



**ICEA T-28-562-2021**

**TEST METHOD FOR MEASUREMENT OF  
HOT CREEP OF POLYMERIC INSULATIONS**

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*Test Method For Measurement Of Hot Creep Of Polymeric Insulations*

*Approved on 11/8/2021 by*

**Insulated Cable Engineers Association**

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## Foreword

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## Scope

This test method provides a procedure, which is suited for determining the relative degree of crosslinking of polymeric, electric cable insulations.

### Summary of Method:

#### Elongation Test:

A specimen is subjected to a constant load stress while suspended in an air oven at a specified elevated temperature for a specified time period. At the end of the time period the increase in elongation of the specimen is determined.

#### Set Test:

Immediately after the elongation test has been completed on a specimen, the same specimen with the load stress removed, will be subjected to an additional time period in the oven at the same elevated temperature. The specimen is then removed and allowed to cool. The set of the specimen, based on original length, is then determined.

#### Significance:

The test method has a consistent reproducibility, which makes it particularly suitable as a quality control test for determining relative degree of crosslinking. This method has been found more reproducible than the other methods in current use such as heat deformation. Also, it corresponds more closely to service conditions than a solvent-extraction procedure.