

Technical Evaluation Report™

TER 1905-04

Vitrabond® – Canada

Fairview Architectural

Product:
Vitrabond® Metal Composite Material (MCM)

Issue Date:
February 5, 2020

Revision Date:
December 15, 2023

Subject to Renewal:
January 1, 2025



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COMPANY
INFORMATION:

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DIVISION: 07 00 00 - THERMAL AND MOISTURE PROTECTION

SECTION: 07 42 00 - Wall Panels

SECTION: 07 42 13.23 - Metal Composite Material Wall Panels

SECTION: 07 42 43 - Composite Wall Panels

1 Innovative Product Evaluated¹

- 1.1 Vitrabond® Metal Composite Material (MCM)

2 Applicable Codes and Standards²

2.1 Codes

- 2.1.1 *NBC—10, 15, 20: National Building Code of Canada*

2.2 Standards and Referenced Documents

- 2.2.1 *AAMA 2605: Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix)*
- 2.2.2 *ASCE/SEI 7: Minimum Design Loads and Associated Criteria for Buildings and Other Structures*
- 2.2.3 *ASTM D1781: Standard Test Method for Climbing Drum Peel for Adhesives*
- 2.2.4 *ASTM E330: Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights, and Curtain Walls by Uniform Static Air Pressure Difference*
- 2.2.5 *CAN/ULC-S102: Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies*
- 2.2.6 *CAN/ULC-S134: Fire Test of Exterior Wall Assemblies*

¹ For more information, visit drjcertification.org or call us at 608-310-6748.

² Unless otherwise noted, all references in this TER are from the 2020 version of the NBC. This alternative solution is also approved for use with the 2010 and 2015 NBC and the standards referenced therein.

3 Performance Evaluation

- 3.1 Testing and related engineering evaluations are defined as intellectual property and/or trade secrets.³
- 3.2 Engineering evaluations are conducted within DrJ’s ANAB accredited ICS code scope, which are also its areas of professional engineering competence.⁴
- 3.3 Vitrabond® Metal Composite Material was evaluated to determine the following properties for use as a cladding material in accordance with NBC Division B for combustible and noncombustible construction.
 - 3.3.1 Structural design in accordance with NBC Division B Part 4 and Article 9.4.1.1
 - 3.3.2 Wind resistance in accordance with NBC Division B Subsection 4.1.7 and Article 4.1.7.3
 - 3.3.3 Weather resistance in accordance with NBC Division B Section 5.5 and Section 5.6 and Article 9.27.1.1
 - 3.3.4 Durability in accordance with NBC Division B Article 5.1.4.2
 - 3.3.5 Use in combustible and noncombustible construction in accordance with NBC Division B Article 3.1.5.1, Article 3.1.5.5, and Section 9.10
 - 3.3.6 Use as an interior finish in noncombustible construction in accordance with NBC Division B Article 3.1.5.12
 - 3.3.7 Surface burning characteristics in accordance with NBC Division B Subsection 3.1.12 and Article 9.10.3.2
- 3.4 Use of Vitrabond® Metal Composite Material as part of a fire separation is outside the scope of this TER.
- 3.5 Any engineering evaluation conducted for this TER was performed on the dates provided in this TER and within DrJ’s professional scope of work.
- 3.6 Any regulation specific issues not addressed in this section are outside the scope of this TER.

4 Product Description and Materials

4.1 The innovative product evaluated in this TER is shown in **Figure 1**.

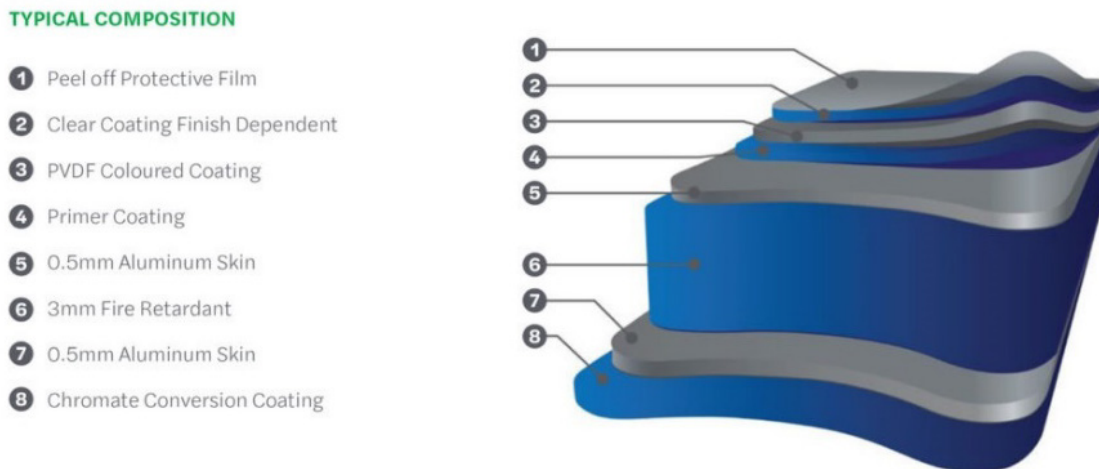


Figure 1. Typical Composition of Vitrabond® MCM Panel

³ 18 U.S. Code § 1831 - Economic espionage - Whoever, intending or knowing that the offense will benefit any foreign government, foreign instrumentality, or foreign agent, knowingly steals, or without authorization appropriates, takes, carries away, or conceals, or by fraud, artifice, or deception obtains a trade secret shall be fined not more than \$5,000,000 or imprisoned not more than 15 years, or both. Any organization that commits any offense described shall be fined not more than the greater of \$10,000,000 or 3 times the value of the stolen trade secret to the organization, including expenses for research and design and other costs of reproducing the trade secret that the organization has thereby avoided. <https://www.law.cornell.edu/uscode/text/18/part-11/chapter-90>.

⁴ ANAB is part of the [USMCA](#) and [IAF MLA](#), where the purpose of these agreements are to ensure mutual recognition of accredited certification and validation/verification statements between agreement signatories, and subsequent acceptance of ANAB accredited certification and validation/verification statements by professional engineers based upon having one universal approval process for the timely approval of innovative materials, products, designs, services, assemblies and/or methods of construction.

4.2 Material Availability

4.2.1 Thickness:

- 4.2.1.1 3 mm (0.188")
- 4.2.1.2 4 mm (0.157")
- 4.2.1.3 6 mm (0.236")

4.2.2 Standard Width:

- 4.2.2.1 100 cm (39.4")
- 4.2.2.2 125 cm (49.2")
- 4.2.2.3 157 cm (62")

4.2.3 Length:

- 4.2.3.1 310 cm (122")
- 4.2.3.2 371 cm (146")
- 4.2.3.3 498 cm (196")

4.2.4 Custom sizes are available in widths between 91 cm (36") and 203 cm (80") and in lengths up to 6.50 m (256").

4.2.5 See www.fairview-na.com/finishes/ for available finishes.

4.3 The Vitrabond® Metal Composite Material panels are installed using the Arrowhead® Panel System. The Arrowhead® Panel System is outside the scope of this report.

5 Applications

5.1 General

- 5.1.1 Vitrabond® Metal Composite Material panels are used as a cladding material in accordance with NBC Article 3.2.3.7 and Section 9.27. The panels are installed over wood-framed, steel-framed, masonry, or concrete walls capable of supporting the imposed loads in accordance with NBC Division B Subsection 4.1.7.
- 5.1.2 Building occupancy classification should be determined in accordance with NBC Table 3.1.2.1.
- 5.1.3 Where the application exceeds the limitations set forth herein, design shall be permitted in accordance with accepted engineering procedures, experience, and technical judgment.

5.2 Structural Design

- 5.2.1 Walls incorporating Vitrabond® Metal Composite Material shall be designed to resist wind loads per NBC Division B Part 4.
- 5.2.2 Vitrabond® Metal Composite Material panels are capable of resisting the loads shown in **Table 1**.

Table 1. Specified Wind Pressure Resistance^{1,2}

| Product | Specified Wind Pressure (kPa) |
|--|-------------------------------|
| Vitrabond® | 2.5 |
| SI: 1 in = 25.4 mm, 1 psf = 0.0479 kPa 1. Tested in accordance with ASTM E330. 2. Panels tested were 1.2 m (3' 11 ¹ / ₁₆ " square. | |

5.3 *Weather Resistance*

- 5.3.1 Vitrabond® Metal Composite Material may be used in exterior cladding assemblies in accordance with NBC Division B Section 5.5 and Section 5.6 where a protective material is properly installed behind the Vitrabond® Metal Composite Material per NBC Article 5.6.1.2.(1) and sealed per NBC Article 5.6.2.1 and Note A-5.6.2.1.
- 5.3.2 The protective material shall be installed and sealed prior to the installation of Vitrabond® Metal Composite Material using the Arrowhead® panel system.

5.4 *Fire-Resistance*

- 5.4.1 Vitrabond® Metal Composite Material has not been evaluated for use as part of a fire separation.

5.5 *Surface Burning Characteristics*

- 5.5.1 Vitrabond® Metal Composite Material has the surface burning characteristics shown in **Table 2** and is approved for use as an interior finish in noncombustible construction.

Table 2. Surface Burning Characteristics

| Product | Flame Spread Rating | Smoke Developed Classification |
|--|---------------------|--------------------------------|
| Vitrabond® | ≤ 25 | ≤ 50 |
| 1. Tested in accordance with CAN/ULC-S102. | | |

5.6 *Full Scale Tests*

- 5.6.1 Vitrabond® Metal Composite Material was tested to assess performance of vertical and lateral fire propagation in accordance with CAN/ULC-S134 and NBC Division B Article 3.1.5.5 for use as a combustible cladding on exterior walls in noncombustible construction (**Table 3**).

Table 3. Combustible Cladding on Exterior Walls Conditions of Acceptance

| Product | Flame Spread (m) | Heat Flux (kW/m ²) |
|--|------------------|--------------------------------|
| Vitrabond® | ≤ 5 | ≤ 35 |
| SI: 25.4 mm = 1 in | | |
| 1. Tested in accordance with CAN/ULC-S134. | | |

5.7 The wall assemblies in **Table 4** are approved for use in buildings of noncombustible construction.

Table 4. Approved CAN/ULC S-134 Wall Assemblies

| Wall Component | Materials |
|--|---|
| Base Wall | CMU Concrete Walls |
| Exterior Sheathing | 15.9 mm (5/8") thick exterior gypsum sheathing |
| Weather Barrier Applied to Exterior Sheathing or Base Wall Surface (under the wall insulation) | SOPREMA® SOPRASEAL® Stick VP |
| Wall Brackets | ACS Clips spaced horizontally 610 mm (24") o.c. with 18-gauge galvanized Z-girts |
| Wall Insulation | 152 mm (6") nominal thick ROCKWOOL™ CAVITYROCK® Mineral Wool |
| Window Header and Floor Line Insulation | 25.4 mm (1") nominal thick ROCKWOOL™ AFB®, 305 mm (12") wide x 1220 mm (48") length behind all horizontal base extrusions |
| Cavity Insulation | None |
| Weather-Resistive Barrier Applied over Exterior Insulation (or FRTW) | None |
| Exterior Cladding MCM with maximum 64 mm (2 1/2") air gap between panel and insulation | 4 mm Fairview Vitrabond® FR Core MCM |

SI: 1 in = 25.4
 1. The assembly was tested in accordance with CAN/ULC S-134.

5.8 Where the application falls outside of the performance evaluation, conditions of use and/or installation requirements set forth herein, alternative techniques shall be permitted in accordance with accepted engineering practice and experience. This includes but is not limited to the following areas of engineering: mechanics or materials, structural, building science and fire science.

6 Installation

- 6.1 Installation shall comply with the manufacturer installation instructions, this TER, the approved construction documents, and the applicable building code.
- 6.2 In the event of a conflict between the manufacturer installation instructions this TER and the applicable building code, the more restrictive shall govern.
- 6.3 Component parts that are observed to be defective in any way, including warped, bowed, dented, abraded, and broken members, must not be installed. Members or parts which have been damaged during installation or thereafter before substantial completion of the project shall be removed and replaced.
- 6.4 No cutting, trimming, welding, or brazing of components that could in any way damage the finish, decrease the strength, or result in visual imperfections or failure in performance shall be executed during installation. Components that require alteration shall be returned to the fabricator. If necessary, replace with new components.
- 6.5 *Tolerances*
 - 6.5.1 All components shall be installed visually flat, level, true to line with uniform joints and reveals.
 - 6.5.2 Maximum deviation for vertical members is 3 mm (1/8") over 5.5 m (18') and 6 mm (1/4") over 12.2 m (40').
 - 6.5.3 Maximum deviation for horizontal members is 3 mm (1/8") over 9.1 m (30').

- 6.6 Anchorage of the cladding substructure to the building structure shall be by approved methods in strict accordance with the specified and approved shop and/or installation drawings. Supporting brackets shall be designed to provide three-dimensional adjustments and accurate location of wall components.
- 6.7 All joints between panels shall be set at widths as shown on the drawings with tolerance of +/- 1.5 mm ($1/16$ "). No two adjacent or perpendicular joints shall have a difference in width of more than 3 mm ($1/8$ "). In addition, the tolerance between adjacent panels across any joint shall not exceed 1.5 mm ($1/16$ ") locally.
- 6.8 *Repairs*
 - 6.8.1 Repair panels with minor damage so those repairs are not discernable at a distance of 120" (10 ft or 3.1 m).
 - 6.8.2 Remove and replace panels damaged beyond repair per Arrowhead® Panel System's replacement instructions.
 - 6.8.3 Remove protective film immediately after installation of panels to avoid prolonged exposure to sunlight.
 - 6.8.4 Remove from project site damaged panels, protective film, and other debris attributable to work of this section.
- 6.9 *Protection*
 - 6.9.1 When installation is complete, remove extraneous matter and marks off the façade components in a manner that leaves the completed installation free of any streaking, spotting, or non-uniform appearance.
 - 6.9.2 Protect as necessary and leave the finished work undamaged on completion.
 - 6.9.3 Panels shall be stored in well-ventilated space and out of direct sunlight.

7 Substantiating Data

- 7.1 Testing has been performed under the supervision of a professional engineer and/or under the requirements of ISO/IEC 17025 as follows:
 - 7.1.1 Wind load resistance testing in accordance with ASTM E330
 - 7.1.2 Weather resistance testing in accordance with AAMA 2605
 - 7.1.3 Durability testing in accordance with ASTM D1781
 - 7.1.4 Surface burning characteristics testing in accordance with CAN/ULC S102
 - 7.1.5 Full-scale fire resistance testing in accordance with CAN/ULC S134
- 7.2 Information contained herein is the result of testing and/or data analysis by sources that conform to the evaluation requirements of NBC Volume 1 Relationship of the NBC to Standards Development and Conformity Assessment and/or professional engineering regulations. DrJ relies upon accurate data to perform its ISO/IEC 17065 evaluations.
- 7.3 Where appropriate, DrJ's analysis is based on provisions that have been codified into law through provincial, territorial, or local adoption of codes and standards. The developers of these codes and standards are responsible for the reliability of published content. DrJ analysis may use code-adopted provisions as a control sample. A control sample versus a test sample establishes a innovative product as being equivalent to that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.
- 7.4 The accuracy of the provisions provided herein may be reliant upon the published properties of raw materials, which are defined by the grade mark, grade stamp, mill certificate, Listings, certified reports, duly authenticated reports from approved agencies, and research reports prepared by approved agencies and/or approved sources provided by the suppliers of products, materials, designs, assemblies and/or methods of construction. These are presumed to be minimum properties and relied upon to be accurate. The reliability of DrJ's engineering practice, as contained in this TER, may be dependent upon published design properties by others.

- 7.5 Testing and engineering analysis: The strength, rigidity and/or general performance of component parts and/or the integrated structure are determined by suitable tests that simulate the actual conditions of application that occur and/or by accepted engineering practice and experience.
- 7.6 Where additional condition of use and/or code compliance information is required, please search for Vitrabond® Metal Composite Material on the DrJ Certification website.

8 Findings

- 8.1 As delineated in Section 3, Vitrabond® Metal Composite Material has performance characteristics that were tested and/or meet pertinent standards and is suitable for use pursuant to its specified purpose.
- 8.2 When used and installed in accordance with this report and the manufacturer installation instructions, Vitrabond® Metal Composite Material shall be approved for the following applications:
 - 8.2.1 Use as a code-compliant combustible cladding material in exterior applications of combustible and noncombustible construction
 - 8.2.2 Use as a code-compliant finish material in interior applications of combustible and noncombustible construction
- 8.3 This innovative product has been evaluated in the context of the codes listed in Section 2 and is compliant with all known provincial, territorial, and local building codes. Where there are known variations in provincial, territorial, or local codes applicable to this TER, they are listed here:
 - 8.3.1 No known variations.
- 8.4 Any application specific issues not addressed herein can be engineered by an RDP. Assistance with engineering is available from Fairview Architectural.
 - 8.4.1 NBC Volume 1 Relationship of the NBC to Standards Development and Conformity Assessment:

Certification

Certification is the confirmation by an independent organization that a product, service, or system meets a requirement...Certification bodies publish lists of certified products and companies...Several organizations, including the Canadian Construction Materials Centre (CCMC), offer such evaluation services.

Evaluation

An evaluation is a written opinion by an independent professional organization that a product will perform its intended function. An evaluation is very often done to determine the ability of an innovative product, for which no standards exist, to satisfy the intent of the Code requirement...

- 8.5 ISO/IEC 17065 accredited third-party certification bodies,⁵ including but not limited to, Standards Council of Canada (SCC)⁶ and ANSI National Accreditation Board (ANAB),⁷ confirm that product certification bodies have the expertise to provide technical evaluation services within their scope of accreditation. All SCC and ANAB product certification bodies meet NBC requirements to offer evaluation services for alternative solutions.⁸
 - 8.5.1 DrJ is an ISO/IEC 17065 ANAB-Accredited Product Certification Body – Accreditation #1131⁹ and employs professional engineers.¹⁰

⁵ <https://anabpd.ansi.org/Accreditation/product-certification/DirectoryListingAccredited?menuID=1&prgID=1>

⁶ https://iaf.nu/en/member-details/?member_id=91

⁷ https://iaf.nu/en/member-details/?member_id=14

⁸ NBC Division A Clause A-1.2.1.1.(1)(b) provides information on code compliance via alternative solutions and defines alternative solutions as "...achiev[ing] at least the minimum level of performance required by Division B." NBC Division C Section 2.3 includes additional guidance for documentation of alternative solutions.

⁹ <https://anabpd.ansi.org/Accreditation/product-certification/AllDirectoryDetails?&prgID=1&OrgId=2125&statusID=4>

¹⁰ Through ANAB accreditation and the IAF MLA, DrJ certification can be used to obtain material, product, design, or method of construction approval in any jurisdiction or country that has IAF MLA Members & Signatories to meet the Purpose of the MLA – "certified once, accepted everywhere".

- 8.6 Through ANAB accreditation and the IAF Multilateral Agreements, this TER can be used to obtain innovative product approval in any jurisdiction or country that has IAF MLA Members & Signatories to meet the Purpose of the MLA – “*certified once, accepted everywhere.*” IAF specifically says, “*Once an accreditation body is a signatory of the IAF MLA, it is required to recognise certificates and validation and verification statements issued by conformity assessment bodies accredited by all other signatories of the IAF MLA, with the appropriate scope.*”¹¹
- 8.7 Product certification organizations, accredited by the SCC and ANAB, are defined as equivalent evaluation services:
- 8.7.1 Canada-United States-Mexico Agreement (CUSMA), Article 11.6 Conformity Assessment confirms mutual recognition by stating, “*...each Party shall accord to conformity assessment bodies located in the territory of another Party treatment no less favorable than that it accords to conformity assessment bodies located in its own territory or in the territory of the other Party.*”
- 8.7.2 The SCC National Conformity Assessment Principles states, “*SCC is a member of a number of international organizations developing voluntary conformity assessment agreements that help ensure the international acceptance of Canadian conformity assessment results. Signatories to these agreements (like SCC) recognize each other’s accreditations as being equivalent to their own.*”¹²
- 8.8 Building official approval of a licensed professional engineer is performed by verifying the professional engineer and/or their business entity are listed by the engineering regulators of the relevant jurisdiction.

9 Conditions of Use

- 9.1 Material properties shall not fall outside the boundaries defined in Section 3.
- 9.2 As defined in Section 3, where material and/or engineering mechanics properties are created for load resisting design purposes, the resistance to the applied load shall not exceed the ability of the defined properties to resist those loads using the principles of accepted engineering practice.
- 9.3 As listed herein, Vitrabond® Metal Composite Material (MCM) shall be:
- 9.3.1 Separated from the interior of a building by an approved thermal barrier in accordance with NBC Division B Section 5.3.
- 9.3.2 Stored in enclosed spaces, above ground, under protective covers. Extreme care shall be taken to avoid contact with moisture, condensation, or materials that might cause staining, such as lime, cement, fresh concrete, or chemicals.
- 9.4 *Storage and Protection*
- 9.4.1 Store materials protected from exposure to harmful weather conditions and at temperature condition recommended by the manufacturer/fabricator.
- 9.4.2 Store panels in well-ventilated space out of direct sunlight.
- 9.4.3 Protect panels from moisture and condensation with tarpaulins or other suitably ventilated weather tight covering.
- 9.4.4 Slope panels to ensure positive drainage and prevent water accumulation.
- 9.4.5 Do not store panels in any space where ambient temperatures can exceed 49°C (120°F).
- 9.4.6 Avoid contact with any other material that might cause staining, denting, scratching, or other surface damage.
- 9.4.7 To prevent adhesive transfer to the finish, exterior aluminum/composite wall panels must not be stored for prolonged periods of time, be stored in direct sunlight, or be subjected to high heat prior to installation.

¹¹ <https://iaf.nu/en/about-iaf-mla/#:~:text=required%20to%20recognise>

¹² The National Conformity Assessment Principles states, “*Product regulations and standards may vary from country to country. If these are set arbitrarily, they could be deemed as protectionist. The World Trade Organization (WTO) Agreement on Technical Barriers to Trade (TBT Agreement) is intended to ensure that technical regulations, standards and conformity assessment procedures of member countries do not create unnecessary obstacles to trade. Under the TBT Agreement, members of the WTO agree to use international standards, including conformity assessment standards and guides, as a basis for their technical requirements.*”

- 9.5 Where required by regulation and enforced by the building official, also known as the authority having jurisdiction (AHJ) in which the project is to be constructed:
- 9.5.1 Any calculations incorporated into the construction documents shall conform to accepted engineering practice, and, when prepared by an approved source, shall be approved when signed and sealed.
 - 9.5.2 This TER and the installation instructions shall be submitted at the time of permit application.
 - 9.5.3 This innovative product has an internal quality control program and a third-party quality assurance program.
 - 9.5.4 At a minimum, this innovative product shall be installed per Section 6 of this TER.
 - 9.5.5 This TER shall be reviewed for code compliance by the AHJ in concert with the duties and powers granted to the building official by the provincial regulations governing such duties and powers.
 - 9.5.6 The application of this innovative product in the context of this TER, is dependent on the accuracy of the construction documents, implementation of installation instructions, inspections, and any other regulatory requirements that may apply.
- 9.6 Design loads shall be determined in accordance with the building code adopted by the jurisdiction in which the project is to be constructed and/or by the designer (i.e., owner).
- 9.7 The actual design, suitability, and use of this TER, for any particular building, is the responsibility of the owner or the authorized agent of the owner.

10 Identification

- 10.1 The innovative product listed in Section 1.1 is identified by a label on the board or packaging material bearing the manufacturer name, product name, TER number and other information to confirm code compliance.
- 10.2 Additional technical information can be found at www.fairview-na.com.

11 Review Schedule

- 11.1 This TER is subject to periodic review and revision. For the most recent version, visit drjcertification.org.
- 11.2 For information on the status of this TER, contact [DrJ Certification](#).

12 Legislation that Authorizes New Product Approval in International Markets is Found in Appendix A

- 12.1 Vitrabond® Metal Composite Material (MCM) has been tested by an ISO/IEC 17025 accredited laboratory and/or evaluated to be in conformance with accepted engineering practice to ensure durable, livable and safe construction.
- 12.2 This TER is published by an ISO/IEC 17065 accredited certification body with the expertise to evaluate products, materials, designs, services, assemblies and/or methods of construction.
- 12.3 This TER meets the legislative intent and definition of a duly authenticated report, which shall be accepted by the AHJ, unless there are specific reasons why the alternative shall not be approved as provided for in writing.

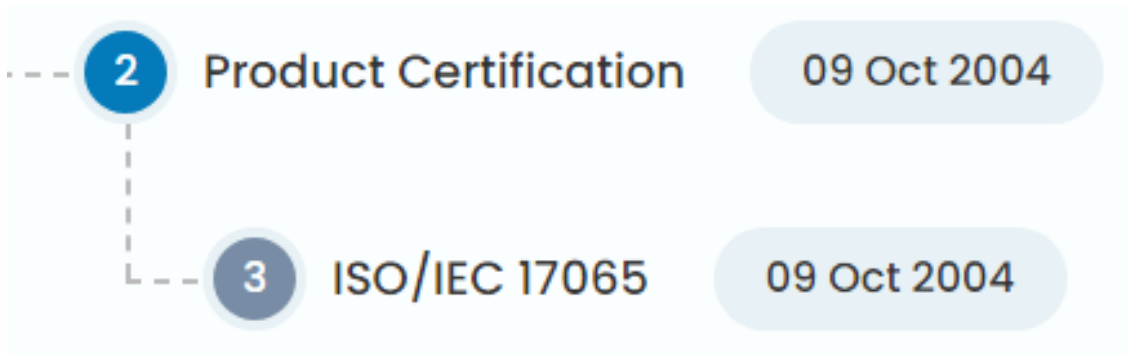
Appendix A

1 Legislation that Authorizes New Product Approval in Canada

- 1.1 The Competition Act is a Canadian federal law governing competition law in Canada. The Act contains both criminal and civil provisions aimed at preventing anti-competitive practices in the marketplace. The Act is enforced and administered by the Competition Bureau, whose regulations encourage the approval of NBC referenced and alternative products, materials, designs, services, assemblies and/or methods of construction that:
 - 1.1.1 Advance Innovation,
 - 1.1.2 Promote competition so all businesses have the opportunity to compete on price and quality in an open market on a level playing field unhampered by anticompetitive constraints, and
 - 1.1.3 Benefit consumers through lower prices, better quality, and greater choice.
- 1.2 **Approved by International Jurisdictions:** The USMCA and GATT agreements provide for approval of innovative materials, products, designs, services, assemblies and/or methods of construction through the Technical Barriers to Trade (TBT) agreements and the International Accreditation Forum (IAF) Multilateral Recognition Arrangement (MLA), where these agreements proclaim the desire of both countries to have their markets open to innovation.
- 1.3 These agreements:
 - 1.3.1 Permit participation of conformity assessment bodies located in the territories of other Members (defined as GATT Countries) under conditions no less favourable than those accorded to bodies located within their territory or the territory of any other country,
 - 1.3.2 State that conformity assessment procedures (i.e., ISO/IEC 17020, 17025, 17065, etc.) are prepared, adopted, and applied so as to grant access for suppliers of like products originating in the territories of other Members under conditions no less favourable than those accorded to suppliers of like products of national origin or originating in any other country, in a comparable situation.
 - 1.3.3 State that conformity assessment procedures are not prepared, adopted, or applied with a view to or with the effect of creating unnecessary obstacles to international trade. This means that conformity assessment procedures shall not be more strict or be applied more strictly than is necessary to give the importing Member adequate confidence that products conform to the applicable technical regulations or standards.
- 1.4 To this end, Canada operates an accreditation system as follows:



1.5 This includes ISO/IEC 17065 product certification as follows:



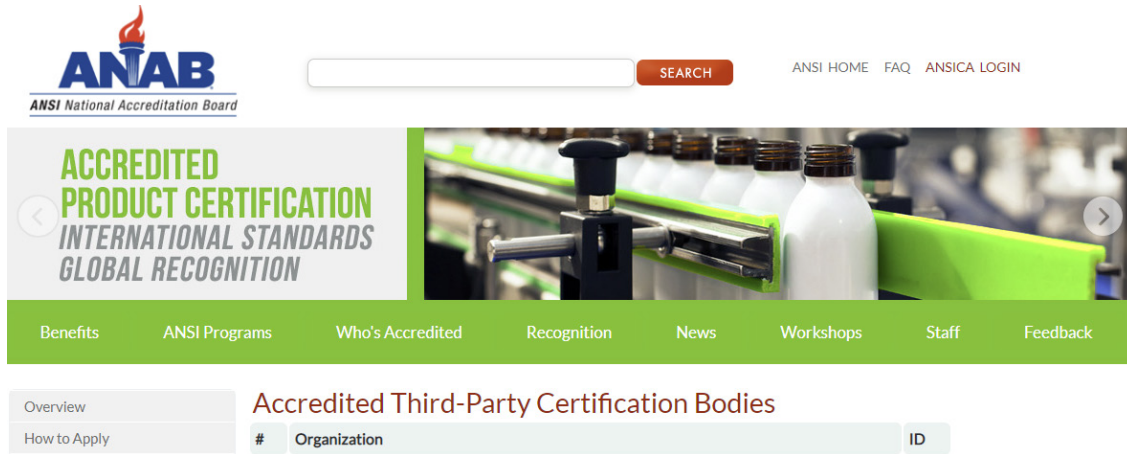
1.6 Similarly, the United States operates multiple accreditation process with ANAB being the most prominent ISO/IEC 17065 product certification organization as follows:

A screenshot of the ANAB website profile. It features the ANAB logo (ANSI National Accreditation Board) on the left. On the right, it lists 'Accreditation Body' and 'IAF MLA Signatory'. The main heading is 'ANAB (ANSI National Accreditation Board)'. Below this, it states 'Code of Conduct Adopted: 01 Feb 2005', the website 'http://www.anab.org', and 'United States of America'. At the bottom, there are logos for IAAC and APAC.

1.7 This includes ISO/IEC 17065 product certification as follows:



- 1.8 The list of ANAB accredited ISO/IEC 17065 product certification organizations can be found at the following link: <https://anabpd.ansi.org/Accreditation/product-certification/DirectoryListingAccredited?menuID=1&prgID=1>



- 1.9 Approval is granted via International Agreement, where the purpose of the IAF MLA is to ensure mutual recognition of accredited certification and validation/verification statements between signatories. Subsequent acceptance of accredited certification and validation/verification statements is required so that one accreditation can be used for the timely approval of innovative materials, products, designs, services, assemblies and/or methods of construction. Accreditations granted by IAF MLA signatories are recognised worldwide based on their equivalent accreditation programs, therefore reducing costs and adding value to businesses and consumers.
- 1.10 Consequently, these agreements permit product approval of innovative Australian and New Zealand products into US markets and vice-versa.
- 1.11 Finally, a question that often arises is, why do these agreements exist? In addition, another question is why is the ISO/IEC 17065 accredited third-party certification process so important?
- 1.11.1 The answer is because all countries desire to protect the intellectual property and trade secrets of their country's businesses.
 - 1.11.2 In the US this protection is provided by 18 U.S. Code § 1831 Under Economic Espionage, where it states "whoever, intending or knowing that the offense will benefit any foreign government, foreign instrumentality, or foreign agent, knowingly steals, or without authorization appropriates, takes, carries away, or conceals, or by fraud, artifice, or deception obtains a trade secret shall be fined not more than \$5,000,000 or imprisoned not more than 15 years, or both."
 - 1.11.3 Any organization that commits any offense described shall be fined not more than the greater of \$10,000,000 or three (3) times the value of the stolen trade secret to the organization, including expenses for research and design and other costs of reproducing the trade secret that the organization has thereby avoided.¹³
 - 1.11.4 Protection of intellectual property and trade secrets reinforces the value of the IAF MLA, the GATT/TBT and the ISO/IEC 17065 product approval process.
 - 1.11.5 The goal is to protect everyone's best interests while also facilitating economic freedom and opportunity by promoting free and fair competition in the marketplace.

¹³ <https://www.law.cornell.edu/uscode/text/18/part-II/chapter-90>