



March 31, 2010

INDUSTRY FILE REVIEW - ACTION REQUIRED LETTER

«ATTENTIONNAME»
«NAME1»
«NAME2»
«NAME3ADRS1»
«ADRS2»
«ADRS3»
«CITY» «ST» «ZIP»
«COUNTRY»

Our Reference: File «FILENOS»

This Action Required Letter announces a forthcoming Industry File Review (IFR) for the Subject Number and Effective Date shown below. New and/or revised requirements have been developed that may be applicable to your product(s).

SUBJECT NUMBER: 444

EFFECTIVE DATE: 2012-01-31

ACTION REQUIRED LETTER DATE: 2010-03-31

I. New Test Requirements –

This Industry File Review is being required due to the changes to the requirements introduced into the ANSI/TIA-568-C.2 Balanced Twisted-Pair Telecommunications Cabling and Components Standard.

The publication of Standard ANSI/TIA-568-C.2 on August 11, 2009 requires Coupling Attenuation testing for shielded LAN cable products and bi-directional testing for the Return Loss, internal Near End Cross Talk (NEXT), internal Power Sum Near End Crosstalk (PSNEXT), Transverse Conversion Loss (TCL) and Equal Level Transverse Conversion Transfer Loss (ELTCTL) tests for all LAN cable products.

- As of the date of this letter, UL will accept submittals of unshielded and shielded cables for testing to the new Bi-directional testing requirement, in accordance with ANSI/TIA-568-C.2.
- After June 21, 2010, UL will accept submittals of:
 - 1) Shielded cables for Coupling Attenuation testing in accordance with ANSI/TIA-568-C.2,
 - 2) Shielded and Non-shielded cables for Coupling Attenuation testing in accordance with ISO/IEC 11801, Standard for Information Technology - Generic Cabling for Customer Premises dated 09/2002, and Amendment 1 dated 04/2008.
 - 3) Shielded cables for Coupling Attenuation & Screening Attenuation, unshielded cables for Coupling Attenuation testing in accordance with BSEN50173-1 Standard for Information Technology – Generic Cabling Systems – Part 1: General Requirements dated 01/2007.

Shielding and Coupling Attenuation will not be required to be performed at the manufacturing location, under the Manufacturer's Test Program, specified in the Follow-Up and Inspection Instructions (FUII). These tests will be performed however under New Work Investigations and as part of Follow-Up Service Testing at UL.

Bi-directional testing will be required to be performed as part of the Manufacturer's Test Program, specified in the Follow-Up and Inspection Instructions (FUII). As part of the Industry File Review submittal process, UL will confirm that manufacturing facilities have the capability of performing Bi-directional testing for UL Verified cables. The Manufacturer's Proprietary Inspection Program (PIP), contained in the Follow-Up Service Procedure, will need to identify this new test requirement.

II. Consolidation of CCN's

Also as part of this review, Verified cable currently covered under the Category for Communication Cables, DUZX will be transferred to the category for Data Transmission Cable Verified in Accordance with National or International Specifications, DVBI. This will allow for all Verified cable to be under one UL category. For those Subscribers that already have a DVBI File, UL will transfer the descriptive reports for cables that are covered under the Listing and Verification Program into the DVBI File. For those subscribers that do not have a DVBI File, a new File Number will be established for the DVBI category.

There will be no costs associated with the transfer of reports or the establishment of the new File Number. There may be additional costs associated with the maintenance of an additional File and for converting labels over to a new format due to the change in category.

For your convenience, a draft copy of the revised guide information for DVBI is provided as an attachment to this Bulletin. The DUZX guide information for the safety requirements will not be changed.

III. Obsolete Performance Ratings -

As part of this review, you will be requested to confirm that you would like to have the following obsolete cables deleted from your Files. It is UL's intention to delete these references by the effective date unless it is indicated that there is a need to maintain them in your Files. Examples of obsolete references include but may not be limited to the following:

- a. Verified Power Limited Circuit Cable, QPTZ
- b. Verified IBM Cable (Standard and extended "A" Types 1, 2, 6, 8 & 9)
- c. Category 1, 2 and 4 Cable
- d. Verified and Listed Type CM, CMG and CMP cable types for the Thomas & Betts 100-Ohm ALL-LAN® Cable Interconnection System Specification.

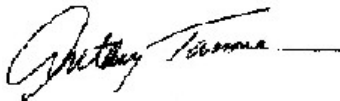
Please visit our Industry File Review website at <http://ifr.ul.com/> (do not include www in the URL). There, you will have access to the Important Letter that provides information concerning our Industry File Review process. In addition, the Information & Schedule and Summary of Requirements for specific reviews are located on the left hand side of the screen. Using the search function, you can search for these documents by the Action Required Letter Date, Effective Date or Subject Number. **Please keep in mind that if we do not receive your response to this IFR (letter) by November 30, 2010 we will proceed with withdrawing all UL Verifications in your File and in our published records, at no charge to you.** If you do not have internet access, experience difficulty retrieving documents or have questions concerning the Industry File Review process, please contact our Customer Service Department at one of the numbers indicated below. Please provide the Subject Number, Effective Date or Action Required Letter date as indicated above, along with your fax number or mailing address. We will fax or mail the Industry File Review information to you.

Argentina	+54 11 4316 8210	Brazil	+55 11 3049 8300	Canada	+1-866-937-3852
China - GuangZhou	+86-20-8348-6999	China - Suzhou	+86-512-6808-6400	Denmark	+45 44 85 65 65
France	+33 160 1988 12	Germany	+49 6102 369 0	Hong Kong	+852-2276-9898
India	+91-80-4138-4500	Italy	+39 039 6410 101	Japan	+81-596-24-6735
Korea	+822-2009-9100	Mexico	+52 55 3000 5400	Netherlands	+31 26 376 4800
Singapore	+65-6274-0702	Spain	+34 93 368 1300	Sweden	+46 8 795 4373
Taiwan	+886-2-55598168	UK	+44 1483 402010	USA	+1-877-854-3577

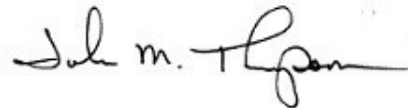
Please review this material as soon as possible.

UNDERWRITERS LABORATORIES INC.

REVIEWED BY:



Anthony Tassone
Principal Engineer
Telecommunications Cable
Phone: (631) 546-2943
Email: anthony.t.tassone@us.ul.com



John Thompson
Director
Primary Designated Engineers

APPENDIX

DRAFT COPY – SUBJECT TO REVISION –DRAFT COPY

****Draft DVBI.Guide Info Draft****
Local Area Network (LAN) Cable Verified for
Transmission Performance in Accordance with
National or International Specifications

Local Area Network (LAN) Cable Verified for Transmission Performance in Accordance with National or International Specifications

[See General Information for Local Area Network \(LAN\) Cable Verified for Transmission Performance in Accordance with National or International Specifications](#)

Date

GENERAL

This category covers local area network cable whose signal transmission characteristics have been determined to be in accordance with one of the specifications shown below or other national or international data transmission performance specifications.

Both “Listed” and “Non-Listed” local area network cables can be evaluated for data transmission performance.

Listed Cables - Listed cables have also been investigated in accordance with the Standard for Communications Cables, UL444 (e.g. – as Type CMP, CMR, CM, CMX, etc.) and for use in accordance with ANSI/NFPA 70, "National Electrical Code". For additional information, see Communications Cable ([DUZX](#)).

Non-Listed Cables – Non-Listed cables have not been investigated in accordance with the Standard for Communications Cables, UL444 and are for use where ANSI/NFPA 70, "National Electrical Code" does not apply. These cables have only been evaluated for data transmission performance.

ADDITIONAL INFORMATION

For additional information, see Electrical Equipment for Use in Ordinary Locations ([AALZ](#)).

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REQUIREMENTS AND SURFACE PRINT MARKINGS

Listed and Verified Cables

Listed cable, employing a solid conductor, that is additionally marked "Verified (UL) Category 3, 5, 5E, 6 or 6A [including latest draft number if applicable]" has been evaluated in accordance with ANSI/TIA-568C.2, "Balanced Twisted-Pair Telecommunications Cabling and Components Standards". Listed cable, employing a stranded conductor, is marked "Verified (UL) Category 3, 5, 5E, 6 or 6A [including latest draft number if applicable] Patch Cable".

Listed cable, employing a solid conductor, that is additionally marked "Verified (UL) Category 5e, 6, 6A or 7 ISO/IEC 11801" has been evaluated in accordance with ISO/IEC 11801, "Information Technology - Generic Cabling for Customer Premises". Cables that bear this surface mark have had the cable performance evaluated to requirements as stated in IEC 61156-5, "Multi-Core and Symmetrical Pair/Quad Cables for Digital Communications - Part 5: Symmetrical Pair/Quad Cables with Transmission Characteristics up to 1,000 MHz-Horizontal Floor Wiring - Sectional Specification". Listed cable, employing a stranded conductor, is marked "Verified (UL) Category 5e, 6, 6A or 7 Patch Cable ISO/IEC 11801".

Listed cable, employing a solid conductor, that is additionally marked "Verified (UL) Category 6 or 7 NEMA WC66" has been evaluated in accordance with NEMA WC66, "Performance Standard for Category 6 and 7 100 Ohm Shielded and Unshielded Twisted Pair Cable." Listed cable, employing a stranded conductor, is marked "Verified (UL) Category 6 or 7 Patch Cable NEMA WC66".

Listed cable, employing a solid conductor, that is additionally marked "Verified (UL) Category 3, 5 or 5E NEMA WC63.1" has been evaluated in accordance with NEMA WC63.1, "Performance Standard for Twisted Pair Premise Voice and Data Communications Cables." Listed cable, employing a stranded conductor, is marked "Verified (UL) Category 3, 5 or 5E Patch Cable NEMA WC63.1.

Listed cable, employing a solid conductor, that is additionally marked "Verified (UL) Category 5, 6 or 7 BS EN 50173-1" has been evaluated in accordance with BSEN 50173-1, "Information Technology – Generic Cabling Systems – Part 1: General Requirements". Cables that bear this surface mark have had the cable performance evaluated to requirements as stated in EN 50288-1, "Multi-Element Metallic Cables Used in Analogue and Digital Communication and Control - Part 1: Generic Specification". Listed cable, employing a stranded conductor, is marked "Verified (UL) Category 5, 6 or 7 Patch Cable BS EN 50173-1

Listed cable that is additionally marked "Verified (UL) In Accordance With [Specification name and/or number]" complies with the requirements of the transmission performance specification referenced in this marking.

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Verified Only (Non-Listed) Cables

This cable is marked as noted below to indicate compliance to the referenced specification. The UL symbol (either the "UL in a circle symbol" or "(UL)") cannot be used in place of "Underwriters Laboratories Inc." in the statement.

Non-Listed cable employing a solid conductor and investigated to ANSI/TIA-568.C.2 "Balanced Twisted-Pair Telecommunications Cabling and Components Standards" is marked "Verified by Underwriters Laboratories Inc. in Accordance with Category 3, 5E, 6 or 6A ANSI/TIA-568.C.2 [including latest draft number, if applicable] Only". This print legend may be abbreviated as "Verified by Und Lab Inc. Only to ANSI/TIA-568.C.2 Cat 3, 5E, 6 or 6A". Non-Listed cable employing a stranded conductor is marked "Verified by Underwriters Laboratories Inc. in Accordance with Category 3, 5E, 6 or 6A Patch Cable ANSI/TIA-568.C.2 [including latest draft number, if applicable] Only". This print legend may be abbreviated as "Verified by Und Lab Inc. Only to ANSI/TIA-568.C.2 Cat 3, 5E, 6 or 6A Patch Cable".

Non-Listed cable employing a solid conductor and investigated to ISO/IEC 11801, "Information Technology - Generic Cabling for Customer Premises" is marked "Verified by Underwriters Laboratories Inc. in Accordance with Category 5e, 6, 6A or 7 ISO/IEC 11801 Only". This print legend may be abbreviated as "Verified by Und Lab Inc Only to ISO/IEC 11801 Category 5e, 6, 6A or 7". Cables that bear this surface mark have had the cable performance evaluated to requirements as stated in IEC 61156-5, "Multi-Core and Symmetrical Pair/Quad Cables for Digital Communications - Part 5: Symmetrical Pair/Quad Cables with Transmission Characteristics up to 1,000 MHz-Horizontal Floor Wiring - Sectional Specification". Non-Listed cable employing a stranded conductor is marked "Verified by Underwriters Laboratories Inc. in Accordance with Category 5e, 6, 6A or 7 Patch Cable ISO/IEC 11801 Only". This print legend may be abbreviated "Verified by Und Lab Inc Only to ISO/IEC 11801 Category 5e, 6, 6A or 7 Patch Cable".

Non-Listed cable employing a solid conductor and investigated to NEMA WC 66, "Performance Standard for Category 6 and 7 100 Ohm Shielded and Unshielded Twisted Pair Cables," is marked "Verified by Underwriters Laboratories Inc. in Accordance with Category 6 or 7 NEMA WC 66 Only". This print legend may be abbreviated as "Verified by Und Lab Inc Only to NEMA WC 66 Category 6 or 7". Non-Listed cable employing a stranded conductor is marked "Verified by Underwriters Laboratories Inc. in Accordance with Category 6 or 7 Patch Cable NEMA WC 66 Only". This print legend may be abbreviated as "Verified by Und Lab Inc Only to NEMA WC 66 Category 6 or 7 Patch Cable".

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Non-Listed cable employing a solid conductor and investigated to NEMA WC63.1, "Performance Standard for Twisted Pair Premise Voice and Data Communications Cables" is marked "Verified by Underwriters Laboratories Inc. in Accordance with Category 3, 5 or 5E NEMA WC 63.1 Only". This print legend may be abbreviated as "Verified by Und Lab Inc. Only to NEMA WC 63.1 Category 3, 5 or 5E".

Non-Listed cable employing a stranded conductor is marked "Verified by Underwriters Laboratories Inc. in Accordance with Category 3, 5 or 5E Patch Cable NEMA WC 63.1 Only". This print legend may be abbreviated as "Verified by Und Lab Inc. Only to NEMA WC 63.1 Category 3, 5 or 5E Patch Cable".

Non-Listed cable employing a solid conductor and investigated to BS EN 50173-1, "Information Technology – Generic Cabling Systems – Part 1: General Requirements" is marked "Verified by Underwriters Laboratories Inc. in Accordance with Category 5, 6 or 7 BS EN 50173-1 Only". This print legend may be abbreviated as "Verified by Und Lab Inc. Only to BS EN 50173-1 Category 5, 6 or 7". Cables that bear this surface mark have had the cable performance evaluated to requirements as stated in EN 50288-1, "Multi-Element Metallic Cables Used in Analogue and Digital Communication and Control - Part 1: Generic Specification". Non-Listed cable employing a stranded conductor is marked "Verified by Underwriters Laboratories Inc. in Accordance with Category 5, 6 or 7 Patch Cable BS EN 50173-1 Only". This print legend may be abbreviated "Verified by Und Lab Inc. Only to BS EN 50173-1 Category 5, 6 or 7 Patch Cable".

Non-Listed cable that is marked "Verified by Underwriters Laboratories Inc. in Accordance with [Specification name and/or number & category performance number] Only" complies with the requirements of the transmission performance specification referenced in this marking. This print legend may be abbreviated as "Verified by Und Lab Inc Only to [Specification name and/or number & category performance number]".

UL MARK

Listed and Verified Cables

The required surface markings on the product, as described above and the Listing Mark of Underwriters Laboratories Inc. on the attached tag, the reel, or the smallest unit container in which the product is packaged is the only method provided by UL to identify products manufactured under its Listing and Follow-Up Service. Since these cables are Listed under the Communications Cable (DUZX) product category, the Communications Cable Listing Mark is used and this Mark will also include the text "Verified in Accordance with [Specification name and/or number]".

Verified Only (Non-Listed) Cables

The required surface markings on the product, as described above and the Verification Mark of Underwriters Laboratories Inc. on the attached tag, the reel, or the smallest unit container in which the product is packaged is the only method provided by UL to identify products manufactured under its Verification and Follow-Up Service. The Verification Mark for these products includes the UL symbol (as illustrated in the Introduction of this Directory) together with the word "VERIFIED," a control number, the product name "Data Transmission Cable" and the Specification name and/or number.