



U.S. CONSUMER PRODUCT SAFETY COMMISSION  
WASHINGTON, D.C. 20207  
June 15, 1995

CPSA 6 (11) Cleared

Product

Consumer

mtg Log of 6/11/95

Mr. James Beyreis  
Vice President, Engineering  
Underwriters Laboratories Inc.  
333 Pfingsten Road  
Northbrook, IL 60062-2096

Re: Twist-on Wire Connectors for Aluminum Wire

Dear Jim:

Thank you for meeting with CPSC staff members to discuss the twist-on wire connectors. Enclosed is a meeting log that we prepared.

Under separate cover, we forwarded copies of the documents from our files that were discussed at the meeting.

If assistance is needed in obtaining specimens of aluminum wiring of the types installed in homes, please let us know.

Sincerely,

Andrew G. Stadnik, P.E.  
Associate Executive Director  
Engineering Sciences

Enclosures

c: Phillip L. Sawyer,  
Vice President, Engineering  
Ideal Industries, Inc.  
Becker Place  
Sycamore, IL 60178

✓

## LOG OF MEETING

**SUBJECT:** Twist-on Wire Connectors for Aluminum Wire

**DATE:** June 1, 1995

**PLACE:** Room 410 B/C  
East West Towers

**DATE OF LOG ENTRY:** June 15, 1995

**SOURCE OF LOG ENTRY:** William H. King, Jr., ESEE *W.H.K.*

### CPSC PARTICIPANTS:

William H. King, Jr., ESEE  
Andrew Stadnik, ES  
Linda Edwards, ESEE  
Aaron Banerjee, ESEE  
Ed Krawiec, ESEE  
Marc Schoem, CCA (a.m. only)  
John Fitch, CCA (p.m. only)

### NON-CPSC PARTICIPANTS:

Jerry Kopstein, Underwriters Laboratories Inc. (UL)  
Jake Killinger, UL  
Jim Beyreis, UL  
Peter Pollak, Aluminum Association  
Phil Sawyer, Ideal Industries, Inc.  
Bill Blaha, Ideal Industries, Inc.

### SUMMARY:

Following the recent announcement by Underwriters Laboratories Inc. that a twist-on wire connector has been listed by UL for use with aluminum-to-copper conductors for the first time since 1987, CPSC staff raised safety concerns with the application of this product to existing homes wired with aluminum wiring. Those concerns led to the meeting covered by this log.

Mr. King provided the explanation of the CPSC staff concerns as documented in the CPSC letter of May 1, 1995 to UL. UL, Ideal and the CPSC staff discussed their position and views on each of the ten issues covered in the letter.

Following the exchange of views, the parties agreed to the following:

1. CPSC staff will provide UL with copies of the reports that led to the selection of the aluminum wiring repair recommendations contained in the CPSC booklet "Repairing Aluminum Wiring". CPSC will also provide copies of reports related to environmental testing of electrical connections involving aluminum wire, and testing of twist-on connectors with aluminum

wire.

2. UL will consider further how representative the aluminum wire stock used in the UL testing is to conductors installed in homes.

3. UL will consider inclusion of environmental test conditions in the performance requirements of their standard.

4. UL will review the human factors issues involved in consumer application of twist-on connectors for aluminum wire.

5. UL will consider hot-wire ignition as a test method applicable to flammable parts of the twist-on connector for aluminum wire.

6. UL will consider additional testing of the connector using electric current flowing between conductors of similar metals, including AL-to-AL, when these are part of the listed AL-CU wire combinations.

It was agreed by the parties to get back in touch with each other, via a conference call, in approximately six weeks from the date of this meeting to further pursue this matter.