



**NEMO|etc.**

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ENGINEER

TEST

CONSULT

**ROOF SYSTEM ASSESSMENT REPORT  
DYNAMIC UPLIFT RESISTANCE PER CSA A123.21**

|                |                                      |                    |            |
|----------------|--------------------------------------|--------------------|------------|
| CUSTOMER:      | <a href="#">IKO Industries, Inc.</a> | TEST DATE:         | 2022-05-31 |
| CUSTOMER REF.: | MARS017-B                            | PUBLICATION DATE:  | 2025-08-28 |
| DOCUMENT NO.   | IKO-MARS-5                           | REVISION NO.       | 3          |
| TEST PANEL NO. | IKO-D5                               | REEVALUATION DATE: | 2028-08-28 |
| SYSTEM TYPE:   | C-2                                  |                    |            |

**MECHANICALLY ATTACHED ROOFING SYSTEM (MARS) SUMMARY**

**ROOFING SYSTEM SUMMARY:**

|                                 |   |
|---------------------------------|---|
| Roof Cover:                     | Thermoplastic polyolefin (TPO) single ply, induction welded                                       |
| Coverboard or Insulation (top): | Polyisocyanurate foam or gypsum-based board, mechanically fixed                                   |
| Insulation (base):              | Polyisocyanurate foam, loose-laid   |
| Vapor Barrier:                  | 6-mil polyethylene, loose-laid or proprietary SBS modified bitumen or HDPE/acrylic, self-adhering |
| Deck:                           | steel   |

**DYNAMIC UPLIFT RESISTANCE PER CSA A123.21:**

| Sustained Test Value |     | Design Value<br>CSA A123.21:20<br>(Test Value x 0.65) |     | Design Value<br>CSA A123.21:14<br>(Test Value ÷ 1.5) |     |
|----------------------|-----|---|-----|--|-----|
| kPa                  | psf | kPa   | psf | kPa  | psf |
| -4,5                 | -94 | -2,9  | -61 | -3,0   | -63 |

**PRODUCTS / APPLICATION:**


|                                 |                    |   |   |  |                  |
|---------------------------------|--------------------|---|---|--|------------------|
| Roof Cover:                     | Description:       | Membrane composed of polyester reinforcement coated with TPO compound |   |  |                  |
|                                 | Application:       | Induction welded  |   |  |                  |
|                                 | Eligible Products: | InnoviTPO (min. nominal 60-mil)                                       |   |  |                  |
| Coverboard or Insulation (top): | Description:       | Polyisocyanurate foam or gypsum-based board                           |   |  |                  |
|                                 | Application:       | Mechanically fixed  |   |  |                  |
|                                 | Eligible Products: | By  | Product   |  | Min. Thickness   |
|                                 |                    | IKO   | IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm Tapered, IKOTherm III Tapered, IKOTherm 25 psi Tapered, IKOTherm III 20 psi or IKOTherm III Tapered 20 psi |  | 38-mm (1.5-inch) |
|                                 |                    | Georgia-Pacific   | DensDeck Prime, DensDeck StormX Prime   |  | 13-mm (0.5-inch) |
| USG                             |                    | SECUROCK Gypsum-Fiber Roof Board                                      |   |  |                  |

**ROOF SYSTEM ASSESSMENT REPORT, DYNAMIC UPLIFT RESISTANCE PER CSA A123.21**

CUSTOMER: IKO Industries, Inc.  
 CUSTOMER REF: MARS017-B  
 DOCUMENT NO. IKO-MARS-5  
 TEST PANEL NO. IKO-D5

PUBLICATION DATE: 2025-08-28  
 REVISION NO. 3  
 REEVALUATION DATE: 2028-08-28



| PRODUCTS/APPLICATION (CONTINUED):         |                    |   |                                     |  |                            |
|---|--------------------|---|-------------------------------------|--|----------------------------|
| Coverboard or Insulation (top) Fasteners: | Description:       | Corrosion resistant screw-type roofing fasteners with steel stress plates coated with proprietary coating   |                                     |  |                            |
|   | Fastening Method:  | Fasteners installed through stress plates to engage the top flanges of the steel deck   |                                     |  |                            |
|   | Fastening Rate:    | Fasteners spaced 0.61-m (2-ft) o.c. in staggered rows spaced 0.46-m (1.5-ft) o.c.   |                                     |  |                            |
|   | Eligible Products: | <b>By</b>   | <b>Fasteners</b>                    |  | <b>Plates</b>              |
|   |                    | IKO   | InnoviFast Heavy Duty (HD) Fastener |  | InnoviWeld Induction Plate |
| Altenloh, Brinck & Co.                    |                    | Trufast #15 EHD Fastener  | Trufast TPO IW Plate                |  |                            |
| SFS Group                                 | Dekfast DF-#15-PH3 | isoweld F1-P-6.8-TPO Plate  |                                     |  |                            |
| Insulation (base):                        | Description:       | Polyisocyanurate foam board   |                                     |  |                            |
|   | Application:       | One or more layer(s), loose-laid with staggered joints  |                                     |  |                            |
|   | Eligible Products: | <b>By</b>   | <b>Product</b>                      | <b>Min. Thickness</b>  |                            |
| IKO                                       |                    | IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm Tapered, IKOTherm III Tapered, IKOTherm 25 psi Tapered, IKOTherm III 20 psi or IKOTherm III Tapered 20 psi | 38-mm (1.5-inch)                    |  |                            |
| Vapour Barrier:                           | Description:       | 6-mil polyethylene or proprietary self-adhering SBS modified bitumen or HDPE/acrylic  |                                     |  |                            |
|   | Application:       | Loose-laid with taped joints or self-adhering   |                                     |  |                            |
|   | Eligible Products: | 6-mil polyethylene or IKO MVP, IKO MVP Sand, Armourbond Flash Sand or IKO AcrylicStick SA   |                                     |  |                            |
| Primer: (Optional)                        | Description:       | Solvent-based surface preparation   |                                     |  |                            |
|   | Application:       | Liquid applied  |                                     |  |                            |
|   | Eligible Products: | IKO S.A.M. Adhesive or S.A.M Adhesive LVC<br><i>Note: Not for use with IKO Acrylic Stick SA</i>   |                                     |  |                            |
| Thermal Barrier: (Optional)               | Description:       | Cement-based, gypsum-based or mineral-wool board  |                                     |  |                            |
|   | Application:       | Loose-laid, adhered or mechanically-fixed   |                                     |  |                            |
|   | Eligible Products: | Any approved product acceptable to the named customer and the Authority Having Jurisdiction   |                                     |  |                            |
| Deck:                                     | Tested Product:    | Steel roof deck   |                                     |  |                            |

**ROOF SYSTEM ASSESSMENT REPORT, DYNAMIC UPLIFT RESISTANCE PER CSA A123.21**

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 TEST PANEL NO. IKO-D5

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| NOTES:                         |  |     |              |
|--------------------------------|--|-----|--------------|
| Test Value and Design Value:   | The "Test Value" noted herein reflects the ultimate passing test pressure recorded during testing. The "Design Value" herein reflects the "Test Value" multiplied by a resistance factor of 0.65 (same as "Test Value" divided by a safety factor of 1.5)<br>The "Design Value" should meet or exceed the design pressure requirements of the project, as determined in accordance with the current National Building Code of Canada (NBC) requirements. |     |              |
| Equivalence of Other Products: | This report applies only to the products listed as "Eligible Products" herein.   |     |              |
| Optional Components:           | Components listed herein as "optional" may be removed from the roof system design with no adverse effect on system dynamic wind uplift performance.  |     |              |
| As-Tested Deck:                | Testing utilized 22 ga., Type B (6-inch deck module) steel deck meeting ASTM A653, A792, A1008 or CSSBI 10M standard and having a yield strength of 275 MPa (40-ksi). Alternate deck displaying equivalent strength and fastener-holding capacity (withdrawal resistance) may be specified at the discretion of the Designer of Record to the satisfaction of the Authority Having Jurisdiction.   |     |              |
| Fastener Point-Loads:          | Point-Load   |     |              |
|                                | Sustained Test Value   |     | Design Value |
|                                | N  | lbf | N            |
|                                | 1252   | 281 | 814          |
|                                |  |     | 183          |

**RSAR SCOPE**

**Roof System Assessment Reports (RSAR)** constitute a summary of allowable products and interfaces used in low-slope roof assemblies based testing in accordance with CSA A123.21 at our ISO/IEC 17025 accredited laboratory.

While RSAR's are reviewed and renewed each 3-years based primarily on report holder declaration, these are not Certification listings, and are not intended to state or imply ongoing quality control / surveillance activities by NEMO at the report holder's facilities.

NEMO ETC, LLC is not, in any way, the Designer of Record for any project on which these RSAR's, or previous versions thereof, is/was used for permitting or design guidance. RSAR's are not to be construed as representing any attributes not specifically listed, nor to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by NEMO ETC, LLC, express or implied, as to any finding or other matter in these RSAR's, or as to any product covered by the RSAR's.

| NEMO ETC CREDENTIALS          |   |                            |
|-------------------------------|---|----------------------------|
| TYPE                          | ENTITY  | REFERENCE                  |
| ISO/IEC 17025 Accreditation   | International Accreditation Service (IAS)           | <a href="#">TL-689</a>     |
| TAS 301 Certification         | Miami-Dade  | <a href="#">21-0409.01</a> |
| Third Party Test Data Program | UL, LLC   | <a href="#">DA2862</a>     |
| Test Lab Listing              | Roofing Contractors Association of British Columbia | <a href="#">RCABC Labs</a> |

| REPORT HISTORY |       |  |                |
|----------------|-------|--|----------------|
| DATE           | EVENT | NOTES  | AUTHORIZED BY: |
| 2022-08-30     | DRAFT | For customer review  | RN             |
| 2022-08-30     | FINAL | After customer review  | RN             |
| 2022-10-28     | REV1  | Correct induction-weld plate names                                       | RN             |
| 2022-11-11     | REV2  | Remove calculated attachment density                                     | RN             |
| 2025-08-28     | REV3  | Revalidation, reformat, add insulation, vapor barrier and primer options | RN             |

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**END OF REPORT**