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Dynamic Wind Uplift Resistance CSA A123.21-2020 - Summary Document

Document No.: 19-06-B0127 RV2- AARS013-A

Document Date: October 14, 2022

element

Reference Documentation:

CSA A123.21-2014 Report No: 18-06-B0192-4 RV1

Supplementary Report No.: 22-06-B0109

| Manufacturer: | IKO Industries Ltd. | R | IKO System Identification: |
|---------------|---------------------------|---|----------------------------|
| | 40 Hansen Road South | | iko system identification: |
| | Brampton, Ontario, Canada | | AARS013 |
| | L6W 3H4 | | AARSUIS |

SECTION 1.0: Roof System Summary:

| "IKO MOD-BIT – SHIELDBASE WITH MVP SAND TO DECK" – Adhesive Adhered Roofing System | | |
|--|--|--|
| Roof Membrane – Cap Sheet: | IKO Torchflex TP-180 Cap | |
| Roof Membrane/Cover Board | IKO ShieldBase 180 | |
| Insulation: | IKO IKOTherm | |
| Insulation: | IKO IKOTherm | |
| Vapour Retarder: | IKO MVP Sand Vapour Retarder | |
| Deck: | Steel Deck, 22 ga, RD938, 230 MPa (33.4 ksi) | |

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

| Test Date | Measured Dynamic Wind Uplift Resistance of tested specimen, as per CSA A123.21-20 kPa (psf) | Dynamic Wind Uplift Resistance Rating, DUR (with 1.5X safety factor) as per CSA A123.21-14 kPa (psf) |
|------------------|---|--|
| December 6, 2018 | 3.6 (75) | 2.4 (50) |

Measured Dynamic Wind Uplift Resistance: 3.6 kPa (75 psf) *

^{*} Value does not include resistance factor. Applicable resistance factor shall be applied.

SECTION 3.0: Tested Product and Substitutable Products:

| Roof Membrane (Cap Sheet) | | | |
|---------------------------|--|--|-----------------------------|
| Tested Product | IKO Torchflex TP-180-Cap | | |
| Product Size | Roll Width: 1 m (39.6"), roll Length 8 m (26') | | |
| Attachment Method | Heat Welded | | |
| Substitutable Product(s) | | | |
| Manufacturer | Product Identification | | |
| | Torchflex TP-HD-Cap | Torchflex TP-250-Cap | Torchflex TP-250-Cap (5 mm) |
| IKO Industries Ltd. | PrevENt TP-250-Cap | PrevENt TP-HD-Cap | PrevENt Premium TP-250-Cap |
| IKO industries Ltd. | ArmourCool Granular TP-HD | PrevENt ArmourCool Granular TP PrevENt ArmourCo | D 51/4 0 11/D 0 |
| | Carrara ArmourCool HD | | Prevent ArmourCool HD Cap |
| IKO Industries Ltd. | Modiflex MP-180-cap | Modiflex MP-250-cap | Modiflex MP-HD-cap |
| | PrevENt MP-250-cap | PrevENt MP-HD-cap | |

| Roof Membrane Base Sheet/Cover Board | | | |
|--------------------------------------|---|--|--|
| Tested Product | IKO ShieldBase 180 | | |
| Product Size | 17 x 914 x 2440 mm (0.6" x 3' 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 | | |

| Insulation (Top Layer) | | | |
|--------------------------|---|----------------------|-------------------------|
| Tested Product | IKO IKOTherm | | |
| Product Size | 38 x 1220 x 1220 mm (1.5" 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. | IKOTherm III | IKOTherm 25 psi | IKOTherm III 25 psi |
| | IKOTherm Tapered | IKOTherm III Tapered | IKOTherm 25 psi Tapered |

| Insulation (Bottom Layer) | | | | |
|---------------------------|--------------------------|---|-------------------------|--|
| Tested Product | IKO IKOTherm | IKO IKOTherm | | |
| Product Size | 38 x 1220 x 1220 mm (1.5 | 38 x 1220 x 1220 mm (1.5" x 4' x 4') | | |
| Attachment Method | Ribbon adhered with IKO | Ribbon adhered with IKO Millennium adhesive | | |
| Fastening Rate | 305 mm (12") o.c. | 305 mm (12") o.c. | | |
| | Substitutable Product(s) | | | |
| Manufacturer | | Product Identification | | |
| IKO Industries Ltd. | IKOTherm III | IKOTherm 25 psi | IKOTherm III 25 psi | |
| | IKOTherm Tapered | IKOTherm III Tapered | IKOTherm 25 psi Tapered | |

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| Vapour Retarder | | | |
|---------------------|---|--|--|
| Tested Product | IKO MVP Sand Vapour Retarder | | |
| Product Size | Roll Width: 0.9 m (36"), roll Length 24.4 m (80') | | |
| 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. | AmourGard Ice and Water Protector Commercial | | |

| 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 <u>summary</u> of the performance results produced for the roof assembly documented herein tested in accordance to CSA A123.21-2020. 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.

The Substitutable Products referenced in this Element Summary Report have been established for IKO Industries as per Element Document 22-06-B0109.

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Accreditation: Element is an ISO 17025 accredited test lab under A2LA. In addition, CSA A123.21 can be found under our scope of accreditation listing.

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