



## RapidShield™ Resistance to Thermal Cycling

The ability of a floor coating to maintain adhesion after being exposed to thermal cycling is a key performance characteristic and should be considered when determining if a coating is “fit for use.” RapidShield™ has been tested in accordance with European standard EN 1062-11 and found to exhibit excellent adhesion after various thermal cycles. Testing was performed via an independent laboratory and utilized standard coating configurations applied to standard concrete blocks. After exposure to the various thermal cycles, the coatings were then tested for adhesion using the pull-off method. The following table provides the results of this testing. Official testing certificates from the laboratory that performed the testing are available upon request.

| Thermal Compatibility Condition  | Adhesion Test Method  | Coating Configurations | Result* (N/mm <sup>2</sup> ) | Result* (psi) |
|--|-----------------------|------------------------|------------------------------|---------------|
| <b>Adhesion Strength by Pull-Off Test</b><br>(N/mm <sup>2</sup> )<br>No Exposure   | EN 1542<br>ASTM D7234 | cl/cl                  | 6.6                          | 957           |
|  |                       | cl/HB                  | 4.9                          | 710           |
|  |                       | cl/c/c/cl              | 5.3                          | 768           |
|  |                       | cl/c/c/HB              | 5.6                          | 812           |
| <b>Adhesion after Thermal Compatibility Heat Aging (EN 1062-11)</b><br>7 days @ 70°C   | EN 1542<br>ASTM D7234 | cl/cl                  | 7.6                          | 1100          |
|  |                       | cl/HB                  | 6.3                          | 914           |
|  |                       | cl/c/c/cl              | 6.1                          | 884           |
|  |                       | cl/c/c/HB              | 5.8                          | 841           |
| <b>Adhesion After Thermal Compatibility Water Storage (EN 1062-11)</b><br>3 cycles, 24 hrs. water (23°C);<br>24 hrs air (50°C)               | EN 1542<br>ASTM D7234 | cl/cl                  | 5.0                          | 725           |
|  |                       | cl/HB                  | 5.0                          | 725           |
|  |                       | cl/c/c/cl              | 4.7                          | 681           |
|  |                       | cl/c/c/HB              | 5.1                          | 739           |
| <b>Adhesion After Thermal Compatibility Freeze thaw/deicing salt (EN 1062-11)</b><br>20 cycles, 2 hrs. water (-15°C);<br>2 hrs. water (21°C) | EN 1542<br>ASTM D7234 | cl/cl                  | 3.4                          | 493           |
|  |                       | cl/HB                  | 3.6                          | 522           |
|  |                       | cl/c/c/cl              | 3.2                          | 464           |
|  |                       | cl/c/c/HB              | 4.5                          | 652           |

\* Each datum displayed is the average of three readings.

### Data Table Key - Coating Configurations Tested

- cl/cl** RapidShield™ 0007 Clear applied as a topcoat over RapidShield™ 0007 Clear applied as a Primer
- cl/HB** RapidShield™ 0007 Clear applied as a topcoat over RapidShield™ 0008 High Build
- cl/c/c/cl** RapidShield™ 0007 Clear applied as a topcoat over two coats of RapidShield™ Color on top of RapidShield™ 0007 Clear applied as a Primer
- cl/c/c/HB** RapidShield™ 0007 Clear applied as a topcoat over of two coats of RapidShield™ Color on top of RapidShield™ 0008 High Build

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