



Champion Fiberglass vs PVC Conduit

The field is busy - but there's only one spot for number one. See how fiberglass conduit stacks up to the competition in crucial areas like weight, corrosion resistance and installation cost.

		EPOXY FIBERGLASS (SW)	PVC SCH 40	PVC SCH 80	PVC-COATED STEEL
Cable Fault Fiberglass conduit will not melt or weld the wire to the inside of the conduit under fault conditions as can happen with PVC, steel and aluminum conduit.		Not Affected	Melt/ Fuse	Melt/ Fuse	Weld
Toxicity/Halogens Fiberglass conduit does not release toxic halogens (i.e. chlorine and bromine) when burning.		No	Yes	Yes	Yes
Weight Comparison (SW IPS - lbs/per 100 ft) Fiberglass conduit offers the lowest weight and is still very rigid.	3/4" 1" 1-1/4" 1-1/2" 2" 2-1/2" 3" 4" 5" 6" 8"	17 19 23 33 38 46 60 72 120 142 214	22 33 44 53 75 119 161 231 313 407 608	29 41 59 73 99 152 202 302 433 595 805	112 174 237 281 358 593 772 1,089 1,535 2,025 2,338
Temperature Range (°F) Fiberglass has an excellent wide temperature range.		-60° to +250°	+40° to +150°	+40° to +150°	N/A
Handling in Low Temperatures Fiberglass conduit has been shown to retain its properties at low temperatures allowing year-round installations.		Excellent	Brittle	Brittle	Excellent
Burn-through (Cable Pull) Fiberglass conduit is an excellent material for avoiding "burn-through" when pulling cable.		No	Yes	Yes	No
Coefficient of Friction Using PVC Jacketed Cable Fiberglass conduit offers one of the lowest coefficient of friction available today for conduit systems. It is completely resistant to any of the current pulling lubricants' corrosive properties.		0.38	0.90	0.90	0.55
Ultraviolet Stable (Sunlight Resistance) (Per UL 2515 and CSA C22.2 No. 211.3-96)		Good	Poor	Poor	Poor
NECA Labor Installation Rates (Normal installation man/hours per/100 ft) (REF: NECA Manual of Labor Units) * Reduce labor units by 10% for 20-foot lengths	3/4" 1" 1-1/4" 1-1/2" 2" 2-1/2" 3" 3-1/2" 4" 5" 6"	5.5 5.8 6.0* 6.4* 6.8* 7.1* 7.5* 7.9* 8.3* 8.6* 9.0*	4.5 5.3 6.0 7.0 8.0 9.0 10.0 12.0 14.0 18.0 24.0	5.4 6.3 7.2 8.4 9.6 10.8 12.0 N/A 16.8 21.6 28.8	8.0 10.0 12.0 15.0 18.0 21.0 26.0 32.0 38.0 45.0 60.0
Memory Fiberglass conduit will retain its original shape after impact or compression.		Yes	No	No	No