

# Non-Compliant and Counterfeit Cable

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On Behalf of CCCA

(Communications Cable & Connectivity Association)



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## Communications Cable & Connectivity Association

- Non-profit association addressing quality & performance, safety, environmental impact and other key issues regarding communications infrastructure.
- Members include leading manufacturers of cable and connectivity products, distributors and material suppliers.





- **Goal:** All communications cable products sold in the U.S. ***comply*** with applicable fire safety codes, transmission standards ... **and the law!**
- **Mission:** Education

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# Codes and Standards Intensive Industry



**“Listed”**

Life Safety  
Mandatory



**“Verified”**

Transmission  
Voluntary

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# National Electrical Code Requirements



## 800.179 Communications Wires and Cables

“Communications wires and cables **shall be listed** in accordance with 800.179(A) through (I) and marked in accordance with Table 800.179.

**Conductors in communications cables, other than in a coaxial cable, shall be copper.”**

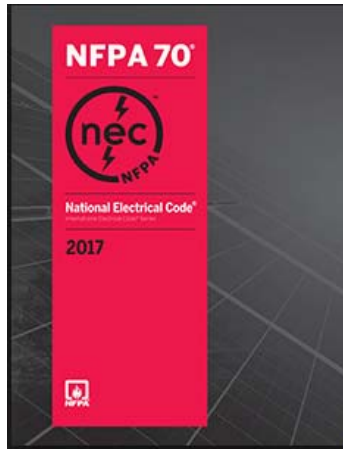
**CMP** - Communications Plenum

**CMR** - Communications Riser

**CM** - Communications General Purpose

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# Safety Listing



“Equipment, materials, or services included in a list published by an organization that is **acceptable to the authority having jurisdiction ...**”



Nationally Recognized Testing Laboratories (NRTLs)

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# The Reality Is...

- People want a “bargain”
- There are unscrupulous manufacturers out there
- Making Code and Standard compliant product is expensive
- It’s “easy” to fake compliance
- Not everyone knows the signs of non-compliant product



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# CCCA Market Surveillance

## **Examining Compliance of:**

- 1. Communications Data / LAN Cables**
- 2. Copper Patch Cords**
- 3. Fiber Optic Jumpers**
- 4. Fiber Optic Assemblies**



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## What we've found:

Packaging and/or cable showing *unauthorized* listing agency Certification Marks

- Cable Listing Mark is considered **counterfeit**
- Cable may not be code compliant
- May have been listed at one time but no longer compliant (removed)



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# How to tell if marks are counterfeit?

Packaging and/or cable shows UL symbol on package or cable but package does not have UL holographic label

- **Every Box** of UL Listed Cable **requires** a Holographic Label
- If no label, cable may be **non-compliant to NEC®**
- Often deceptively advertised and marketed as fully compliant
- Misleading and false claims, e.g.
  - “Plenum rated”
  - “Plenum cable”
  - “Plenum approved”



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## Another problem:

Packaging and/or cable shows UL or ETL marks, including holographic label (UL) but *does not meet* requirements of codes and standards

- Cable is **non-compliant**
- Not manufactured with materials needed to pass flame spread and smoke generation limits
- May have significant failure in fire performance testing – life safety risk



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# UL Public Notices

UL warns of communication cable with unauthorized reference to UL

**“This cable does not comply** with the standard for safety for the United States and Canada, and is not authorized to bear the UL Mark or reference UL.”



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# UL Public Notices

- There are currently 16 public notices regarding non-compliant and/or counterfeit communication cable

UL Warns of Potentially Hazardous Communications Cable (Release No. 17PN-13)

(Version française)  
(Versión en español)

NORTHBROOK, Ill., Aug. 15, 2017 — The following is a notification from UL that the communications cable identified below may pose a fire hazard. The communications cable does not comply with UL's Standards for Safety and is not authorized to bear the UL Mark.

Name of Product:  
Communications Cable, Type CMP

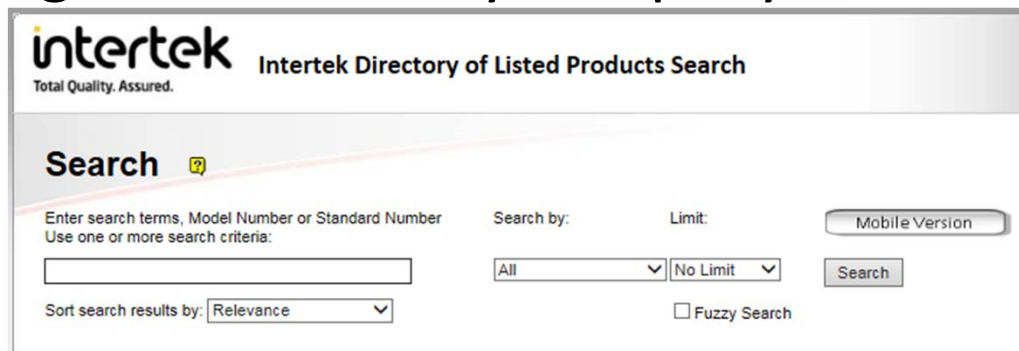
Photos of the Product:




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# Where do I get more Information?

- Visit UL or Intertek (ETL) Web sites
- Both sites are searchable for listing information by company name



**intertek** Intertek Directory of Listed Products Search  
Total Quality. Assured.

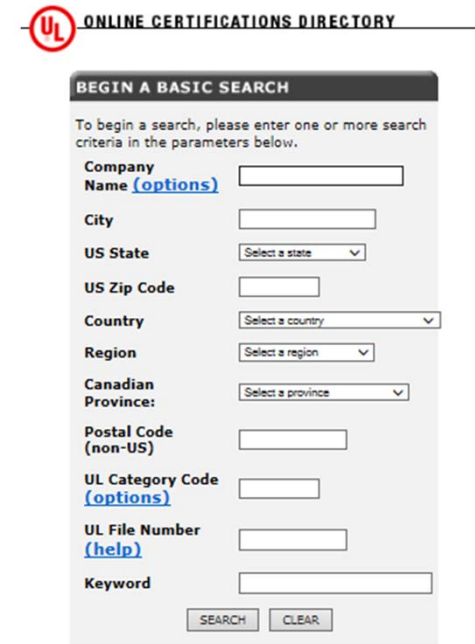
**Search** 

Enter search terms, Model Number or Standard Number  
Use one or more search criteria:

Sort search results by:

Search by:  Limit:

Fuzzy Search



**UL** ONLINE CERTIFICATIONS DIRECTORY

**BEGIN A BASIC SEARCH**

To begin a search, please enter one or more search criteria in the parameters below.

Company Name [\(options\)](#)

City

US State

US Zip Code

Country

Region

Canadian Province:

Postal Code (non-US)

UL Category Code [\(options\)](#)

UL File Number [\(help\)](#)

Keyword

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# CCCA CableCheck™ App

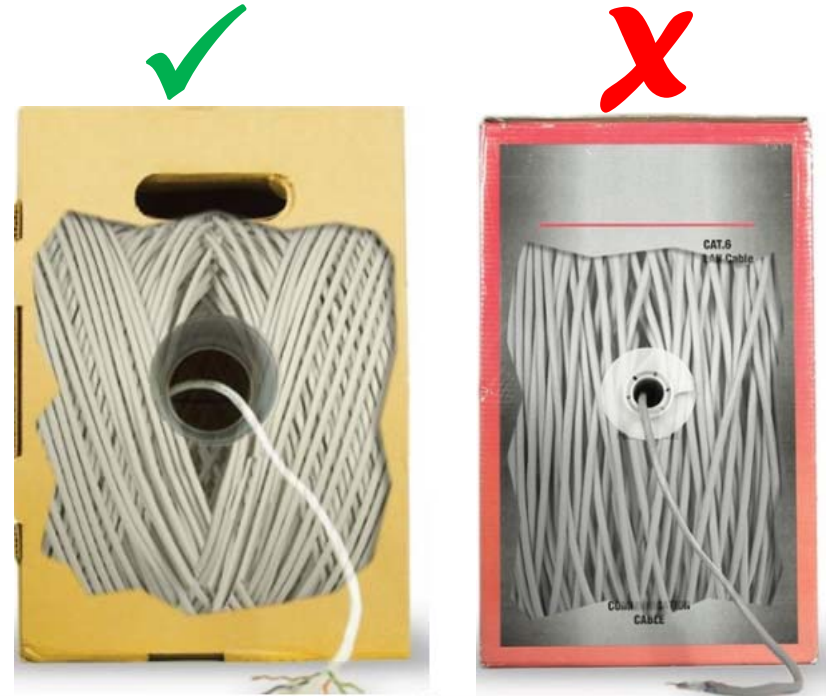
- For use as a field-screening tool with UL listed cables
  - Type in the “E” file number printed on the cable jacket
- Available from the App Store and Google Play.



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# Other Clues Regarding Non-Compliant Cable

- Poor cable design and/or quality control
- Poor packaging and problems with cable payout – imitation of Reelex™ wind



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## Additional Things To Be Wary Of

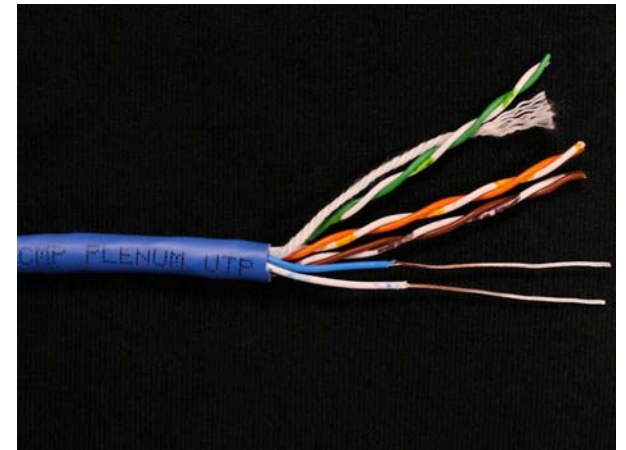
- Unfamiliar brands from unknown manufacturers
- Only available from online vendors
  - Poor English on company website
- No information or hidden information on factory location or country of origin



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# Counterfeit Cable Hiding in Plain Sight

- Copper Clad Aluminum (CCA) Conductors
- Not allowed for communication cables
- Would never be Listed by any listing agency
- Many sites selling this cable refer to it as “cost effective”



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# Real Encounters with Non-Compliant Cables

**NYC Case study Video**



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# CCCA Market Surveillance and Testing Program

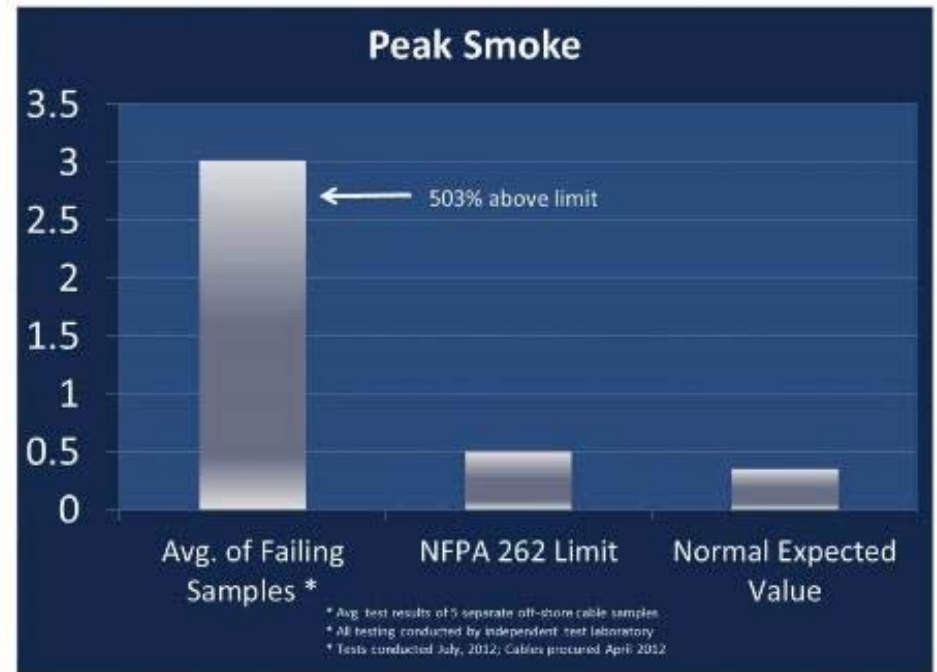
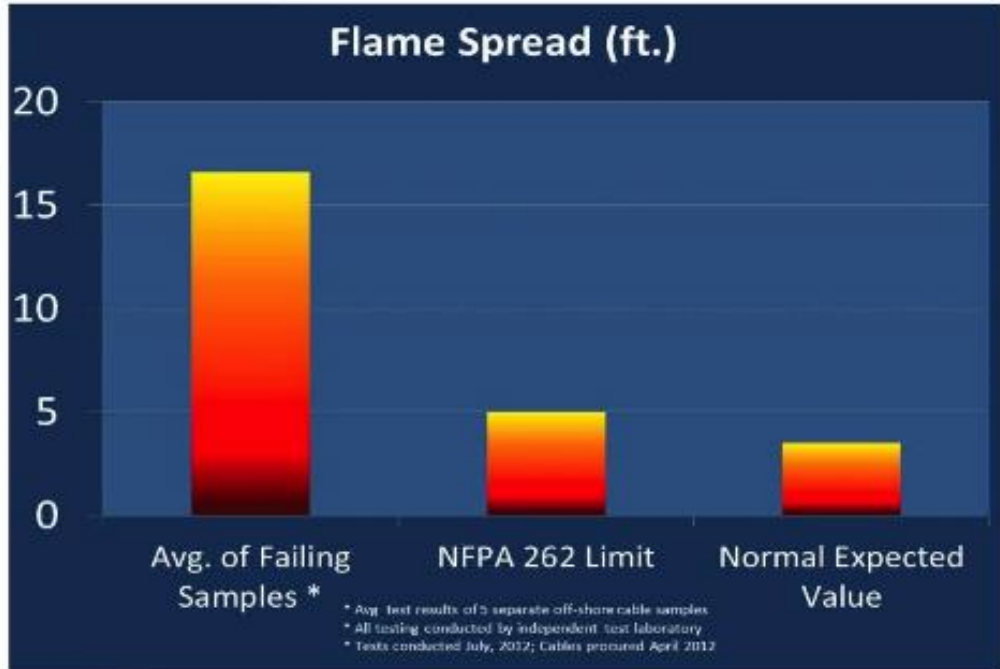
- Samples from Market – CMP Plenum-rated Cables
- Independent / Third Party testing
- NFPA 262 (Steiner Tunnel)
  - Flame Spread
  - Smoke



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# Initial Round of Tests



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# The latest round of testing

- New Steiner Tunnel Video



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# Liability for Installation of Non-Compliant Cable

- Installers have a legal responsibility (a duty of care) to ensure the products they install are compliant to local building codes
- “..a **duty of care** is a [legal obligation](#) which is imposed on an individual requiring adherence to a [standard](#) of [reasonable](#) care while performing any acts that could foreseeably harm others.”
- Liability exists **whether or not the installer actually knows** (or verifies) the product is non-compliant

Duty of care. (2017, May 15). In *Wikipedia, The Free Encyclopedia*. Retrieved 19:23, November 15, 2017, from [https://en.wikipedia.org/w/index.php?title=Duty\\_of\\_care&oldid=780551099](https://en.wikipedia.org/w/index.php?title=Duty_of_care&oldid=780551099)

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# Liability for Installation of Non-Compliant Cable

- Consequences for the installation of non-compliant cable – building code violations:
  - Vary by state but can include fines and/or imprisonment for building code violation. Some states impose fines for each day the code violation exists.
  - Certificate of Occupancy may not be issued to building owner/tenant

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# Liability for Installation of Non-Compliant Cable

- Possible Civil Liability
  - Negligence – liability for additional damage caused by fire
  - Fraud – possibility of additional damages, including punitive damages
  - Breach of Contract and Warranty



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# What CCCA is Doing

- Collaborating with UL on compliance and quality assurance procedures
- Communications, training, education, tools for industry and end-users
- Collaborating with & training global customs and law enforcement to protect member brands and trademarks.
- Ongoing surveillance and testing



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# Webcasts on CCCAssoc.org



Part 1 **How Big is the Problem? – CCCA**

Part 2 **Avoiding Liability – Legal Perspective**

Part 3 **UL Labels and Marks - UL**

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# Conference Presentations

U.S. and International – large and small



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## *What **You** Can Do to **Protect Your Company, Your Customers** and the **Public!***

- Long term due diligence is vital.
- Industry media and educational events
- UL and Intertek public notices
- [www.CCCAssoc.org](http://www.CCCAssoc.org)
- CableCheck™ app
- Buy known brands
- If unknown brand, require written proof of listing or verification



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## What To Watch Out For:

- x Very low price – especially for CMP rated product
- x Unknown brand names with no information on factory location or country of origin
- x Suspicious advertising language – poor English
- x Packaging and/or cable with **NO** UL or third-party Mark
- x Copper clad aluminum **(CCA)** conductors

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## What to Look For:

- ✓ Recognizable Manufacturer and Factory Location
- ✓ Reputable Vendor
- ✓ Industry Consistent Cost
- ✓ Listing Marks from UL or Intertek and listing information on their web site
- ✓ Quality packaging and smooth payout

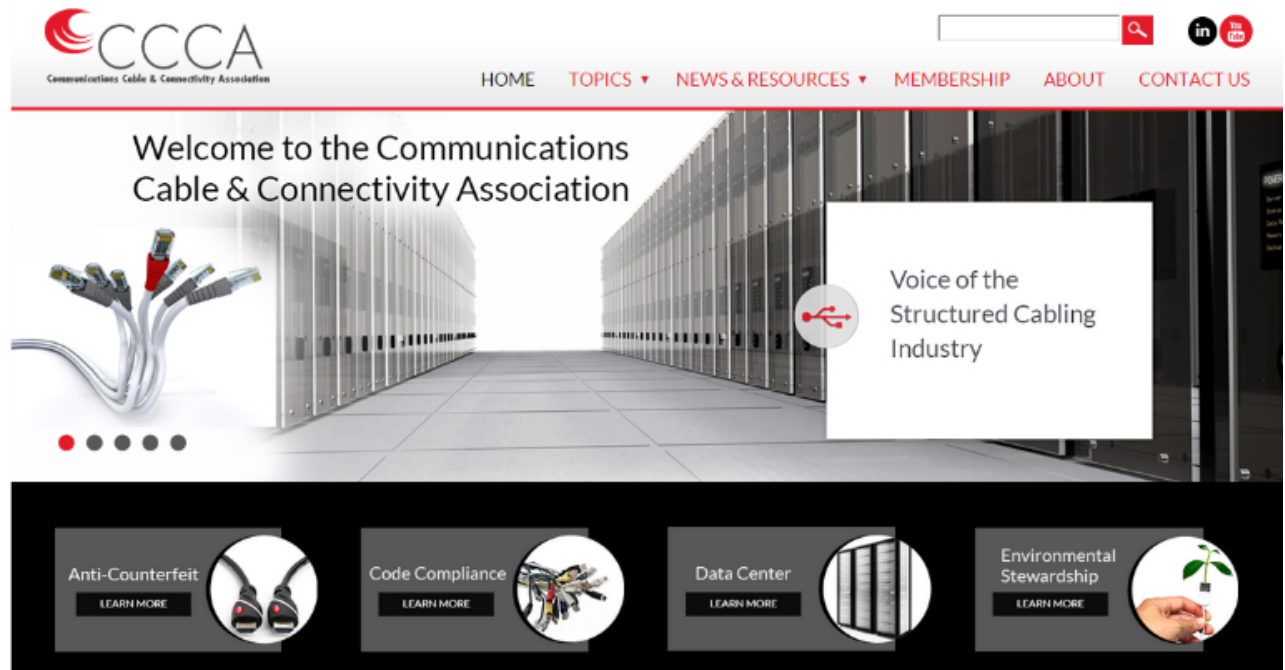
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# Thanks for Listening!

White papers, articles, notices, webcasts, etc. can be found at:

**CCCAssoc.org**

Follow us on Facebook, LinkedIn, and YouTube



The screenshot shows the homepage of the Communications Cable & Connectivity Association (CCCA). The header includes the CCCA logo, a search bar, and navigation links for HOME, TOPICS, NEWS & RESOURCES, MEMBERSHIP, ABOUT, and CONTACT US. The main content area features a large image of a server room with a white box overlay that reads "Voice of the Structured Cabling Industry". Below this, there are four circular icons with corresponding text and "LEARN MORE" buttons: Anti-Counterfeit (with a cable icon), Code Compliance (with a cable icon), Data Center (with a server rack icon), and Environmental Stewardship (with a plant icon).

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