



AMP NETCONNECT
Solutions Division

**EVALUATION OF FIRE PERFORMANCE TESTS ON UNIVERSAL LOW SMOKE
ZERO HALOGEN MATERIAL**

Testing Done at an Independent Test House

TECHNICAL SHORT REPORT NUMBER : SR104b

AUTHOR : J. Rhodes

DATE : 30/6/98

1.0 SCOPE

This investigation was carried out in order to assess the flame retardancy of the new Universal Low Smoke Zero Halogen material, used as a standard jacket for the AMP NETCONNECT Fiber Optic Cables . The smoke emission and the halogen content of the material was also assessed.

2.0 METHOD

A 4 fibre Office Distribution Cable with ULSZH sheath was subjected to 4 different tests:

IEC 332 - 1 : 1993
IEC 332 - 3 : 1992 (cat. A & C/F)
IEC 754 - 1 : 1994
IEC 1034 - 2 : 1997

3.0 RESULTS

3.1 IEC 332 pt 1 - Method of test on a single vertical insulated wire or cable

The maximum height of the cable charred or affected as measured from the point of flame application was 5.4 cm.

3.2 IEC 332 pt 3 - Tests on bunched wires or cables

The maximum height of the cable charred or affected as measured from the bottom of the burner was:

In front of the cable group 68 cm
At the rear of the cable group N/A

3.3 IEC 754 pt 1 - Determination of the amount of halogen acid gas

The average hydrochloric acid yield was 5mg/g.

3.4 IEC 1034 pt 2 - Measurements of smoke density of electric cables burning under defined conditions

The minimum light transmittance recorded was 90.3 %

4.0 CONCLUSIONS

The specimens tested met the performance requirements for IEC 332 pts 1 and 3, and IEC 1034 pt 2. There are no performance requirements specified in IEC 754 pt 1.