



## PRODUCT SPECIFICATION TelcoFlex® IV

**TYPE:** TelcoFlex® IV / KS24194™ L4  
 Central Office Power Wire and Cable  
 Limited Smoke, Non-Halogenated Insulated (With Cotton Braid)  
 Lead-Free and Silicone Free, Meets European RoHS Directive  
 UL Listed RHH/ST1 and VW-1  
 90°C Dry, 60°C Wet - 600 Volts  
 UL Listed "For CT Use" (1/0 & Larger)  
 CSA AWM I B 105°C, 600 V. FT4  
 Complies with Telcordia GR-347-CORE  
**SIZE:** 8 AWG thru 750 KCMIL - Single Conductor

**I. SCOPE:**  
 This specification covers the construction requirements for limited smoke, non-halogenated central office power wire and cable, insulated with TelcoHyde® 5221. UL listed Type RHH/ST1 with cotton braid for use in accordance with the National Electrical Code.

The construction of the wire and cable is in accordance with Specification KS24194™ (List 4), Underwriters' Laboratories requirements, and the requirements of CSA for the FT4 flame test. Sizes 1/0 AWG and larger are UL "CT Use" (Cable Tray) rated.

### II. CONSTRUCTION:

SIZE (AWG or KCMIL)	STRANDING	NOMINAL CONDUCTOR DIAMETER (INCHES)	INSUL. MIN. AVG. WALL (MILS)	NOMINAL INSUL. DIAM. (INCHES)	NOMINAL OUTSIDE DIAM. (INCHES)	MAX D.C. RES. @ 20°C (OHMS PER 1000')	AMPACITY PER NEC TABLE 310.16	
							75°C	90°C
8	41/#24	.153	60	.280	.330	0.679	50	55
6	65/#24	.188		.315	.365	0.436	65	75
4	105/#24	.260		.385	.435	0.274	85	95
2	168/#24	.305		.430	.480	0.172	115	130
1/0	266/#24	.392	80	.560	.615	0.109	150	170
2/0	342/#24	.455		.620	.675	0.0868	175	195
4/0	532/#24	.577		.745	.800	0.0546	230	260
350	888/#24	.760	95	.960	1.015	0.0334	310	350
500	1221/#24	.890		1.090	1.145	0.0234	380	430
750	1850/#24	1.094	110	1.320	1.380	0.0157	475	535



- A. CONDUCTORS:  
Class I modified bunched (8 AND 6 AWG) or rope-bunched (4 AWG and larger) stranded tin-coated copper conforming to ASTM B-33 and Underwriters' Laboratories requirements. An opaque Mylar tape shall be applied over the conductor to facilitate stripping. Bare copper is available upon request.
- B. INSULATION:  
90°C / 105°C rated limited smoke, non-halogen TelcoHyde® 5221 conforming to Underwriters' Laboratories Standard 44, Subjects 509 and 758, and CSA C22.2 No. 210.2 M90. In addition, TelcoHyde® 5221 complies with the requirements of Telcordia Specification GR-347-CORE. The insulation has a Limiting Oxygen Index of 35%.
- C. SEPARATOR:  
On sizes 6 AWG and larger, a 1 mil clear Mylar tape shall be applied over the insulation.
- D. COVERING:  
On all sizes, a natural cotton braid conforming to UL Standard 44 requirements is applied overall. A section of completed cable has a Limiting Oxygen Index of 35%.
- E. FINISH:  
A moisture resistant, fire retardant saturant and a colored finisher are applied to the braid.
- F. SURFACE MARKING:  
Two sides of the cable shall be printed using an ink of a contrasting color and with the following information:

"TelcoFlex®IV / KS24194™L4 NON-HAL (SIZE) AWG (or KCMIL) 600 V. RHH/ST1 FT4 (UL) or AWM 3578 60°C WET VW-1 E18321 --- A.I.W. CORP. --- LL 8825 CSA AWM I B 105° 600V. FT4 (YEAR) M\_\_\_\_\_\*"

Add "FOR CT USE" before "(UL)" on Sizes 1/0 AWG and larger.  
Sequential footage markings shall be applied at 2 foot intervals on one side of the cable.



**G. TESTING:**

Physical and electrical tests in accordance with the requirements of UL Standard 44, Subject 509 and 758, and CSA Standard C22.2 No. 210.2 M90 as AWM.

**H. LABELS:**

UL and CSA tags and labels shall be applied to all packages.

**I. LENGTHS:**

All put-ups one length only unless agreed to otherwise. Maximum lengths per size will be advised.

**J. PACKAGING:**

The ends of the cable shall be capped or taped to prevent the entrance of moisture during shipment or storage.

**K. PART NUMBERS for TelcoFlex® IV / KS24194™ L4:**

SIZE ALL ITEMS ARE BRAIDED	COLOR						
	GRAY	GREEN	RED	BLUE	BLACK	RED --	BLUE --
						BLACK TRACER	BLACK TRACER
750 STR	56961901	57145001	56962001	56961801	57150101	56962101	56962301
500 STR	56963701	W40046	56963801	57155101	57157401	56963901	56962501
350 STR	56981301	57310201	57168901	57137901	57150001	56979601	56981201
4/0 STR	56985201	57126801	56985301	56985101	57126901	W40036	W40037
2/0 STR	56978401	56978501	56978601	56978901	56978301	W40030	56979001
1/0 STR	57050601	56967201	56967401	57155201	57138101	56967501	W40025
2 STR	57145801	57192501	57168801	57149901	56976801	56976601	56976701
4 STR	56983301	W40010	56983401	57168501	57157301	W40012	56983201
6 STR	56987001	57150401	57153001	57126301	56986801	56987201	56986901
8 STR	56988201	57206101	57178901	57179001	W39996	W40000	W40001
COLOR	GRAY	GREEN	RED	BLUE	BLACK	RED/BLK	BLUE/BLK