


Dynamic Wind Uplift Resistance CSA A123.21-2014 – Summary Document

Document No.: 19-06-B0127-AARS009-A
Document Date: October 11, 2019

Reference Documentation:

CSA A123.21-2014 Report No: 18-06-B0042-3
Supplementary Report No.: 19-06-B0042-M

| | | | |
|----------------------|---------------------------|--|-----------------------------------|
| Manufacturer: | IKO Industries Ltd. |  | IKO System Identification: |
| | 40 Hansen Road South | | |
| | Brampton, Ontario, Canada | | AARS009 |
| | L6W 3H4 | | |

SECTION 1.0: Roof System Summary:

| "IKO BUR - NO.15 PERF. FELT WITH MVP OVER THERMAL BARRIER" – Adhesive Adhered Roofing System | |
|---|--|
| Roof Membrane: | IKO No. 15 Perforated Felt – 4 Ply |
| Cover Board: | IKO Protectoboard |
| Insulation: | IKO IKOTerm |
| Insulation: | IKO IKOTerm |
| Vapour Retarder: | IKO AmourGard Ice and Water Protector Commercial |
| Thermal Barrier: | GP 12.7 mm (1/2") DensDeck Prime® |
| Deck: | Steel Deck, 22 ga, RD938, 230 MPa (33.4 ksi) |

SECTION 2.0: System Dynamic Wind Uplift Resistance (DUR) Testing Details:

| Test Date | Dynamic Wind Uplift Resistance (DUR) of tested specimen kPa (psf) | Dynamic Wind Uplift Resistance (DUR)* Rating (with 1.5X safety factor) kPa (psf) |
|-------------------|--|---|
| February 27, 2018 | 7.2 (150) | 4.9 (100) |

Dynamic Wind Uplift Resistance Rating (DUR): 4.9 kPa (100 psf)

SECTION 3.0: Tested Product and Substitutable Products:

| Roof Membrane | | |
|--------------------------|---|--------------|
| Tested Product | IKO No. 15 Perforated Felt – 4 Ply Organic BUR with Glaze Coat, 203 mm (8") Overlap | |
| Product Size | Roll Width: 0.914 m (36"), roll Length 43.9 m (144') | |
| Attachment Method | Hot Mopped with CSA A123.4 Type 2 Hot Asphalt Adhesive | |
| Substitutable Product(s) | | |
| Manufacturer | Product Identification | |
| IKO Industries Ltd. | Type IV Glass | Type 6 glass |

| Cover Board | |
|--------------------------|---|
| Tested Product | IKO Protectoboard |
| Product Size | 3 x 1220 x 1524 mm (1/8" x 4' x 5') |
| Attachment Method | Ribbon adhered with IKO Millennium adhesive |
| Fastening Rate | 305 mm (12") o.c. |
| Substitutable Product(s) | |
| Manufacturer | Product Identification |
| IKO Industries Ltd. | Protectobase 180 |

| Insulation (Top Layer) | | | |
|--------------------------|---|---------------------|------------------------|
| Tested Product | IKO IKOTerm | | |
| Product Size | 51 x 1220 x 1220 mm (2" x 4' x 4') | | |
| Attachment Method | Ribbon adhered with IKO Millennium adhesive | | |
| Fastening Rate | 305 mm (12") o.c. | | |
| Substitutable Product(s) | | | |
| Manufacturer | Product Identification | | |
| IKO Industries Ltd. | IKOTerm III | IKOTerm 25 psi | IKOTerm III 25 psi |
| | IKOTerm Tapered | IKOTerm III Tapered | IKOTerm 25 psi Tapered |

| Insulation (Bottom Layer) | | | |
|---------------------------|---|---------------------|------------------------|
| Tested Product | IKO IKOTerm | | |
| Product Size | 51 x 1220 x 1220 mm (2" x 4' x 4') | | |
| Attachment Method | Ribbon adhered with IKO Millennium adhesive | | |
| Fastening Rate | 305 mm (12") o.c. | | |
| Substitutable Product(s) | | | |
| Manufacturer | Product Identification | | |
| IKO Industries Ltd. | IKOTerm III | IKOTerm 25 psi | IKOTerm III 25 psi |
| | IKOTerm Tapered | IKOTerm III Tapered | IKOTerm 25 psi Tapered |


| Vapour Retarder | |
|--------------------------|---|
| Tested Product | IKO AmourGard Ice and Water Protector Commercial |
| Product Size | Roll Width: 0.914 m (36"), roll Length 19.8 m (65') |
| Attachment Method | Self-adhered to substrate primed with IKO S.A.M. adhesive |
| Fastening Rate | n/a |
| Substitutable Product(s) | |
| Manufacturer | Product Identification |
| IKO Industries Ltd. | MVP Sand |

| Thermal Barrier | |
|--------------------------|---|
| Tested Product | GP DensDeck Prime® |
| Product Size | 12.7 x 1220 x 2440 mm (1/2" x 4' x 8') |
| Attachment Method | Ribbon adhered with IKO Millennium adhesive |
| Fastening Rate | 305 mm (12") o.c. |
| Substitutable Product(s) | |
| Manufacturer | Product Identification |
| n/a | n/a |

| Assembly Adhesive Securement | |
|------------------------------|--|
| Tested Product | IKO Millennium adhesive – ribbon adhered |
| Fastening Rate | 305 mm (12") o.c. |
| Substitutional Product(s) | |
| Manufacturer | Product Identification |
| n/a | n/a |

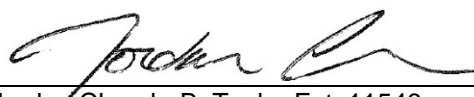
Note: This is not a comprehensive report but a summary of the performance results produced for the roof assembly documented herein tested in accordance to CSA A123.21-2014. Please refer to the reference documents stated on page 1, or consult the manufacturer, for detailed information pertaining to the test specimen configuration and construction.

Reported by:



Allan Lawrence, Ext. 11212
Supervisor, Building Systems
Industrials Division

Authorized by:



Jordan Church, B. Tech., Ext. 11546
Ops. / Tech. Manager, Bldg. Science & Fire Testing
Industrials Division

Accreditation: Element is an ISO 17025 accredited test lab under International Accreditation Service "TL-407". In addition, CSA A123.21 can be found under our scope of accreditation listing.

This document and service are covered under Element Materials Technology Canada Inc.'s Standard Terms and Conditions of Contract which may be found on our company's website www.element.com, or by calling 1-866-263-9268.