



# CERTIFICATE OF ACCREDITATION

## The ANSI National Accreditation Board

Hereby attests that

**CMTE Inc.**  
65 Imperial Street  
Hamilton, Ontario, Canada L8L 4E2

Fulfills the requirements of

**ISO/IEC 17025:2017**

In the field of

**TESTING**

This certificate is valid only when accompanied by a current scope of accreditation document.  
The current scope of accreditation can be verified at [www.anab.org](http://www.anab.org).

A handwritten signature in black ink, appearing to read 'R.D.L.', is positioned above a horizontal line.

R. Douglas Leonard Jr., VP, PILR SBU

Expiry Date: 26 May 2023  
Certificate Number: AT-2988



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory  
quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

## SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

### CMTE Inc.

65 Imperial Street  
Hamilton, Ontario, Canada L8L 4E2  
Dr. Ahmed Mostafa [amostafa@cmte.ca](mailto:amostafa@cmte.ca)  
905 746 6090

### TESTING

Valid to: **May 26, 2023**

Certificate Number: **AT-2988**

#### Mechanical


Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Cross-Sectional Area	CSA S806-12 Annex A	Fiber Reinforced Polymer (FRP)	Scale and Water Displacement/Caliper
Longitudinal Tensile Strength, Modulus and Ultimate Elongation at Room Temperature	CSA S806-12 Annex C ASTM D7205/D7205M		Universal Testing Machine w/Extensometer
Longitudinal Tensile Strength, Modulus and Ultimate Elongation at Cold Temperature	ASTM D7205/D7205M, CSA S806-12 Annex C		Universal Testing Machine w/Extensometer, Ultra Low Freezer
Bond Strength and Pullout Capacity of anchor head (with and without alkali)	ASTM D7913/D7913M, CSA S806- 12 Annex G, CSA S807- 19 Annex F		Universal Testing Machine w/LVDT and External Load Cell
Transverse Shear Strength	ASTM D7617/D7617M, ACI 440.3R-04 - Test Method B4, CSA S806-12 Annex L		Universal Testing Machine
Strength of FRP Bent Bars and Stirrups at Bend Locations	CSA S807-19 Annex E		Universal Testing Machine
Fiber Content	ASTM D2584		Oven
Water Absorption	ASTM D570, Subsection 7.4 (At 50 °C)		Scale
Alkali Resistance in High pH Solution with and without load	CSA S806-12 Annex M, ASTM D7705/D7705M (except the weight-change test)		Universal Testing Machine w/Extensometer

**Mechanical**

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Creep Rupture Strength	ASTM D7337/D7337M, CSA S806-12 Annex H	Fiber Reinforced Polymer (FRP)	Time Measuring Device, Dial Gage
Glass Transition Temperature	ASTM D3418, ASTM E1356 (using DSC)	Fiber Reinforced Polymer (FRP)	Differential Scanning Calorimetry (DSC)
Degree of Cure, Cure Ratio, or Total Enthalpy of Polymerization (Resin)	ASTM E2160, ASTM D5028, CSA S807-19 Annex A using DSC	Fiber Reinforced Polymer (FRP)	Differential Scanning Calorimetry (DSC)
Cross-Sectional Area	ASTM D792	Fiber Reinforced Polymer (FRP)	Scale and Water Displacement
Strength of Fiber Reinforced Polymer (FRP) Bent Bars in Bend Locations	ASTM D7914 / ASTM D7914M	Fiber Reinforced Polymer (FRP)	External Load Cell
Apparent Horizontal Shear Strength	ASTM D4475	Fiber Reinforced Polymer (FRP)	Universal testing Machine
Standard Specification for Solid Round Glass Fiber Reinforced Polymer Bars for Concrete Reinforcement	ASTM D7957/D7957M-17	Glass Fiber Reinforced Polymer Bars	<ul style="list-style-type: none"> <li>• Scale and Water Displacement/Caliper</li> <li>• Micro Balance</li> <li>• Universal Testing Machine w/Extensometer/LVDT</li> <li>• External Load Cell</li> <li>• Differential Scanning Calorimetry (DSC)</li> <li>• Time Measuring Device,</li> <li>• Dial Gage</li> <li>• Ultra Low Freezer Oven</li> </ul>

Note:

1. This scope is formatted as part of a single document including Certificate of Accreditation No. AT -2988.



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