ER- Exposed Run Approval

In order to comply with CSA Certification requirements all AWM wire and cable must pass one of the following flame tests*

FT1 – This vertical flame test procedure is specified under CSA Standard C22.2 No. 0.3 and requires that any wire or cable must not propagate a flame or continue to burn for more than one minute after five, fifteen-second applications of flame. The flame source is removed for fifteen seconds in between flame applications.

FT2 - This horizontal test procedure is also specified under CSA Standard C22.2 No. 0.3 and requires that any wire or cable must self-extinguish after one 30-second application of flame. Any burning particles falling from the test specimen cannot cause the cotton covering the enclosure floor to ignite.

FT4 - This vertical test procedure is also specified under CSA Standard C22.2 No. 0.3 and used to determine the flame propagation tendency of cables in a vertical tray. While this test is similar to the UL Vertical Tray Flame test specified under UL Standard 1581, FT4 differs in severity. The FT4 test requires mounting of the burner to be at 20° from the horizontal with its burner ports facing up. The UL Vertical Flame test requires positioning of the burner at 0° from the horizontal. The allowable cable char length for the FT4 flame test is only 4.92 ft, where UL 1581 permits eight feet maximum of damage.

* Note: The flame tests indicated above are brief descriptive summaries only, for complete details regarding specific test procedures and requirements, please refer to the applicable CSA standards. The Chart on Page 655 explains how Lapp cables are categorized.

Exposed Run for Tray Cables

Type TC-ER: 600V
2008 NEC Article 336.10 (7) indicates that in Industrial establishments, Type TC Tray cable that complies with the crush and impact requirements of Type MC (Metal Clad) cable and is identified for such use with the marking Type TC-ER shall be permitted between a cable tray and the utilization equipment or device. The cable shall be secured at intervals not exceeding 1.8 m (6 ft). Please refer to NEC Article 336.10 (7) for more specific information.

Type PLTC-ER: 300V
2008 NEC Article 725.154 (E) (7) indicates that in industrial establishments Type PLTC cable that complies with the crush and impact requirements of Type MC (Metal Clad) cable and is identified for such use shall be permitted to be exposed between the cable tray and the utilization equipment or device. The cable shall be secured at intervals not exceeding 1.8 m (6 ft). Please refer to the NEC Article 725.154 (E) (7) for more specific information.