SCOPE OF ACCREDITATION

GROUPE CTT INC. / CTT GROUP INC.
3000, rue Boullé
St. Hyacinthe, QC
J2S 1H9

Accredited Laboratory No. 40
(Conforms with requirements of ISO/IEC 17025:2005)

CONTACT: Liette Courchesne
TEL: (450) 778-1870
FAX: (450) 778-3901
EMAIL: lcourchesne@gcttg.com
URL: http://www.gcttg.com/en

CLIENTS SERVED: Services offered to all customers

FIELDS OF TESTING: Chemical/Physical, Mechanical/Physical, Thermal & Fire Resistance

INITIAL ACCREDITATION DATE : 1987-08-13
MOST RECENT ACCREDITATION : 2018-06-16
ACCREDITATION VALID TO: 2020-11-11

Remarque: La présente portée d'accréditation existe également en français, sous la forme d'un document distinct.
Note: This scope of accreditation is also available in French as a separately issued document.

ANIMAL AND PLANTS (AGRICULTURE)

Animal and Fishery Products: (except food)

Leathers

ASTM D2212 Standard Test Method for Slit Tear Resistance of Leather

Soils

ASTM D3080 Standard Test Method for Direct Shear Test of Soils Under Consolidated Drained Conditions
<table>
<thead>
<tr>
<th>Standard Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM D422</td>
<td>Standard Test Method for Particle-Size Analysis of Soils</td>
</tr>
<tr>
<td><strong>CONSTRUCTION</strong></td>
<td></td>
</tr>
<tr>
<td><strong>(Geosynthetics)</strong></td>
<td></td>
</tr>
<tr>
<td>ASTM D1203</td>
<td>Test Method for Volatile Loss from Plastic Film Using activated Carbon</td>
</tr>
<tr>
<td>ASTM D1593</td>
<td>Specification for Nonrigid Vinyl Chloride Plastic Sheeting (thickness)</td>
</tr>
<tr>
<td>ASTM D3083</td>
<td>Specification for Flexible Poly (Vinyl Chloride) Plastic Sheeting for Pond, Canal and Reservoir Lining Only for: Tensile Strength, Water Extraction, Tear Resistance, Shrinkage, Thickness, Soil Burial</td>
</tr>
<tr>
<td>ASTM D4218</td>
<td>Standard Test Method for Determination of Carbon Black Content in Polyethylene Compounds By the Muffle-Furnace Technique</td>
</tr>
<tr>
<td>ASTM D4355</td>
<td>Standard Test Method for Deterioration of Geotextiles from Exposure to Ultraviolet Light and Water (Xenon-Arc Type Apparatus)</td>
</tr>
<tr>
<td>ASTM D4437-99</td>
<td>Standard Practice for Determining the Integrity of Field Seams Used in Joining Flexible Polymeric Sheet Geomembranes</td>
</tr>
<tr>
<td>ASTM D4491</td>
<td>Standard Test Method for Water Permeability of Geotextiles by Permittivity</td>
</tr>
<tr>
<td>ASTM D4533</td>
<td>Standard Test Method for Trapezoid Tearing Strength of Geotextiles</td>
</tr>
<tr>
<td>ASTM D4545</td>
<td>Standard Practice for Determining the Integrity of Factory Seams Used in Joining Manufactured Flexible Sheet Geomembranes</td>
</tr>
<tr>
<td>ASTM D4632</td>
<td>Standard Test Method for Grab Breaking Load and Elongation of Geotextiles</td>
</tr>
<tr>
<td>ASTM D4716</td>
<td>Test Method for Determining the (In-plane) Floe Rate per Unit Width and Hydraulic Transmissivity of a Geosynthetic Using a Constant Head</td>
</tr>
<tr>
<td>ASTM D4751</td>
<td>Standard Test Method for Determining Apparent Opening Size of a Geotextile</td>
</tr>
<tr>
<td>ASTM D4884</td>
<td>Standard Test Method for Strength of Sewn or Thermally Bonded Seams of Geotextiles</td>
</tr>
<tr>
<td>ASTM D4885</td>
<td>Standard Test Method for Determining Performance Strength of Geomembranes by the Wide Strip Tensile Method</td>
</tr>
</tbody>
</table>
ASTM D5101 Standard Test Method for Measuring the Soil-Geotextile System Clogging Potential by the Gradient Ratio
ASTM D5199 Standard Test Method for Measuring the Nominal Thickness of Geosynthetics
ASTM D5261 Standard Test Method for Measuring Mass per Unit Area of Geotextiles
ASTM D5321 Standard Test Method for Determining the Coefficient of Soil and Geosynthetic or Geosynthetic and Geosynthetic Friction by the Direct Shear Method
ASTM D5493 Standard Test Method for Permittivity of Geotextiles Under Load
ASTM D5514 Standard Test Method for Large Scale Hydrostatic Puncture Testing of Geosynthetics
ASTM D5617 Standard Test Method for Multi-Axial Tension Test for Geosynthetics
ASTM D5721 Standard Practice for Air-Oven Aging of Polyolefin Geomembranes
ASTM D5747 Standard Practice for Tests to Evaluate the Chemical Resistance of Geomembranes to Liquids
ASTM D5885 Standard Test Method for Oxidative Induction Time of Polyolefin Geosynthetics by High-Pressure Differential Scanning Calorimetry
ASTM D5993 Standard Test Method for Measuring Mass per Unit of Geosynthetic Clay Liners
ASTM D5994 Standard Practice for Measuring Core Thickness of Textured Geomembrane
ASTM D6140 Standard Test Method to Determine Asphalt Retention of Paving Fabrics Used in Asphalt Paving for Full-Width Applications
| ASTM D6241 | Standard Test Method for the Static Puncture Strength of Geotextiles and Geotextile-Related Products Using a 50-mm Probe |
| ASTM D6243 | Standard Test Method for Determining the Internal and Interface Shear Resistance of Geosynthetic Clay Liner by the Direct Shear Method |
| ASTM D6364 | Standard Test Method for Determining the Short-Term Compression Behavior of Geosynthetics |
| ASTM D6392 | Standard Test Method for Determining the Integrity of Nonreinforced Geomembrane Seams Produced Using Thermo-Fusion Methods |
| ASTM D6496 | Standard Test Method for Determining Average Bonding Peel Strength Between the Top and Bottom Layers of Needle-Punched Geosynthetic Clay Liners |
| ASTM D6567 | Standard Test Method for Measuring the Light Penetration of a Turf Reinforcement Mat (TRM) |
| ASTM D6574 | Test Method for Determining the (In-Plane) Hydraulic Transmissivity of a Geosynthetic by Radial Flow |
| ASTM D6637 | Standard Test Method for Determining Tensile Properties of Geogrids by the Single or Multi-Rib Tensile Method |
| ASTM D6693 | Standard Test Method for Determining Tensile Properties of Nonreinforced Polyethylene and Nonreinforced Flexible Polypropylene Geomembranes |
| ASTM D6707 | Standard Specification for Circular-Knit Geotextile for Use in Subsurface Drainage Applications |
| ASTM D6767 | Standard Test Method for Pore Size Characteristics of Geotextiles by Capillary Flow Test |
| ASTM D6768 | Standard Test Method for Tensile Strength of Geosynthetic Clay Liners |
| ASTM D7003 | Test Method for Strip Tensile Properties of Reinforced Geomembranes |
| ASTM D7004 | Test Method for Grab Tensile Properties of Reinforced Geomembranes |
| ASTM D7005 | Test Method for Determining the Bond Strength (Ply Adhesion) of Geocomposites |
| ASTM D7056 | Standard Test Method for Determining the Tensile Shear Strength of Pre Fabricated Bituminous Geomembrane Seams |
| ASTM D7179 | Determining Geonet Breaking Force |
ASTM D7238 Standard Test Method for Effect of Exposure of Unreinforced Polyolefin Geomembrane Using Fluorescent UV Condensation Apparatus
ASTM D7272 Standard Test Method for Determining the Integrity of Seams Used in Joining Geomembranes by Pre-manufactured Taped Methods
ASTM D7274 Standard Test Method for Mineral Stabilizer
ASTM D7275 Standard Test Method for Tensile Properties of Bituminous Geomembranes (BGM)
ASTM D7466 Standard Test Method for Measuring the Asperity Height of Textured Geomembrane
ASTM D7737 Standard Test Method for Individual Geogrid Junction Strength
ASTM D7747 Standard Test Method for Determining Integrity of Seams Produced Using Thermo-Fusion Methods for Reinforced Geomembranes by the Strip Tensile Method
ASTM D7748 Standard Test Method for Flexural Rigidity of Geogrids, Geotextiles and Related Products
ASTM D7749 Standard Test Method for Determining Integrity of Seams Produced Using Thermo-Fusion Methods for Reinforced Geomembranes by the Grab Method
ASTM E154 Standard Test Methods for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs, on Walls, or as Ground Cover
BNQ 3624-110 Tuyaux annelés semi-rigides et raccords en thermoplastique, de diamètre égal ou supérieur à 300mm, pour l'évacuation des eaux de surface et l'égout pluvial
BNQ 3624-115 Tuyaux et raccords en polyéthylène (PE) - Tuyaux annelés flexibles pour le drainage - Caractéristiques et méthodes d'essais
BNQ 3624-120 Tuyaux annelés à intérieur lisse et raccords en plastique PE ou PP pour l'évacuation des eaux pluviales
CAN/CGSB 148.1-10 Geotextiles - Filtration Opening Size
CAN/CGSB 148.1-14 Stiffness of Geotextiles
CAN/CGSB 148.1-2 Mass per Unit Area (geotextiles and geomembranes)
CAN/CGSB 148.1-3 Thickness of Geotextiles
CAN/CGSB 148.1-4 Geotextiles - Normal Water Permeability Under No Compressive Load
CAN/CGSB 148.1-7.3 Grab Tensile Test for Geotextiles
EN 12226 Geotextiles and Geotextiles-Related Products-General Tests for Evaluation Following Durability Testing
EN 12447 Geotextiles and geotextile-related products - Screening test method for determining the resistance to hydrolysis in water
EN 13562  Geotextiles and geotextile-related products - Determination of the resistance to water penetration (water pressure test)
EN 14030  Geotextiles and geotextile-related products - Screening test method for determining the resistance to acid and alkaline liquids
EN 14575  Geosynthetic barriers - Screening test method for determining the resistance to oxidation
EN 14576  Geosynthetics - Test methods for determining the resistance of polymeric geosynthetic barriers to environmental stress cracking
EN 918  Geotextiles and geotextile-related products: Dynamic perforation test (cone drop test)
EN 964-1  Geotextiles and geotextile-related products: Determination of thickness at specified pressures  Part 1: Single layers (A-2 kPa)
EN 965  Geotextiles and geotextile-related products – Determination of mass per unit area
EN ISO 13433  Geosynthetics - Dynamic perforation test (cone drop test)
EN ISO 13438  Geotextiles and geotextile-related products - Screening test method for determining the resistance to oxidation
EPA 600/2-88/052  Lining of Waste Containment And Other Impoundment Facilities (Only for: Appendix E: Procedure for determination of the extractables content of exposed and unexposed FMLS)
EPA 9090A  Compatibility test for wastes and membrane liners
FGI 1115 and PGI 1104  PVC Geomembrane Specifications
FTMS 101C-2065  Puncture Resistance (1/8 inch radius probe method)
FTMS 101C-2065.1  Puncture Resistance (1/8 inch radius probe method)
GRI GG1  Geogrid Rib Tensile Strength
GRI GG2  Geogrid Junction Strength
GRI GM11  Accelerated Weathering of Geomembranes Using a Fluorescent UVA Device
GRI GM12  Asperity Measurement of Textured Geomembranes Using a Depth Gage
ISO 10319  Geotextiles - Wide-width tensile test (as per NF EN ISO 10319)
ISO 10321  Geotextiles - Tensile test for joints/seams by wide-width method (as per NF EN ISO 10321)
ISO 11058  Geotextiles and geotextile-related products -- Determination of water permeability characteristics normal to the plane, without load
ISO 12236  Geotextiles and geotextile-related products - Static puncture test (CBR test) (as per NF EN ISO 12236)
ISO 12956  Geotextiles and geotextile-related products - Determination of the characteristic opening size (as per NF EN ISO 12956)
ISO 12957-1  Geosynthetics - Determination of friction characteristics - Part 1: Direct shear test
ISO 12958  Geotextiles and geotextile-related products -- Determination of water flow capacity in their plane
ISO 13433  Geosynthetics - Dynamic perforation test (cone drop test)
ISO 13438  Geotextiles and geotextile-related products - Screening test method for determining the resistance to oxidation
ISO 9863  Geotextiles -- Determination of thickness at specified pressures
ISO 9863-1  Geosynthetics-Determination of thickness at specified pressures- Part 1: Single layers
ISO 9864  Geotextiles -- Determination of mass per unit area
NF EN 14576  Geosynthetics-Test methods for determining the resistance of polymeric geosynthetic barriers to environmental stress cracking
NF EN 918  Geotextiles and geotextile-related products : Dynamic perforation test (cone drop test)
NF EN 964-1  Geotextiles and geotextile-related products : Détermination of thickness at specified pressures - Part 1: Single layers (A-2 kPa)
NF EN 965  Geotextiles and geotextile-related products - Determination of mass per unit area
NF G38-016 Disc.  Textiles - Articles à usages industriels - Essais des géotextiles - Mesure de la permittivité hydraulique
NF G38-017 Disc.  Textiles - Articles à usages industriels - Essais des géotextiles - Porométrie : détermination de l'ouverture de filtration
NF G38-018 Disc.  Textiles - Articles à usages industriels - Essais des géotextiles - mesure de la transmissivité hydraulique
NF G38-019  Textiles - Articles à usages industriels - Essais des géotextiles - Détermination de la résistance au poinçonnement
NF P84-501  Géomembranes - Dispositif d'étanchéité par géomembranes (DEG) - Détermination des caractéristiques en traction
NF P84-502-1  Géomembranes - Essais sur joints - Partie 1 : détermination des caractéristiques en traction-cisaillement
NF P84-502-2  Géomembranes - Essais sur joints - Partie 2 : détermination de la résistance en traction-pelage
NF P84-505  Géomembranes - Mesure de l'angle de frottement "géomembrane-sable normal" à la boîte de cisaillement
NF P84-507  Essais des géomembranes - Détermination de la résistance au poinçonnement statique des géomembranes et des dispositifs d'étanchéité par géomembranes - Cas du poinçon cylindrique sans support
NF P84-514  Géomembranes - Détermination de la masse surfacique

Construction Materials : (Excluding textile products)
(Excluding textile products)

Floor Coverings (See also FIBRE, METAL, ELAS and WOOD Sections)

ASTM C1378  Standard Test Method for Determination of Resistance to Staining
ASTM D3936 Standard Test Method for Resistance to Delamination of the Secondary Backing of Pile Yarn Floor Covering
ASTM D418 Standard Methods of Testing Pile Yarn Floor Covering Construction
ASTM D5793 Standard Test Method for Binding Sites Per Unit Length or Width of Pile Yarn Floor Coverings
ASTM D5823 Standard Test Method for Tuft Height of Pile Floor Coverings
ASTM D5848 Standard Test Method for Mass Per Unit Area of Pile Yarn Floor Coverings
ASTM F1015 Standard Test Method for Relative Abrasiveness of Synthetic Turf Playing Surfaces
ASTM F150 Standard Test Method for Electrical Resistance of Conductive and Static Dissipative Resilient Flooring
ASTM F1914 Standard Test Methods for Short-Term Indentation and Residual Indentation of Resilient Floor Covering
ASTM F970 Standard Test Method for Measuring Recovery Properties of Floor Coverings after Static Loading
EN 12228 Surface for sports areas - Determination of joint strength of synthetic surfaces
EN 13744 Surfaces for sports areas-Procedure for accelerated ageing by immersion in hot water
NF EN 12228 Surface for sports areas - Determination of joint strength of synthetic surfaces
NF EN 13744 Surfaces for sports areas-Procedure for accelerated ageing by immersion in hot water

**Insulating Materials**

ASTM C1258 Standard Test Method for Elevated Temperature and Humidity Resistance of Vapor Retarders for Insulation
ASTM C203 Standard Test Method for Breaking Load and Flexural Properties of Block-Type Thermal Insulation
ASTM D3574 Standard Test Methods for Flexible Cellular Materials-Slab, Bonded, and Molded Urethane Foams(«Test B» and «Test E» only)
CAN/ULC S704 Standard for Thermal Insulation, Polyurethane and Polyisocyanurate Boards, Faced (Only for: Dimensions, Water
Vapor Permeance, Dimensional Stability, Water Absorption, Flexural Strength, Compressive and Tensile Strength)

CAN/ULC S706.1 Standard for Wood Fibre Insulating Boards for Buildings
Except for: Air permeance, Surface burning, Thermal resistance

Miscellaneous Construction Materials

Only for: Nail Pull Resistance-Method B

ASTM D3330 Standard Test Method for Peel-Adhesion of Pressure-Sensitive Tape

ASTM D3359 Standard Test Methods for Rating Adhesion by Tape Test

PSTC 101 Peel Adhesion of Pressure Sensitive Tape

PSTC 107 Shear Adhesion of Pressure Sensitive Tape

PSTC 5 Quick Stick of Pressure Sensitive Tape

Roof Coverings


Except for: Appearance and Dimensions of Rolls, Strength, Pliability, Loss on Heating


ASTM D3462 Standard Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules

ASTM D4073 Test Method for Tensile-Tear Strength of Bituminous Roofing Membranes

ASTM D4434 Standard Specification for Poly(Vinyl Chloride) Sheet Roofing

ASTM D4521 Coefficient of Static Friction of Corrugated and Solid Fiberboard

ASTM D4798 Standard Practice for Accelerated Weathering Test Conditions and Procedures for Bituminous Materials (Xenon-Arc Method)

Except for: Bituminous Saturant

ASTM D5323  Practice for Testing Load-Strain Properties of Roofing Membranes
ASTM D5602  Standard Test Method for Static Puncture Resistance of Roofing Membrane Specimens
CAN/CGSB 37.54  Roofing and Waterproofing Membrane, Sheet Applied, Flexible, Polyvinyl Chloride
CAN/CGSB 37.58  Membrane, Elastomeric, Cold-Applied Liquid, for Non-Exposed Use in Roofing and Waterproofing
CAN/CGSB 37-GP-52M  Roofing and Waterproofing Membrane, Sheet Applied, Elastomeric
CAN/CGSB 37-GP-56M  Membrane, Modified, Bituminous, Prefabricated, and Reinforced for Roofing
CSA A123.3  Asphalt Saturated Organic Roofing Felt
CSA A220.1  Installation of concrete roof tiles, (Section: Underlayment Materials)
EN 12311-1  Flexible sheets for waterproofing - Part 1: Bitumen sheets for roof waterproofing - Determination of tensile properties
ICC-ES AC148  Acceptance Criteria For Flexible Flashing Materials
ICC-ES AC188  Acceptance Criteria For Roof Underlayments
ICC-ES AC207  Acceptance Criteria For Polypropylene Roof Underlayments
ICC-ES AC39  Acceptance Criteria For Walking Decks
ICC-ES AC48  Acceptance Criteria For Roof Underlayment for Use in Severe Climate Areas

Vapour Barriers, Water Proofing Membranes

ASTM D2939  Standard Test Methods for Emulsified Bitumens Used as Protective Coatings, (Section: Resistance to water)
ASTM D5385 Standard Test Method for Hydrostatic Pressure Resistance of Waterproofing Membranes
CAN/CGSB-37.50 Hot-applied, Rubberized Asphalt for Roofing and Waterproofing Except for: Heat Stability, Toughness and Viscosity Test
CAN/CGSB-51.33 Vapour Barrier Sheet, excluding Polyethylene, for Use in Building Construction
CAN/CGSB-51.34 Pare-vapeur en feuille de polyéthylène pour bâtiments
CAN2-51.32 Sheathing Membrane, Breather Type
ICC-ES AC243 Acceptance Criteria For Composite Foundation Drainage Systems
ICC-ES AC279 Acceptance Criteria for Vinyl-Lined Residential Swimming Pools
ICC-ES AC29 Acceptance Criteria for Cold, Liquid-Applied, Below-Grade, Exterior Dampproofing And Waterproofing Materials
ICC-ES AC38 Acceptance Criteria for Water-Resistive Barriers - Polymeric-Based Barriers
ICC-ES Evaluation Guideline EG 114 Evaluation Guideline for rigid polyethylene, below grade, dampproofing and wall waterproofing material.

Other
(Geosynthetics)

See also tests listed in section ELASTOMERS AND PROTECTIVE AND COATINGS, subsection Plastics, Resins & Rubbers and section TEXTILES & FIBROUS MATERIALS

ELASTOMERS AND PROTECTIVE AND OTHER COATINGS

(Composites)

ASTM C297 Standard Test Method for Flatwise Tensile Strength of Sandwich Constructions
ASTM C365 Standard Test Method for Flatwise Compressive Properties of Sandwich Cores
ASTM C393 Standard Test Method for Core Shear Properties of Sandwich Constructions by Beam Flexure
ASTM D1781 Standard Test Method for Climbing Drum Peel for Adhesives
ASTM D3171 Standard Test Methods for Constituent Content of Composite Materials (sauf pour: procédure H)
ASTM D3518 Standard Test Method for In-Plane Shear Response of Polymer Matrix Composite Materials by Tensile Test of a ±45° Laminate
<table>
<thead>
<tr>
<th>Standard Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM D5961</td>
<td>Standard Test Method for Bearing Response of Polymer Matrix Composite Laminates</td>
</tr>
<tr>
<td>ASTM D7028</td>
<td>Standard Test Method for Glass Transition Temperature (DMA Tg) of Polymer Matrix Composites by Dynamic Mechanical Analysis (DMA)</td>
</tr>
</tbody>
</table>

**Plastics; Resins and Rubbers:**

**Plastics**

<table>
<thead>
<tr>
<th>Standard Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM D1002</td>
<td>Standard Test Method for Apparent Shear Strength of Single-Lap-Joint Adhesively Bonded Metal Specimens by Tension Loading (Metal-to-Metal)</td>
</tr>
<tr>
<td>ASTM D1003</td>
<td>Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics</td>
</tr>
<tr>
<td>ASTM D1004</td>
<td>Standard Test Method for Initial Tear Resistance of Plastic Film and Sheeting</td>
</tr>
<tr>
<td>ASTM D1042</td>
<td>Standard Test Method for Linear Dimensional Changes of Plastics Under Accelerated Service Conditions</td>
</tr>
<tr>
<td>ASTM D1044</td>
<td>Standard Test Method for Resistance of Transparent Plastics to Surface Abrasion</td>
</tr>
<tr>
<td>ASTM D1204</td>
<td>Standard Test Method for Linear Dimensional Changes of Nonrigid Thermoplastic Sheeting or Film at Elevated Temperature</td>
</tr>
<tr>
<td>ASTM D1238</td>
<td>Standard Test Method for Melt Flow Rates of Thermoplastics by Extrusion Plastometer</td>
</tr>
<tr>
<td>ASTM D1239</td>
<td>Standard Test Method for Resistance of Plastic Films to Extraction by Chemicals</td>
</tr>
<tr>
<td>ASTM D1603</td>
<td>Standard Test Method for Carbon Black In Olefin Plastics</td>
</tr>
<tr>
<td>ASTM D1623</td>
<td>Standard Test Method for Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics</td>
</tr>
</tbody>
</table>
ASTM D1693 Standard Test Method for Environmental Stress-Cracking of Ethylene Plastics
ASTM D1709 Standard Test Methods for Impact Resistance of Plastic Film by the Free-Falling Dart Method
ASTM D1790 Standard Test Method for Brittleness Temperature of Plastic Sheeting by Impact
ASTM D1894 Standard Test Method for Static and Kinetic Coefficients of Friction of Film and Sheeting
ASTM D1922 Standard Test Method for Propagation Tear Resistance of Plastic Film and Thin Sheeting by Pendulum Method
ASTM D1928 Practice for Preparation of Compression-Molded Polyethylene Test Sheets and Test Specimens
ASTM D2103 Standard Specification for Polyethylene Film and Sheeting
ASTM D2124 Standard Test Method for Analysis of Components in Poly(Vinyl Chloride) Compounds Using and Infrared Spectrophotometric Technique
ASTM D2126 Standard Test Method for Response of Rigid Cellular Plastics to Thermal and Humid Aging
ASTM D2344 Standard Test Method for Short-Beam Strength of Polymer Matrix Composite Materials and Their Laminates
ASTM D2412 Standard Test Method for Determination of External Loading Characteristics of Plastic Pipe by Parallel-Plate Loading
ASTM D2565 Standard Practice for Xenon-Arc Exposure of Plastics Intended for Outdoor Applications
ASTM D2582 Standard Test Method for Puncture-Propagation Tear Resistance of Plastic Film and Thin Sheeting
ASTM D2584 Standard Test Method for Ignition Loss of Cured Reinforced Resins
ASTM D2842 Standard Test Method for Water Absorption of Rigid Cellular Plastics
ASTM D3015 Standard Practice for Microscopical Examination of Pigment Dispersion in Plastic Compounds
ASTM D3039  Standard Test Method for Tensile Properties of Polymer Matrix Composite Materials
ASTM D3045  Standard Practice for Heat Aging of Plastics Without Load
ASTM D3350  Standard Specification for Polyethylene Plastics Pipe and Fittings Materials

Except for: ASTM D1505, D2837, F1473, F2263, ISO 12162

ASTM D3417  Standard Test Method for Enthalpies of Fusion and Crystallization of Polymers by Differential Scanning Calorimetry (DSC)
ASTM D3418  Standard Test Method for Transition Temperatures of Polymers by Differential Scanning Calorimetry
ASTM D3575  Standard Test Methods for Flexible Cellular Materials Made From Olefin Polymers
Except for: Suffix: M, R2, V, CC

ASTM D374  Standard Test Methods for Thickness of Solid Electrical Insulation
ASTM D3846  Standard Test Method for In-Plane Shear Strength of Reinforced Plastics
ASTM D3985  Standard Test Method for Oxygen Gas Transmission Rate Through Plastic Film and Sheeting Using a Coulometric Sensor
Only for: Impact Test
ASTM D4329  Standard Practice for Fluorescent UV Exposure of Plastics
ASTM D4459  Standard Practice for Xenon-Arc Exposure of Plastics Intended for Indoor Applications
ASTM D4703  Standard Practice for Compression Molding Thermoplastic Materials into Test Specimens, Plaques, or Sheets
ASTM D5208  Standard Practice for Fluorescent Ultraviolet (UV) Exposure of Photodegradable Plastics
ASTM D5630  Standard Test Method for Ash Content in Plastics
ASTM D570  Standard Test Method for Water Absorption of Plastics
ASTM D5748  Standard Test Method for Protrusion Puncture Resistance of Stretch Wrap Film
ASTM D5868  Standard Test Method for Lap Shear Adhesion for Fiber Reinforced Plastic (FRP) Bonding
ASTM D5947  Standard Test Methods for Physical Dimensions of Solid Plastics Specimens
ASTM D635  Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position
ASTM D638  Standard Test Method for Tensile Properties of Plastics

ASTM D6641 Compressive Properties of Polymer Matrix Composite Materials Using a Combined Loading Compression (CLC) Test Fixture


ASTM D6988 Standard Guide for Determination of Thickness of Plastic Film Test Specimens

ASTM D7249 Standard Test Method for Facing Properties of Sandwich Constructions by Long Beam Flexure

ASTM D746  Standard Test Method for Brittleness Temperature of Plastics and Elastomers by Impact

ASTM D751  Standard Test Methods for Coated Fabrics

Only for:


ASTM D792  Standard Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement

ASTM D828 Tensile Properties of Paper and Paperboard Using Constant-Rate-of-Elongation Apparatus

ASTM D882 Standard Test Method for Tensile Properties of Thin Plastic Sheet

ASTM E1131 Standard Test Method for Compositional Analysis by Thermogravimetry

ASTM E1252 Standard Practice for General Techniques for Obtaining Infrared Spectra for Qualitative Analysis


ASTM E1356 Standard Test Method for Assignment of the Glass Transition Temperatures by Differential Scanning Calorimetry or Differential Thermal Analysis

ASTM E2550 Standard Test Method for Thermal Stability by Thermogravimetry

ASTM E2602 Standard Test Methods for the Assignment of the Glass Transition Temperature by Modulated Temperature Differential Scanning Calorimetry

ASTM E308 Standard Practice for Computing the Colors of Objects by Using the CIE System

ASTM E424 Standard Test Methods for Solar Energy Transmittance and Reflectance (Terrestrial) of Sheet Materials

ASTM E793 Standard Test Method for Enthalpies of Fusion and Crystallization by Differential Scanning Calorimetry
ASTM E794  Standard Test Method for Melting and Crystallization Temperatures by Thermal Analysis
ASTM E831  Standard Test Method for Linear Thermal Expansion of Solid Materials by Thermomechanical Analysis
ASTM E96   Standard Test Methods for Water Vapor Transmission of Materials
ASTM F1249 Standard Test Method for Water Vapor Transmission Rate Through Plastic Film and Sheeting Using a Modulated Infrared Sensor
ASTM F2136 Standard Test Method for Notched, Constant Ligament-Stress (NCLS) Test to Determine Slow-Crack-Growth Resistance of HDPE Resins or HDPE Corrugated Pipe
ASTM F88   Standard Test Method for Seal Strength of Flexible Barrier Materials
ASTM F904  Standard Test Method for Comparison of Bond Strength or Ply Adhesion of Similar Laminates Made from Flexible Materials
ASTM G154  Standard Practice for Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials
ASTM G155  Standard Practice for Operating Xenon-Arc Light Apparatus for Exposure of Non-Metallic Materials
ASTM G160  Standard Practice for Evaluating Microbial Susceptibility of Nonmetallic Materials by Laboratory Soil Burial
ASTM G26   Practice for Operating Light-Exposure Apparatus (Xenon-Arc Type) With and Without Water for Exposure of Nonmetallic Materials
ASTM G53   Standard Practice for Operating Light- and Water-Exposure Apparatus (Fluorescent UV-Condensation Type) for Exposure of Nonmetallic Materials (Discontinued en 2000, replace par G154)
ISO 1133   Melt Flow Index
ISO 11357-6 Plastics-Differential scanning calorimetry (DSC)-Part 6: Determination of oxidation induction time (isothermal OIT) and oxidation induction temperature (dynamic OIT)
ISO 1183   Density
ISO 1183-1 Plastiques-Méthodes de détermination de la masse volumique des plastiques non alvéolaires-Partie 1: Méthode par immersion, méthode du pycnomètre en milieu liquide et méthode par titrage
ISO 13953  Tubes et raccords en polyéthylène (PE)-Détermination de la résistance en traction et du mode de rupture d’éprouvettes prélevées dans des assemblages par soudage bout à bout
ISO 1421   Rubber-or plastics-coated fabrics-Determination of tensile strength and elongation at break
ISO 178  Plastics-Determination of flexural properties
ISO 18553  Method for assessment of the degree of pigment or carbon black dispersion in polyolefin pipes, fittings and compounds
ISO 1923  Cellular plastics and rubbers - Determination of linear dimension
ISO 293  Plastiques-Moulage par compression des épreuvettes en matières thermoplastiques
ISO 4675  Rubber- or plastics-coated fabrics – Low temperature bend test
ISO 4892-2  Plastics - Methods of exposure to laboratory light sources - Part 2: Xenon-arc Lamps
ISO 527-1  Plastics - Determination of tensile properties -- Part 1: General principles
ISO 527-3  Plastics - Determination of tensile properties - Part 3: Test conditions for films and sheets
ISO 6964  Polyolefin pipes and fittings-Determination of carbon black content by calcination and pyrolysis-Test method and basic specification
ISO 75-2  Plastics-Determination of temperature of deflection under load-Part 2: Plastics and ebonite
ISO 7854  Rubber- or plastics-coated fabrics – Determination of resistance to damage by flexing
          Except for: Method A and C
MA.100-S.T.1.1  Détermination des solides totaux et des solides totaux volatils : méthode gravimétrique (only for : Humidité, matières volatiles à 550 °C, matière organique à 550 °C and cendres dans les solides)
UL 94  Tests for Flammability of Plastic Materials for Parts in Devices and Appliances - Horizontal Burning Test; HB
VOLVO STD 1024,2511  Determination of flexural properties
VOLVO STD 1026,1121  Test Method, Dimensional changes, Plastics

**Resins and Rubbers**

ASTM D1876  Standard Test Method for Peel Resistance of Adhesives (T-Peel Test)
ASTM D2240  Standard Test Method for Rubber Property-Durometer Hardness (for durometer of type A, Type D)
ASTM D297 (Density)  Standard Test Methods for Rubber Products-Chemical Analysis - Density
ASTM D3677  Standard Test Methods for Rubber-Identification by Infrared Spectrophotometry
ASTM D3767  Standard Practice for Rubber-Measurement of Dimensions
ASTM D395  Standard Test Methods for Rubber Property-Compression Set
ASTM D4060  Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser
ASTM D412  Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers-Tension
<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM D413</td>
<td>Standard Test Method for Rubber Property-Adhesion to Flexible Substrate (Machine Method, Strip Type A)</td>
</tr>
<tr>
<td>ASTM D4587</td>
<td>Standard Practice for Fluorescent UV-Condensation Exposures of Paint and Related Coatings</td>
</tr>
<tr>
<td>ASTM D4591</td>
<td>Standard Test Method for Determining Temperatures and Heats of Transitions of Fluoropolymers by Differential Scanning Calorimetry</td>
</tr>
<tr>
<td>ASTM D5028</td>
<td>Standard Test Method for Curing Properties of Pultrusion Resins by Thermal Analysis</td>
</tr>
<tr>
<td>ASTM D523</td>
<td>Standard Test Method for Specular Gloss</td>
</tr>
<tr>
<td>ASTM D573</td>
<td>Standard Test Method for Rubber Deterioration in an Air Oven</td>
</tr>
<tr>
<td>ASTM D575</td>
<td>Standard Test Methods for Rubber Properties in Compression</td>
</tr>
<tr>
<td>ASTM D624</td>
<td>Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers</td>
</tr>
<tr>
<td>ASTM D6862</td>
<td>Standard Test Method for 90 Degree Peel Resistance of Adhesives</td>
</tr>
<tr>
<td>ASTM D816</td>
<td>Standard Test Methods for Rubber Cements Only for: Articles 1-8, 13, 15</td>
</tr>
<tr>
<td>ASTM D903</td>
<td>Standard Test Method for Peel or Stripping Strength of Adhesive Bonds</td>
</tr>
<tr>
<td>ISO 188</td>
<td>Rubber, vulcanized or thermoplastic - Accelerated ageing and heat resistance tests</td>
</tr>
<tr>
<td>ISO 37</td>
<td>Rubber, vulcanized or thermoplastic - Determination of tensile stress-strain properties</td>
</tr>
<tr>
<td>ISO 4648</td>
<td>Rubber, vulcanized or thermoplastic - Determination of dimensions of test pieces and products for test purposes</td>
</tr>
</tbody>
</table>

**ENVIRONMENTAL AND OCCUPATIONAL HEALTH AND SAFETY**

**Occupational Health and Safety:**

**Fire Protection**
See tests listed in section "TEXTILES & FIBROUS MATERIALS"
MARKETPLACE PRODUCTS-CONSUMER AND BUSINESS

Furniture and Consumer Articles:

Hazardous Products

<table>
<thead>
<tr>
<th>Standard/Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOAC Official Method 974.02</td>
<td>&quot;Lead in Paint - Atomic Absorption Spectrophotometric Method&quot; (&quot;Band of Lead-Containing Paint and Certain Consumer Products Bearing Lead-Containing Paint&quot;) (As requested by «16 CFR Part 1303»)</td>
</tr>
<tr>
<td>ASTM E1645</td>
<td>Standard Practice for Preparation of Dried Paint Samples by Hotplate or Microwave Digestion for Subsequent Lead Analysis (As requested by «16 CFR Part 1303»)</td>
</tr>
<tr>
<td>CPSC-CH-C1001-09.3</td>
<td>Standard Operating Procedure for Determination of Phthalates</td>
</tr>
<tr>
<td>CPSC-CH-C1001-09.4</td>
<td>Standard Operating Procedure for Determination of Phthalates</td>
</tr>
<tr>
<td>CPSC-CH-E1001-08</td>
<td>Standard Operating Procedure for Determining Total Lead (Pb) in Children’s Metal Products (Including Children’s Metal Jewelry)</td>
</tr>
<tr>
<td>CPSC-CH-E1001-08.1</td>
<td>Standard Operating Procedure for Determining Total Lead (Pb) in Metal Children’s Products (including Children’s Metal Jewelry)</td>
</tr>
<tr>
<td>CPSC-CH-E1001-08.2</td>
<td>Standard Operating Procedure for Determining Total Lead (Pb) in Children’s Metal Products (Including Children’s Metal Jewelry)</td>
</tr>
<tr>
<td>CPSC-CH-E1001-08.3</td>
<td>Standard Operating Procedure for Determining Total Lead (Pb) in Children’s Metal Products (Including Children’s Metal Jewelry)</td>
</tr>
<tr>
<td>CPSC-CH-E1002-08</td>
<td>Standard Operating Procedure for Determining Total Lead (Pb) in Non-metal Children’s Products</td>
</tr>
<tr>
<td>CPSC-CH-E1002-08.1</td>
<td>Standard Operating Procedure for Determining Total Lead (Pb) in Non-Metal Children’s Products</td>
</tr>
<tr>
<td>CPSC-CH-E1002-08.2</td>
<td>Standard Operating Procedure for Determining Total Lead (Pb) in Nonmetal Children’s Products</td>
</tr>
<tr>
<td>CPSC-CH-E1002-08.3</td>
<td>Standard Operating Procedure for Determining Total Lead (Pb) in Nonmetal Children’s Products</td>
</tr>
<tr>
<td>CPSC-CH-E1003-09</td>
<td>Standard Operating Procedure for Determining Lead (Pb) in Paint and Other Similar Surface Coatings</td>
</tr>
<tr>
<td>CPSC-CH-E1003-09.1</td>
<td>Standard Operating Procedure for Determining Lead (Pb) in Paint and Other Similar Surface Coatings</td>
</tr>
<tr>
<td>Health Canada - Part B: C-O2</td>
<td>Determination of Total Lead in Paints and Applied Coatings</td>
</tr>
</tbody>
</table>
NON METALLIC MINERALS AND PRODUCTS

Ceramics; Clay and Clay Products:

Ceramics

ASTM C1028  Standard Test Method for Determining the Static Coefficient of Friction of Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull-Meter Method

ASTM C627  Standard Test Method for Evaluating Ceramic Floor Tile Installation Systems Using the Robinson-Type Floor Tester

TEXTILES AND FIBROUS MATERIALS

Apparel and Other Finished Textile Products:

(Others (fire and flammability))

16 CFR Part 1610  Standard for the flammability of clothing textiles

16 CFR Part 1615  Standard for the flammability of children’s sleepwear: Sizes 0 through 6X (FF-3-71)

16 CFR Part 1616  Standard for the flammability of children’s sleepwear: Sizes 7 through 14 (FF 5-74)

49 CFR Part 571.302  Standard No. 302; Flammability of interior materials (FMVSS 302)


ASTM D6413  Standard Test Method for Flame Resistance of Textiles (Vertical Test)


ASTM E662  Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials
Except for: Article: 7.8 Arc Rating
Article: 7.6.2 Flammability after Dry Cleaning (les # d’articles proviennent de l’édition 2017a)

ASTM F1891  Standard Specification for Arc and Flame Resistant Rainwear
Only for: Cleaning, Weight, Leak resistance fabric and seam, Trapezoidal Tearing resistance, Flame resistance , Stiffness

ASTM F1930  Evaluation of Flame Resistant Clothing for Protection Against Fire Simulations Using an Instrumented Manikin


Boeing BSS 7239  Test Method for Toxic Gaz Generation by Materials Combustion
Bombardier SMP 800-C  Toxic Gaz Generation

CAN/CGSB 4.2 No. 78.1  Thermal Protective Performance of Material for Clothing
CAN/ULC S109  Flame Tests of Flame Resistant Fabrics and Films
CAN/ULC S668  Standard for Liners Used for Secondary Containment of Aboveground Flammable and Combustible Liquid Tanks

CPAI-84  Specification for Flame-Resistant Materials in Camping Tentage

DOT/FAA/AR-00/12 – Aircraft Materials Fire Test Handbook  Chapter 1 : Vertical Bunsen Burner Test for Cabin and Cargo Compartment Materials.
Chapter 2 : 45-Degree Bunsen Burner Test for Cargo Compartment Liners and Waste Stowage Compartment Materials.
Chapter 3 : Horizontal Bunsen Burner Test for Cabin, Cargo Compartment, and Miscellaneous Materials.
Chapter 4 : 60-Degree Bunsen Burner Test for Electric Wire.
Chapter 5 : Heat Release Rate Test for Cabin Materials.
Chapter 6 : The Smoke Test for Cabin Materials.

FAR 25.853 (a)  Appendix F – Part I – Paragraph 4 : Vertical Test
Paragraph 5 : Horizontal Test
Paragraph 6 : Forty-Five Degree Test
Paragraph 7 : Sixty Degree Test

FAR 25.853 (d)  Appendix F Part IV – Test Method to Determine the Heat Release Rate from Cabin Materials Exposed to Radiant Heat.

FTMS 191A No 5903.1  Flame resistance of cloth; vertical

ISO 13506-1  Protective clothing against heat and flame - Part 1: Test method for complete garments - Measurement of transferred energy using an instrumented manikin
<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO 13506-2</td>
<td>Protective clothing against heat and flame - Part 2: Skin burn injury prediction - Calculation requirements and test cases</td>
</tr>
<tr>
<td>ISO 15025</td>
<td>Protective clothing - Protection against heat and flame - Method of test for limited flame spread</td>
</tr>
<tr>
<td>ISO 15025</td>
<td>Protective clothing - Protection against heat and flame - Method of test for limited flame spread</td>
</tr>
<tr>
<td>NFPA 701</td>
<td>Standard Methods of Fire Tests for Flame Propagation of Textiles and Films</td>
</tr>
</tbody>
</table>

**Clothing**

<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 CFR Part 1500.53</td>
<td>Test methods for simulating use and abuse of toys and other articles intended for use by children over 36 but not over 96 months of age - Torque Test</td>
</tr>
<tr>
<td>ANSI/ISEA 107</td>
<td>High Visibility Safety Apparel and Accessories</td>
</tr>
<tr>
<td>ASTM B117</td>
<td>Standard Practice for Operating Salt Spray (Fog) Apparatus</td>
</tr>
<tr>
<td>ASTM D2810</td>
<td>Standard Test Method for pH of Leather</td>
</tr>
<tr>
<td>ASTM D4108</td>
<td>Test Method for Thermal Protective Performance of Materials for Clothing by Open-Flame Method</td>
</tr>
<tr>
<td>ASTM E1164</td>
<td>Standard Practice for Obtaining Spectrometric Data for Object-Color Evaluation</td>
</tr>
<tr>
<td>ASTM E809</td>
<td>Standard Practice for Measuring Photometric Characteristics of Retroreflectors</td>
</tr>
<tr>
<td>ASTM E810</td>
<td>Standard Test Method for Coefficient of Retroreflection of Retroreflective Sheeting Utilizing the Coplanar Geometry</td>
</tr>
<tr>
<td>ASTM F903</td>
<td>Standard Test Method for Resistance of Materials Use in Protective Clothing to Penetration by Liquids</td>
</tr>
<tr>
<td>CAN/CGSB 155.1</td>
<td>Firefighters' Protective Clothing for Protection against Heat and Flame Except for: Water absorption</td>
</tr>
<tr>
<td>CAN/CGSB 155.20</td>
<td>Workwear for protection against hydrocarbon flash fire and optionally steam and hot fluids</td>
</tr>
<tr>
<td>CAN/CGSB 155.22</td>
<td>Fireline workwear for wildland firefighters Except for: microscope polarisant</td>
</tr>
<tr>
<td>CAN/CGSB 4.2 No. 27.5</td>
<td>Flame Resistance - 45° Angle Test - One Second Flame Impingement</td>
</tr>
<tr>
<td>CSA Z96</td>
<td>High Visibility Safety Apparel</td>
</tr>
<tr>
<td>EN 388</td>
<td>Gants de protection contre les risques mécaniques</td>
</tr>
<tr>
<td>EN 471</td>
<td>High Visibility Warning Clothing</td>
</tr>
<tr>
<td>Standard Code</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
</tr>
<tr>
<td>ISO 17492</td>
<td>Clothing for protection against heat and flame - Determination of heat transmission on exposure to both flame and radiant heat</td>
</tr>
<tr>
<td>ISO 20471</td>
<td>Vêtements à haute visibilité -- Méthodes d’essai et exigences (seulement pour : Détermination de la couleur)</td>
</tr>
<tr>
<td>ISO 3759</td>
<td>Textiles-Préparation, marquage et mesurage des échantillons d’étoffe et des vêtements dans les essais de détermination de la variation des dimensions</td>
</tr>
<tr>
<td>NFPA 1971</td>
<td>Standard on Protective Clothing for Structural Fire Fighting</td>
</tr>
<tr>
<td></td>
<td>Only for: Articles: 8.2 Flame resistance test 1 and test four (8.5), 8.6 Heat and thermal shrinkage, 8.10 Thermal protective performance, 8.11 Thread Melting, 8.12 Tear, 8.13 Burst Strength, 8.14 Seam Breaking Strength, 8.21 Cut, 8.24 Cleaning shrinkage, 8.25 Water absorption, 8.26 Water penetration, 8.27 Liquid penetration, 8.29 Corrosion resistance test, 8.33 Total Heat Loss (THL), 8.41 Label durability and legality test 1, 8.45 Retroreflectivity and fluorescence test, 8.50 Breaking strength, 8.57 Resistance to High temperature blocking test (les # d’articles proviennent de l’édition 2018)</td>
</tr>
<tr>
<td>NFPA 1977</td>
<td>Standard on Protective Clothing and Equipment for Wildland Fire Fighting</td>
</tr>
<tr>
<td></td>
<td>Only for: Articles: 8.6 Tear resistance, 8.7 Cleaning Shrinkage, 8.8 Seam Breaking Strength, 8.9 Thread Heat Resistance, 8.16 Retroreflectivity, 8.31 Label Durability and Legibility One(Article numbers are from 2016 edition)</td>
</tr>
<tr>
<td>NFPA 2112</td>
<td>Standard on Flame-Resistant Garments for Protection of Industrial Personnel against Flash Fire</td>
</tr>
<tr>
<td></td>
<td>Only for: Articles: 8.2 HTP (except 8.1.3), 8.3 Flame Resistance Test, 8.4 Heat and Thermal Shrinkage Resistance Test, 8.5 Manikin Test, 8.6 Thread Heat Resistance). (Article numbers are from 2018 edition)</td>
</tr>
</tbody>
</table>

**Floor Coverings**

<table>
<thead>
<tr>
<th>Standard Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 CFR Part 1630</td>
<td>Standard for the surface flammability of carpets and rugs (FF1-70)</td>
</tr>
<tr>
<td>ASTM D1335</td>
<td>Standard Test Method for Tuft Bind of Pile Yarn Floor Coverings</td>
</tr>
<tr>
<td>CAN/CGSB 4.129</td>
<td>Carpet for Commercial Use</td>
</tr>
<tr>
<td>CAN/CGSB 4.2 No. 27.6</td>
<td>Flame Resistance - Methenamine Tablet Test for Textile Floor Coverings</td>
</tr>
<tr>
<td>CAN/CGSB 4.2 No. 77.1/ISO 4919</td>
<td>Carpets - Determination of Tuft Withdrawal Force</td>
</tr>
</tbody>
</table>

**Mattresses**

<table>
<thead>
<tr>
<th>Standard Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAN/CGSB 4.2 No.27.7</td>
<td>Combustion Resistance of Mattresses - Cigarette Test</td>
</tr>
</tbody>
</table>
Tents
Refer to minor-heading: Window Coverings.

**Textile Mill Products: (Including synthetic and natural fibres)**

**Aircraft Materials**

FAR 25.853(a)  Vertical and Horizontal Bunsen Burner Test for Cabin and Cargo Compartment Materials

**Fabrics**

AATCC 106  Colorfastness to Water: Sea (as per CAN/CGSB 4.2 No.21)
AATCC 107  Colorfastness to Water (as per CAN/CGSB 4.2 No.20)
AATCC 112  Formaldehyde Release from Fabric, Determination of: Sealed Jar Method
AATCC 116  Colorfastness to Crocking: Rotary Vertical Crockmeter Method
AATCC 117  Colorfastness to Heat: Dry (Excluding: Pressing)
AATCC 118  Oil Repellency: Hydrocarbon Resistance Test
AATCC 127  Water Resistance: Hydrostatic Pressure Test
AATCC 132  Colorfastness to Drycleaning (as per CAN/CGSB 4.2 No. 29.1)
AATCC 133  Colorfastness to Heat: Hot Pressing
AATCC 135  Dimensional Changes in Automatic Home Laundering of Woven or Knit Fabrics
AATCC 15  Colorfastness to Perspiration (as per CAN/CGSB 4.2 No. 23)
AATCC 16  Colorfastness to Light
AATCC 16.3  Colorfastness to Light: Xénon Arc
AATCC 162  Colorfastness to Water: Chlorinated Pool
AATCC 169  Weather Resistance of Textiles: Xenon Lamp Exposure
AATCC 183  Transmittance or Blocking of Erythemally Weighted Ultraviolet Radiation through Fabrics
AATCC 195  Liquid Moisture Management Properties of Textile Fabrics
AATCC 22  Water Repellency: Spray Test
AATCC 35  Water Resistance: Rain Test
AATCC 61  Colorfastness to Laundering Home and Commercial: Accelerated (as per CAN/CGSB 4.2 No. 19.1)
AATCC 76  Electrical Surface Resistivity of Fabrics
AATCC 79  Absorbency of Textiles
AATCC 8  Colorfastness to Crocking: AATCC Crockmeter Method (as per CAN/CGSB 4.2 No. 22)
AATCC 81  pH of the Water-Extract from Wet Processed Textiles
<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AATCC 88C</td>
<td>Retention of Creases in Fabrics after Repeated Home Laundering</td>
</tr>
<tr>
<td>AATCC 96</td>
<td>Dimensional Changes in Commercial Laundering of Woven and Knitted Fabrics Except Wool</td>
</tr>
<tr>
<td>ASTM D1388</td>
<td>Standard Test Methods for Stiffness of Fabrics</td>
</tr>
<tr>
<td>ASTM D1424</td>
<td>Standard Test Method for Tearing Strength of Fabrics by Falling-Pendulum Type (Elmendorf) Apparatus</td>
</tr>
<tr>
<td>ASTM D1682</td>
<td>Standard Methods of Test for Breaking Load and Elongation of Textile Fabrics</td>
</tr>
<tr>
<td>ASTM D1683</td>
<td>Test Method for Failure in Sewn Seams of Woven Fabrics (Discontinued 1999) (as per CAN/CGSB 4.2 No. 32.2)</td>
</tr>
<tr>
<td>ASTM D1776</td>
<td>Standard Practice for Conditioning and Testing Textiles</td>
</tr>
<tr>
<td>ASTM D1777</td>
<td>Standard Test Method for Thickness of Textile Materials</td>
</tr>
<tr>
<td>ASTM D2136</td>
<td>Standard Test Method for Coated Fabrics - Low-Temperature Bend Test</td>
</tr>
<tr>
<td>ASTM D2594</td>
<td>Standard Test Method for Stretch Properties of Knitted Fabrics Having Low Power</td>
</tr>
<tr>
<td>ASTM D3775</td>
<td>Standard Test Method for Warp (End) and Filling (Pick) Count of Woven Fabrics</td>
</tr>
<tr>
<td>ASTM D3776</td>
<td>Standard Test Methods for Mass Per Unit Area (Weight) of Fabric</td>
</tr>
<tr>
<td>ASTM D3786</td>
<td>Standard Test Methods for Hydraulic Bursting Strength of Textile Fabrics-Diaphragm Bursting Strength Tester Method</td>
</tr>
<tr>
<td>ASTM D3885</td>
<td>Standard Test Method for Abrasion Resistance of Textile Fabrics (Flexing and Abrasion Method)</td>
</tr>
<tr>
<td>ASTM D3887</td>
<td>Standard Specification for Tolerances for Knitted Fabrics (Mass, Fabric count, Bursting strength)</td>
</tr>
<tr>
<td>ASTM D3939</td>
<td>Standard Test Method for Snagging Resistance of Fabrics (Mace)</td>
</tr>
<tr>
<td>ASTM D3940</td>
<td>Test Method for Bursting Strength (Load) and Elongation of Sewn Seams of Knit or Woven Stretch Textile Fabrics</td>
</tr>
</tbody>
</table>
ASTM D4964 Standard Test Method for Tension and Elongation of Elastic Fabrics (Constant-Rate-of-Extension Type Tensile Testing Machine)
ASTM D4966 Standard Test Method for Abrasion Resistance of Textile Fabrics (Martindale Abrasion Tester Method)1
ASTM D4970 Standard Test Method for Pilling Resistance and Other Related Surface Changes of Textile Fabrics: Martindale Tester
ASTM D5034 Standard Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test)
ASTM D5035 Standard Test Method for Breaking Force and Elongation of Textile Fabrics (Strip Method)
ASTM D5587 Standard Test Method for Tearing Strength of Fabrics by Trapezoid Procedure
ASTM D5732 Standard Test Method for Stiffness of Nonwoven Fabrics Using the Cantilever Test
ASTM D6797 Standard Test Method for Bursting Strength of Fabrics Constant-Rate-of-Extension (CRE) Ball Burst Test
ASTM D737 Standard Test Method for Air Permeability of Textile Fabrics
ASTM F1342 Standard Test Method for Protective Clothing Material Resistance to Puncture
BS EN 29073-3 Methods of tests for nonwovens-Part 3: Determination of tensile strength and elongation
CAN/CGSB 4.2 No. 11.1 Bursting Strength - Diaphragm Pressure Test (as per ASTM D3786)
CAN/CGSB 4.2 No. 11.2 Bursting Strength – Ball Burst Test
CAN/CGSB 4.2 No. 12.1 Tearing Strength - Single-Rip Method (as per ASTM D2262)
CAN/CGSB 4.2 No. 12.2 Tearing Strength - Trapezoid Method
CAN/CGSB 4.2 No. 12.3 Tearing Strength - Elmendorf Ballistic Method (as per ASTM D1424)
CAN/CGSB 4.2 No. 15 Non-Fibrous Material on Textiles
CAN/CGSB 4.2 No. 18.3/ISO 105-B02 Textiles - Tests for Colourfastness - Part B02 : Colourfastness to Artificial Light: Xenon Arc Fading Lamp Test
CAN/CGSB 4.2 No. 19.1 Colourfastness to Washing - Accelerated test - Launder-Ometer (as per AATCC 61)
CAN/CGSB 4.2 No. 2 Conditioning Textile Materials for Testing
CAN/CGSB 4.2 No. 20 Colourfastness to Water (as per AATCC 107)
CAN/CGSB 4.2 No. 21 Colourfastness to Sea Water (as per AATCC 106)
CAN/CGSB 4.2 No. 22 Colourfastness to Rubbing (Crocking) (as per AATCC 8)
CAN/CGSB 4.2 No. 23  Colourfastness to perspiration (as per AATCC 15)
CAN/CGSB 4.2 No. 24  Colourfastness and Dimensional Change in Commercial Laundering (supersedes CGSB-4.2 N°24.2)
CAN/CGSB 4.2 No. 25.1  Dimensional change in Wetting
CAN/CGSB 4.2 No. 26.2  Textile Fabrics - Determination of Resistance to Surface Wetting (Spray Test) (as per AATCC 22)
CAN/CGSB 4.2 No. 26.3/ISO 811  Textile Fabrics - Determination of Resistance to Water Penetration - Hydrostatic Pressure Test
CAN/CGSB 4.2 No. 26.5  Water Resistance - High Pressure Penetration Test
CAN/CGSB 4.2 No. 27.1  Flame Resistance - Vertical Burning Test
CAN/CGSB 4.2 No. 27.10  Flame Resistance - Vertically Oriented Textile Fabric or Fabric Assembly Test
CAN/CGSB 4.2 No. 29.1  Colourfastness to Dry Cleaning Solvent (as per AATCC 132)
CAN/CGSB 4.2 No. 30  Dimensional Change in Dry-Cleaning (as per AATCC 158)
CAN/CGSB 4.2 No. 32.1  Resistance of Woven Fabrics to Seam Slippage
CAN/CGSB 4.2 No. 32.2  Breaking Strength of Seams in Woven Fabrics (as per ASTM D1683)
CAN/CGSB 4.2 No. 36  Air Permeability (as per ASTM D737)
CAN/CGSB 4.2 No. 37  Fabric Thickness
CAN/CGSB 4.2 No. 4.1/ISO 22198  Measurement of Width of Pieces
CAN/CGSB 4.2 No. 45  Textiles Fabrics - Determination of the Recovery from Creasing of a Horizontally Folded Specimen by Measuring the Angle-of-Recovery
CAN/CGSB 4.2 No. 49  Resistance of Materials to Water Vapour Diffusion
CAN/CGSB 4.2 No. 5.1  Unit Mass of Fabrics
CAN/CGSB 4.2 No. 51.2  Resistance to Pilling - Random Tumble Pilling Tester (as per ASTM D3512)
CAN/CGSB 4.2 No. 58  Colourfastness and Dimensional Change in Domestic Laundering of Textiles
CAN/CGSB 4.2 No. 6.2/ISO 7211/2  Textiles - Woven Fabrics - Construction - Methods of Analysis - Part 2: Determination of Number of Threads per Unit Length
CAN/CGSB 4.2 No. 60  Textiles - Résistance aux accrocs - Essai à la masse
CAN/CGSB 4.2 No. 69  Weather Resistance - Xenon Arc Radiation
CAN/CGSB 4.2 No. 7  Knitted Fabric Count - Wales and Courses per Centimetre
CAN/CGSB 4.2 No. 74/ISO 3071  Textiles - Determination of pH of the Aqueous Extract
CAN/CGSB 4.2 No. 9.1  Breaking Strength of Fabrics - Strip Method - Constant-Time-to-Break Principle (as per ASTM D5035)
CAN/CGSB 4.2 No. 9.2  Breaking Strength of Fabrics - Grab Method - Constant-Time-to-Break Principle (as per ASTM D5034)
CAN/CGSB 4.2 No. 51.1  Resistance to Pilling, Rotating Box Method
CAN/CGSB 4.2 No. 57  Determination of Maximum Safe Ironing Temperature
EN 29073-3  Textiles-Test methods for nonwovens-Part 3: Determination of tensile strength and elongation
EN ISO 13934-1  Textiles-Tensile properties of fabrics-Part 1: Determination of maximum force and elongation at maximum force using the strip method
FTMS 191A No 4108  Strength and elongation, breaking; textile webbing, tape and braided items
FTMS 191A No 5512  Water resistance of coated cloth: High Range, Hydrostatic Pressure Method
FTMS 191A No 5516  Water resistance of cloth: Water Permeability, Hydrostatic Pressure Method
FTMS 191A Section No 4  Textiles Conditioning
ISO 105-B02  Textiles-Tests for colour fastness-Part B02: Colour fastness to artificial light: Xenon arc fading lamp test
ISO 105-C06  Textiles -- Tests for colour fastness -- Part C06: Colour fastness to domestic and commercial laundering
ISO 105-D01  Textiles-Tests for colour fastness-Part D01: Colour fastness to drycleaning using perchloroethylene solvent
ISO 105-X12  Textiles-Tests for colour fastness-Part X12: Colour fastness to rubbing
ISO 11092  Textiles-Physiological effects-Measurement of thermal and water-vapour resistance under steady-state conditions (sweating guarded-hotplate test)
ISO 12947-2  Textiles -- Determination of the abrasion resistance of fabrics by the Martindale method -- Part 2: Determination of specimen breakdown
ISO 13934-1  Textiles-Tensile properties of fabrics-Part 1: Determination of maximum force and elongation at maximum force using the strip method
ISO 13935-2  Textiles - Seam tensile properties of fabrics and made-up textile articles -Part 2: Determination of maximum force to seam rupture using the grab method
ISO 13937-1  Textiles -- Tear properties of fabrics -- Part 1: Determination of tear force using ballistic pendulum method (Elmendorf)
ISO 13937-2  Textiles - Tear properties of fabrics - Part 2: Determination of tear force of trouser-shaped test specimens (Single tear method)
ISO 13938-1  Textiles - Bursting properties of fabrics - Part 1: Hydraulic method for determination of bursting strength and bursting distension
ISO 13997  Protective clothing-Mechanical properties-Determination of resistance to cutting by sharp objects
ISO 17493  Clothing and equipment for protection against heat -- Test method for convective heat resistance using a hot air circulating oven
ISO 4920  Textiles -- Determination of resistance to surface wetting (spray test) of fabrics
ISO 5081  Textiles -- Woven fabrics -- Determination of breaking strength and elongation (Strip method)
ISO 6330  Textiles-Domestic washing and drying procedures for textile testing
Except for: washing machine reference type C – pulsator type
ISO 7198  Cardiovascular implants-Tubular vascular prostheses
(Determination of water permeability)
ISO 811  Textile fabrics-Determination of resistance to water penetration-
Hydrostatic pressure test
ISO 9073-3  Textiles-Test methods for nonwovens-Part 3: Determination of tensile strength and elongation
NF EN 29073  Methods of tests for nonwovens-Part 3: Determination of tensile strength and elongation
NF EN 530  Abrasion resistance of protective clothing material

**Fibres**

ASTM D1577  Standard Test Methods for Linear Density of Textile Fibers
ASTM D7138  Standard Test Method to Determine Melting Temperature of Synthetic Fibers
CAN/CGSB 4.2 No. 48/ISO 137  Wool - Determination of Fibre Diameter - Projection Microscope Method
CAN/CGSB 4.2 No.14 Serie
FTMS 191A No 1534  Melting Point of Synthetic Fibers

**Yarns**

ASTM D3218  Standard Specification for Polyolefin Monofilaments
Except for: Width, Gloss, Polyolefin-Material Cleanliness, Hot Water Shrinkage (D2259)
CAN/CGSB 4.2 No. 5.2  Linear Density of Yarn in SI Units
CAN/CGSB 4.2 No. 9.4  Breaking Strength of Yarns - Single Strand Method

**Notes:**

**ISO/IEC 17025:2005:** General Requirements for the Competence of Testing and Calibration Laboratories
AATCC: American Association of Textile Chemists and Colorists
ASTM: American Society of Testing Methods
BNQ: Bureau de normalisation du Québec
CAN: Canadian Test Method from the «Canadian General Standard Board»
CAN/CGSB: Canadian General Standard Board
CAN/ULC: Canadian Underwriters Laboratory
CFR: Code Federal Regulation
CPAI: Canvas Products Association International
CSA: Canadian Standard Association
DOT/FAA/AR: Test method from the «Federal Aviation Administration»
DOT/FAA/AR: Federal Aviation Regulation
EN: Test method from the «European Standard Committee»
EPA: Environnemental Protection Agency
FTMS: Federal Test Method Standard
GRI: Geosynthetic Research Institute
ISO: International Standard Organization
NF: Test method from the «Association française de normalisation»
NFPA: National Fire Protection Association
NFQ: Test method from the «Bureau de normalisation du Québec»
PSTC: Pressure Sensitive Tape Council
SAE: Society of Automobile Engineers
UL: Underwriters Laboratory
UPH: Test method from the «Upholstered Furniture Action Council»

Elias Rafoul, Vice President
Accreditation Services

Publication on: 2019-12-12

SCC file number: 15056
Partner File #26950
Partner: BNQ-EL