

MOHAWK

Just as our firefighters are committed to the art of life-safety, we support their quest by reducing flame and smoke hazards with the safest choice of fire protection cables available.

commitment



PlenumPlus[®]
with the new SMOKEGUARD[®] FP

*Cabling Excellence for
Open Architecture*

Why choose PlenumPlus?

PlenumPlus Dupont™ Certified Limited Combustible Cables with SMOKEGUARD® FP jacketing, have attributes that improve performance and are easier to install. Here are some of the reasons why you should specify PlenumPlus.

Featuring the best available fire safety and other cable properties:

- 8 Times Less Fuel Load
- 20 Times Less Smoke
- No RoHS or WEE Restricted Substances
- Low Corrosivity / Acid Gas Generation
- Less Cable Memory (Ease of Installation)
- Improved Char Forming Characteristics
- High Abrasion / Cut Thru Resistance
- Improved Flexibility / Slip Characteristics
- Outstanding Resistance to Aging
- Full Variety of Standard Colors
- Good Chemical Resistance
- Standard Marking (No Marker Tapes)
- Available for All Cable Grades
- Less Kinking
- Thin-Wall Jackets for Reduced Cable OD's
- Improved Stripability
- Remains Flexible at Low Temperatures
- Excellent Economics vs Sprinklers in Concealed Spaces or Cable in Conduit
- Operating Temp Range from -40°C to 125°C

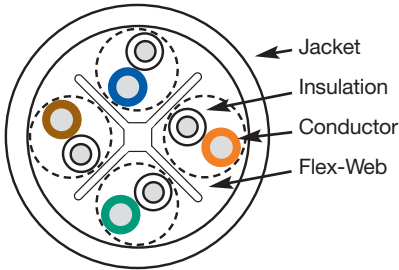
MOHAWK

Cabling Excellence for Open Architecture

800 422 9961

www.mohawk-cable.com

Category 6e+
GigaLAN™ LC
 Tested to 750 MHz



Other Jacket Colors

Blue	M58406
Gray	M58556

Additional jacket colors available, please consult factory.

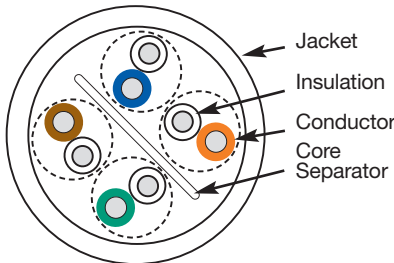
Mohawk Part No.	Cable Type	Dielectric Type	Jacket Type Diameter		Weight	
			inch	mm	lbs/ M'	kg/ km
M58405 PlenumPlus	4 Pair 23 AWG UTP	FEP Teflon†	White SMOKEGUARD®FP .216	5.49	34	51

US Patent Nos. 6,596,944, 6,074,503 and 5,424,491.

STANDARDS: EXCEEDS TIA/EIA 568-B.2-1 CAT 6 & ISO/IEC 11801:2002 CAT 6 HORIZONTAL CABLE
CONDUCTOR DCR: 6.71 Ω/100m (22.0 Ω/Mft) MAX
DCR UNBALANCE: 3% MAX
MUTUAL CAPACITANCE: 46 pF/m (14 pF/ft) NOM
CAPACITANCE UNBALANCE PAIR/GROUND: 33 pF/100m (100 pF/Mft) MAX

CHARACTERISTIC IMPEDANCE: 100 Ω ± 7% (10-550 MHz)
INPUT IMPEDANCE: 100 Ω ± 12% (1-100 MHz)
 100 Ω ± 15% (>100-350 MHz)
 100 Ω ± 22% (>350 MHz)
PROPAGATION DELAY: 506 + 36/ f ns/100m MAX (1-500 MHz)
DELTA DELAY (SKEW): 30 ns/100m MAX
NOMINAL VELOCITY OF PROPAGATION (NVP): 72%

Category 6e
AdvanceNet™ LC
 Tested to 650 MHz



Other Jacket Colors

Blue	M58413
Gray	M58555

Additional jacket colors available, please consult factory.

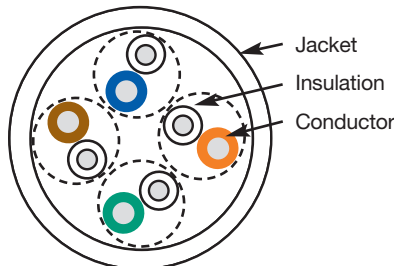
Mohawk Part No.	Cable Type	Dielectric Type	Jacket Type Diameter		Weight	
			inch	mm	lbs/ M'	kg/ km
M58414 PlenumPlus	4 PAIR 24 AWG UTP	FEP Teflon†	White SMOKEGUARD®FP .191	4.85	28	42

US Patent Nos. 6,570,095 and 5,424,491.

STANDARDS: EXCEEDS TIA/EIA 568-B.2-1 CAT 6 & ISO/IEC 11801:2002 CAT 6 HORIZONTAL CABLE
CONDUCTOR DCR: 8.9 Ω/100m (27.1 Ω/Mft) MAX
DCR UNBALANCE: 3% MAX
MUTUAL CAPACITANCE: 46 pF/m (14 pF/ft) NOM
CAPACITANCE UNBALANCE PAIR/GROUND: 66 pF/100m (200 pF/Mft) MAX

CHARACTERISTIC IMPEDANCE: 100 Ω ± 15% (1-350 MHz)
INPUT IMPEDANCE: 100 Ω ± 15% (1-100 MHz)
 100 Ω ± 18% (>100-200 MHz)
 100 Ω ± 22% (>200-350 MHz)
PROPAGATION DELAY: 534 + 36/ f ns/100m MAX
DELTA DELAY (SKEW): 25 ns/100m MAX
NOMINAL VELOCITY OF PROPAGATION (NVP): 72%

Category 5E+
MegaLAN™ LC
 Tested to 400 MHz



Other Jacket Colors

Blue	M57976
Gray	M58550

Additional jacket colors available, please consult factory.

Mohawk Part No.	Cable Type	Dielectric Type	Jacket Type Diameter		Weight	
			inch	mm	lbs/ M'	kg/ km
M57113 PlenumPlus	4 PAIR 24 AWG UTP	FEP Teflon†	White SMOKEGUARD®FP .171	4.34	24	36

US Patent No. 5,424,491.

STANDARDS: EXCEEDS TIA/EIA 568-B.2 CAT 5e & ISO/IEC 11801:2002 CAT 5 HORIZONTAL CABLE
CONDUCTOR DCR: 8.9 Ω/100m (27.1 Ω/Mft) MAX
DCR UNBALANCE: 3% MAX
MUTUAL CAPACITANCE: 46 pF/m (14 pF/ft) NOM
CAPACITANCE UNBALANCE PAIR/GROUND: 66 pF/100m (200 pF/Mft) MAX

CHARACTERISTIC IMPEDANCE: 100 Ω ± 15% (1-400 MHz)
INPUT IMPEDANCE: 100 Ω ± 15% (1-100 MHz)
 100 Ω ± 22% (>100-200 MHz)
PROPAGATION DELAY: 506 + 36/ f ns/100m MAX
DELTA DELAY (SKEW): 25 ns/100m MAX
NOMINAL VELOCITY OF PROPAGATION (NVP): 72%

†Teflon and DuPont are registered trademarks. *SMOKEGUARD is a registered trademark of Alpha Gary Corporation.

FREQ (MHz)	INSERTION LOSS (dB/100m)		NEXT (dB/100m)		ACR (dB/100m)	PS-NEXT (dB/100m)		PS-ACR (dB/100m)	ELFEXT (dB/100m)	PS-ELFEXT (dB/100m)	RL (dB)	DELAY (ns/100m)
	avg	max	avg	min	min	avg	min	min	min	min	min	max
.772	1.6	1.7	93	83.0	81.3	86	81.0	79.3	-	-	-	-
1.0	1.8	1.9	91	81.3	79.4	84	79.3	77.4	74.8	72.8	20.0	542.0
4.0	3.3	3.5	82	72.3	68.8	75	70.3	66.8	62.8	60.8	24.2	524.0
8.0	4.7	4.9	78	67.8	62.9	71	65.8	60.9	56.7	54.7	26.3	518.7
10.0	5.2	5.5	76	66.3	60.8	69	64.3	58.8	54.8	52.8	27.0	517.4
16.0	6.7	7.0	73	63.2	56.2	66	61.2	54.2	50.7	48.7	27.0	515.0
20.0	7.4	7.8	72	61.8	54.0	65	59.8	52.0	48.8	46.8	27.0	514.0
25.0	8.3	8.7	70	60.3	51.6	63	58.3	49.6	46.8	44.8	26.5	513.2
31.25	9.3	9.8	69	58.9	49.1	62	56.9	47.1	44.9	42.9	25.9	512.4
62.5	13.4	14.1	64	54.4	40.3	57	52.4	38.3	38.9	36.9	24.2	510.6
100.0	17.1	18.0	61	51.3	33.3	54	49.3	31.3	34.8	32.8	23.1	509.6
155.0	21.7	22.8	58	48.4	25.6	51	46.4	23.6	31.0	29.0	22.0	508.9
200.0	24.9	26.2	57	46.8	20.6	50	44.8	18.6	28.8	26.8	21.4	508.5
250.0	28.1	29.6	55	45.3	15.7	48	43.3	13.7	26.8	24.8	20.9	508.3
300.0	31.1	32.7	54	44.1	11.4	47	42.1	9.4	25.3	23.3	20.4	508.1
350.0	33.8	35.6	53	43.1	7.5	46	41.1	5.5	23.9	21.9	20.1	507.9
400.0	36.5	38.4	52	42.3	3.9	45	40.3	1.9	22.8	20.8	19.7	507.8
500.0	41.4	43.6	51	40.8	-	44	38.8	-	20.8	18.8	19.2	507.6
550.0	43.7	46.0	50	40.2	-	43	38.2	-	-	-	19.0	--
600.0	46.0	48.4	50	39.6	-	43	37.6	-	-	-	18.8	-
650.0	48.1	50.6	49	39.1	-	42	37.1	-	-	-	18.6	-
750.0	52.3	55.0	48	38.2	-	41	36.2	-	-	-	18.2	-

Values above 500 MHz are for engineering information only



FREQ (MHz)	INSERTION LOSS (dB/100m)		NEXT (dB/100m)		ACR (dB/100m)	PS-NEXT (dB/100m)		PS-ACR (dB/100m)	ELFEXT (dB/100m)	PS-ELFEXT (dB/100m)	RL (dB)
	avg	max	avg	min	min	avg	min	min	min	min	min
.772	1.6	1.8	90	80.0	78.2	83	78.0	76.2	-	-	-
1.0	1.8	2.0	88	78.3	76.3	81	76.3	74.3	70.0	68.0	20.0
4.0	3.5	3.8	79	69.3	65.5	72	67.3	63.5	58.0	56.0	24.2
8.0	4.9	5.3	75	64.8	59.5	68	62.8	57.5	51.9	49.9	26.3
10.0	5.6	5.9	73	63.3	57.4	66	61.3	55.4	50.0	48.0	27.0
16.0	7.1	7.5	70	60.2	52.7	63	58.2	50.7	45.9	43.9	27.0
20.0	7.9	8.4	69	58.8	50.4	62	56.8	48.4	44.0	42.0	27.0
25.0	8.8	9.4	67	57.3	47.9	60	55.3	45.9	42.0	40.0	26.5
31.25	10.0	10.6	66	55.9	45.3	59	53.9	43.3	40.1	38.1	25.9
62.5	14.3	15.3	61	51.4	36.1	54	49.4	34.1	34.1	32.1	24.2
100.0	18.4	19.7	58	48.3	28.6	51	46.3	26.6	30.0	28.0	23.1
155.0	23.4	25.0	55	45.4	20.4	48	43.4	18.4	26.2	24.2	22.0
200.0	27.0	28.8	54	43.8	15.0	47	41.8	13.0	24.0	22.0	21.4
250.0	30.5	32.6	52	42.3	9.7	45	40.3	7.7	22.0	20.0	20.9
300.0	33.9	36.2	51	41.1	4.9	44	39.1	2.9	20.5	18.5	20.4
350.0	37.0	39.5	50	40.1	0.6	43	38.1	-	19.1	17.1	20.1
400.0	40.0	42.7	49	39.3	-	42	37.3	-	18.0	16.0	19.7
500.0	45.5	48.6	48	37.8	-	41	35.8	-	16.0	14.0	19.2
550.0	48.2	51.5	47	37.2	-	40	35.2	-	-	-	19.0
600.0	50.7	54.2	47	36.6	-	40	34.6	-	-	-	18.8
650.0	53.2	56.8	46	36.1	-	39	34.1	-	-	-	18.6

Values above 350 MHz are for engineering information only



FREQ (MHz)	INSERTION LOSS			NEXT		ACR	PS-NEXT		PS-ACR	ELFEXT	PS-ELFEXT	RL
	(dB/100m)	(dB/mft)	(dB/mft)	(dB/100m)	(dB/100m)	(dB/100m)	(dB/100m)	(dB/100m)	(dB/100m)	(dB/100m)	(dB/100m)	(dB)
.772	1.6	1.8	5.5	82	72.0	72.2	75	70.0	68.2	-	-	-
1.0	1.8	2.0	6.2	80	70.3	70.3	73	68.3	66.3	67.8	64.8	20.0
4.0	3.6	4.0	12.2	70	61.3	59.3	63	59.3	55.3	55.8	52.8	23.0
8.0	5.2	5.7	17.4	66	56.8	53.1	59	54.8	49.1	49.7	46.7	24.5
10.0	5.8	6.4	19.4	64	55.3	50.9	58	53.3	46.9	47.8	44.8	25.0
16.0	7.3	8.1	24.7	62	52.2	46.1	56	50.2	42.1	43.7	40.7	25.0
20.0	8.3	9.1	27.7	60	50.8	43.7	54	48.8	39.7	41.8	38.8	25.0
25.0	9.3	10.2	31.0	59	49.3	41.1	52	47.3	37.1	39.8	36.8	24.3
31.25	10.4	11.4	34.8	58	47.9	38.5	51	45.9	34.5	37.9	34.9	23.6
62.5	15.1	16.4	50	54	43.4	29.0	47	41.4	25.0	31.9	28.9	21.5
100.0	19.6	21.0	64	50	40.3	21.3	43	38.3	17.3	27.8	24.8	20.1
155.0	25.0	26.6	81	48	37.4	12.9	41	35.4	8.9	24.0	21.0	18.8
200.0	28.8	30.5	93	46	35.8	7.3	40	33.8	3.3	21.8	18.8	18.0
250.0	32.8	34.4	105	45	34.3	1.9	38	32.3	-	19.8	16.8	17.3
300.0	36.5	38.0	116	44	33.1	-	37	31.1	-	-	-	16.8
350.0	40.0	41.4	126	43	32.1	-	36	30.1	-	-	-	16.3
400.0	43.2	44.6	136	42	31.3	-	35	29.3	-	-	-	15.9

Values above 250 MHz are for engineering information only



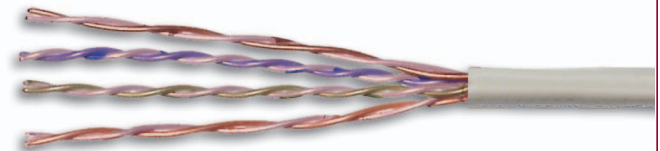
In order to be listed by Underwriters Laboratories (UL) as “Limited Combustible FHC 25/50”, PlenumPlus cable meets not only the NFPA 262 (Steiner Tunnel) Test for fire and smoke characteristics of wires and cables, but also passes NFPA 259 Potential Heat of Building Materials test for fire loads, and the much more severe NFPA 255 Steiner Tunnel Test for flame spread and smoke developed index for building materials (see table 1). CMP cables need only pass the less severe NFPA 262 test. Because of the new SMOKEGUARD® FP jacket, PlenumPlus cables have superior flame and smoke resistance (see graphs below), along with top electrical performance.

Summary Cable Testing Requirements

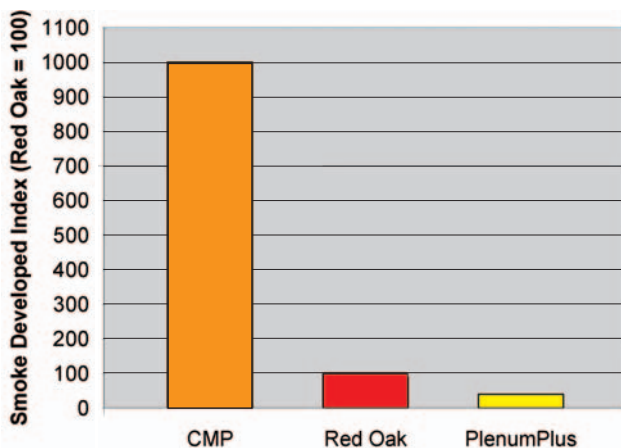
Testing Criteria	PlenumPlus	CMP
Flame Spread	Yes	Yes
Smoke	Yes	Yes
Heat Aging	Yes	Not Required
Humidity Aging	Yes	Not Required
Jacket Slitting	Yes	Not Required
Fuel Load (Potential Heat)	Yes	Not Required

Table 1

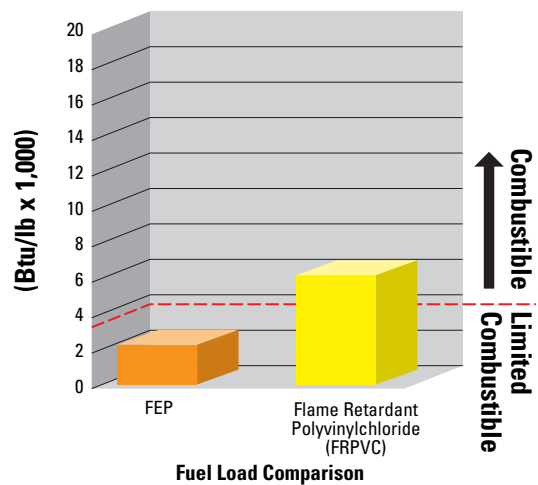
Plenum (CMP)	PlenumPlus Limited Combustible
Passes NFPA 262	Passes NFPA 262
	Passes NFPA 259
	Passes NFPA 255



Smoke Generation per NFPA 255



Potential Heat per NFPA 259



Safety listed to NEC (NFPA 70)



Verified by ETL to TIA/EIA-568-B.2-1



MOHAWK

Just as our firefighters are committed to the art of life-safety, we support their quest by reducing flame and smoke hazards with the safest choice of fire protection cables available.

commitment



PlenumPlus[®]
with the new SMOKEGUARD[®] FP

*Cabling Excellence for
Open Architecture*

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Mohawk reserves the right to revise any specifications
in the interest of product enhancement.

GigaLAN, Cablemate Planner, LAN-Trak OSP, AdvanceNet, AdvanceLite, MegaLAN,
SystemMATE, HomeLAN, UltraLink, MegaLink, GigaLink, AdvanceLink,
Cable Caddy, Media Pull, ChannelMate, TruLite, RiserLite, Versalite, Micro-Loose,
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CERTIFIED**