

HPS® (High Performance Sliding) Doors HPX Monumental Sliding Doors

Hanging Tough
Against Rain,
Hail and Hurricanes



Atlantis Casino and Resort, Paradise Island, Nassau, Bahamas
Architect: HKS Architects, Dallas, TX
Glazing Contractor: Commonwealth Building Supply Ltd., Nassau, Bahamas

Kawneer's HPS®/HPX Sliding Doors meet the most stringent design criteria and withstand the worst kind of weather. Monumental in design and providing the highest performance for wind load and water resistance, these sliding doors have also been hurricane impact and cycle tested by an independent laboratory to meet the requirements of the Florida Building Code and International Building Code.

Performance

HPS® Sliding Doors are available in four different performance ranges for all types of applications, including high-rise. Meeting or exceeding all criteria established by the American Architectural Manufacturers Association (AAMA), they are certified for performance classes and grades of HC60, HC80, HC100 and HC120. For example, a performance designation of HC120 indicates that the product has been tested at a structural load of 180 psf. HPS® Sliding Doors

withstand water infiltration that exceeds the minimum test standard requirements – sufficient to endure heavy rains at high pressures. They also meet both AAMA's Operating Force requirements and Forced Entry Resistance requirements in accordance with AAMA 1303.5.

HPS® Sliding Doors have been small missile impact and cycle tested to withstand hurricanes. The small missile test involves simulating wind-borne roof gravel damage and is used for products installed more than 30 feet above ground. Three identical test units are positioned opposite an air cannon containing 2 gram steel ball bearings, which are fired at the test specimens at 130 feet per second (88 mph) for a total of 30 impacts per specimen. No penetration may occur.



Large missile hurricane impact tested HPX Slider

Both large and small missile tests are followed by a severe cyclic pressure test in which the impacted test units are subjected to a series of 4,500 inward and 4,500 outward pressure cycles (up to the design pressure) that simulate wind forces in a hurricane. These take place every one to three seconds for an extended period of time. No significant opening through which air can pass may occur. HPS® Sliding Doors have been cycle tested at design pressures of +90/-125 psf.

HPX Sliding Doors meet even more extreme conditions with taller and heavier sections for monumental applications such as high-rise coastal buildings up to 40 stories that require superior wind load and water performance as well as the ability to retain structural integrity during the toughest kind of hurricane. HPX test results are some of the highest in the industry and have been cycle tested to +130/-180 psf design pressures and higher. HPX Sliding Doors withstand water infiltration at 32 psf – sufficient to endure the heaviest rains at extreme pressures.

HPX Sliding Doors have been large missile impact tested to simulate large wind-borne debris that may occur during hurricanes. The test is used for products installed up to 30 feet above ground. Three identical test units are positioned opposite an air cannon containing a 9 lb. two-by-four timber which is fired at 50 feet per second (34 mph). Each unit must resist penetration by strikes at strategically different points: for example, at the center and six inches from one corner of the glazing and other areas on the door. No penetration may occur. This test is also followed by a cyclic pressure test.

HPX Sliding Doors also meet both the Operating Force requirements of AAMA and the requirements for Forced Entry Resistance in accordance with ASTM F-588.

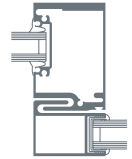


Realm Condominiums,
Atlanta, GA
Architect: The Preston
Partnership, LLC, Atlanta, GA
Glazing Contractor: Glass
Systems, Inc., Lithonia, GA

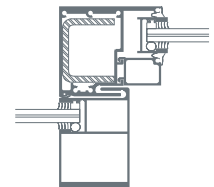
Aesthetics

Monumental in appearance, HPS® and HPX Sliding Doors have larger, wider and deeper sections than regular sliders, and are available in four standard configurations: OX, XO, OXO and OXXO. Other configurations are possible with the addition of a fixed mullion for HPS®. Sightlines for both doors vary depending upon the configuration of panels.

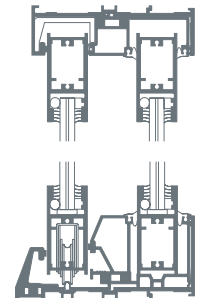
HPS® Sliding Doors have the appearance of a storefront type system with a 3" high sill track to meet higher water performance standards. Overall system depth is 5-9/16 inches. Infill options for HPS® Sliding Doors range from 1/4" to 1", and include 9/16" impact resistant laminated glass. Factory glazing is available for the sliding panels. Three performance ranges of interlocks meet various structural designs.



HPX Sliding Doors offer similar configurations and options. The larger interlocks and stiles are designed to meet higher structural loads. Overall system depth is 6 inches. The standard infill is 5/8" impact resistant, glass-clad polycarbonate. Other infills for non-impact applications range from 3/8" to 7/8 inch. HPX Sliding Doors also offer the ability to pre-glaze panels, and factory glazing is available for both fixed and sliding panels.



Stainless steel track inserts and adjustable stainless steel tandem roller assemblies with ball bearings ensure smooth operation in both doors. The Adams-Rite 1847 all stainless steel deadlock is available in both doors and provides dependable security and durability.



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