

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

Document No.: 20-06-B0138-PARS018-A
Document Date: April 16, 2021

Reference Documentation:

CSA A123.21-2014 Report No: 20-06-B0138-2
Supplementary Report No.: 19-06-B0042-M RV2

| | | | |
|----------------------|---------------------------|--|-----------------------------------|
| Manufacturer: | IKO Industries Ltd. |  | IKO System Identification: |
| | 40 Hansen Road South | | |
| | Brampton, Ontario, Canada | | PARS018 |
| | L6W 3H4 | | |

SECTION 1.0: Roof System Summary:

| "IKO MOD-BIT – MVP SAND WITH MA THERMAL BARRIER" – Partially Attached Roofing System | |
|--|--|
| Roof Membrane – Cap Sheet: | IKO Torchflex TP-180-Cap |
| Roof Membrane – Base Sheet | IKO Torchflex TF-95-FF-Base |
| Cover Board: | IKO Protectoboard |
| Insulation: | IKO IKOTerm |
| Insulation: | IKO IKOTerm |
| Vapour Retarder: | IKO MVP Sand Vapour Retarder |
| 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) |
|----------------|--|--|
| April 15, 2021 | 5.4 (112.5) | 3.6 (75) |

Dynamic Wind Uplift Resistance Rating (DUR): 3.6 kPa (75 psf)

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 (26.2') | | |
| Attachment Method | Heat Welded | | |
| Substitutable Product(s) | | | |
| Manufacturer | Product Identification | | |
| IKO Industries Ltd. | Torchflex TP-HD-Cap | Torchflex TP-250-Cap | Torchflex TP-250-Cap (5 mm) |
| | Torchflex Ultra TP-HD-Cap | PrevEnt TP-250-Cap | PrevEnt TP-HD-Cap |
| | PrevEnt Premium TP-250-Cap | ArmourCool Granular TP-HD | Carrara ArmourCool HD |
| | PrevEnt ArmourCool HD-Cap | PrevEnt ArmourCool Granular TP | |
| 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) | | | |
|----------------------------|---|-----------------------------|--------------------------|
| Tested Product | IKO Torchflex TF-95-FF-Base | | |
| Product Size | Roll Width: 1 m (39.6"), roll Length 15 m (49') | | |
| Attachment Method | Heat Welded | | |
| Substitutable Product(s) | | | |
| Manufacturer | Product Identification | | |
| IKO Industries Ltd. | Torchflex TF-95-SF-Base | Torchflex TP-180-FF-Base | Torchflex TP-180-SF-Base |
| | Torchflex HD-FF-Base | Torchflex Ultra HD-FF-Base | |
| IKO Industries Ltd. | Modiflex MF-95-FS-Base | Modiflex MF-95-SS-Base | Modiflex MP-180-FS-Base |
| | Modiflex MP-180-SS-Base | Modiflex MP-180-FS-Base 3mm | Modiflex MP-HD-FS-Base |
| | Modiflex MP-HD-SS-Base | | |

| 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 (this optional product also replaces the Base Sheet in the tested system) |

| Insulation (Top Layer) | | | |
|--------------------------|---|---------------------|------------------------|
| Tested Product | IKO IKOTerm | | |
| 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. | 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 | 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. | IKOTerm III | IKOTerm 25 psi | IKOTerm III 25 psi |
| | IKOTerm Tapered | IKOTerm III Tapered | IKOTerm 25 psi Tapered |

| 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. | ArmourGard Ice and Water Protector Commercial |

| Thermal Barrier | | |
|--------------------------|--|------------------------|
| Tested Product | GP DensDeck Prime® | |
| Product Thickness | 12.7 x 1220 x 2440 mm (1/2" x 4' x 8') | |
| Attachment Method | Mechanically attached | |
| Fastening Rate | 1 per 2.0 ft² (0.186 m²) | |
| Substitutable Product(s) | | |
| Manufacturer | Product Identification | |
| Georgia-Pacific® | DensDeck® | |
| USG®/CGC | Securock® Glass-Mat | Securock® Gypsum-Fiber |

| 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 |

| Thermal Barrier Securement | |
|----------------------------|---|
| Tested Product | SFS #14 Dekfast Fastener with 3" (76 mm) round (PLT-R-3) Metal Insulation Plate |
| Fastening Rate | 1 per 2.0 ft ² (0.186 m ²) - Sixteen (16) per 12.7 x 1220 x 2440 mm (1/2" x 4' x 8') board |
| Substitutional Product(s) | |
| Manufacturer | Product Identification |
| Trufast® | #14 HD Roofing Fastener with 76 mm (3") round (MP-3000) Metal Insulation Plate |
| OMG® | Heavy Duty #14 Roofing Fastener with 3" (76 mm) Galvalume Plate (SPGA3C) |

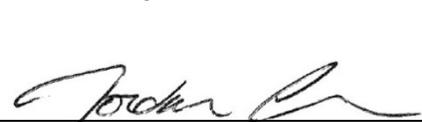
Note: This is not a comprehensive report but a summary of the performance results produced for the roof assembly documented herein tested in accordance to CSA A123.21-2014. Please refer to the reference documents stated on page 1, or consult the manufacturer, for detailed information pertaining to the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

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