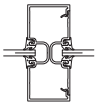
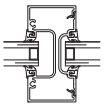
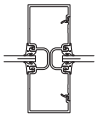
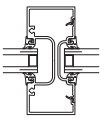
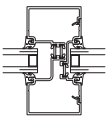
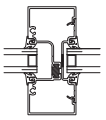
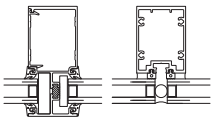
Storefront Selection Guide

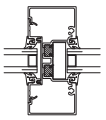
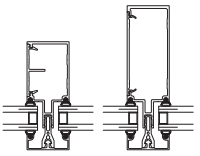
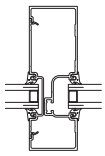
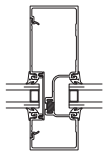
Product w/ Description	**YES 20** **Sash Framing** A **1" x 2"** flush glazed or center glazed sash window system.	**YES 40 FS** A **1-3/4" x 4"** center set, flush glazed, monolithic glazed storefront system with available hinged mullions.	**YES 40 FI** A **2" x 4"** center set, flush glazed framing system developed for 1" insulating glass and other types of infill panels of varying thicknesses.	**YES 45 FS** A **1-3/4" x 4-1/2"** center set, flush glazed, monolithic glazed storefront system with available hinged mullions.
Typical Vertical Detail				
Glass Position	Center, Front	Center	Center	Center
Applications	Sash Window Punched Openings	Storefront Ribbon Windows Punched Openings	Storefront Ribbon Windows Punched Openings	Storefront Ribbon Windows Punched Openings
Glazing Options	Outside Glazed	Outside Glazed	Outside Glazed	Inside Glazed Outside Glazed
Infill Options	3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 7/8", & 1"	1/4"	1/4", 1/2", 5/8" 3/4", 1", & 1-1/8"	1/4"
Thermal System / Performance	No	No	No	No
Acoustical Rating	-	-	-	-
SSG	No	No	No	No
2-Color Option	No	No	No	No
Entrance Integration	No	Yes	Yes	Yes
SSG Vent Integration	No	No	No	No
ThermaShade® Integration	No	No	No	No
Assembly Method	-	Screw Spline	Screw Spline, Shear Block	Screw Spline, Shear Block, Can Assembly
Hurricane Impact Tested	-	-	-	-
Blast Mitigation	-	-	-	-
Seismic Drift	-	-	-	-
Performance Test Standards	-	ASTM E283, E330, E331	ASTM E283, E330, E331 AAMA 501	ASTM E283, E330, E331 AAMA 501

See General Notes at end of document.

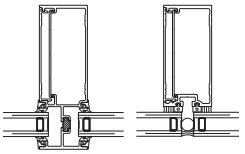
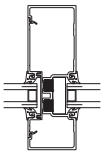
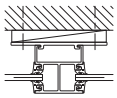
Product w/ Description	**YES 45 FI** A **2" x 4-1/2"** center set, flush glazed framing system developed for 1" insulating glass and other types of infill panels of varying thicknesses.	**YES 45 FT** A **2-1/2" x 4-1/2"** thermally broken, center set, flush glazed storefront system for monolithic and insulating glass.	**YES 45 TU** **Center Set** A **2" x 4-1/2"** thermally broken, center set, flush glazed framing system developed for 1" insulating glass.	**YES 45 TU** **Front Set** A **2" x 4-1/2"** thermally broken front set framing system that maximizes energy performance and provides the aesthetics of a curtain wall.
Typical Vertical Detail				
Glass Position	Center	Center	Center	Front
Applications	Storefront Ribbon Windows Punched Openings	Storefront Ribbon Windows	Storefront Ribbon Windows Punched Openings	Storefront Ribbon Windows Punched Openings
Glazing Options	Inside Glazed Outside Glazed	Inside Glazed Outside Glazed	Inside Glazed Outside Glazed	Inside Glazed Outside Glazed
Infill Options	1/4", 1/2", 5/8" 3/4", 1", & 1-1/8"	1/4", 1/2", 5/8" 3/4", 1", & 1-1/8"	1/4", 1/2", 5/8" 3/4", 1", & 1-1/8"	1/4", 1/2", 5/8" 3/4", 1", & 1-1/8"
Thermal System / Performance	No / CRF_f: 44 U-value: 0.50 btu/hr/ft^2/°F	Thermally Broken / CRF_f: 60 U-value: 0.46 btu/hr/ft^2/°F	Thermally Broken / CRF_f: 57 U-value: 0.42 btu/hr/ft^2/°F	Thermally Broken / CRF_f: 60 U-value: 0.40 btu/hr/ft^2/°F
Acoustical Rating	STC: 32 (1" IGU), 37 (1" lami) OITC: 27 (1" IGU), 30 (1" lami)	-	STC: 32 (1" ann), 35 (1" lami) OITC: 26 (1" ann), 29 (1" lami)	STC: 32 (1" ann), 36 (1" lami) OITC: 27 (1" ann), 30 (1" lami)
SSG	No	No	No	Yes
2-Color Option	No	Yes	No	No
Entrance Integration	Yes	Yes	Yes	Yes
SSG Vent Integration	Yes	Yes	Yes	No
ThermaShade® Integration	Yes	No	Yes	Yes
Assembly Method	Screw Spline, Shear Block, Can Assembly	Screw Spline, Shear Block	Screw Spline, Shear Block Can Assembly	Screw Spline, Shear Block, Can Assembly
Hurricane Impact Tested	-	-	-	-
Blast Mitigation	-	-	-	-
Seismic Drift	-	-	Passed @ 1.62" horizontal displacement (3 cycles)	Passed @ 1.62" horizontal displacement (3 cycles)
Performance Test Standards	ASTM E283, E330, E331 AAMA 501, 1503.1, 1801 NFRC 100	ASTM E 283, E 330, E 331 AAMA 1503 NFRC 100	ASTM E283, E330, E331 AAMA 501, 501.4, 507, 1503, 1801 NFRC 100	ASTM E90, E283, E330, E331 AAMA 501, 501.4, 507, 1503, 1801 NFRC 100

See General Notes at end of document.

Storefront Selection Guide

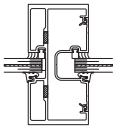
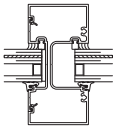
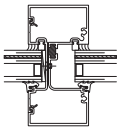
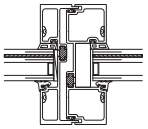
Product w/ Description	**YES 45 XT** enerGfacade A **2"x4-1/2"** center set, flush glazed framing system that features a dual thermal barrier design to significantly reduce head transfer and keep internal surfaces warmer.	**YES 600** A **1-3/4" x 4-1/2"** or **1-3/4" x 6"** thermally broken, front loaded storefront system for 1" insulating glass.	**YES 60 FI** A **2" x 6"** center set, flush glazed framing system developed for 1" insulating glass and other types of infill panels of varying thicknesses	**YES 60 TU** A **2" x 6"** thermally broken flush glazes framing system developed for 1" insulating glass.
Typical Vertical Detail				
Glass Position	Center	Front	Center	Center
Applications	Storefront Ribbon Windows Punched Openings	Storefront Ribbon Windows Punched Openings	Storefront Ribbon Windows Punched Openings	Storefront Ribbon Windows Punched Openings
Glazing Options	Inside Glazed Outside Glazed	Outside Glazed	Outside Glazed	Outside Glazed
Infill Options	1/4", 1/2", 5/8" 3/4", 1", & 1-1/8"	1/4" & 1"	1/4", 1/2", 5/8" 3/4", 1", & 1-1/8"	1/4", 1/2", 5/8" 3/4", 1", & 1-1/8"
Thermal System / Performance	Thermally Broken / CRF_f: 66 U-value: 0.36 btu/hr/ft²/°F	Thermally Broken / CRF_f: 78 U-value: 0.44 btu/hr/ft²/°F	No / CRF_f: 42 U-value: 0.54 btu/hr/ft²/°	Thermally Broken / CRF_f: 69 U-value: 0.41 btu/hr/ft²/°F
Acoustical Rating	STC: 32 (1" IGU), 36 (1" lami) OITC: 27 (1" IGU), 30 (1" lami)	STC: 32 (1" ann), 37 (1" lami) OITC: 26 (1" ann), 31 (1" lami)	STC: 31 (1" ann), 34 (1" lami) OITC: 25 (1" ann), 28 (1" lami)	STC: 31 (1" IGU), 34 (1" lami) OITC: 25 (1" IGU), 29 (1" lami)
SSG	No	Optional	No	No
2-Color Option	No	Yes	No	No
Entrance Integration	Yes	Yes	Yes	Yes
SSG Vent Integration	Yes	No	Yes	Yes
ThermaShade® Integration	Yes	No	Yes	Yes
Assembly Method	Screw Spline, Shear Block	Screw Spline, Shear Block	Screw Spline	Screw Spline
Hurricane Impact Tested	-	-	-	-
Blast Mitigation	-	-	-	-
Seismic Drift	-	-	Passed @ 2" horizontal displacement (3 cycles)	Passed @ 2" horizontal displacement (3 cycles)
Performance Test Standards	ASTM E283, E330, E331 AAMA 501, 507, 1503, 1801 NFRC 100	ASTM E283, E330, E331 AAMA 101/I.S.2-97 AAMA 1503, 1801 NFRC 100	ASTM E 283, E 330, E 331 AAMA 501.1, 501.4, 503 AAMA 507, 1503, 1801 NFRC 100	ASTM E 283, E 330, E 331 AAMA 501.1, 501.4, 503 AAMA 507, 1503, 1801 NFRC 1000

See General Notes at end of document.

Product w/ Description	**YES 60 TU Front Set** A **2" x 6"** thermally broken front set screw spline framing system that maximizes energy performance and provides the aesthetics of a curtain wall.	**YES 60 XT** EnerGfacade A **2" x 6"** center set, flush glazed framing system that features a dual thermal barrier design to significantly reduce heat transfer and keep internal surfaces warmer.	**YES Veneer** A **2" x 2"** front set, flush glazed framing system designed to be anchored to a steel structure of a building.
Typical Vertical Detail			
Glass Position	Front	Center	Front
Applications	Storefront Ribbon Windows Punched Openings	Storefront Ribbon Windows Punched Openings	Storefront Veneer Wall
Glazing Options	Inside Glazed Outside Glazed	Outside Glazed	Outside Glazed
Infill Options	1/4", 1/2", 5/8" 3/4", 1", & 1-1/8"	1/4", 1/2", 5/8" 3/4", 1", & 1-1/8"	1/4"
Thermal System / Performance	Thermally Broken / CRF_f: 74 U-value: 0.40 btu/hr/ft²/°F	Thermally Broken / CRF_f: 72 U-value: 0.38 btu/hr/ft²/°F	No
Acoustical Rating	STC: 32 (1" IGU), 36 (1" lami) OITC: 26 (1" IGU), 30 (1" lami)	STC: 31 (1" IGU), 34 (1" lami) OITC: 25 (1" IGU), 28 (1" lami)	-
SSG	Yes	No	Yes
2-Color Option	No	No	No
Entrance Integration	Yes	Yes	No
SSG Vent Integration	Yes	Yes	No
ThermaShade® Integration	No	Yes	No
Assembly Method	Screw Spline, Can Assembly	Screw Spline	Screw Spline, Can Assembly
Hurricane Impact Tested	-	-	-
Blast Mitigation	-	-	-
Seismic Drift	-	Passed @ 2" horizontal displacement (3 cycles)	-
Performance Test Standards	ASTM E 283, E 330, E 331 AAMA 501.1, 501.4, 503 AAMA 507, 1503, 1801 NFRC 100	ASTM E 283, E 330, E 331 AAMA 501.1, 501.4, 503 AAMA 507, 1503, 1801 NFRC 100	ASTM E 283, E 330, E331 AAMA 501-24

See General Notes at end of document.

Storefront Selection Guide

Product w/ Description	YHS 50 FS ProTek A **2-1/2" x 5"** high performance monolithic storefront system designed and tested to meet the most demanding conditions.	YHS 50 FI ProTek A **2-1/2" x 5"** high performance storefront system designed for insulating glass 1" to 1-5/16" thick and tested to meed the most demanding conditions.	YHS 50 TU ProTek A **2-1/2" x 5"** high performance storefront system designed for insulating glass 1" to 1-5/16" thick and tested to meed the most demanding conditions.	YHS 50 TU PreGlazed ProTek A **5"** deep high performance preglazed storefront system designed for insulating glass 1" to 1-5/16" thick and tested to meed the most demanding conditions.
Typical Vertical Detail				
Glass Position	Center	Center	Center	Center
Applications	Storefront Ribbon Windows Punched Openings	Storefront Ribbon Windows Punched Openings	Storefront Ribbon Windows Punched Openings	Storefront Ribbon Windows Punched Openings
Glazing Options	Inside Glazed Outside Glazed	Inside Glazed Outside Glazed	Inside Glazed Outside Glazed	Inside Glazed Outside Glazed
Infill Options	1/4" to 9/16"	1" to 1-5/16"	1" to 1-5/16"	1" to 1-5/16"
Thermal System / Performance	No	No / U-value: 0.49 btu/hr/ft^2/°F	Thermally Broken / CRF$_f$: 59 U-value: 0.45 btu/hr/ft^2/°F	Thermally Broken / CRF$_f$: 61 U-value: 0.41 btu/hr/ft^2/°F
Acoustical Rating	-	STC: 39 (1$^5/_{16}$" lami) OITC: 34 (1$^5/_{16}$" lami)	STC: 39 (1$^1/_4$" lami) OITC: 33 (1$^1/_4$" lami)	STC: 40 (1$^1/_4$" lami) OITC: 33 (1$^1/_4$" lami)
SSG	No	No	No	No
2-Color Option	No	No	No	No
Entrance Integration	Yes	Yes	Yes	Yes
SSG Vent Integration	No	Yes	Yes	Yes
ThermaShade® Integration	No	Yes	Yes	No
Assembly Method	Screw Spline	Screw Spline	Screw Spline	Screw Spline
Hurricane Impact Tested	Small Missile Large Missile	Small Missile Large Missile	Small Missile Large Missile	Small Missile Large Missile
Blast Mitigation	6 psi / 41psi-ms	6 psi / 41psi-ms	6 psi / 41psi-ms	-
Seismic Drift	-	-	-	-
Performance Test Standards	ASTM E 283, E 330, E 331 TAS 201, 202, 203 AAMA 101/I.S.2-97 AAMA 503	ASTM E 283, E 330, E 331 TAS 201, 202, 203 AAMA 503 NFRC 100	ASTM E 283, E 330, E 331, E 1425 AAMA 1503 NFRC 102 TAS 201, 202, 203	ASTM E 283, E 330, E 1886, E 1996 TAS 201, 202, 203 AAMA 507, 1503, 1801 NRFC 100

GENERAL NOTES

Glass and glazing building codes governing the design and use of products vary widely. YKK AP America Inc. does not control the selection of products, product configurations, operating hardware and function, or glazing materials, and YKK AP assumes no responsibility for these design considerations. It is the responsibility of the design professional, owner, architect, specifier, general contractor, and the installer to make these selections in strict accordance with all applicable codes.

Visit www.ykkap.com for more information on YKK AP's architectural products and for any updates on the Product Selection Guide.