



> YOW 225 H

Impact Resistant Operable Window
for Monolithic Glass



YKK AP Hurricane & Blast Solutions

Worry Free Protection

YOW 225 H windows have been designed and engineered to the highest standards so as to provide a window that will be worry free. The windows have successfully passed the impact and cycle requirements of ASTM E-1886, ASTM E 1996, and the test requirements for the Florida High Velocity Hurricane Zone (TAS 201, TAS 202, & TAS 203). The windows are glazed with laminated monolithic glass. The vents are flush with the frame thus eliminating unsightly overlap. YOW 225 TUH is the thermally broken version of this product.

Product Benefits

- Available configurations: Casement Outswing, Project Out, & Fixed
- AAMA/WDMA AW-65 Operable, AW-100 Fixed
- Miami Dade NOA & Florida state-wide approval +65/-65 PSF operable, +70/-90 PSF minimum fixed
- 2-1/4" frame depth
- Accepts 9/16" glazing
- Factory glazing and screens
- Stacking mullions
- Standard heavy-duty hardware
- Blast Mitigation Testing



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1.01 SUMMARY

- A. Section Includes: Operable and Fixed Aluminum Window Systems
 - 1. YKK AP Series YOW 225 H Operable and Fixed Aluminum Window Systems.
- B. Related Sections:
 - 1. Glass and Glazing: Refer to Division 8 Glass and Glazing Section for glass and glazing requirements.

1.02 SYSTEM PERFORMANCE DESCRIPTION

- A. All test unit sizes and configurations shall conform to the minimum sizes in accordance with AAMA/WDMA/CSA 101/I.S.A440-05 with a performance class of AW, performance grade 65 (Operable), 100 (Fixed). Windows shall also meet all requirements of South Florida Building Code Protocols TAS 201, TAS 202, and TAS 203 and comply with the following specific performance requirements indicated.
 - 1. Air Infiltration: When tested in accordance with ASTM E 283 and TAS 202 at differential static pressure of 6.24 PSF (299 Pa), completed window systems shall have maximum allowable infiltration of 0.10 CFM/FT² (1.83 m³/h-m²).
 - 2. Water Infiltration: No uncontrolled water on indoor face of any component when tested in accordance with ASTM E 331 and TAS 202 at a static pressure of 12 PSF (574 Pa) operable, 15 PSF (718 Pa) fixed.
 - 3. Static Load: There shall be no damage to fasteners, hardware, accessories, or any other damage that would render the window inoperable when tested in accordance with ASTM E 330 and TAS 202 at a differential static pressure as follows;
 - a. Operable windows: Large & Small Missile: ±65 psf
 - b. Fixed windows:
 - Large Missile +70/-90 psf
 - Small Missile ± 100 psf.
 - 4. Forced Entry Resistance: Windows shall meet all test requirements of AAMA 1302.5 and TAS 202.
 - 5. Large & Small Missile Impact: Windows shall successfully pass the test requirements of both ASTM E 1886/E 1996 and South Florida Protocol TAS 201.
 - 6. Cyclic Load: Windows shall successfully pass the test requirements of both ASTM E 1886/E 1996 and South Florida Protocol TAS 203.
 - 7. Acoustical Performance: When tested in accordance with ASTM E 90 and ASTM E 1332, the Sound Transmission Class (STC), and Outdoor-Indoor Transmission Class (OITC) shall not be less than 32 STC and 26 OITC.
 - 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.

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. Window System: YKK AP YOW 225 H Operable and Fixed Aluminum Window Systems.
- B. Window Framing System:
 - 1. AAMA Designation: AW-65 (Operable), AW-100 (Fixed).
 - 2. Description: The windows shall be extruded aluminum; 2-1/4" frame depth; Vents shall be flush with frame and have mitered corner construction; Factory-assembled.
 - 3. Configuration: The windows shall be (select one or more) Fixed, Casement Outswing, or Project Out.
 - 4. Glazing (Contact YKK AP for approved glass types):
 - a. Large Missile Impact: Exterior glazing tape with silicone cap bead; 9/16" monolithic units; Interior silicone compatible setting blocks & structural silicone sealant; Aluminum interior glazing beads; Factory or bench glazed.
 - b. Small Missile Impact: Exterior glazing tape with silicone cap bead; 9/16" monolithic units; Interior EPDM wedge gaskets; Aluminum interior glazing beads; Factory or bench glazed.

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 concealed stainless steel 4 bar hinges for casement outswing and projected vents, exposed white bronze butt hinges for casement inswing vents, white bronze cam handles and strikes; Optional white bronze roto-operators for casement outswing vents, stainless steel support arms for casement inswing vents, aluminum/white bronze push bars for project out vents, white bronze custodial locks or multi-locks in lieu of cam handles, stainless steel limit stop devices.
 - 2. Fasteners: All fasteners to be AISI 300 series (except for self-drilling which are to be AISI 400 series) stainless steel.
 - 3. Glazing: Setting blocks, edge blocks, and spacers in accordance with ASTM C 864, shore durometer hardness as recommended by manufacturer; Glazing gaskets in accordance with ASTM C 864.

2.06 FINISHES

- A. Anodic Coating: Electrolytic color coating followed by an organic seal applied in accordance with the requirements of AAMA 612.
- B. High Performance Organic Coating Finish: 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.