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Test Method for Conducting Longitudinal Water
Penetration Resistance Tests on Longitudinal Water
Blocked Conductors

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*TEST METHOD FOR CONDUCTING LONGITUDINAL WATER PENETRATION
RESISTANCE TESTS ON BLOCKED CONDUCTORS*

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Foreword

This test method for conducting longitudinal water penetration resistance tests on longitudinally water blocked cables, T-34-664, was developed by the Insulated Cable Engineers Association, Inc. (ICEA). Cable constructions that only have a blocked conductor should be tested to ICEA Publication T-31-610; "Test Method for Conducting Longitudinal Water Penetration Resistance Tests on Blocked Conductors".

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Requests for interpretation of this publication must be submitted in writing to the Insulated Cable Engineers Association, Inc. www.icea.net. An official written interpretation will be provided. Suggestions for improvements gained in the use of this publication will be welcomed by the Association.

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Section 1 GENERAL

1.1 SCOPE

This test method provides for qualification and production test procedures for determining the effectiveness of non-metallic water barriers incorporated in a cable construction which are designed as an impediment to longitudinal water penetration along the cable interstices.

1.2 GENERAL INFORMATION

U.S. customary units, except for temperature, are specified throughout this standard. Approximate International System of Units (SI) equivalents are included for information only.

1.3 DEFINITIONS

Cable Core: For nonshielded designs, the cable core is the portion of the cable which includes the conductor and the insulation, it may also include a conductor shield. For shielded cable designs, the cable core is the portion of the cable that includes the conductor, the conductor shield, the insulation and the extruded insulation shield.

Extrudable Conductor Filler Compound: An extrudable compound material incorporated in a cable construction intended as an impediment to water penetration.

Nominal Insulation Thickness: The insulation thickness that is used for identification purposes only. The nominal insulation thickness can be found in the applicable ICEA cable standard.

Pumpable Conductor Filler Compound: A pumpable compound material incorporated in a cable construction intended as an impediment to water penetration.

Water Swellable Component: A water swellable tape, yarn, or powder, or a combination thereof incorporated in a cable construction intended as an impediment to water penetration.