CABLE SOLUTIONS

Sound/Security Cable

Plenum - CMP/CL3P Electronic Wire

Shielded / Cabled

Part#	Description	Rating
75302	22/2 stranded BC	CMP/CL3P
75304	22/4 stranded BC	CMP/CL3P
75306	22/6 stranded BC	CMP/CL3P
75902	18/2 stranded BC	CMP/CL3P
75903	18/3 stranded BC	CMP/CL3P
75904	18/4 stranded BC	CMP/CL3P
75906	18/6 stranded BC	CMP/CL3P
75908	18/8 stranded BC	CMP/CL3P
75702	16/2 stranded BC	CMP/CL3P
75704	16/4 stranded BC	CMP/CL3P

Unshielded / Cabled

Part#	Description	Rating
72302	22/2 stranded BC	CMP/CL3P
72304	22/4 stranded BC	CMP/CL3P
72306	22/6 stranded BC	CMP/CL3P
71902	18/2 stranded BC	CMP/CL3P
71903	18/3 stranded BC	CMP/CL3P
71904	18/4 stranded BC	CMP/CL3P
71906	18/6 stranded BC	CMP/CL3P
71702	16/2 stranded BC	CMP/CL3P
71704	16/4 stranded BC	CMP/CL3P
71502	14/2 stranded BC	CMP/CL3P

Riser - CMR/CL3R Electronic Wire

Shielded / Cabled

Part#	Description	Rating
95211	22/2 stranded BC	CMR/CL3R
67001	22/4 stranded BC	CMR/CL3R
67005	22/6 stranded BC	CMR/CL3R
95214	18/2 stranded BC	CMR/CL3R
95218	18/3 stranded BC	CMR/CL3R
67003	18/4 stranded BC	CMR/CL3R
67006	18/6 stranded BC	CMR/CL3R
95215	16/2 stranded BC	CMR/CL3R
95230	16/4 stranded BC	CMR/CL3R

Unshielded / Cabled

Part#	Description	Rating
51116	22/6 stranded BC	CMR/CL3R
51118	22/8 stranded BC	CMR/CL3R
51122	22/12 stranded BC	CMR/CL3R
51104	18/2 stranded BC	CMR/CL3R
51114	18/4 stranded BC	CMR/CL3R
51117	18/6 stranded BC	CMR/CL3R
51105	16/2 stranded BC	CMR/CL3R
51115	16/4 stranded BC	CMR/CL3R
51140	14/2 stranded BC	CMR/CL3R

Burglar Alarm Wire - CM/CL2

Unshielded / Parallel

Part#	Description	Rating
51101	22/2 stranded BC	CM/CL2
51112	22/4 stranded BC	CM/CL2

Unshielded / Parallel

Part#	Description	Rating
96222	22/2 solid BC	CM/CL2
96238	22/4 solid BC	CM/CL2

Speaker Wire (Oxygen Free*)

Part#	Description	Rating
Pro Audio Cable (high-strand, pressure-extruded, round)		
94762	16/2 stranded BC (65/34)	CL3
94764	16/4 stranded BC (65/34)	CL3
94742	14/2 stranded BC (105/34)	CL3
94744	14/4 stranded BC (105/34)	CL3
94722	12/2 stranded BC (168/34)	CL3
Complete Audio Cable (direct burial, high-strand, tubed)		
94562	16/2 stranded BC (65/34)	CL3
94564	16/4 stranded BC (65/34)	CL3
94542	14/2 stranded BC (105/34)	CL3
94544	14/4 stranded BC (105/34)	CL3

Part#	Description	Rating
Easy Audio Cable (direct burial, tubed construction)		
94662	16/2 stranded BC (26/30)	CL3
94664	16/4 stranded BC (26/30)	CL3
94642	14/2 stranded BC (41/30)	CL3
94644	14/4 stranded BC (41/30)	CL3
Premium Parallel Zip Speaker Cable		
94616	16/2 stranded BC (65/34)	CL2
94614	14/2 stranded BC (105/34)	CL2
94612	12/2 stranded BC (168/34)	CL2

** Industry standard for "Oxygen Free" is 99.97%*

CABLE SOLUTIONS

Sound/Security Cable

What Really Matters in Selecting the RIGHT Sound/Security Cable

Plenum vs. Riser vs. Non-Plenum

PLENUM RATED: Plenum spaces are defined as any space used as return passage for environmental air (such as ducts). NEC Code states that all cabling not in conduit, installed in plenum spaces, shall be listed as having adequate fire-resistant and low smoke producing characteristics. Beware of imitations like "plenum-listed" or "plenum-approved". All listed and classified cables must be identified every 40 inches with printing on the jacket or internal marker tape.

RISER RATED: "Non-Plenum" does not necessarily mean "Riser". Some companies offer CM rated (general purpose) cable that is NOT riser rated, for a lower price. Note that a CMR product can be used where a CM product would be acceptable; but the reverse does not hold true (see NEC Article 800 chart to the right). By selling the riser-rated product, you reduce the number of sku's you and your customers have to handle.

Shielded vs. Unshielded

SHIELDED: Offers excellent protection against interference (EMI / RFI).

- **EMI (Electro Magnetic Interference):** Electrostatic sparks or spiking from motors, neon or fluorescent lighting ballasts, or any other sources that cause noise. Shielded cables should be considered for installations in areas near dimmer panels and light switches, in parallel runs, near neon or fluorescent lights and near power cables.
- **RFI (Radio Frequency Interference):** Some frequencies used for radio communications have a tendency to become coupled onto conductors to produce RFI. Depending on the level of interference, shielded cables offer excellent protection against this common noise.

UNSHIELDED: Cost effective where interference is not a concern.

Cabled (Twisted) vs. Straight-Lay (Zip/Parallel)

CABLED: Reduces crosstalk interference from other signals (inside or outside the cable). Standard straight-lay cables do not offer enough protection, but twisted cables can minimize this type of noise especially over longer runs.

STRAIGHT-LAY: Cost effective where interference is not a concern.

Stranded vs. Solid

STRANDED: The industry standard for most electronic cables. Stranded conductors are more flexible than solid and are easier to pull. They reduce potential conductor breakage when repeatedly flexed, and the increased surface area may be a factor in overall frequency response.

SOLID: Occasionally requested because it's less-expensive or the application requires solder of connectors. They are easier to terminate.

AWG (Gauge)

22 thru 12 gauge is most common. Larger size for longer runs... Power loss should be calculated to determine the appropriate gauge size.

Number of Conductors

2 & 4 conductor are most popular. 6, 8, 10 or higher conductor count may be required for complex systems or multiple zones.

Is your competition beating you on price?

- CMR vs CM / "Plenum" vs "Non-Plenum" (general purpose) - Don't assume riser when your customer says non-plenum.
- Cabled (Twisted) vs Straight-Lay (Zip/Parallel) - Different constructions make a big difference in price.
- High-Grade Strand-count - Be sure you compare apples to apples.

Identify the Application

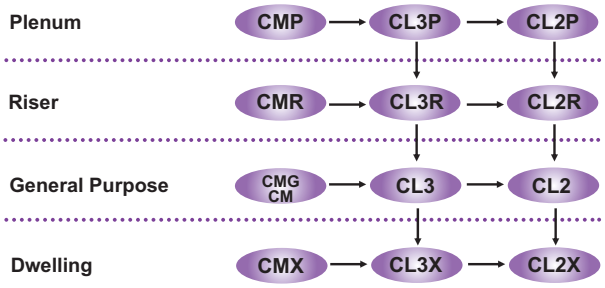
- Power Limited Circuits, Communications, Remote Control
- Security, Intercom/PA Systems, Access Control, Nurse Call
- Surround Sound, Home Theater, Whole-Home, Speakers
- Plenum vs Riser vs General Purpose requirements (Plenum cables can save costs when Plenum cables are used in place of cable in conduit.)

NEC Article 725

Remote Control, Signaling, and Power-Limited Cables

Applies to remote-control, signaling and power-limited circuits that are not an integral part of a device or appliance.

Cable Substitution Hierarchy



Type CM - Communications wire & cable

Type CL2 & CL3 - Class 2 and Class 3 remote control, signaling & power-limited cables.

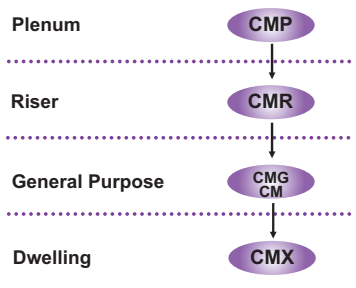
A → B Cable A shall be permitted to be used in place of Cable B

NEC Article 800

Communication Circuits

Applies to telephone, telegraph (except radio) outside wiring for fire alarm and burglar alarm, and similar central station systems, and telephone systems not connected to a central station system but using similar types of equipment, methods of installation and maintenance.

Cable Substitution Hierarchy



Type CM - Communications wire & cable

A → B Cable A shall be permitted to be used in place of Cable B

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