



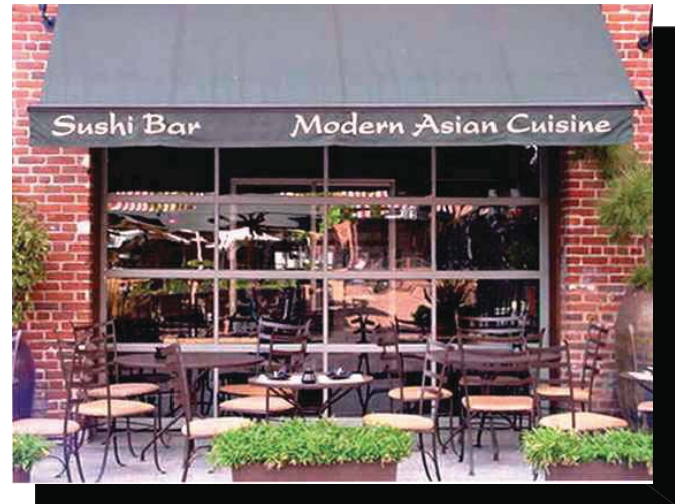
Glass Garage Doors

The Architects' Choice:

- Insulated Frames & Glass (Pat.)
- Energy Code & Hurricane Rated
- Factory Direct Shipping (US & Intl.)
- Stainless Steel Hardware & Rollers
- Custom Designs, Finishes, Glazing
- Custom Tapered/Sloped Sections

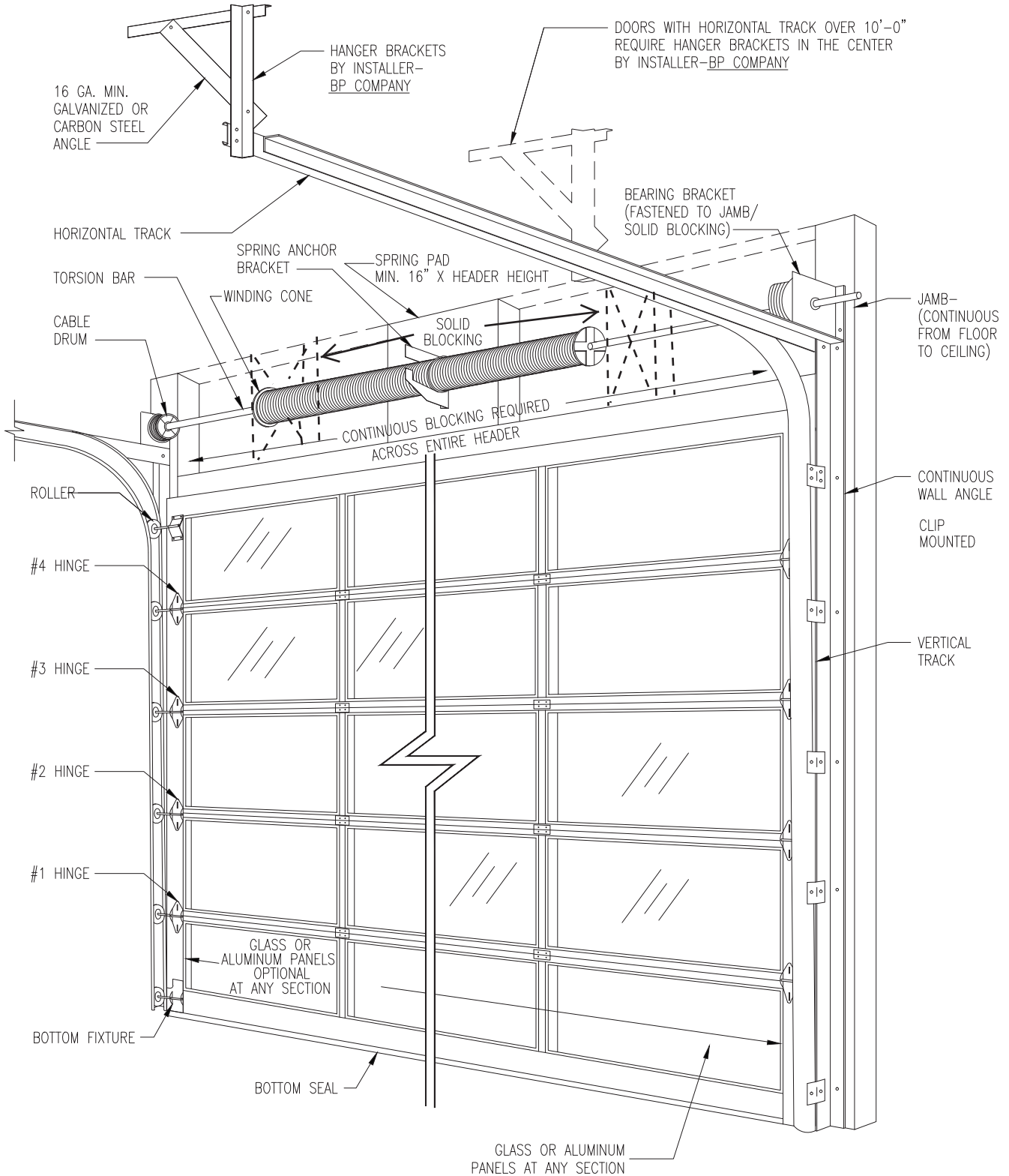
TOLL FREE:

877-442-1716



Phone: 626-442-1716
www.GlassGarageDoors.com

1511 W. 2nd St., Pomona, CA 91766
Email: service@glassgaragedoors.com



CRITICAL REQUIREMENTS:

1. THE INTERIOR FACE OF THE JAMBS AND ENTIRE HEADER (STRUCTURALLY OR COSMETICALLY FINISHED), MUST BE LOCATED ON THE SAME VERTICAL PLANE (FLUSH WITH EACH OTHER); FROM FLOOR TO CEILING. THIS INCLUDES FINISHES SUCH AS DRYWALL, TRIM, MOLDINGS, ETC., WHICH COULD INTERFERE WITH THE DOOR OPERATION. VERIFY THE INTERIOR AND EXTERIOR FINISHES WORK TOGETHER, AS SHOWN ON DRAWINGS 1-5; HEREIN.
2. THE INTERIOR FACE OF THE JAMBS, AND ENTIRE HEADER SHOWN BELOW (INCLUDING THE HORIZONTAL TRACK AREA, WHICH IS USED AS PART OF THE REQUIRED OPERATIONAL AIR SPACE), MUST BE KEPT CLEAR OF ANY: CONDUITS, PLUMBING LINES, HVAC, OR OTHER ITEMS, THAT CAN INTERFERE WITH THE DOOR OPERATION.
3. GARAGE DOORS ARE TYPICALLY FABRICATED 1"-2" LARGER THAN THE NET FINISHED OPENING, THEREFORE, WILL ONLY OPERATE AND ARTICULATE; ON THE INTERIOR FACE OF THE JAMBS, AND HEADER.

INTERIOR ELEVATION



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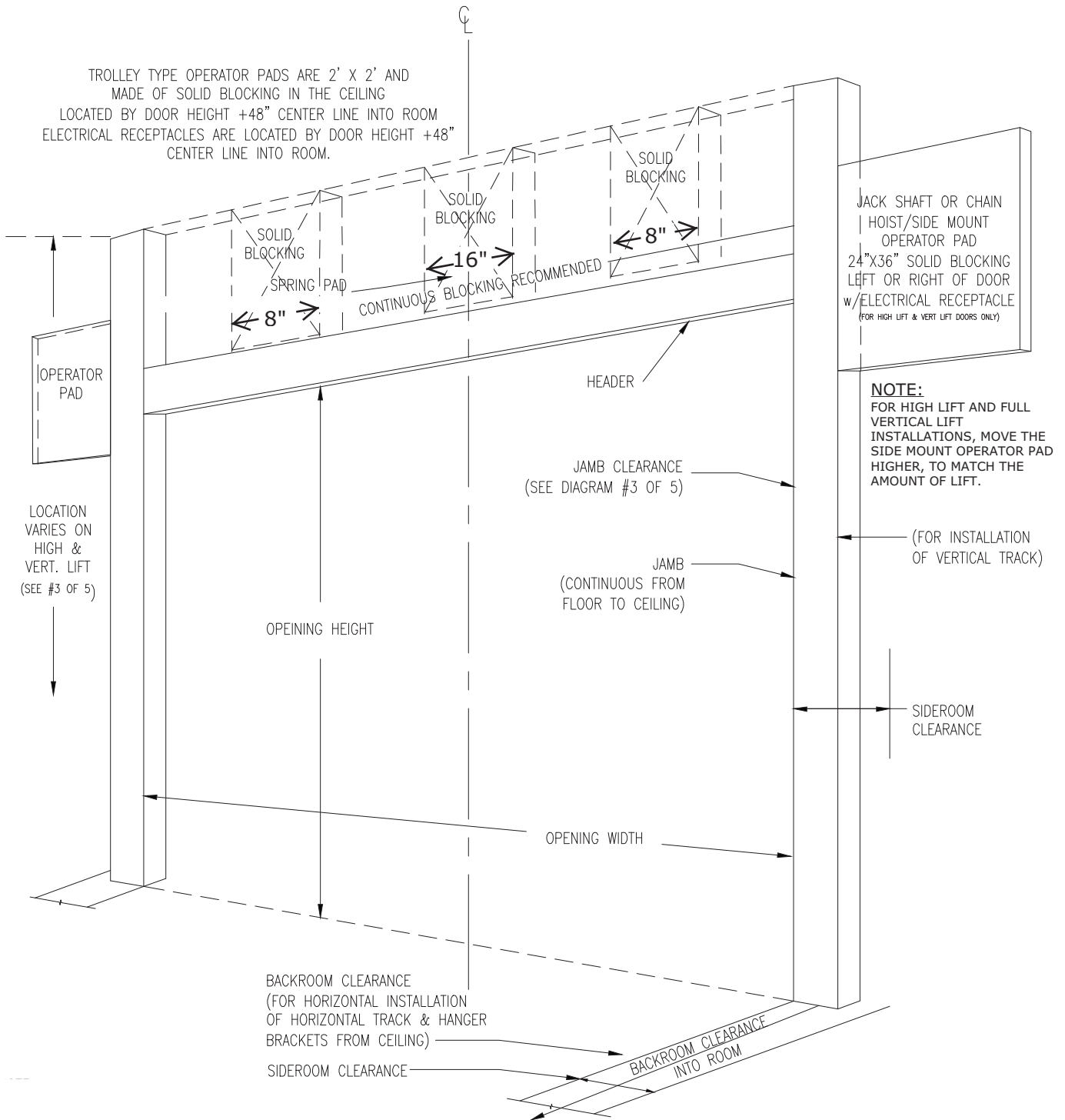
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DRAWING
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CRITICAL REQUIREMENTS:

- THE TRACKS AND RELATED HARDWARE, MUST ONLY BE MOUNTED TO THE APPROVED JAMB & HEADER TYPES; PER EXAMPLES: 1-5. THIS WOULD EXCLUDE MOUNTING TO BRITTLE, OR UNEVEN TYPES OF FINISH MATERIALS, SUCH AS: TILE, MARBLE, STACKED STONE, VENEERS, TRIM MOULDING, ETC..
- HAVE THE AREA CLEAR OF ALL DEBRIS, VEHICLES, BUILDING MATERIALS, ETC., SO THE INSTALLATION CREWS MAY HAVE ACCESS TO CLEAR AND SOLID FLOORING, DEPLOY USE LADDERS, SCISSOR LIFTS, OR OTHER EQUIPMENT, TO EFFECT THE INSTALLATION IN A PROFESSIONAL MANNER.



CRITICAL REQUIREMENTS:

- THE INTERIOR / EXTERIOR FRAMING; (INCLUDING FINISHES), LOW VOLT WIRING FOR SENSORS, PUSH BUTTON OR KEY SWITCH CONTROLS, CONDUITS, ETC., MUST BE 100% COMPLETE; PRIOR TO INSTALLATION. THIS WILL ENSURE THE INTERIOR AND/OR EXTERIOR WEATHER STRIPPING, OPERATORS, THRESHOLDS, AIR / WATER INFILTRATION PACKAGES (IF APP.), OR OTHER RELATED HARDWARE, WILL BE FULLY OPERATIONAL, ON THE INSTAL DATE. IF THIS DOES NOT OCCUR, THE INSTALLATION MAY NOT BE GUARANTEED TO FUNCTION AS DESIGNED. THIS WILL ALSO HELP AVOID COMPLICATIONS, AND/OR RETURN TRIPS. AS SUCH, PHOTOGRAPHIC EVIDENCE (PRIOR TO INSTALLATION) WOULD BE HELPFUL IN VERIFYING THE SITE. (CUSTOMERS' RESPONSIBILITY)
- STRUCTURAL FRAMING (HEADER, JAMBS, BACK HANGER BRACKETS, OPERATOR PADS; AS APPL.) WILL BE CALCULATED TO HOLD THE CALCULATED LOADS; PER THE ENGINEER OF RECORD.
- 2" & 3" TRACK OPERATING WEIGHT LIMITS: (EX. DOOR WIDTH x DOOR HT. X 5LBS = TOTAL WEIGHT) DOOR FRAMES & PANELS WEIGHTS ARE APPROX. 5 LBS. PER SQ. FT. --> 2" TRACK = 600 LB. MAX, 3" TRACK = 1600 LB. MAX - DO NOT EXCEED TRACK WEIGHT LIMITS

PREPARATION OF THE OPENING



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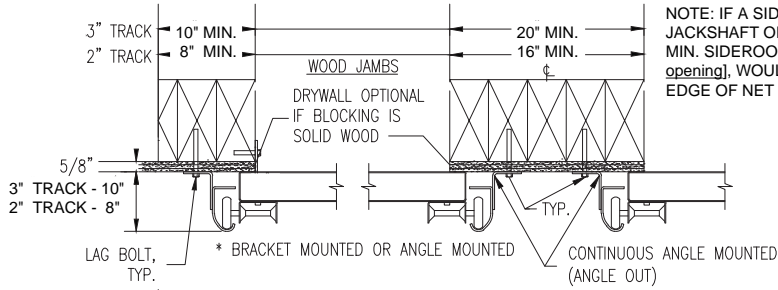
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DRAWING
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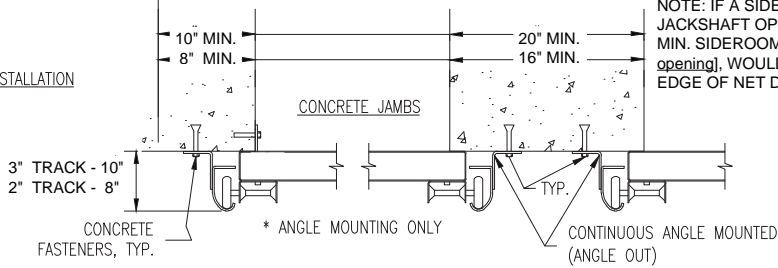
PREPERATION OF 2" & 3" TRACK REQUIREMENTS AND SIDE JAMB CLEARANCES – PLAN VIEW

LAG BOLT INSTALLATION



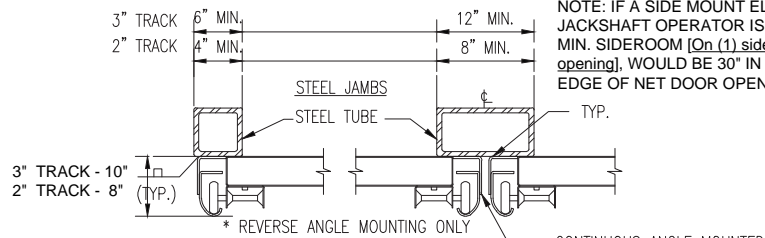
NOTE: IF A SIDE MOUNT ELECTRIC JACKSHAFT OPERATOR IS REQUIRED, THE MIN. SIDEROOM [On (1) side of each door opening], WOULD BE 30" IN WIDTH; FROM EDGE OF NET DOOR OPENING.

CONCRETE FASTENER INSTALLATION



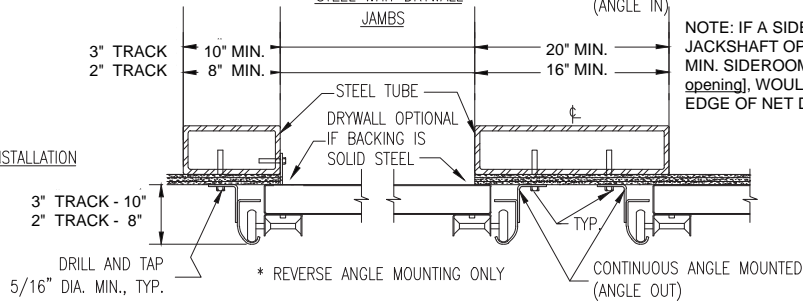
NOTE: IF A SIDE MOUNT ELECTRIC JACKSHAFT OPERATOR IS REQUIRED, THE MIN. SIDEROOM [On (1) side of each door opening], WOULD BE 30" IN WIDTH; FROM EDGE OF NET DOOR OPENING.

WELDED INSTALLATION



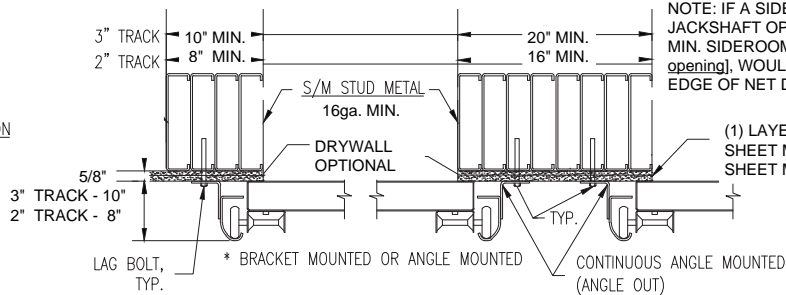
NOTE: IF A SIDE MOUNT ELECTRIC JACKSHAFT OPERATOR IS REQUIRED, THE MIN. SIDEROOM [On (1) side of each door opening], WOULD BE 30" IN WIDTH; FROM EDGE OF NET DOOR OPENING.

THREADED SCREW INSTALLATION



NOTE: IF A SIDE MOUNT ELECTRIC JACKSHAFT OPERATOR IS REQUIRED, THE MIN. SIDEROOM [On (1) side of each door opening], WOULD BE 30" IN WIDTH; FROM EDGE OF NET DOOR OPENING.

S/M STUD INSTALLATION



NOTE: IF A SIDE MOUNT ELECTRIC JACKSHAFT OPERATOR IS REQUIRED, THE MIN. SIDEROOM [On (1) side of each door opening], WOULD BE 30" IN WIDTH; FROM EDGE OF NET DOOR OPENING.

(1) LAYER OF 12GA. FLAT STOCK SHEET METAL, ON TOP OF 16GA. SHEET METAL STUDS.

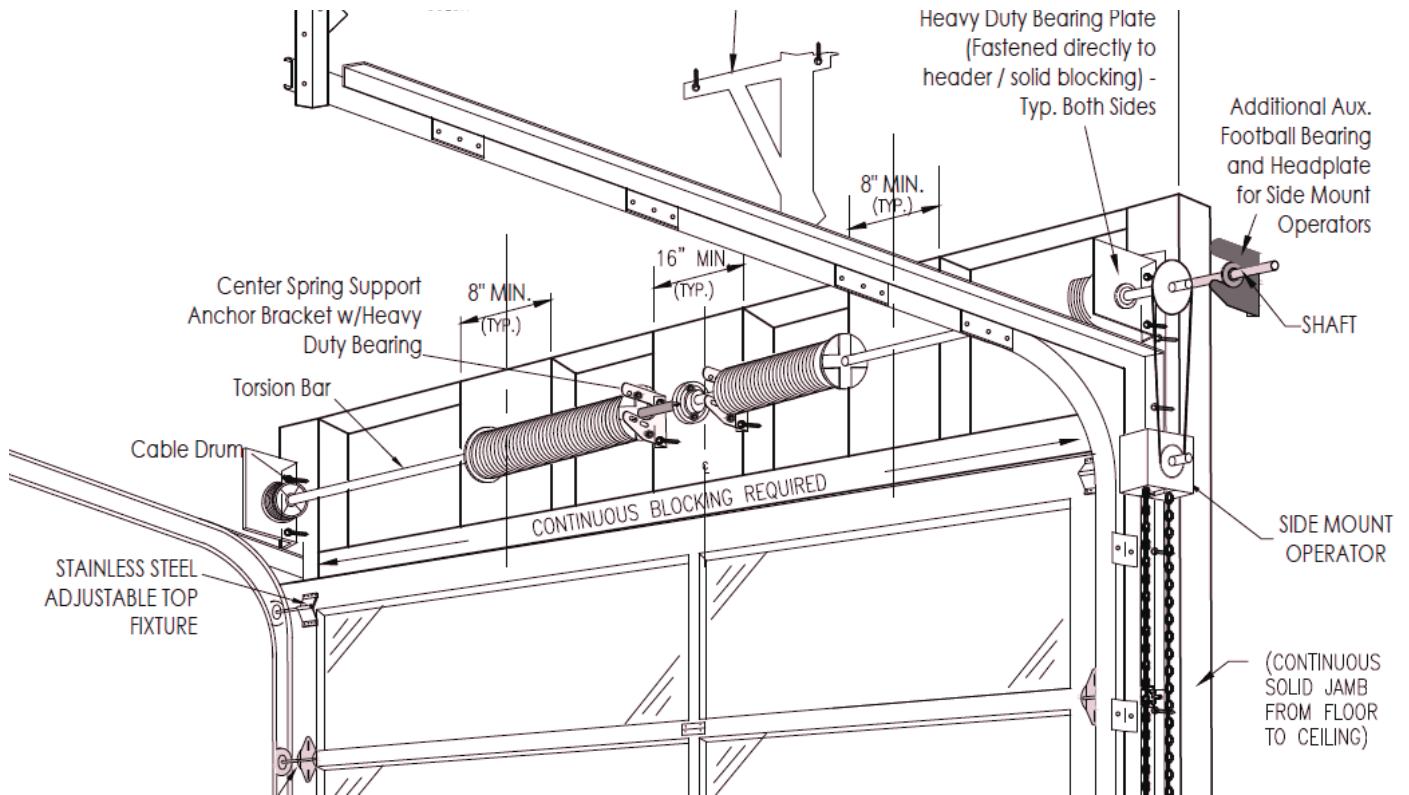
SIDE TRACK CLEARANCES



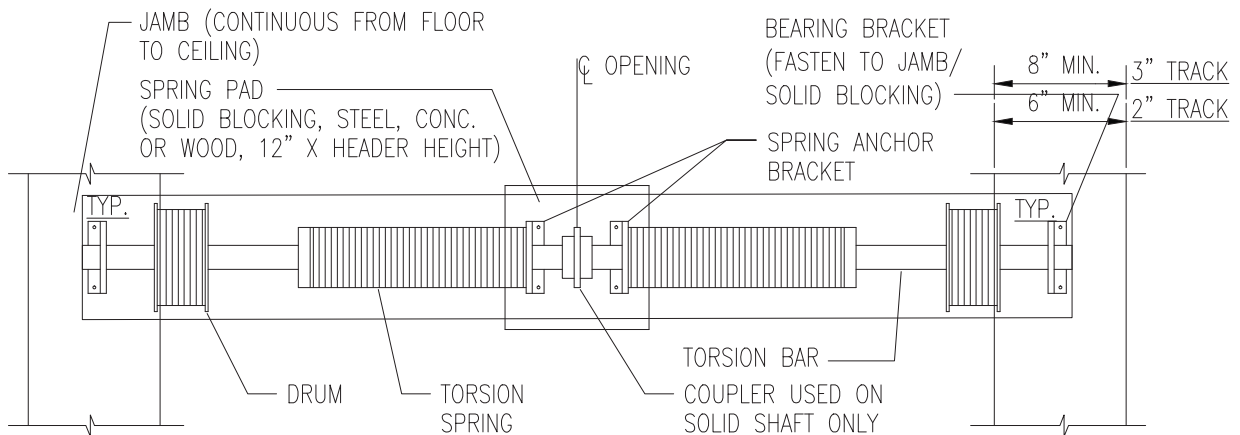
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**2 SPRINGS - ISOMETRIC VIEW -
(Standard Track Example)**



2 SPRINGS - FRONT ELEVATION



CONTINUOUS BLOCKING IS REQUIRED
NOTE: JAMBS ARE CONTINUOUS FROM FLOOR TO CEILING (SEE DIAGRAM #2 OF 5)

NOTE:

- * 2" AND 3" TRACK: 1" CLEARANCE BETWEEN OUTSIDE OF DRUM AND HORIZONTAL TRACK.
- * EXCEPT ON ROOF PITCH TRACK WHICH REQUIRES ADDITIONAL ROOM. 1" ADDITIONAL PER EVERY INCH OF PITCH.

SPRING ANCHOR PAD



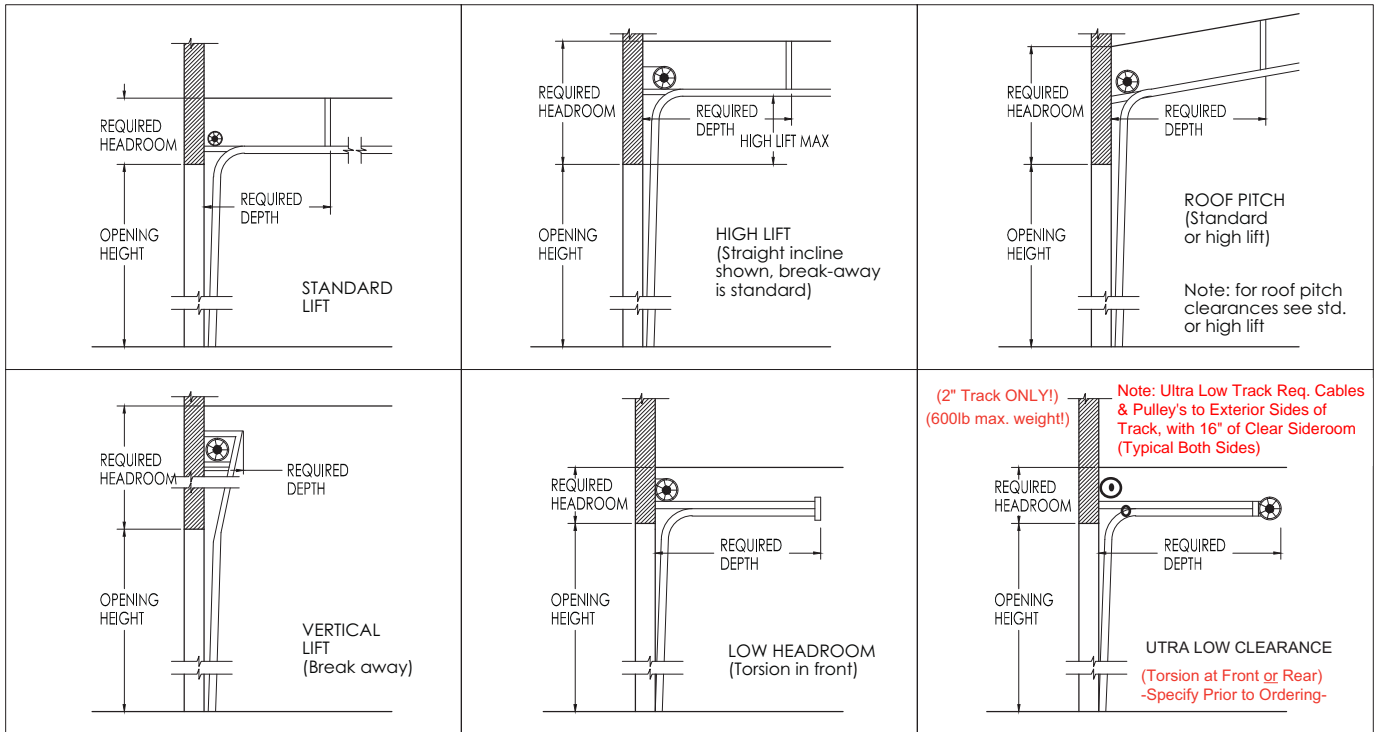
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**DRAWING
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TRACK SELECTION GUIDE & CLEARANCES



- **MINIMUM REQ.** -

OPERATING CLEARANCES

Verify the various track sets, will work w/ the project clearances!	HEADROOM REQ.		SIDE ROOM (Typ. Both Sides)		DEPTH INTO ROOM (PERPENDICULAR TO DOOR)
	2" Track	3" Track	2" Track	3" Track	2" & 3" Track
Std. Lift (14" or 20" Rad.: 2" trk.)	16" or 24"	24"	8"	10"	Opening Height +18" Manual or Side Mnt. Oper.
Std. Lift (14" or 20" Rad.)w/ Trolley Op	20" or 28"	28"	8"	10"	Opening Height + 48" For Trolley Operator
High lift Manual ***	24" High Lift +12" min.		8"	10"	Opening Height - Lift + 48"
High Lift Motor Oper. **	24" High Lift +12" min.		30"x48" One Side of Header		Opening Height - High Lift Amount
Vertical Lift Manual ***	Double Door Ht. + 18"		8"	10"	18"
Vertical Lift Motor Oper. **	Double Door Ht. + 18"		30"x48" One Side of Header		18"
Low Headroom Manual	N/A	N/A	N/A	N/A	N/A
Low Headroom Motor Oper. *	11"	17"	8"	10"	Opening Height + 48" Trolley Operator Req.
Ultra Low Clearance Manual	N/A	N/A	N/A	N/A	N/A
Ultra Low Clearance Motor Op.	6"	N/A	16" x 600lb max.	N/A	Opening Height + 48" Trolley Operator Req.

OPERATING WEIGHTS

Multiply Door Width x Door Height x 5lbs = Door Weight (Select proper track above)

NOTE : Door weights are: 5 lbs. Per SQ. FT.

TRACK LIMITS:

2" Track = 600lbs Max.

3" Track = 1600lbs Max.

* Standard Lift, Low Headroom, and Zero Clearance Track ore for trolley type operators.
 ** High Lift and Vertical Lift clearances ore for jock shaft or choin hoist/side mounted type operators. See diagram #2 of 5
 *** 4" of additional side room is required (one side) for doors having chain hoists. (Chain hoists ore for vertical & high lifts only)
 NOTE 1: See diagram #2 of 5 for side mount jack shaft) operator preparation. The location of the standard pad is determined by the door height (+) the amount of high lift or vertical lift (-) 18" below headroom requirements (center line of operator pad)

TRACK SELECTION GUIDE & CLEARANCES



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DRAWING
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Glass Garage Doors & Entry Systems, Inc.

ARCHITECTURAL DESCRIPTION

bp – Full View Aluminum & Glass Sectional Garage Doors

Factory Direct Installations in CA, AZ, NV, FL, optional in all other states (Shipped World Wide)

- MODEL'S: **bp - 350** (4 ft.-8ft. wide x 8 ft. high) **Lite Duty**
bp - 450 HD (8 ft.-16 ft. wide x 12 ft. high) **Heavy Duty**
bp - 550 SHD (16 ft.-24 ft. wide x 16 ft. high) **Super Heavy Duty**
California Line: Typ. use: Garages & Warehouses spaces (Non Conditioned)
Insulated Line: Typ. use: Sealing the Building Envelope (Air Tight for HVAC)
Hurricane Line: Typ. use: High Wind & Miami / Dade NOA (Hurricane Zones)
- MANUFACTURER: Aluminum & Glass Sectional Overhead Garage Doors: Full Vision Type; manufactured by **bp - Glass Garage Doors** in Pomona, CA - 877-442-1716 – www.glassgaragedoors.com
An established manufacturer with 65 years experience specializing in Glass Garage Doors
- ALUM. FRAMES: All sections are constructed of **bp** - extruded aluminum alloy. The tensile strength is a minimum of 38 ksi, and approximately double the strength of standard 6063-T5 aluminum alloy.
All rails are heat treated to maximum hardness as per Aluminum Association Standards.
- STILES & RAILS: **Model bp - 350:** Top rails, bottom rails, and end stiles are 3-1/4" wide.
Model bp - 450 HD: Top & Bottom rails are 5-3/8" wide and end stiles are 3-1/4" wide
Model bp - 550 SHD: Top & Bottom rails are 5-3/8" wide and end stiles are 3-1/4" wide
Horizontal meeting rails have a combined width of 2-3/4".
Vertical intermediate center mullions are 1-1/2" wide.
5/16 inch thru-bolts, nuts, and washers are used to rigidly secure all stiles and rails.
- FINISH: All rails are standard clear anodized at least 4 mills thick for a permanent luster finish.
Powder coated colors can be chosen from the RAL European color standard. (Optional)
(Kynar paints or coatings are optional. Control Samples or Color #'s must be provided to **bp**)
- DOOR THICKNESS: 1-3/4 inches thick.
- JOINTS: All joints are mitered to form a tight and smooth fit with the door rails.
- COUNTER BALANCE: Galvanized torsion springs, head-plates, and center spring supports are mounted on a continuous galvanized torsion bar, calculated to exact weight and travel of each door.
Cable drums are of die cast aluminum and are paired categorically for the track type specified.
Lift cables are of high tension galvanized aviation type. (1/8 " – 1/4" as req. by Factory Calc.'s)
Stainless Steel: Springs, and hardware above, can be substituted in lieu of galvanized (Optional)
- TRACK: 2 inch x 15ga. galvanized continuous angle mounted (14 inch or 20 in. radius x 600lb max.)
3 inch x 12ga. galvanized continuous angle mounted (15 inch radius x 1200lb max.)
3 inch x 12ga. Stainless Steel continuous angle mounted (15 inch radius x 1400lb max) (Optional)
All tracks are tapered to insure a weather-tight fit when in the closed position.
(See "Track Selection Guide" for headroom required in our design guide: glassgaragedoors.com)



Glass Garage Doors & Entry Systems, Inc.

- HINGES:** **bp** - Stainless Steel 12ga. laser cut and offset type, are graduated at each section to insure weather tight fit. **bp** – Stainless Steel hinges do not require lubrication. (Lifetime Warranty = Standard)
- ROLLERS:** 2 in. **bp** - Stainless Steel, poly coated tire, sealed, 500 lb ea., precision bearing, roller (Standard)
3 in. **bp** - Stainless Steel, poly coated tire, sealed, 700 lb, precision bearing, roller (Standard)
bp – Stainless Steel sealed rollers do not require lubrication. (Standard)
- WEATHER-STRIP:** A Vinyl or Santoprene gasket is applied at the factory the full length of the bottom section and at each end of the top rail where contact is made with the bumper spring.
bp - Architectural perimeter weather-stripping is made of a three part extruded aluminum and Santoprene system, which conceals the fasteners with a snap cover. The **bp** – Architectural perimeter weather stripping can be exterior or interior mounted for a clean “Architectural finish”.
Optional: To prevent energy loss, we recommend our Pat. Pend. “**bp** - Insulated Frame Package”
- OPERATORS:** Manual chain-hoists are compatible with standard, roof pitch, high-lift, and full vertical lift tracks
Electric operation must be specified with the following: Push button station, key button station, and/or remote control operation. Auto reversing safety sensors are required for residential use and optional for most commercial applications. Operator specifications are per **bp** – **Glass Garage Door** factory recommendations; based on weight, height, track type, and as required per code.
(Note: Low headroom & zero-clearance track must be electronically operated for safety)
- GLAZING:** Glass, aluminum, or specialty panels ranging from: 1/16 in. – 1/2 in. thickness, and are encased in vinyl moldings, held in place by aluminum snap-in beads, and are designed to be easily removed and replaced in case of glass or panel breakage. Tempered, Laminated, and Insulated Options.
(Note: Call the Factory for Custom, or maximum panel limits!)
- GLASS/
SPECIFICATIONS:** Glass type must be specified with the following: Transparent or obscured frosted, tempered or laminated safety glass, and clear or color tinted hues (Visit us online to view glass panel samples)
Tempered Glass meets the quality and strength requirements of ASTM C 1036 and ASTM 1048 for condition A, Quality q3, and Kind FT (Full Tempered). Tempered glass also meets the safety criteria of CPSC 16 CFR 1201 Categories 1 & 2, ANSI Z97.1, and qualifies as the glazing material for use in hazardous locations.
Laminated Safety Glass (0.030 PVB or thicker interlayer with two lites of glass) also meets the safety criteria CPSC 16 CFR 1201 Categories 1 & 2, ANSI Z97.1, and ASTM C 1172 Standard Specifications for Laminated Architectural Flat Glass. 1/4" laminated glass has an STC of 35.
- ADDL. OPTIONS:** Custom glass panels, plastic panels, metal panels, or any flat panel within 1/16”- 1/2” thick
Ventilation louvers in 1/16” aluminum panels as required by some local building codes
300 powder coated colors from the RAL color standard, Simulated Wood, and Kynar Paint.
Stainless track, springs, and related hardware. Note: Stainless hinges are already provided!
Tapered bottom sections (for use when floors are out of square or sloping)
Custom panel locations, widths, and heights within the same door can also be accommodated to meet specific Architectural designs. Custom Requests are also accepted: Call 877-442-1716
Note: Custom configurations (Varied panels or centerlines, tapered bottom sections, etc.) require elevation/ shop drawings!

VIEW ADDITIONAL OPTIONS & INFO. ON OUR DOWNLOADS PAGE: www.GlassGarageDoors.com

Insulated Line (US & Intl. Pat. System)

bp - Glass Garage Doors "Fully Insulated Frame Technology" (US & Intl. Patented) is the key factor for eliminating air leakage, when using this type of door to seal the building envelope, or enclose any "climate controlled space". What is the point in having insulated glass panels, if the frame leaks Air or Water? Our Insulated Frame System also enhances acoustical performance: STC = 36±

bp - Insulated Line glazing options consists of: **bp** insulated frames with 1/2" Air filled IG units. Each glass panel is sealed during fabrication and are available in: transparent, obscured, with or without low-E glass, and in a variety of colors to suit your design. Every glass type has a unique set of energy ratings: U-Values of ± .52-.99, SHGC of ±.15-.45, and VT 0.02-.46; which is determined by the glass specified on the project; to match adjacent materials.

→ (Keep in mind that IG units (Insulated Glass) are ineffective if the frame leaks air!)

The NFRC Certified Air Resistance Package provides an airtight system for any wall opening (24ft wide max); where building code compliance is required. **bp** doors have been tested and certified as a whole, with "Insulated Frames". Testing reports and CPD #'s (Certified Products Database) for various glass types can be found at: www.NFRC.org



Note: --> The "bp - Water Resistant Option" Per ASTM E331 & E547 [SOLD SEPARATELY], must be combined with the "bp - Air Infiltration Option" to function as tested; and **CAN NOT BE INSTALLED AFTERWARDS!**

Note: Doors or Windows without Certified "NFRC" labels = FALSE ADVERTISING, are ILLEGAL PER ENERGY CODE, and will Leak Air through the Frame System! Insulated Glass Alone WILL NOT make a Door or Window Insulated, Unless a **bp - Insulated Frame System** is also integrated! (US & Intl. Pat)



24ft width max. x 16ft height max.

Air Leakage Resistance Package*

Air Leakage Resistance Results (Per NFRC 400 / ASTM E283 / DASMA 105)

Residential Standard	0.3 CFM
Commercial Standard	0.4 CFM
bp - Glass Garage Doors results	0.06 CFM

*Note: The lower the CFM = Better Air Leakage Resistance. Thermal ratings for U- factor, SHGC, and VT available upon request, per NFRC 100 / 200.

- Air Infiltration package is available in combination with any type of glazing.





Hurricane Line (US Patented System)

bp – Glass Garage Doors meet hurricane requirements for wind load, impact, and cycling in accordance with Miami-Dade County Test Protocols TAS 201 (large missile impact), TAS 202 (structural pressure, air, forced entry), and TAS 203 (cyclic pressure) **bp** – Glass Garage Doors have been successfully tested, have passed, and been issued the [Miami-Dade County, Florida, Notice Of Acceptance \(NOA\) 20-1123.03 \(18'w x 8'h\)](#) and [\(NOA\) 20-1123.02 \(24'w x 16'h\)](#)

bp – Glass Garage Doors are engineered to be impact resistant and provide high structural performance: ASTM E1996 and ASTM E1886.

An optional, NFRC Certified Air Leakage Resistance Package is available, for an airtight wall opening where building code compliance for energy efficiency, is required. Per NFRC 400, **bp - Glass Garage Doors Fully Insulated Frame Technology (US and International Patented)** and interior/exterior mounted perimeter weather-strip, combine to significantly reduce air leakage well below the allowable residential and commercial standards.

Design Pressure and Impact Rating

NOA 20- 1123.02	+50.0 /-50.0 PSF	NOA 20- 1123.03	+65.0 /-65.0 PSF	Large & Small Missile Impact Rated
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Air Leakage Resistance Results (Per NFRC 400 / ASTM E283)

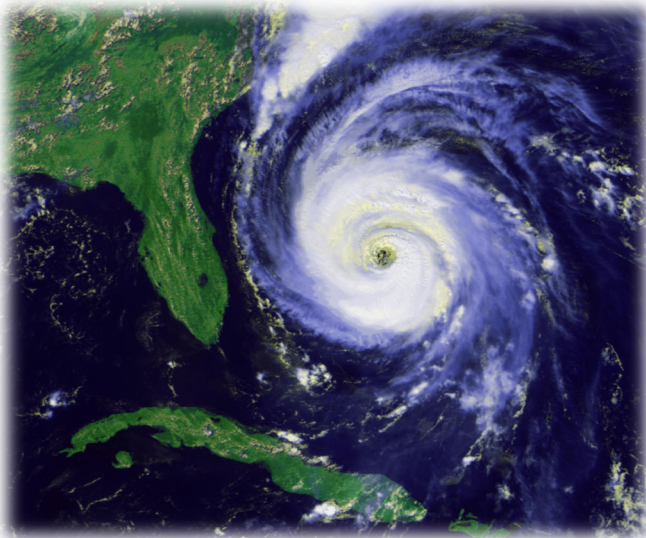
Residential Standard	0.3 CFM
Commercial Standard	0.4 CFM
bp – Glass Garage Door Results	0.06 CFM
<i>Note:</i> The lower the CFM = Better Air Leakage Resistance. Thermal ratings for U-factor, SHGC, and VT available upon request, per NFRC 100	



National Fenestration
Rating Council®

MIAMI-DADE COUNTY
APPROVED

24ft width max. x 16ft height max.



bp - Water Resistant Package



The Water Resistant Package has been tested in accordance with the following test methods:

- ❖ ASTM E331- Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference; 2009.
- ❖ ASTM E547- Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Cyclic Static Air Pressure Difference; 2009.

Note: The Water Resistant Package **must be combined** with the Air Resistant Package **DURING THE MANUFACTURING PROCESS** to function as tested! The Water Resistant Package **CAN NOT BE INSTALLED AFTERWARDS**, per the ASTM E331 or ASTM E547 testing standard.

Test Method E331 and E547			Title of Test Water Resistance			Results No Leakage	
Classification			DP	Pa	PSF	mph	" H ₂ O
Res.	Lite Com.	Com.	30	220	4.59	42	0.88"

24ft width max. x 16ft height max.



California Line

bp manufactures and installs full-vision aluminum and glass sectional overhead doors. The California line (our base model) is primarily used for typical garage and warehouse areas in all climates.

bp - Glass Garage Doors offers an optional NFRC Certified Air Leakage Resistance Package for an airtight wall opening, where building code compliance for energy efficiency is required.

bp - *Fully Insulated Frame Technology (US and International Patented)* is the key factor for eliminating air leakage, when using this type of door to enclose any *climate controlled space*. Acoustical performance is also enhanced: STC = 36+

24ft width max. x 16ft height max.

Air Leakage Resistance Package*

Air Leakage Resistance Results (Per NFRC 400 / ASTM E283)

Residential Standard	0.3 CFM
Commercial Standard	0.4 CFM
bp - Glass Garage Doors results	0.06 CFM

***Note:** The lower the CFM = Better Air Leakage Resistance. Thermal ratings for U-factor, SHGC, and VT available upon request, per NFRC 100.

*Air Infiltration package is available in combination with any type of glazing.





Green Building References

LEED NC 3.0

MATERIALS AND RESOURCES

bp meets criteria	Recycle Content
Garage Doors	Cr. 4, Cr. 5

AIR INFILTRATION

bp meets criteria	ASHRAE 90.1-2007
Garage Doors	EAc1- Optimize Energy Performance

LEED V 2.2

MATERIALS AND RESOURCES

bp meets criteria	EPP
Garage Doors	MR 4.1, 4.2, 5.1, 5.2

National Green Building Standard

RESOURCE EFFICIENCY

bp meets criteria	Recycled Material
Garage Doors	604.1

Green Globes

RESOURCE EFFICIENCY

bp meets criteria	Recycled Content
Garage Doors	E.2



bp Glass Garage Doors may help a project achieve third-party certifications, such as LEED or Green Globes by providing an Environmentally Preferable Product (EPP).

bp Glass Garage Doors has historically streamlined its operational necessities to minimize any waste of materials, maximizing the ability to recycle and reuse post-industrial materials.

bp Glass Garage Door & Entry Systems manufacturing plant utilizes approximately 25-40%, by weight, of post-industrial (pre-consumer) and 60-75%, by weight, of post-consumer recycled materials within our products and manufacturing process. In addition, approximately 95% of the raw materials utilized in production are manufactured regionally within 500 miles of our manufacturing facility.

bp Glass Garage Doors has a commitment to utilize recycled materials while meeting the needs of our valued customers and sustaining the environment we all live in.



POWDER COAT - (Matte) FRAME COLOR OPTIONS



TIGER Drylac® 38/10130
SeaShell White 30±5*



TIGER Drylac® 38/70070
Taupe 30±5*



TIGER Drylac® 38/60040
Roman Bronze 30±5*



TIGER Drylac® 38/30028
Brick Red 20±5*



TIGER Drylac® 38/70049
Silver Grey 30±5*



TIGER Drylac® 38/10070
Bone White 30±5*



TIGER Drylac® 38/15002
Sierra Tan 30±5*



TIGER Drylac® 38/60080
Statuary Bronze 30±5*



TIGER Drylac® 38/60006
Aged Copper 20±5*



TIGER Drylac® 38/40025
Interstate Blue 20±5*



TIGER Drylac® 38/70048
Sky Grey 30±5*



TIGER Drylac® 38/70025
Ash Grey 30±5*



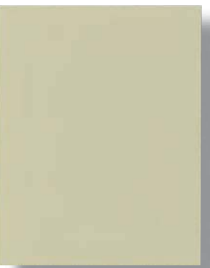
TIGER Drylac® 38/60090
Dark Anodized Bronze 20±5*



TIGER Drylac® 38/50080
Ivy Green 30±5*



TIGER Drylac® 38/40051
Military Blue 30±5*



TIGER Drylac® 38/15003
Almond 30±5*



TIGER Drylac® 38/70019
Slate Grey 30±5*



TIGER Drylac® 38/30033
Boysenberry 20±5*



TIGER Drylac® 38/50037
Classic Green 30±5*



TIGER Drylac® 38/80020
Jet Black 30±5*



TIGER Drylac® 38/15012
Sandstone 30±5*



TIGER Drylac® 38/60018
Koko Brown 30±5*



TIGER Drylac® 38/30041
Redwood 30±5*



TIGER Drylac® 38/50110
Hartford Green 30±5*



TIGER Drylac 38/81009
Railing Black Semi Gloss 60±5*

*Gloss level according to Gardner 60° ASTM D523. Paper and ink limitations of color samples as well as influence from heat and light account for differences from actual powder coatings.

Glossy

POWDER COATING - (Matte) FRAME COLOR OPTIONS

Metallic



TIGER Drylac® 38/00001
Clear 90+*



TIGER Drylac® 38/15009
Crème 305 85±5*



TIGER Drylac® 38/50039
Highland 305 85±5*



TIGER Drylac® 38/70061
Grey Classic 314 85±5*



TIGER Drylac® 38/90003
Argento 301 Metallic



TIGER Drylac® 38/10007
Bianco 302 85±5*



TIGER Drylac® 38/15007
Crème 303 85±5*



TIGER Drylac® 38/50040
Highland 306 85±5*



TIGER Drylac® 38/80002
Carbon 301 85±5*



TIGER Drylac® 38/90010
Marine Silver



TIGER Drylac® 38/10090
Extrusion White 85±5*



TIGER Drylac® 38/15005
Crème 301 85±5*



TIGER Drylac® 38/50041
Highland 307 85±5*



TIGER Drylac® 38/90007
Argento 305 Metallic



TIGER Drylac® 38/70032
Grey Classic 303 85±5*



TIGER Drylac® 38/60026
Marrone 306 85±5*



TIGER Drylac® 38/40033
Azzurro 307 85±5*



TIGER Drylac® 38/90011
Argento 308 Metallic



TIGER Drylac® 38/70056
Grey Classic 310 85±5*



TIGER Drylac® 38/60039
Marrone 308 85±5*



TIGER Drylac® 38/70054
Grey Classic 308 85±5*



TIGER Drylac® 38/90015
Pearl Dark Grey Metallic

*Gloss level according to Gardner 60° ASTM D523. Paper and ink limitations, account for differences from actual powder coatings. Gloss levels are indicated as shown, or otherwise defaulted to 80%.

bp - Glass Garage Doors & Entry Systems - Frame Color - Sim. Wood Powder Coating



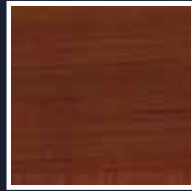
DS 403
1001/01



DS 403
1002/01



DS 402
1101/02



DS 403
1102/01



DS 402
1103/01



DS 403
1301/01



DS 403
1401/01



DS 403
1402/02



DS 402
1403/01



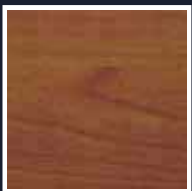
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1404/02



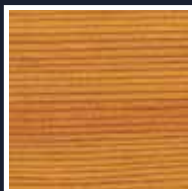
DS 402
1405/02



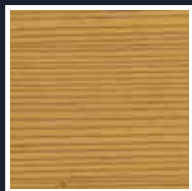
DS 402
1406/01



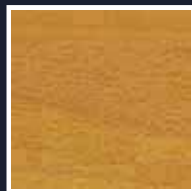
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1407/01



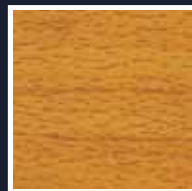
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1501/02



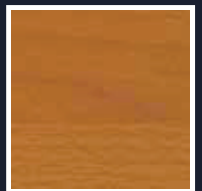
DS 402
1502/02



DS 402
1601/06



DS 402
1602/01



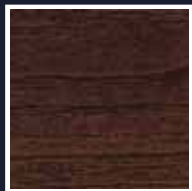
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1603/02



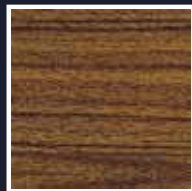
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1701/01



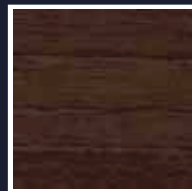
DS 403
1801/02



DS 403
1802/02



DS 403
1803/01



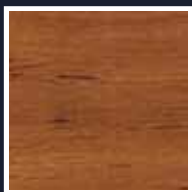
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1804/05



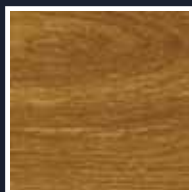
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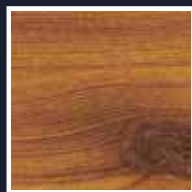
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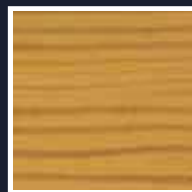
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1901/01



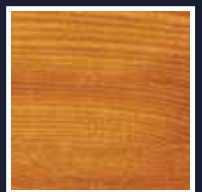
DS 402
2001/01



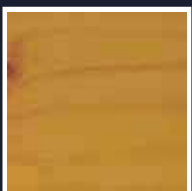
DS 402
2101/01



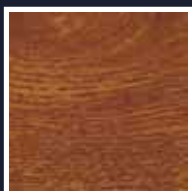
DS 402
2102/01



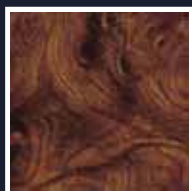
DS 402
2103/01



DS 402
2104/01



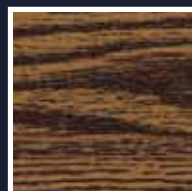
DS 403
2301/02



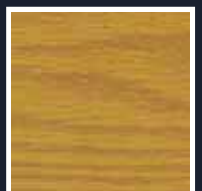
DS 403
2401/04



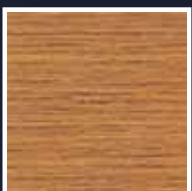
DS 810+PE411
2402/02



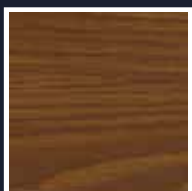
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2501/02



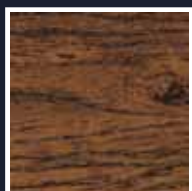
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2501/05



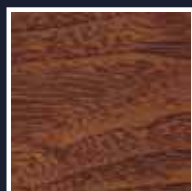
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2502/01



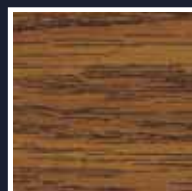
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2503/04



DS 403
2504/01



DS 403
2505/01



DS 403
2507/01



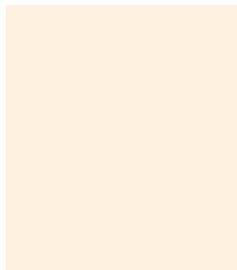
DS 402
2902/03



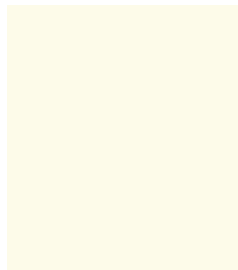
Proven performance and lasting durability. That's why generations of architects and building professionals, have trusted Kynar Color Coatings; to protect architectural metal substrates.

All PPG Kynar coatings contain 70% fluoropolymer resin, which is chemically inert to protect your building from environmental stresses. Adhesion and flexibility are excellent, which resists chipping, cracking, crazing, erosion, abrasion and impact. Color fast warranties are provided for 20 - 30 years.

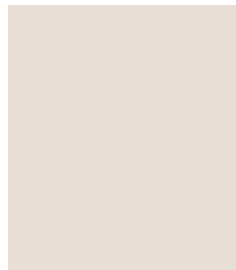
10 colors (shown below) out of 500+ for your choosing - [Custom color matching upon request]



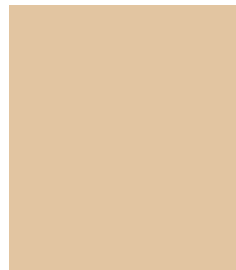
Graham White
UC72638



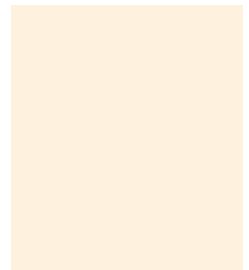
Bright White
UC55026



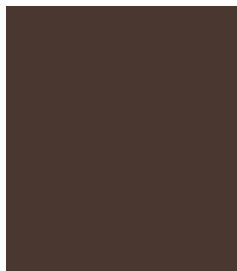
Kuala White
UC74215



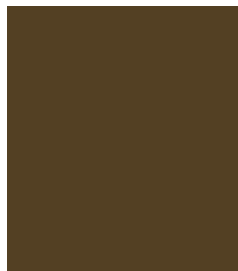
Caramel Latte
UC105737



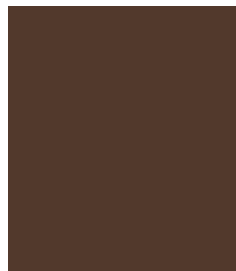
Natural Wicker
UC105747



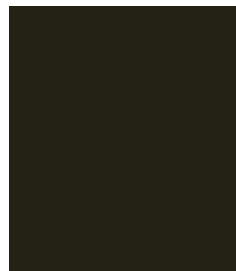
Antique Bronze
UC100027



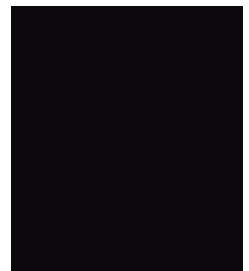
Fairview Taupe
UC105741



Medium Bronze
UC109862



Sanctuary Bronze
UC43347



Black
UC40577

Lasting Choices with Architecturally Tested Coating Systems

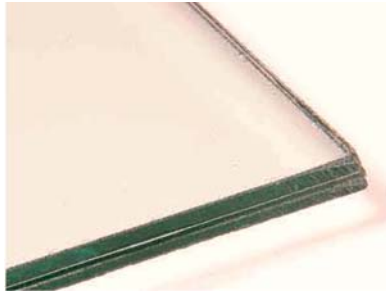
Kynar coatings meet the industry's toughest performance requirements, including AAMA 2605 (Voluntary Specification), for Performance Requirements, Test Procedures, and Superior Performing Organic Coatings; on Aluminum Extrusions and Panels.



DISCLAIMER:

The color chips on this website cannot be considered totally accurate color matches, and are not to be used as approved standards. This document contains general information only, and should not be construed as creating any warranties, express or implied. Please contact a PPG representative for additional information.

bp - Glass Garage Doors "Glass Panel Options"



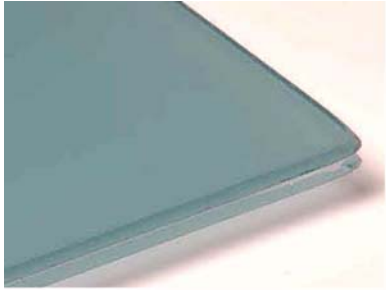
CLEAR LAMINATED



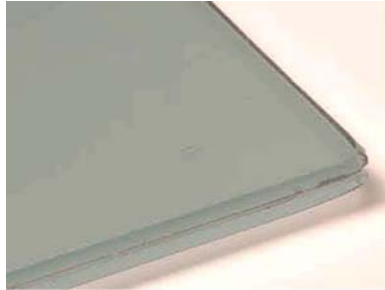
OBSUCRED LAMINATED
REG. WHITE (SLIGHT GREENISH HUE)



OBSCURED OR TRANSPARENT
LAMINATED STARFIRE WHITE
([ARCHITECTURAL LOW-IRON)



OBSCURED OR TRANSPARENT
LAMINATED (AZURLITE)
(Orders of 10 or more doors)



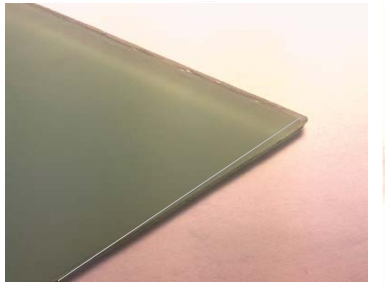
OBSCURED OR TRANSPARENT
LAMINATED (SOLEX GREEN)



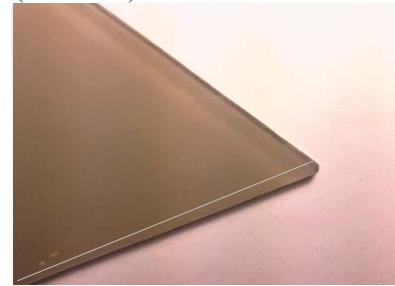
OBSCURED OR
TRANSPARENT LAMINATED
(GRAY 60%)



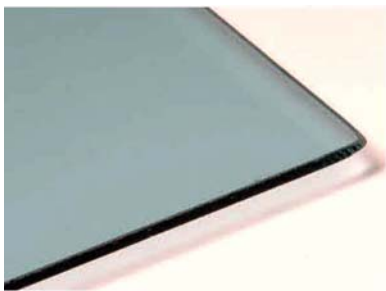
OBSCURED OR TRANSPARENT
LAMINATED (GRAY 24%)



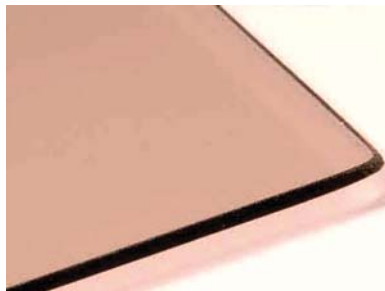
OBSCURED OR TRANSPARENT
LAMINATED (EVERGREEN)
(Orders of 10 or more doors)



OBSCURED OR TRANSPARENT
LAMINATED (BRONZE)



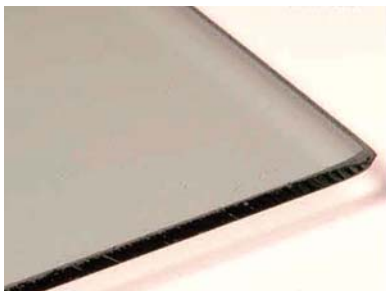
TEMPERED (AZURLITE)
(Orders of 10 or more doors)



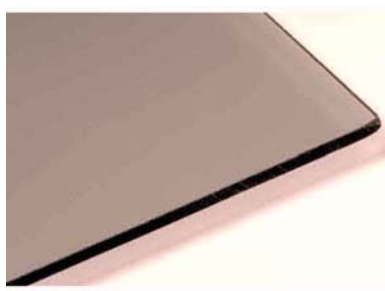
TEMPERED (BRONZE)



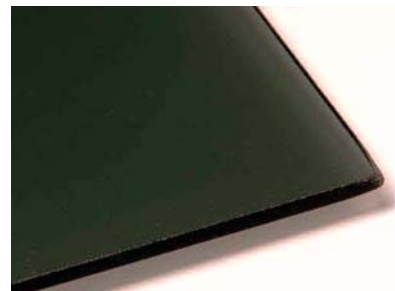
TEMPERED (EVERGEEN)
(Orders of 10 or more doors)



TEMPERED (SOLEX GREEN)

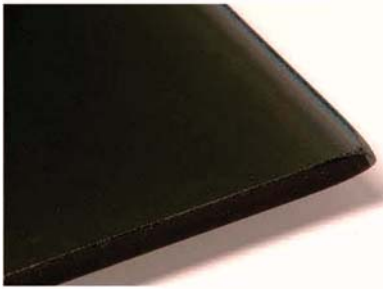


TEMPERED (GRAY 61%)



TEMPERED (GRAY 24%)

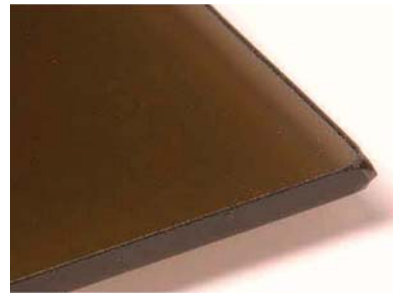
bp - Glass Garage Doors "Glass Panel Options"



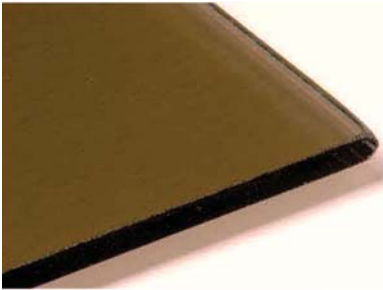
REFLECTIVE TEMPERED BLUE RC



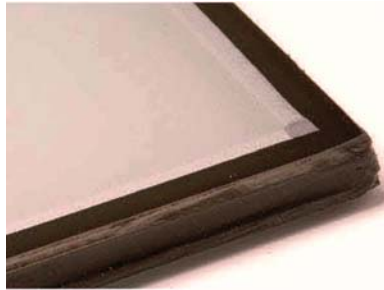
REFLECTIVE TEMPERED BRONZE RC



REFLECTIVE TEMPERED GRAY RC



REFLECTIVE TEMPERED GREEN RC



OBSCURED or TRANSPARENT INSUL.
STARPHIRE via SANDBLAST (WHITE)



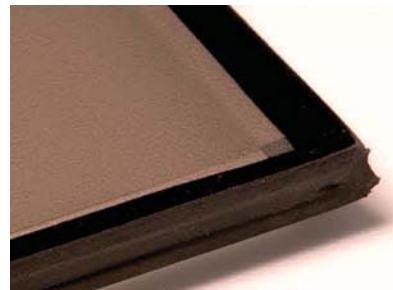
OBSCURED or TRANSPARENT INSUL.
via ACID ETCH (SLIGHT GREEN HUE)



OBSCURED or TRANSPARENT INSUL.
via ACID ETCH (AZURLITE)
(Orders of 10 or more doors)



OBSCURED or TRANSPARENT INSUL.
via ACID ETCH (EVERGREEN)
(Orders of 10 or more doors)



OBSCURED or TRANSPARENT INSUL.
via ACID ETCH (BRONZE)



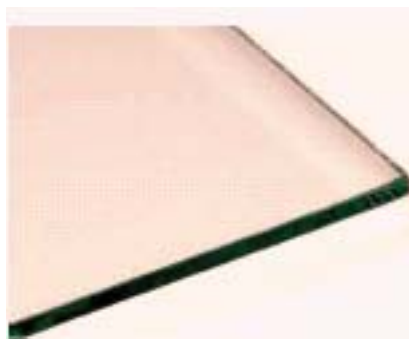
OBSCURED or TRANSPARENT INSUL.
via ACID ETCH (GRAY 60%)



OBSCURED or TRANSPARENT INSUL.
via ACID ETCH (GRAY 24%)



OBSCURED or TRANSPARENT INSUL.
via ACID ETCH (SOLEX GREEN)



CLEAR: TEMP., LAMI, INSUL., & LOW-E

bp Glass Garage Doors

"The Architect's Choice"

bp Advantages (Our Door)



Competitors' Top Glass, Mid Glass, and Bottom Glass Panels Are Not Equal In Size! Does Not Appear Symmetrical!

Competitors' Disadvantage (Competitor Door)



- ➡ **BP- Aluminum Alloy:** High tensile strength at 38 ksi and double the rigidity of standard alloy.

➡ **Narrow Intermediate Mullions:** Cleaner architectural lines, showing more glass and less structure.

➡ **Heavier Wall Thickness:** Allows for more weight and wider glass panels, without deflection. (Ex. Our door has 250 lbs of aluminum vs. a competitor's 100 lbs.)

➡ **Factory Direct Manufacturing Speed:** By strictly focusing on Glass Garage Doors and Entry Doors, our manufacturing time is the best in the industry.

➡ **Factory Direct Installation (CA, AZ, NV, FL & Optional in all other states):** A factory specified installation produces a smoother and longer lasting garage door.

➡ **Customization:** Our customers can request specific panel sizes, quantities, height of each section, tapered bottom / top sections, and reveal of frame around the door.

➡ **Complementing Entry Doors:** We can manufacture Entry Doors and Side Gates with single or multiple glass panels to match your Glass Garage Door. Custom Lock hardware can also be accommodated.
- ➡ **Standard (6063) Aluminum Alloy:** Much weaker and 1/2 the tensile strength of BP - Aluminum Alloy.

➡ **Wide Intermediate Mullions:** Shows less glass, more frame, and is visually less appealing (See above, marked by arrows).

➡ **Thinner Wall Thickness:** Causes vertical and horizontal deflection, which requires stiffening struts that can be seen through the glass. (See above, as marked by red arrows)

➡ **Not Factory Direct:** Orders are placed through a distributor, and can take 6-10 weeks.

➡ **Not Factory Installation:** An installer other than the factory may not have the expertise or take the time needed to meet a factory specified installation.

➡ **Limited Customization:** Our competitors are not set up to accommodate customers' special requests.

➡ **No Complementing Entry Doors:** Our competitors are not set up to accommodate customers' special requests.

- ➡ **Stainless Steel 11-gauge Hinges:** Laser cut, heavy duty hinges for an extra clean Architectural finish. Note: Stainless Hinges do not require lubrication.
- ➡ **Standard Mild Steel Hinges:** Thinner 14 to 18 gauge galvanized hinges are weaker, may break under typical glass weights, and require constant lubrication.
- ➡ **Stainless Steel Rollers:** Heavy Duty, sealed, water resistant rollers of 500lb load capacity each, with no lubrication required.
- ➡ **Standard Metal or Nylon Rollers:** 50lb. load capacity each, non sealed, and require constant lubrication.
- ➡ **Zinc Plated or Stainless Steel Springs:** Rust resistant and do not require lubrication.
- ➡ **Standard Springs:** Raw oil tempered springs rust and require constant lubrication.
- ➡ **Concealed Stiffening Struts:** Stronger, lighter, and are hidden as part of the door rail, which won't be seen from the outside.
- ➡ **Standard Metal Struts:** Weak, heavy, surface mounted, and can be seen through glass. (See above, marked by arrows).
- ➡ **Custom Glass and Frame Colors:** Over 200 types of custom glass, powder coated colors, and panels to choose from.
- ➡ **Limited Glass and Color Options:** A few standard glazing types and color options.
- ➡ **Architectural Weather Stripping:** Made from 3 part extruded aluminum, commercial Santoprene, and installed with concealed fasteners.
- ➡ **Typical Residential Weather Stripping:** Made entirely of poor quality vinyl with exposed nails which rust.
- ➡ **Custom Tapered Sections:** Top and/or bottom sections/panels for out of square driveways and openings. (See picture gallery)
- ➡ **Standard Rectangular Sections:** May otherwise leave large gaps at the floor and header.
- ➡ **Commercial Duty Hardware:** High capacity, long lasting, with minimum lubrication or service required.
- ➡ **Standard Residential Hardware:** Low capacity, which wears out quickly; requiring constant lubrication, and costly service calls.
- ➡ **Extremely Quiet Operation:** Due to the use of premium components, noise-causing friction is dramatically reduced.
- ➡ **Typical Noisy Operation:** Attributed to cheap components, and out of square track; which cause friction and costly repairs.
- ➡ **What Makes ~~be~~ the best:** In addition to the reasons above, proprietary fabrication methods and classified materials have been incorporated to produce our highly regarded glass doors.
- ➡ **Why Others Can't Compare:** Manufacturers that mass-produce a wide variety of other types of doors are catering to a less discriminating market. In most cases, quality is compromised for quantity.

You get what you pay for! Quality engineered and tested designs for over 55 years in business!

Additional Options:

- 300 + Powder Coated, Wood Grained, and Kynar Finishes over Anodized Aluminum Frames
- Fully Insulated Frame (US and Int'l Pat. Pend.- to meet Building / Energy Code and NFRC ratings)
- Insulated, Laminated, Tempered, Obscured, Transparent, and Poly Sealed Panels in Various Colors
- NFRC Air & U-Value Infiltration, ASTM - Water Resistant, and HVHZ, Wind / Impact - Rated Doors
- Matching Entry Doors, Side Gates, & Drive Gates (California Residents Only!)
- Custom Designs, Configurations, Shop Drawings, and Other Custom Options (Upon Request!)
- Perimeter Weather Stripping (2-Part Alum. w/ Santoprene) AND/OR Solid Aluminum Thresholds
- Tapered Bottom Sections (for un-level floors) & Aux. Hat Struts (doors over 18'ft or 800lbs)
- Side Mount, Manual Chain Hoist, and Various Electric Operators; (Depending on Track Type!)
- Aluminum or Stainless Steel Cladding (Mounted on Outside Perimeter of Door Openings)
- Stainless Steel Track, Stainless Springs w/ Hardware, Powder Coated Track, or Various Combo's
- Hurricane Rated Doors with Miami / Dade NOA! Large Missile, Small Missile, +/- 65psf & +/- 50 psf