

# > YSD 700 H

YKK AP ProTek® Impact Resistant Heavy Commercial Sliding Door



# **Heavy Commercial Impact Protection**

The YKK AP ProTek® YSD 700 H impact resistant heavy commercial sliding glass door is designed to provide protection from the fierce cyclical pressures and projectiles associated with hurricane force winds. The engineering behind the design concept provides enhanced structural capabilities to meet stringent building codes. This sliding door is designed to accept 9/16" laminated monolithic lites and 1" or 1-3/16" thick insulating units that may be configured to provide protection from both large and small missile impacts. Fixed lites are integrated into the sub frame for improved performance and reduced cost.

# **Product Benefits**

- Available configurations: OX, XO, OXO, & OXXO
- AAMA/WDMA 101/I.S. 2-97/NAFS-02
  - HC-120 Grade
- Florida Product Approval HVHZ
  - +100/-120 PSF
- 7" frame depth
- Factory glazing (active panels) & screens
- Standard heavy-duty hardware, including stainless steel tandem rollers & track cover for years of worry-free operation







# YKK AP ProTek® Impact Resistant Heavy Commercial Sliding Door Specifications

#### 1.01 SUMMARY

- A. Section includes: Aluminum Sliding Doors, including:
  - 1. YKK AP Series YSD 700 H Impact Resistant Heavy Commercial Sliding Doors.
  - 2. Glass: Contact YKK AP for approved glass types.
  - 3. Glazing: Structural silicone for large missile, dry glazed for small missile & non-impact applications.

# 1.02 TEST AND PERFORMANCE REQUIREMENTS

- A. All test unit sizes and configurations shall conform to the minimum sizes in accordance with AAMA 101/I.S./NAFS-02, with a performance class of HC, performance grade 120, meet all requirements of High Velocity Hurricane Zone (HVHZ) Code Protocols TAS 201, TAS 202, and TAS 203 and comply with the following specific performance requirements indicated.
  - 1. Air Infiltration: Sliding doors shall have 0.30 CFM/FT<sup>2</sup> maximum allowable infiltration when tested in accordance with ASTM E 283 and TAS 202 at a differential static pressure of 6.24 psf (299 Pa).
  - 2. Water Infiltration: There shall be no uncontrolled water leakage when tested in accordance with ASTM E 331, at a static pressure of :
    - a. 15 psf (718 Pa) for monolithic glass.
    - b. 20 psf (958 Pa) for insulating glass.
  - 3. Static Load: There shall be no damage to fasteners, hardware, accessories, or any other damage that would render the sliding door inoperable when tested in accordance with ASTM E 330 and TAS 202 at a differential static pressure of 120 psf positive and negative
  - Large & Small Missile Impact: There shall be no signs of penetration, rupture, or opening after the impact test when tested in accordance with ASTM E 1886/1996, SSTD 12-99 and TAS 201.
  - 5. Cyclic Load: Test to be done upon completion of missile impact test. There shall be no damage to fasteners, hardware, accessories, or any other damage that would render the sliding door inoperable when tested in accordance with ASTM E 1886/1996 and TAS 203.
  - 6. Thermal Performance: When tested in accordance with AAMA 1503 and AAMA 507:
    - a. Condensation Resistance Factor (CRF): A minimum of 21.
    - b. Thermal Transmittance U Value: 0.61 BTU/HR/FT<sup>2</sup>/°F or less.
  - 7. Acoustical Performance: When tested in accordance with AAMA 1801 the Sound Transmission

Class (STC), and Outdoor-Indoor Transmission Class (OITC) shall not be less than:

- a. 30 STC and 26 OITC for annealed glass.
- b. 30 STC and 27 OITC for laminated glass.
- 8. Life Cycle Testing: When tested in accordance with AAMA 910, there shall be no damage to fasteners, hardware parts, or any other damage that would cause the specimen to be inoperable. Resistance to air leakage and water penetration resistance test results shall not exceed the gateway performance.
- Forced Entry Resistance: Sliding doors shall be tested in accordance with ASTM F 842 & TAS 202 and meet the requirements of performance grade 10.
- 10. Deglazing: Sliding doors shall meet all test requirements of ASTM E 987 and NAFS (5.3.6.2).

Note: Performance based on lab testing and will vary by configuration and glass type; contact YKK AP engineering for job specific analysis at higher performance levels.

## 2.01 MANUFACTURERS

- A. Acceptable Manufacturers: YKK AP America Inc.
  - 1. Sliding Doors: YKK AP YSD 700 H Impact Resistant Heavy Commercial Sliding Doors.
- B. Sliding Doors:
  - 1. AAMA Designation: HC-120.
  - 2. Description: YKK YSD 700 H Series Impact Resistant Heavy Commercial Sliding Doors shall be extruded aluminum with overall frame depth of 7" (177.8mm) not including interlock stiles; Horizontal frame members run through square cut vertical members, butted and mechanically fastened with stainless steel screws; Vertical panel members run through notched top and bottom rails, butted and mechanically fastened with two stainless steel screws per joint; Standard shipped knocked-down or optional pre-glazed sliding panels.
  - 3. Configuration: The sliding doors shall be OX, XO, OXO, or OXXO.
  - 4. Glazing (Contact YKK AP for approved glass types):
    - a. Non-Impact & Small Missile: Sliding panel(s) shall be channel glazed using a marine type wrap around EPDM glazing gasket; Fixed panel(s) shall be glazed with standard glazing stops and EPDM wedge gasket on the exterior and EPDM sponge gaskets on the interior; 9/16" monolithic or 1" to 1-3/16" insulating units.

#### 2.02 MATERIALS

A. Extrusions: ASTM B 221 (ASTM B 221M), 6063-T5 Aluminum Alloy.

## 2.03 ACCESSORIES

- A. Manufacturer's Standard Accessories:
  - 1. Hardware: Standard adjustable stainless steel ball bearing rollers, stainless steel track cover, MS Lock with all steel case and laminated steel hookbolt (1-1/2" backset), 1" aluminum tubular exterior (shoulder bolt) and interior (through bolt) pull handles; Optional alloy thumbturn cylinder and aluminum cylinder trim ring.
  - 2. Fasteners: All fasteners to be AISI 300 series (except for self-drilling which are to be AISI 400 series) stainless steel.
  - 3. Sealant: Non-skinning type, AAMA 803.3.

## 2.06 FINISHES

- A. Anodic Coating: Electrolytic color coating followed by an organic seal applied in accordance with the requirements of AAMA 612.
- B. Fluoropolymer Type: Factory applied two-coat 70% Kynar resin by Arkema or 70% Hylar resin by Solvay Solexis, fluoropolymer based coating system, Polyvinylidene Fluoride (PVF-2), applied in accordance with YKK AP procedures and meeting AAMA 2605 specifications.

For additional information on architectural aluminum products offered by YKK AP America Inc. visit our web site at www.ykkap.com.