

> Quality  
Protects

Glazing Systems for Hurricane Protection



Entrances | Storefronts | Curtain Walls | Sun Controls | Windows | Balcony Doors

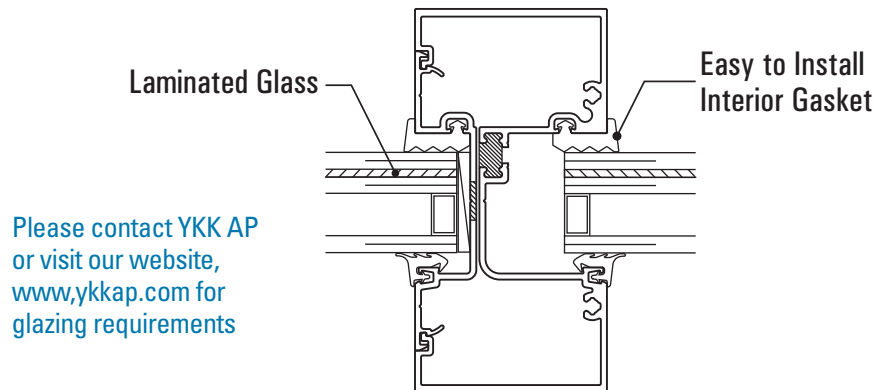


# YKK AP's ProTek® Dry Glazing Option

## A Glazing Option for Large Missile Applications

YKK AP is constantly developing new and innovative solutions to meet the requirements of their markets. To help lower the “installed costs” for large missile applications, our product development engineers looked for ways to eliminate the interior structural silicone seal that has been historically required. Testing of the YKK AP ProTek systems with an interior gasket and new laminated glass products clearly demonstrated their ability to meet the testing criteria of the International Building Code, and the “High Velocity Hurricane Zone” of the Florida Building Code.

YKK AP is pleased to introduce “Dry Glazed” versions of our popular YKK AP ProTek entrance and storefront systems. The design of the YKK AP ProTek systems make it possible to protect building envelopes from flying debris and the strong cyclical winds associated with hurricanes — without an interior structural silicone seal. A simple to install interior glazing gasket replaces the structural silicone to lower material cost, reduce glazing labor, and provide a tested and reliable solution that you can count on. Dry Glazed versions of the Model 35H entrance door and all three of our storefront systems have received Florida Product Approval for large missile applications.



Please contact YKK AP  
or visit our website,  
[www.ykkap.com](http://www.ykkap.com) for  
glazing requirements

### YKK AP ProTek® Hurricane System Dry Glazing Benefits

- **Lower Labor Costs**  
A simple push in gasket replaces the task of taping off the glass and frame, then applying and tooling the silicone.
- **Enhanced Reliability**  
Dry Glazing does not rely on the proper application of the structural silicone.
- **Simple to Re-Glaze**  
Replacing the glass in a dry glazed system is much less expensive as it is not necessary to cut out and clean off the old sealant prior to re-glazing.
- **Lower Material Costs**  
Very little gasket is wasted while a significant portion of sealant is scraped (tooled) off and thrown away.
- **Improved Aesthetics**  
A gasket provides a smooth and even seal against the glass and will not collect dust and dirt.
- **Single Source**  
All gaskets are ordered and will ship together with the stock length material.



## Our Dedication

YKK AP America Inc., the true industry leader in hurricane impact resistant glazing systems, is proud to offer a complete line of glazing systems that meet both Miami-Dade County (NOA) and Florida product approval. All of YKK AP's ProTek® systems are engineered and tested in accordance with ASTM E 1886 and ASTM E 1996 as well as the Florida Building Code "High Velocity Hurricane Zone" test requirements: TAS 201, TAS 202, and TAS 203. YKK AP's ProTek systems are designed to protect your building from flying debris, both large and small missile, and the fierce cyclical winds associated with hurricanes. We provide storefront systems for monolithic and insulating glazing applications. Our Model 35H hurricane impact resistant door is available with a wide variety of hardware options and has been tested and approved in sizes up to 8'-0" x 8'-0". Complete curtain wall and storefront systems are available for both monolithic and insulating glazing and may be glazed from either the exterior or interior of the building. YKK AP offers non-thermal and thermally broken operable and fixed

window systems as well as sliding glass doors in many configurations to meet your project requirements. Contact your local sales representative for additional information on the family of hurricane impact resistant systems and their available glazing options from YKK AP America Inc.

## Hurricane Protection

The massive destruction of property and buildings from hurricanes has tragically emphasized the importance of hurricane-resistant building methods and codes. Experience has shown that structures built to certain minimum wind-borne debris and impact standards can successfully withstand a strong hurricane, while structures not built to certain minimum requirements are often severely damaged. Combined with other structural safety measures, the use of impact resistant glazing systems is critical to a building remaining intact during a hurricane. There were numerous examples of YKK AP's ProTek® hurricane-resistant glazing systems performing well following hurricanes Charley of 2004, and Katrina, Rita, and Wilma of 2005.

### Saffir-Simpson Hurricane Scale

Category	Wind Speed	Result
1	74-95 mph	Some damage to building structures. Damage primarily to unanchored mobile homes, shrubbery and trees. Also, some coastal road flooding and minor pier damage.
2	96-110 mph	Some roofing material, door and window damage to buildings. Considerable damage to vegetation, mobile homes and piers. Coastal and low-lying escape routes flood 2-4 hours before arrival of center.
3	111-130 mph	Some structural damage to small residences and buildings with a minor amount of wall failures. Mobile homes are destroyed.
4	131-155 mph	Some wall failures with some complete roof structure failures on small residence. Major erosion of beach. Major damage to lower floors of structures near the shore.
5	155 > mph	Some complete building failures with small buildings blown over or away are likely. Nearly all windows in high rise buildings will be dislodged and become airborne.

## Storefront & Entrance Systems

The YKK AP Protek® non-shuttered systems comply with impact and cycle requirements for **Large and Small Missile Impact** and meet or exceed the air, water, and structural requirements.



### YHS 50 Framing System

- Design pressure: Up to +70/-90 psf
- Glazing: 9/16" monolithic

### YHS 50 FI Framing System

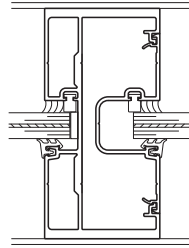
- Design pressure: Up to ±70 psf
- Glazing: 1-5/16" insulating

### YHS 50 TU Framing System

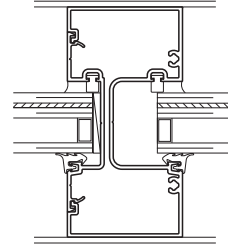
- Thermally broken using YKK AP ThermaBond Plus® technology
- Design pressure: Up to ±70 psf
- Spans: Up to 9'-0" tall
- Glazing: 1-5/16" insulating

### Model 35H Entrance Doors

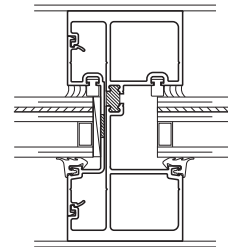
- Singles: 4'-0" x 8'-0"
- Pairs: 8'-0" x 8'-0"
- Transom frames: Up to 10'-0"
- Maximum security locking system (five point for pairs and three point for single doors) or optional exit devices



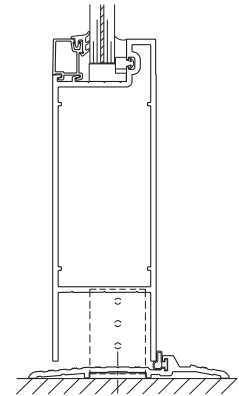
YHS 50



YHS 50 FI



YHS 50 TU



Model 35H Entrance Door  
(Air Only Threshold)

## Curtain Wall Systems

YKK AP offers three complete YKK AP Protek® curtain wall systems for non-shuttered applications. All three systems have been thoroughly tested and approved for **Large and Small Missile Impact** resistance, as well as **Large Missile Level E** for essential facilities.

### YHC 300 OG

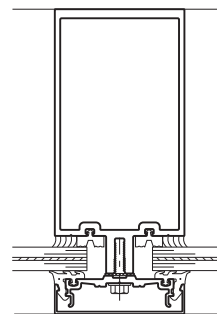
- Outside Glazed
- Single and multiple spans design pressure: Up to ±130 psf
- Linear spacing of verticals: Up to 5'-0" centerline to centerline
- Glazing: 9/16" monolithic and 1-5/16" insulating

### YHC 300 SSG

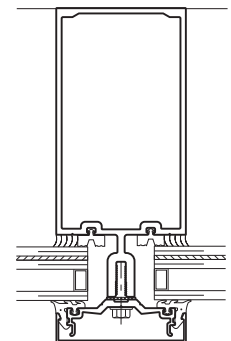
- Structural Silicone Glazed at Intermediate Verticals
- Single and multiple spans design pressure: Up to ±90 psf
- Linear spacing of verticals: Up to 4'-0" centerline to centerline
- Glazing: 9/16" monolithic and 1-5/16" insulating

### YHC 300 IG

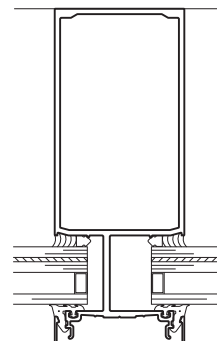
- Inside Glazed
- Single and multiple span design pressure: Up to ±120 psf for in
- Linear spacing of verticals: Up to 5'-0" centerline to centerline
- Glazing: 9/16" monolithic and 1-5/16" insulating



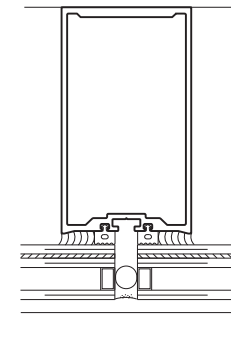
YHC 300 OG  
MONOLITHIC GLAZING



YHC 300 OG  
INSULATING GLAZING



YHC 300 IG  
INSULATING GLAZING  
(MONOLITHIC SYSTEM SIMILAR)



YHC 300 SSG  
INSULATING GLAZING  
(MONOLITHIC SYSTEM SIMILAR)

Please contact YKK AP for additional product information.

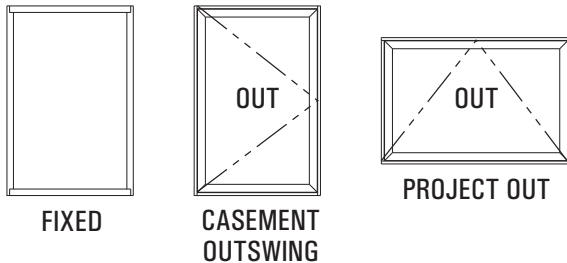
## Window Systems & Sliding Doors

YKK AP offers three operable windows, one fixed window, and two sliding doors for non-shuttered applications. Each product has been thoroughly tested for both **Large and Small Missile Impact resistance**.

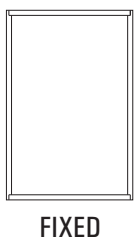
- 🌀 **YFW 400 TUH Thermally Broken Fixed Window**
  - Large and Small Missile: Up to +90/- 120 psf
  - Glazing: 1" insulating
- 🌀 **YOW 225 H Non-Thermal Operable & Fixed Windows**
  - Large and Small Missile: Up to ±65 psf for operable, up to +70/- 90 psf for fixed
  - Glazing: 9/16" monolithic
- 🌀 **YOW 225 TUH Thermally Broken Operable & Fixed Windows**
  - Large and Small Missile: Up to ±65 psf
  - Glazing: 1-3/16" insulating
- 🌀 **YVS 410 TUH Thermally Broken Single Hung Windows**
  - Large and Small Missile: Up to +80/- 120 psf
  - Glazing: 1-1/16" insulating
- 🌀 **YSD 600 TH Thermally Broken Architectural Sliding Doors**
  - Large and Small Missile: 4'-0" x 8'-0" panels, up to ±120 psf
  - Glazing: 1-3/16" insulating
- 🌀 **YSD 700 H Non-Thermal Heavy Commercial Sliding Doors**
  - Large and Small Missile: 5'-0" x 8'-0" panels, up to +100/- 120 psf
  - Glazing: 9/16" monolithic
  - Large and Small Missile: 5'-0" x 8'-0" panels, up to +100/- 120 psf
  - Glazing: 1-3/16" insulating



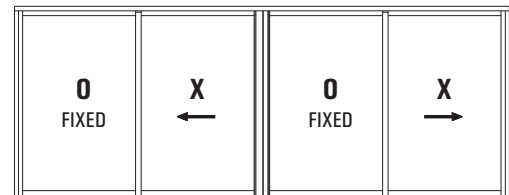
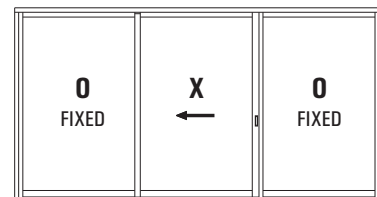
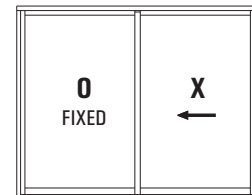
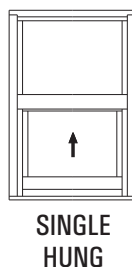
YOW 225 H / YOW 225 TUH



YFW 400 TUH



YVS 410 TUH



YSD 600 TH / YSD 700 H

# YKK AP ProTek® Product Selection Guide

Systems		Frame Width	Frame Depth or Max Size	Water Infiltration (PSF)	Test Pressure (PSF)	Miami-Dade Product Approval	General Florida Approval	Florida Approval Dry Glazed
Entrances & Storefronts	<b>Model 35H</b>	3-1/2"	Maximum Door Size Single: 4'-0" x 8'-0" Pair: 8'-0" x 8'-0"	12	+70/-90	Yes	Yes	Yes
	<b>YHS 50</b>	2-1/2"	5"	12	+70/-90	Yes	Yes	Yes
	<b>YHS 50 FI</b>	2-1/2"	5"	12	±70	Yes	Yes	Yes
	<b>YHS 50 TU</b>	2-1/2"	5"	12	±70	Yes	Yes	Yes
Curtain Walls	<b>YHC 300 OG</b>	3"	7-1/16" & 7-3/4"	20	±130	Yes	Yes	Yes
	<b>YHC 300 SSG</b>	3"	7-1/16" & 7-3/4"	20	±90	Yes	Yes	Yes (Small Missile)
	<b>YHC 300 IG</b>	3"	7-1/16" & 7-13/16"	20	±90 Monolithic ±120 Insulating	Yes	Yes	Yes (Small Missile)
Windows	<b>YOW 225 H</b>	2-1/2"	Max. Size – Outswing Project: 5'-0" x 3'-0" Casement: 3'-0" x 5'-0" Fixed: 4'-0" x 7'-0"	12 Operable 15 Fixed	±65 Operable +80/-100 Fixed	Yes	Yes	No
	<b>YOW 225 TUH</b>	2-1/2"	Max. Size – Outswing Project: 5'-0" x 3'-0" Casement: 3'-0" x 5'-0" Fixed: 4'-0" x 7'-0"	12 Operable 15 Fixed	±65 Operable +80/-100 Fixed	Yes	Yes	No
	<b>YFW 400 TUH</b>	4"	Maximum Size Fixed: 4'-4" x 8'-0"	15	+90/-120 Fixed	No	Yes	No
	<b>YVS 410 TUH</b>	4"	Maximum Size Single Hung: 5'-0" x 3'-0" Double Hung: 3'-0" x 5'-0"	13	+80/-120 Operable +80/-120 Fixed	Yes	Yes	No
Sliding Doors	<b>YSD 600 TH</b>	6"	Maximum Size Panels to 4'-0" x 8'-0"	18	+100/-120	Yes	Yes	No
	<b>YSD 700 H</b>	7"	Maximum Size Panels to 5'-0" x 8'-0" Monolithic 8'-0" x 10'-0" Insulating	15 Monolithic 20 Insulating	+100/-120 Monolithic ±120 Insulating	Yes	Yes	No

All products listed meet the maximum allowable air infiltration levels when tested in accordance with ASTM E 283, TAS 202, or AAMA 101.  
\* When tested in accordance with ASTM E 330, and TAS 202.

## Service Centers

### Atlanta

8140 Troon Circle  
Suite 110  
Austell, GA 30168  
Tel: 678-945-6190  
Fax: 678-945-6328

### Boston

Eight Connector Road  
Andover, MA 01810  
Tel: 978-749-9554  
Fax: 978-749-2915

### Baltimore

8680 Greenwood Place  
Savage, MD 20763  
Tel: 301-498-3650  
Fax: 301-498-3755

### Chicago

1000 Stevenson Court  
Suite 100  
Roselle, IL 60172-4314  
Tel: 630-582-9602  
Fax: 866-955-2441

### Cincinnati

5406 Spellmire Drive  
Cincinnati, OH 45246  
Tel: 513-942-7200  
Fax: 513-682-2123

### Dallas

2025 W. Belt Line Road  
Suite 130  
Carrollton, TX 75006  
Tel: 972-245-9551  
Fax: 972-245-9522

### Greensboro

4524 Green Point Drive  
Suite 106  
Greensboro, NC 27410  
Tel: 336-665-1963  
Fax: 336-665-1965

### Houston

3550 Brittmoore Road  
Suite 200  
Houston, TX 77043  
Tel: 713 329-9551  
Fax: 713 939-0811

### Orlando

7608 Currency Drive  
Orlando, FL 32809  
Tel: 407-856-0660  
Fax: 407-856-0090

### Headquarters

7680 The Bluffs  
Suite 100  
Austell, GA 30168  
Tel: 678-838-6000  
Fax: 678-838-6001

YKK AP America Inc.

7680 The Bluffs, Suite 100

Austell, GA 30168

1-800-955-9551

www.ykkapprotects.com



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