From:	Jeffrey.Fecteau@us.ul.com
To:	Baker, Tarry
Cc:	Rick.Dixon@dca.state.fl.us
Subject:	Aluminum Connections
Date:	03/22/2011 01:16 PM
Attachments:	Alum Conn White Paper.pdf AlumiConn.pdf CPSC Meeting Aluminum Wire repair.pdf CPSC #516.pdf

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Tarry,

This information may be useful.

COPALUM:

http://www.tycoelectronics.com/catalog/cinf/en/c/10914/968?RQS=

http://tooling.tycoelectronics.com/copalum/procedure.asp

Keep in mind that COPALUM installers must be certified. Therefore, it would not be unreasonable for the insurance company to ask for a copy of the installers certificate.

Keep in mind that AlumiConn, as part of the listing requirement, has specific installation instructions that require in-lb torquing based on conductor type and size. There is a statement that warns "Do not over torque." Insurance companies may consider requesting a signed affidavit by the qualified installing electrician that this product was installed in accordance with all manufacturer's torquing requirements.

UL Listed products that are installed per manufacturer's installation instructions as required by 110.3(B) of the NEC means that the manufacturer has demonstrated the ability to produce a product that complies with appropriate requirements regarding reasonably foreseeable risks associated with the product.

It is important to ensure products are properly installed in accordance with their makings. The following information is from the UL Guide Information for UL Category ZMVV:

Marking (or equivalent)	**For Use With**
"CU"	Copper wire only
"AL"	Aluminum wire only
"AL-CU" or "CU-AL"	Copper to copper, aluminum to aluminum, copper to aluminum **but not intermixed or in direct physical contact**, copper-clad aluminum to copper-clad aluminum, copper to copper-clad aluminum, aluminum to copper-clad aluminum **but not intermixed or in direct physical contact**
"AL-CU (intermixed - dry locations)"	Copper to copper, aluminum to aluminum, copper to aluminum **intermixed and in direct physical contact**, copper-clad aluminum to copper-clad aluminum,

copper to copper-clad aluminum,
aluminum to copper-clad aluminum **and in direct physical contact**

Except as otherwise noted on or in the shipping carton, aluminum conductors are not intended to be used in direct physical contact with copper and copper-clad aluminum conductors in the same connector. A wire connector for securing an aluminum wire in combination with a copper or copper-clad aluminum conductor, where physical contact occurs between the wires of different metals, **is limited to dry locations only and is marked "AL-CU (intermixed - dry locations)."**

Hope you find this helpful for your April Electrical TAC meeting.

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