

CCW-MIRAPLY-V MATERIAL CERTIFICATION

This is to certify that CCW MiraPLY-V is a vertical grade, self-adhering membrane that is comprised of a tough, durable and flexible TPO backing with a butyl alloy adhesive designed for blindside waterproofing in below-grade construction. CCW MiraPLY is manufactured in the USA.

CCW manufactures CCW MiraPLY-V Membrane to comply with the following ASTM typical property values and meets the specification requirements:

| CCW-MiraPLY-V-Property | Test Method | Unit | Typical Value* |
|--|-------------|-----------|--------------------|
| TPO | - | mils (mm) | 22 (.56) |
| Butyl Alloy | - | mils (mm) | 25 (.64) |
| Thickness | ASTM D 1970 | mils (mm) | 47 (1.19) |
| Water Vapor Transmission | ASTM E 96 B | perms | 0.100 |
| Tensile Strength | ASTM D 882 | psi | 1,360 |
| 300% Modulus | ASTM D 412 | psi | 1,390 |
| 90 ⁰ T-Peel | ASTM D 1876 | lb. | >5.0 |
| Elongation @ Break @ 23 ⁰ C (Die C) | ASTM D 412 | % | 335 |
| Flexibility Temperature @ -29 ⁰ C (-20 ⁰ F) | ASTM D 1970 | Pass/Fail | No Cracking - Pass |
| Hydrostatic Pressure Resistance | ASTM D 5385 | ft. | >231 (100 psi) |
| Peel Strength Over Poured Concrete (tested w/2" strips) | ASTM D 903 | lb. | 5.6 |
| Puncture Resistance Elongation | ASTM E 154 | in. | 4.9 |
| Puncture Resistance Load at Puncture | ASTM E 154 | lb. | 106.4 |
| Tear Strength | ASTM D 624 | psi | 685 |
| Soil Decay Testing – E 96 Permeance | ASTM E 154 | - | pass |
| Soil Decay Testing – Weight Loss | ASTM D 154 | - | Pass |

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