Fiberguide’s Universal Clad, or UniClad, optical fibers are Silica Core/Silica Clad/Polymer Coated fibers designed for high power transmission and other applications where a large cladding relative to the core is beneficial. These fibers feature a fixed 500µm cladding diameter, with a 100µm - 400µm core size, making laser alignment and splicing easier. The larger 600µm and 800µm core sizes use proportionally larger cladding.

**FIBER SPECIFICATIONS**
- Step Index Multimode
- Pure Fused Silica Core / Fluorine Doped Silica Cladding
- Silicone Buffer Coating Layer for Nylon
- Core / Cladding Sizes: 100µm to 800µm
- Numerical Aperture (NA): 0.20 ± 0.02
- Recommended Bend Radius:
  - Short Term: 100 X Clad Diameter
  - Long Term: 200 X Clad Diameter
- 100% Proof Test Using 4-Axis Bend Method
- Nylon certified to NAMSA Class VI

**APPLICATIONS**
- High Power Applications
- Spectroscopy
- Ultra Low Loss Assemblies
- Low Focal Ratio Degradation Applications
- Universal Dimensioning
- Simplified Assembly

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UniClad All Silica Fiber

Fiber Type:
Step Index Multimode

Construction:
Silica Core/
Silica Clad/
Polymer Coated

Trade Name:
UniClad™
Anhydroguide™
VIS-IR (Low OH)
300nm – 2400nm

UniClad™
Superguide™
UV-VIS (High OH)
190nm – 1250nm

Fiber Type: Anhydroguide™ Pure Fused Silica Core/ Fluorine Doped Silica Cladding - Step Index Multimode
Wavelength: VIS-IR (Low OH): 300 nm - 2400 nm
UniClad All Silica Fiber

Fiber Type: Step Index Multimode

Construction:
Silica Core/
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Trade Name:
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VIS-IR (Low OH)
300nm – 2400nm

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Superguide™
UV-VIS (High OH)
190nm – 1250nm

Fiber Type: Superguide™ Pure Fused Silica Core/ Fluorine Doped Silica Cladding - Step Index Multimode

Wavelength: UV-VIS (High OH): 190 nm - 1250 nm

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Graphs showing attenuation and transmission over various wavelengths.
UniClad All Silica Fiber

Nylon Coating
Temperature: -40°C to +100°C / -40°F to + 212°F

Fiber Type: Anhydroguide™ Pure Fused Silica Core/ Fluorine Doped Silica Cladding - Step Index Multimode

Wavelength: VIS-IR (Low OH): 300 nm - 2400 nm

Numerical Aperture (NA):
Standard: 0.20 ± 0.02 (Full acceptance Angle 23°) - Prefix AFR

Proof Test: 100 KPSI 4-Axis Bend Test

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Core Diameter (µm)</th>
<th>Doped Cladding Diameter (µm)</th>
<th>Un-Doped Cladding Diameter (µm)</th>
<th>Silicone Buffer Diameter (µm)</th>
<th>Coating Diameter (µm)</th>
<th>Bend Radius Short Term/ Long Term (mm)</th>
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</thead>
<tbody>
<tr>
<td>AFR100/140/500/780/1300N</td>
<td>100 ± 2</td>
<td>140 ± 3</td>
<td>500 ± 10</td>
<td>780 ± 23</td>
<td>1300 ± 65</td>
<td>≥ 50/100</td>
</tr>
<tr>
<td>AFR200/280/500/780/1300N</td>
<td>200 ± 4</td>
<td>280 ± 6</td>
<td>500 ± 10</td>
<td>780 ± 23</td>
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<tr>
<td>AFR300/500/780/1300N</td>
<td>300 ± 6</td>
<td>500 ± 10</td>
<td>N/A</td>
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<tr>
<td>AFR400/500/780/1300N</td>
<td>400 ± 8</td>
<td>500 ± 10</td>
<td>N/A</td>
<td>780 ± 23</td>
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<tr>
<td>AFR600/750/1100/1700N</td>
<td>600 ± 12</td>
<td>750 ± 15</td>
<td>N/A</td>
<td>1100 ± 33</td>
<td>1700 ± 85</td>
<td>≥ 75/150</td>
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<tr>
<td>AFR800/1000/1320/2000N</td>
<td>800 ± 16</td>
<td>1000 ± 20</td>
<td>N/A</td>
<td>1320 ± 40</td>
<td>2000 ± 100</td>
<td>≥ 100/200</td>
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Nylon Coating
Temperature: -40°C to +100°C / -40°F to + 212°F

Fiber Type: Superguide™ Pure Fused Silica Core/ Fluorine Doped Silica Cladding - Step Index Multimode

Wavelength: UV-VIS (High OH): 190 nm - 1250 nm

Numerical Aperture (NA):
Standard: 0.20 ± 0.02 (Full acceptance Angle 23°) - Prefix SFR

Proof Test: 100 KPSI 4-Axis Bend Test

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