SYSTEM DESCRIPTION:

YOW 225 TU windows have been designed and engineered to provide the highest level of quality. The windows have an overall depth of 2-1/4” and are thermally broken by means of ThermaBond Plus™ technology developed by YKK AP. Combining science and technology, this patented process resolves the problem of adhesion and the resulting dry shrinkage associated with typical poured and debridged systems. YOW 225 TU windows may be installed as independent units or adapted to fit into most YKK AP storefront, window wall, or curtain wall systems. The vents are flush with the frame thus eliminating unsightly overlap. YOW 225 TU windows are available in a variety of configurations to accommodate project requirements.

OPTIONS & FEATURES:

- AAMA/NWWDDW 101/I.S. 2-97
  - AW-65
- Factory Mitered and Sealed
- Heavy Duty Hardware
  - Four Bar Hinges that comply with AAMA 904.1
  - Aluminum Butt Hinges, Cast White Bronze Cam Handles, Locks, Strikes, and Keepers as required
- Stainless Steel Fasteners
- 1” or 1/4” Glazing
- Optional Screens
- Optional Head/Jamb Receptors and Sill Flashing
- Hurricane Impact Resistant YOW 225 TUH available
1.01 SUMMARY
A. Section Includes: Operable and Fixed Aluminum Window Systems:
   1. YKK AP Series YOW 225 TU ThermaBond Plus™ Operable and Fixed Aluminum Window System.
B. Related Sections:
   2. Glass and Glazing: Refer to Division 8 Glass and Glazing Section for glass and glazing requirements.

1.02 SYSTEM DESCRIPTION
A. Performance Requirements: Provide aluminum window systems that comply with performance requirements indicated, as
demonstrated by testing manufacturer’s assemblies in accordance with test method indicated.
1. Wind Loads: Completed window system shall withstand wind pressure loads normal to wall plane indicated:
   a. Exterior Walls:
      1) Positive Pressure:
      2) Negative Pressure:
   b. Interior Walls (Pressure Acting in Either Direction):
2. Deflection: Maximum allowable deflection in any member supporting a single lite of glass is no more than L/175.
3. Uniform Load Structural Test: Provide aluminum window systems that comply with ANSI/NWWDA101/I.S.2-97,
guidelines for AW-65 (operable) and AW-100 (fixed) rated product.
4. Thermal Movement: Provide for thermal movement caused by 180 degrees F (82.2 degrees C) surface temperature, without
   causing buckling stresses on glass, joint seal failure, undue stress on structural elements, damaging loads on fasteners,
   reduction of performance, or detrimental effects.
5. Air Infiltration: When tested in accordance with ASTM E 283-91 at differential static pressure of 6.24 PSF
   (299 Pa), completed window systems shall have maximum allowable infiltration of 0.04 CFM/FT² (1.85 m³ /h·m²).
6. Water Infiltration: No uncontrolled water other than condensation on indoor face of any component when tested in accordance with
   ASTM E 331-93 at a minimum test pressure differential of 12 PSF (575 Pa) for operable vents and 15 PSF (718 Pa) for fixed windows.
7. Thermal Performance: When tested in accordance with AAMA 1503.1-98 and ASTM C 236-89:
   a. Condensation Resistance Factor (CRF): A minimum of 60.
   b. Thermal Transmittance U Value: 0.45 BTU/HR/FT²/°F or less.
   Note: Performance will vary by window configuration and glass type; see actual test reports.

2.01 MANUFACTURERS
A. Acceptable Manufacturers: YKK AP America Inc.
B. Window Framing System:
   2. Description: The windows shall be extruded aluminum with integral structural thermal break; 2-1/4" frame depth;
      vents shall be flush with frame and have mitered corner construction; factory-assembled.
   3. Configuration: The thermally broken windows shall be (select one or more) Fixed, Casement (out/in) or Project (out/in).
   4. Thermal Barrier: Provide continuous thermal barrier by means of a poured and debridged pocket consisting of a two-part, chemically
      cured high density polyurethane which is bonded to the aluminum by YKK AP ThermaBond Plus™.
      Systems employing nonstructural type thermal barriers are not acceptable.

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, aluminum 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 device.
   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 612-02.
B. High Performance Organic Coating Finish: Factory applied two-coat 70% Kynar resin by Auto Chem or 70% Hylar resin by Ausimont,
   fluoropolymer based coating system, Polyvinylidene Fluoride (PVF-2), applied in accordance with YKK AP procedures and meeting
   AAMA 2605 specifications.