

ASPIRE PAVERS WIND UPLIFT TESTING

SUMMARY

This bulletin describes testing methodology, tested assemblies, and Aspire Paver System performance at an independent testing facility in Miami, Florida. Tested assemblies had a maximum wind speed of up to 157 mph without failure when fully adhered.

METHODOLOGY

Two 10' x 10' roof decks with 16" parapet walls were constructed, one for each assembly tested. The starting wind speed (60 mph) was held at a given wind direction (90 degrees) relative to the test roof deck and paver system assembly for 1 minute for each cycle. The entire roof deck was then rotated to a new wind direction (45 degrees) at the same wind speed and duration. After each full cycle, the wind speed was increased by 10 mph and the cycle repeated until failure (e.g., a paver lifted out of the grid).

CONTENTS

- Methodology
- Standard Rooftop Assembly
- High Wind Rooftop Assembly
- Results
- Notes
- Resources
- Questions



WIND TESTING FACILITY



10'X10' TEST DECK

STANDARD ROOFTOP ASSEMBLY

Aspire Standard Rooftop Assembly requires that perimeter and corner pavers (16" from the perimeter or parapet) be adhered to the grid. All other field pavers were loose laid with no adhesive. (Assembly 1)

HIGH WIND ROOFTOP ASSEMBLY

Aspire High Wind Rooftop Assembly requires that all pavers be fully adhered to the grids. (Assembly 2)



ADHERING PAVERS WITH ADHESIVE

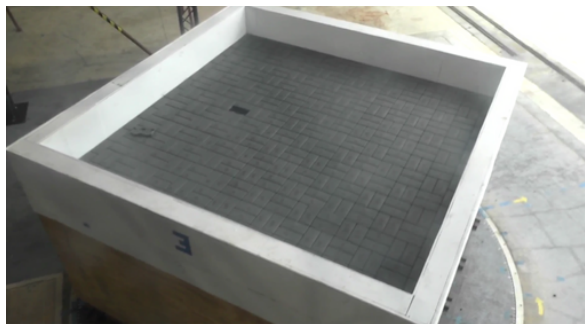


INSTALLED PAVER ASSEMBLY

RESULTS

ASSEMBLY 1: STANDARD ROOFTOP

Wind Speed Rating: 100 mph (Category 2 Hurricane Equivalency*)



At 110 mph a paver lifted from the grid completing the test.

ASSEMBLY 2: HIGH WIND ROOFTOP

Wind Speed Rating: 157 mph (Category 5 Hurricane Equivalency*)



No damage to the system.

NOTES

The basket weave pattern was used for all tests. Lexel Sealant from Sashco was used for adhered pavers in all applicable tests. Adhesive was only used to adhere the pavers to the grids. The grid assembly was never adhered to the roof system below. *Saffir-Simpson Hurricane Wind Scale used by National Weather Service and test facility.

Revision updates adhesive notes for High Wind Assembly.

RESOURCES

Check for updates to this and other [Technical Bulletins](#) on our [Resources Page](#).

Complete Installation Training, View Resources, and Contact Technical Support by visiting our [Website](#) or our [Frequently Asked Questions page](#).

Training before any installation can improve project outcomes.

QUESTIONS

If you have any questions regarding Aspire products and accessories, call 844-290-4196 and ask for Aspire Paver Technical Support. Or contact us through the [Website](#).

