost to warehouse per pallet in NJ
HOW TINIFIBER REDUCES LABOR COSTS

Cost Simulation for TiniFiber® Micro Armor Fiber™ vs. AIA

- (24) LC Connectors
- (2) Locations
- (2) Fiber optic couplers for LC Connectors
- (2) Face plates with 6-ports
- (1) 12-Port fiber optic rack mounted patch panel
- (1) Wire manager
- (2) Runs of 6-Strand 50/125 Multimode OM3 armored plenum fiber optic with LC connectors on both sides

TiniFiber® Saves You 39%

$3,335.00

VS.

$5,460.00

TiniFiber®

Micro Armor Fiber: $620

$480.00 Terminated LCs
$260.00 Fiber Box
$60.00 Two Loaded Face Plates
$1,800.00 12hrs [Labor 2 ppl] 16hrs
$0.00 Core Holes
$65.00 Support System
$50.00 Delivery

AIA

AIA Cable: $680

$480.00
$260.00
$60.00
$2,400.00
$1,200.00
$180.00
$200.00
TiniFiber Micro Armor Fiber optic cable is a stainless steel coiled tubular armored solution that is designed as the smallest and lightest cable with enhanced crush resistance and ruggedness.

Micro Armor Fiber can be used for all general usage, patch and inside/outside plant applications in place of a conduit.

Aluminum Interlocking Armored (AIA) cables are standard fiber optic cables inside a spirally wrapped interlocking armor for enhanced crush resistance and ruggedness.

AIA cable is bulky and has been known to crush the fiber when the aluminum casing is compromised. It is difficult to work with, expensive to ship, requires additional crew and labor, and is limited in its applications due to its size and lack of flexibility.

**12 Strands - Based on 1000 feet**

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Diameter</th>
<th>Weight*</th>
<th>Bendable Armor</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>5.5 mm</td>
<td>99.20 lbs.</td>
<td>10.00XD</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Diameter</th>
<th>Weight*</th>
<th>Bendable Armor</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>13.90 mm</td>
<td>395 lbs.</td>
<td>20.00XD</td>
</tr>
</tbody>
</table>

*This calculation does not include the actual weight of the reel*
<table>
<thead>
<tr>
<th>CLIENT &amp; PROJECT SAMPLING</th>
</tr>
</thead>
<tbody>
<tr>
<td>911 Memorial</td>
</tr>
<tr>
<td>Freedom Tower</td>
</tr>
<tr>
<td>Arthur Ash Stadium</td>
</tr>
<tr>
<td>Hudson Yards</td>
</tr>
<tr>
<td>Winthrop Hospital</td>
</tr>
<tr>
<td>Panthers Stadium</td>
</tr>
</tbody>
</table>
CONTACT INFORMATION

Christian A. Peterson III
Chief Executive Officer
Chris@TiniFiber.com

Barry Skolnick
Chief Operating Officer
Barry@TiniFiber.com

Roman Krawczyk
Chief Technology Officer
Roman@TiniFiber.com

102 Marine Street
Farmingdale, NY 11735
631.756.2626 opt.2
www.TiniFiber.com