

FIBER PREPARATION

FIELD GUIDE for Microcable

Revision 1.0 | July 2026

This guide is intended specifically for Viper Microcable



VIPER™

01 PURPOSE, SCOPE & SAFETY

This guide provides a field-ready workflow for preparing Viper micro cable for splicing and enclosure installation. It covers cable-end access, mid-sheath entry, core preparation, buffer-tube access, mid-span tube access, and final enclosure checks.

WORK SAFELY

- Wear approved safety glasses and cut-resistant gloves.
- Use only properly adjusted cable and tube tools.
- Make several light cuts rather than one deep cut.
- Keep blades pointed away from hands and exposed fibers.
- Dispose of fiber shards in an approved container.
- Maintain a clean, well-lit work surface.

02 CABLE ANATOMY & REQUIRED TOOLS

TIA-598 Fibers and Tubes	1	2	3	4	5	6	7	8	9	10	11	12
	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Rose	Aqua
	13	14	15	16	17	18	19	20	21	22	23	24
	Blue	Orange	Green	Brown	Slate	White	Red	Clear	Yellow	Violet	Rose	Aqua



REQUIRED TOOLS



03 END ACCESS - CREATE THE INITIAL WINDOW

- OBJECTIVE : Expose the ripcord at the cable end without damaging the cable core.



PROCEDURE

1. Measure approximately 4"- 6" from the cable end and mark the location.
2. Adjust the sheath cutter so it scores the jacket without cutting completely through it. Micro cable jackets are generally thinner than traditional cable jackets.
3. Make a circumferential ring cut at the mark.
4. Using the rounded longitudinal blade, make a shallow slit from the ring cut to the cable end.
5. Peel away the short sheath section to expose the ripcord.

04 END ACCESS - REMOVE THE REQUIRED SHEATH LENGTH

- OBJECTIVE Use the ripcord to open the jacket cleanly to the required enclosure strip length.



PROCEDURE

1. Confirm the enclosure manufacturer's required strip length and mark that distance on the cable.
2. Make a second circumferential ring cut at the final strip-length mark.
3. Grip the exposed ripcord and pull it parallel to the cable axis toward the second ring cut.
4. Open and remove the split sheath.
5. Trim the ripcord flush and inspect the exposed cable core.

05 MID-SHEATH ENTRY - MARK & OPEN THE CENTER WINDOW

- OBJECTIVE Create a controlled access window without cutting the cable or disturbing fibers outside the work zone.



PROCEDURE

1. Mark the full access-zone length required for the closure or terminal.
2. Make circumferential ring cuts at both outer boundaries of the access zone.
3. At the approximate center, make two additional ring cuts about 1.5"- 2" apart.
4. Use the rounded longitudinal blade at the shallowest practical setting to slit between the two center cuts.
5. Peel away the short center sheath section to expose the ripcord.

06 MID-SHEATH ENTRY - STRIP TO BOTH BOUNDARIES

- OBJECTIVE Open the sheath from the center window to each outer boundary while preserving continuous fibers.

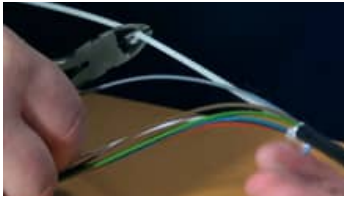


PROCEDURE

1. Locate and lift the ripcord in the center access window.
2. Pull the ripcord longitudinally toward one outer boundary cut.
3. Repeat the procedure toward the opposite boundary cut.
4. Peel open and remove both sheath sections.
5. Inspect the complete access zone before cutting binders or moving tubes.

07 PREPARE THE CABLE CORE

- OBJECTIVE Separate and organize the loose tubes while preserving enough strength-member length for the enclosure.



PROCEDURE

1. Carefully cut and remove binding yarns without contacting the buffer tubes.
2. Unwind and separate the buffer tubes while keeping them in their natural lay.
3. Identify the central strength member and confirm the enclosure's required retention length.
4. Trim the strength member only after locating the clamp or retention point.
5. Lay out the tubes in the intended routing direction before opening any tube.

08 BUFFER-TUBE ACCESS - SCORE & SNAP

- OBJECTIVE Remove secondary coating tube in short sections without stretching, nicking, or breaking fibers.

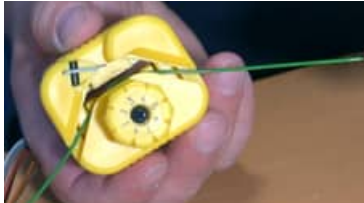


PROCEDURE

1. Select the correct tube cutter or stripping channel for the tube diameter.
2. Set the blade to score only the tube wall.
3. Make a circumferential score at the desired removal point.
4. Gently flex the tube at the score until it snaps cleanly.
5. Slide the tube section off the fibers. For long strip lengths, repeat in 12"-16" increments.

09 MID-SPAN BUFFER-TUBE ACCESS

- OBJECTIVE Open a longitudinal window in a selected buffer tube while keeping the remaining fibers continuous.



PROCEDURE

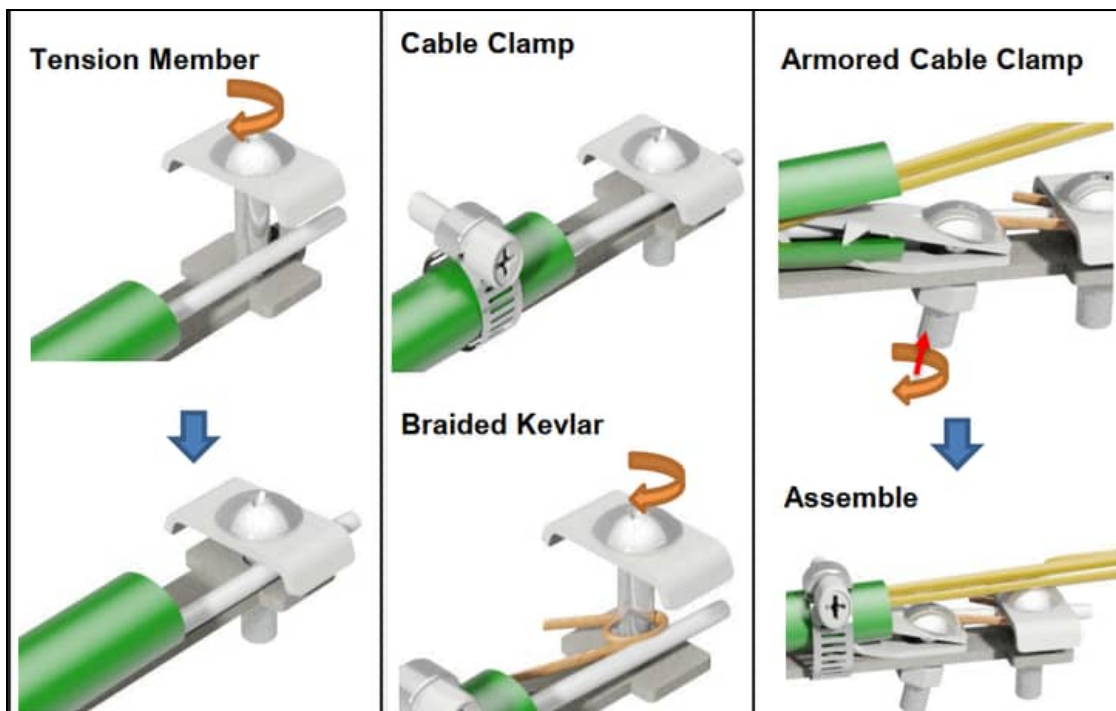
1. Confirm the target tube and the required access-window length.
2. Select and install the guide or channel that exactly matches the tube diameter.
3. Engage the tool on the tube and draw it steadily along the required length.
4. Remove the shaved tube strip or "lid."
5. Carefully trim the strip at both ends without contacting exposed fibers.

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ENCLOSURE PREPARATION & CABLE RETENTION

VERIFY BEFORE ROUTING FIBERS

- ☐ Cable entry components and seals match the cable diameter.
- ☐ Outer jacket is mechanically retained.
- ☐ Central strength member is secured in the designated clamp.
- ☐ Buffer tubes are supported at the transition into the enclosure.
- ☐ Tube and fiber routing maintain the required bend radius.
- ☐ Slack is organized without pinch points or sharp-edge contact.
- ☐ Unused fibers and tubes are protected and identified.



11 COMMON ERRORS & FINAL INSPECTION

- OBJECTIVE Open a longitudinal window in a selected buffer tube while keeping the remaining fibers continuous.

COMMON ERRORS

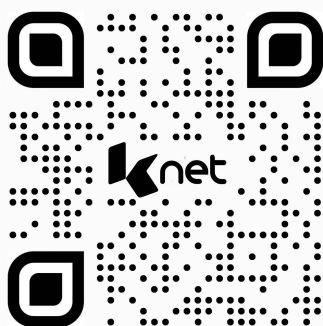
- × Cutting too deep: Scores or severs fibers beneath the sheath or tube wall.
- × Pulling the ripcord sideways: Tears the jacket unevenly and can disturb the cable core.
- × Removing too much tube at once: Creates excess friction and fiber stress.
- × Trimming the strength member too short: Prevents proper retention in the enclosure.
- × Twisting loose tubes: Creates poor tray routing and unnecessary stress.
- × Routing before securing the cable: Transfers cable movement directly to fibers and splices.

FINAL INSPECTION

- ☐ Correct cable and access location confirmed
- ☐ Jacket edges are clean and fully retained
- ☐ Strength member is secured
- ☐ Buffer tubes are identified and supported
- ☐ No fiber or tube damage is visible
- ☐ Bend radius is maintained throughout
- ☐ Fiber slack is organized in the tray
- ☐ Enclosure seals and hardware are complete
- ☐ Work area is clean and fiber shards are contained
- ☐ Required optical tests are completed and recorded

VIDEO

HANDLING OF THE HEXATRONIC VIPER MICRO CABLE



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