

Armored Fiber Patch Cords — Selection Guide

When armour matters, what it is, and how to specify it · Hengchang Technology (Jiangsu, China) · www.hengchangtech.com

1. What an armored patch cord actually is

Inside the outer jacket sits a **stainless-steel spiral tube** that protects the optical fibre. The fibre itself, the connectors and the optical performance are unchanged — armour adds mechanical protection without meaningful loss increase.

Layer	Function
Outer jacket (PVC / LSZH)	Environmental protection; LSZH for indoor fire safety
Stainless-steel spiral tube	Rodent resistance, crush resistance, bend protection
Buffer + optical fibre	Light transmission (G.657A1/A2, G.652D available)

2. Four situations that call for armour

Situation	Why armour
Outdoor / aerial runs (FTTH, OSP)	UV, wind load, accidental impact; a standard cord will fail early
Rodent-prone routes	Rodents chew standard jackets; steel armour is the practical defence
Industrial environments	Vibration, oil, physical abuse, tight bend radii
Cable trays & cabinets	Repeated installation and re-routing; protects against crush points

If the run is inside a protected rack and never touched, a standard cord is cheaper and fine. Armour is insurance for exposed, handled or hostile routes.

3. Armored vs standard — quick comparison

Point	Standard patch cord	Armored patch cord
Rodent resistance	Low	High
Crush resistance	Low	High
Minimum bend radius	Standard	Better (protected)
Outdoor suitability	Not recommended	Suitable
Insertion loss impact	—	Negligible
Weight / stiffness	Light, flexible	Heavier, stiffer

Cost	Lower	Higher
Typical use	Racks, patching	OSP, FTTH, industrial, harsh routes

4. How to specify (send us these six items)

#	Specification	Example
1	Connector type (both ends)	SC/APC – SC/APC
2	Polish & endface	APC 8°
3	Fibre mode	Single-mode OS2 (G.657A1)
4	Structure	Simplex, armored, 3.0 mm
5	Jacket	LSZH, black / blue
6	Length & quantity	10 m × 500 pcs

5. Our quality practice

- **100% optical testing** — insertion loss and return loss measured on every cord; test report included
- **Endface inspection** — ferrule endfaces checked (scratches / defects)
- Typical performance: IL ≤ 0.3 dB (0.2 dB grade available) · RL ≥ 55 dB (APC)
- Packing: individual bag + label + test report; OEM packaging available

6. Contact

Email	wangyazhong@hengchangtech.com
WhatsApp	+86 138 1667 2110

No drawing needed for fiber orders — simply send the six specifications above (or a sample list), and we will quote within 24 hours.