# **bp** Glass Garage Doors

## The Architects' Choice:

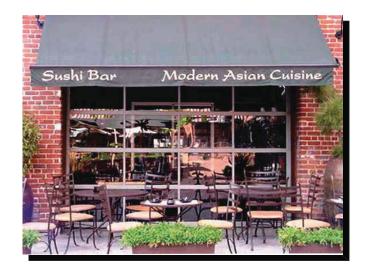
- Insulated Frames & Glass (Pat.)
- Energy Code & Hurricane Rated
- Factory Direct Shipping (US & Intl.)
- Stainless Steel Hardware & Rollers
- Custom Designs, Finishes, Glazing
- Custom Tapered/Sloped Sections



#### **TOLL FREE:**

## 877-442-1716



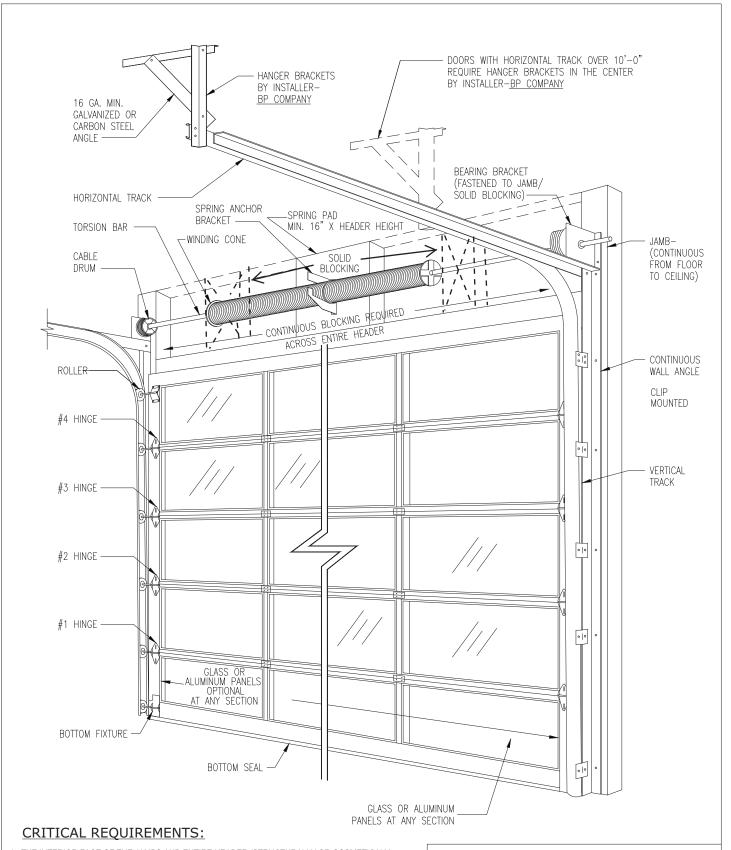






TF: 877-442-1716 www.GlassGarageDoors.com

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



- 1. THE INTERIOR FACE OF THE JAMBS AND ENTIRE HEADER (STRUCTURALLY OR COSMETICALY 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 IN INTERFERE WITH THE DOOR OPERATION. VERIFY THE INTERIOR AND EXTERIOR FINSHES WORK TOGETHER, AS SHOWN ON DRAWINGS 1-5; HEREIN.
- THE INTERIOR FACE OF THE JAMBS, AND ENTIRE HEADER SHOWN BELOW (INCLUDING THE HORIZONTAL TRACK AREA, WHICH IS USED AS PART OF THE REQUIRED OPERATOINAL AIR SPACE), MUST BE KEPT CLEAR OF ANY: CONDUITS, PLUMBING LINES, HVAC, OR OTHER ITEMS, THAT CAN INTERFERE WITH THE DOOR OPERATION.
- 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



#### Glass Garage Doors

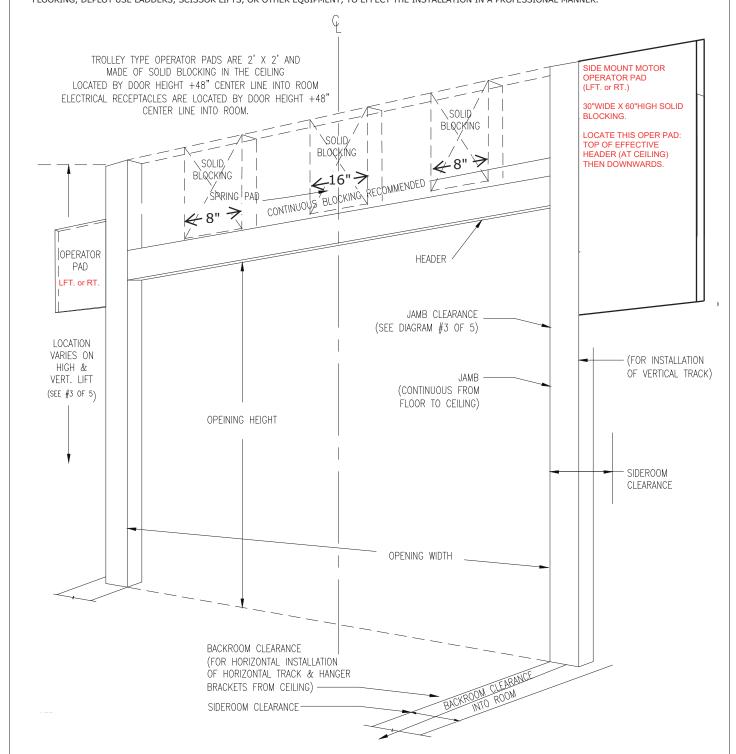
(877) 442-1716

DRAWING 1 Of 5

www.GlassGarageDoors.com

#### **CRITICAL REQUIREMENTS:**

- 4. 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..
- 5. 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:

- 6. 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 INFILITRATION 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.
- 8. 2" & 3" TRACK <u>OPERATING WEIGHT LIMITS</u>: (EX. DOOR WIDTH X DOOR HT. X 5LBS = TOTAL WEIGHT) DOOR FRAMES & PANELS WEIGHTS ARE APPOX. 5 LBS. PER SQ. FT. --> 2" TRACK = 600 LB. MAX, 3" TRACK = 1600 LB. MAX DO NOT EXCEED TRACK WEIGHT LIMITS

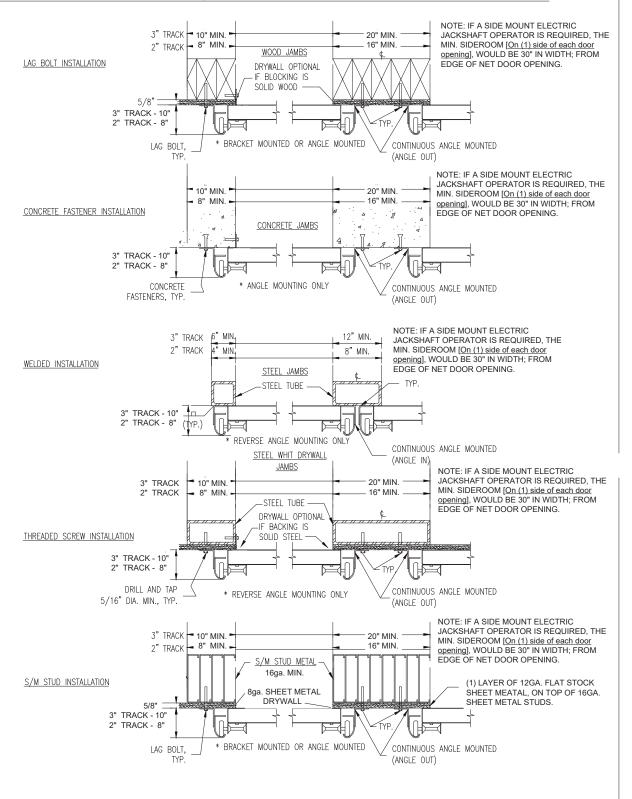
#### PREPARATION OF THE OPENING



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#### PREPERATION OF 2" & 3" TRACK REQUIREMENTS AND SIDE JAMB CLEARANCES - PLAN VIEW

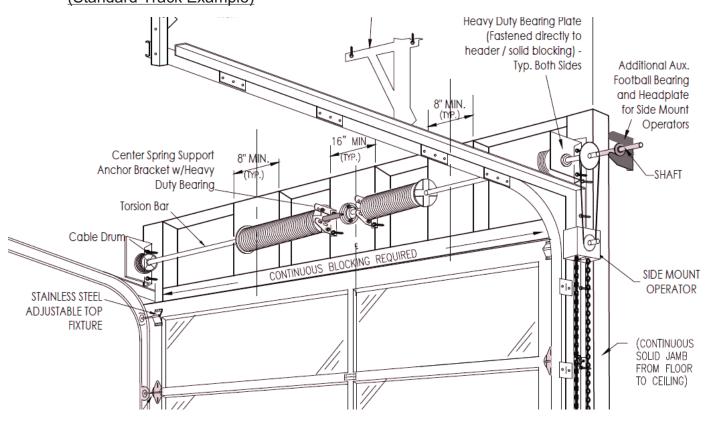


#### SIDE TRACK CLEARANCES

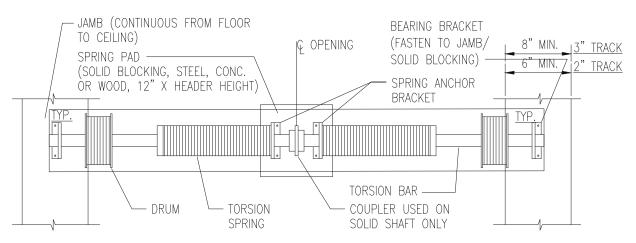


DRAWING 3 Of 5

## <u>2 SPRINGS - ISOMETRIC VIEW -</u> (Standard Track Example)



#### 2 SPRINGS - FRONT ELEVATION



CONTINUOUS BLOCKING IS REQUIRED NOTE: JAMBS ARE CONTINUOUS FROM FLOOR TO CELING (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.

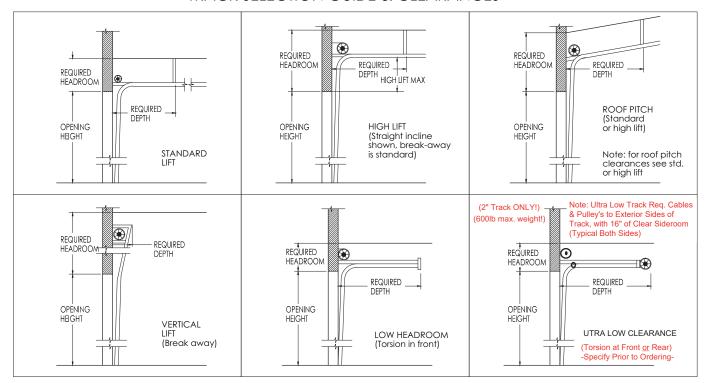
#### SPRING ANCHOR PAD



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DRAWING 4 Of 5

#### TRACK SELECTION GUIDE & CLEARANCES



## - MINIMUM REQ. OPERATING CLEARANCES

Verify the various track sets, will	HEADROOM REQ.		SIDE ROOM (Typ. Both Sides)		DEPTH INTO ROOM (PERPENDICULAR TO DOOR)				
work w/ the project clearances!	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 Do	Double Door Ht. + 18" 30"x48" (		de 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 Headraam. 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



DRAWING 5 Of 5



#### **ARCHITECTURAL DESCRIPTION**

#### **bρ** – 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: Size Series: **bp** - 350 (4 ft.-8ft. wide x 8 ft. high) Lite Duty

Size Series: **bp - 450HD** (8 ft.-16 ft. wide x 12 ft. high) **Heavy Duty** 

Size Series: **bp** - 550SHD (16 ft.-24 ft. wide x 16 ft. high) Super Heavy Duty

Classic Standard Line: Typ. use: Garages & Warehouses spaces (Non Conditioned)

Insulated Line:
Hurricane Line:
Typ. use: Sealing the Building Envelope (Air Tight for HVAC)
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 - <u>www.glassgaragedoors.com</u> 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: Size Series bp - 350: Top rails, bottom rails, and end stiles are 3-1/4"wide.

Size Series bo - 450 HD: Top & Bottom rails are 5-3/8" wide and end stiles are 3-1/4" wide

Size Series bp - 550SHD: 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 Galvanized torsion springs, head-plates, and center spring supports are mounted on a continuous

BALANCE: 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

(877) 442-1716 - Web: www.GlassGarageDoors.com



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 **bo** – **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)

(Note: Low neadroom & zero clearance track must be electromeany operated for surety)

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/ Glass type must be specified with the following: <u>Transparent</u> or <u>obscured frosted</u>, <u>tempered</u> or

SPECIFICATIONS: <u>laminated safety glass</u>, and <u>clear</u> or <u>color tinted hues</u> (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.

<u>Laminated Safety Glass</u> (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!

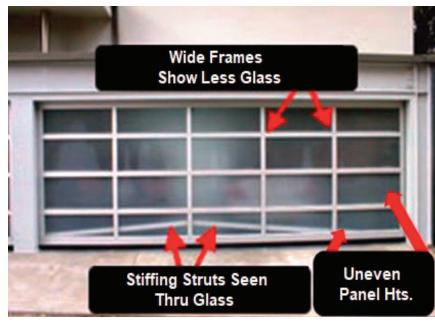
Tapered bottom sections (for use when floors are out of square or sloping)

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





## **bp** Advantage

#### 1. STRONGER ALUMINUM ALLOY

High Tensile Strength Aluminum Alloy: Double rigidity of standard alloy.

#### 2. NARROW / SKINNY MULLIONS

Narrow Frame Rails: Cleaner architectural lines, shows more glass, and less frame.

#### 3. STRONGER WALL THICKNESS

Heavier Wall Thickness: Allows for more structural load, heavier weight, and wider glass panels. This reduces deflection. (Ex. Our door has 250 lbs. of aluminum vs. a competitor's 100 lbs)

#### 4. FACTORY DIRECT MANUFACTURING

Factory Direct: Saves costs, more accurate customer service, backed by our experience of strictly focusing on Glass Garage & Entry Doors.

#### 5. FACTORY INSTALATION

Factory Direct Installation (CA, AZ, NV, UT & FL, optional in all other states): A factory spec. installation, produces a smoother installation and longer lasting garage door, with a Factory Direct Warranty.

## Competitor' Disadvantage

#### 1. WEAKER ALUMINUM ALLOY

Standard Aluminum Alloy: Much weaker and ½ the tensile bp alloy.

#### 2. WIDER / FATTER MULLIONS

Wide Frame Rails: Shows more frame, and less glass, which is visually less appealing. (See picture above w/ red arrows)

#### 3. WEAKER WALL THICKNESS

Thinner Walls: Causes major vertical & horizontal deflection, which requires unsightly struts (seen through the glass). This marketing practice reduce cost, but compromises quality. (See picture above w/ red arrows)

#### 4. INDIRECT DISTRIBUTOR

Non-Factory Direct: Orders are placed through a distributor, who will most likely order the wrong sizes, make mistakes, and mark up the price.

#### 5. INDIRECT INSTALLATION

Distributor Installation: An unlicensed and / or uninsured installer, may not have the expertise, or take care needed to meet a factory specified installation, with an unpredictable warranty.



#### 6. CUSTOM CONFIGURATIONS

Heavy Wall Construction: Allows for more weight, and wider glass panels, with little to no deflection. As the Factory, we listen and work with our customers, to produce custom and unique designs.

#### 7. MATCHING GLASS ENTRY DOORS & GATES

**bp** manufactures matching entry doors and gates, to provide a seamless look between our glass garage & driveway gate systems.

#### 8. STAINLESS STEEL ROLLERS

Stainless Steel Rollers: Extra Heavy Duty, sealed, water resistant rollers; of 900 lb. load capacity each, with no lubrication required. Our nylon ultra quiet glide tire, does not produce any noise.

#### 9. STAINLESS STEEL HINGES

Stainless Steel 12ga Hinges: Laser cut, extra heavy duty; for an extra clean Architectural finish, that does not require lubrication!

#### **10. ZINC COATED SPRINGS**

Zinc Plated or Stainless Steel Springs: Rust resistant and requires minimal lubrication. Long Lasting.

#### 11. CONSEALED STRUTS

Concealed Stiffening Struts: Stronger, lighter, and are hidden in the door rail, which can't be seen from the outside (through the glass), and are aesthetically integrated from inside. (For doors over 18' wide)

#### 12. CUSTOM FRAME & GLASS COLORS

Custom Glass & Frame colors: Over 100 types of custom glass, 300 powder coating colors (with a 10 yr warranty), and 300 Kynar paint colors (with a 30 year warranty). The possibilities are only limited by your imagination.

#### 13. ARCHITECTURAL ALUM. WEATHER STRIPPING

Architectural Weather Stripping: Made from 2-part extruded aluminum, and 1-part commercial Santoprene, which is designed to provide a seamless and fastener appearance. Extremely Architectural

## Competitor' Disadvantage

#### 6. STANDARD OPTIONS ONLY

Limited Customization: Our competitors are not set up to a accommodate customers' special requests. As such, distributors are not capable of helping or accommodating customers' special requests.

#### 7. DOES NOT OFFERED ENTRY DOORS OR GATES

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

#### 8. CHEAP IMPORTED HINGES

Standard Metal or Nylon Rollers: 50 lb. load capacity each, are not sealed, and require constant lubrication. This produces friction and a very noisy door.

#### 9. CHEAP IMPORTED ROLLERS

Standard Mild Steel Hinges: Thinner 14ga to 18ga hinges are weaker, may break under typical glass weights, and require constant lubrication.

#### 10. OIL TEMPERED SPRINGS

Steel Springs: Raw oil tempered springs rust and required constant lubrication.

#### 11. VISIBLE STRUTS

Standard Metal Struts: Weak, galvanized metal (not aluminum), heavy, surface mounted, and can be through the glass. (See picture above w/ red arrows)

#### 12. MINIMAL FRAME & GLASS COLORS

Limited Glass and color Options: A few standard glazing types and color are all that is offered. They do not offer Kynar painting options, and only provide a 1 year warranty; for color fade.

#### 13. CHEAP SIM. WOOD / VINYL WEATHER STRIPPING

Typical Residential Weather Stripping: Made entirely of poor quality vinyl, with exposed nails. This type of trim molding will produce rusted nail heads, which will stain whatever paint materials is applied on the surface.



#### 14. CUSTOM TAPERED SECTIONS (When Required)

Tapered Sections: Top and/or bottom sections / panels, are custom made to fit sloped driveways or flooring, and guarantees a good seal.

#### 15. H.D. COMMERCIAL TRACK HARDWARE

Heavy Duty Commercial Hardware: High capacity, long lasting, with NO DEFLECTION or serviced required.

#### 16. QUIET OPERATION = LESS SOUND

Extremely Quiet Operation: Due to the use if Premium Stainless Steel Components, noise causing friction, is dramatically reduced.

#### 17. CUSTOM MADE = UNIFORM GLASS & PANEL SIZES

We offer varied sizes for sections and glass sizes for our Glass Garage Doors. All our doors have aesthetic and symmetrical appeal.

#### 18. 100% AMERICAN MADE (IN HOUSE)

We manufacture our own hardware and parts (in house), most of which are Stainless Steel.

#### 19. NFRC CERTIFIED & HURRICANE (NOA) RATED

The ONLY CODE COMPLIANT door of this type (US & intl. pat.) used for sealing the building envelope; with insulated frame, and IG units.

•• Is NFRC tested, certified, and Miami-Dade NOA rated.

#### 20. HEAVY DUTY SEAMLESS MOUNTAIN ANGLE

**bp** manufactures and provide 12ga heavy duty seamless mounting angle, without any pre-punched holes. This ensures strength (2-3 times stronger), and is aesthetically pleasing to the eye.

#### 21. WHY **bp**?

What makes **bp** the Best Glass Garage Door in the Industry? In addition to the items above, proprietary fabrication methods and classified materials have been incorporated into our 70 year history. This culmination is used to produce our highly regarded glass doors.

## Competitor' Disadvantage

#### 14. STANDARD SECTIONS

Standard Rectangular Sections: May otherwise leave a large gaps at either side of the opening, floor, or header. Unsealed opening may attract pests.

#### 15. THIN GAGE RESIDENTIAL TRACK HARDWARE

Standard Residential Hardware: Low capacity, thinly made, MAJOR DEFLECTION; which requires constant and costly service calls.

#### 16. NOISY OPERATING = RATTLING SOUND

Typical Noisy Operation: Attributed to cheap components (Hinges, Rollers, Fixtures, Bearings); which will cause friction, noise, and costly repairs.

#### 17. MASS PRODUCTION = UNEVEN GLASS & PANEL SIZES

Our competitors are infamously known for producing unequal panel heights, which are not symmetrical. (See picture above w/ red arrows)

#### 18. CHEAP OVERSEAS IMPORTED PARTS

Our competitors use light weight imported residential components, tracks, hinges, fixtures, and bearings, which is used by the majority of the industry.

#### 19. ILLEGAL DOOR

Competitors falsely advertise insulated glass units, which ignorantly assumes the product they sell is insulated in its entirety. What is the purpose of insulated glass if the door leaks air, and is NOT NFRC certified?

#### 20. PRE-PUNCHED MOUNTING ANGLE

Competitors use pre-punched mounting angle with hundreds of holes, which takes away strength, causes deflection, and looks cheap.

#### 21. WHY THERE IS NO COMPARISON

Why Others can't compare: Quality, Quality, Quality!! 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 quality.

## Insulated Line (US & Intl. Pat.)

bp Glass Garage Doors "Fully Insulated Frame Technology" (US & Intl. Pat.) is the key component for eliminating air leakage, when using Full Vision Type Doors to "seal the building envelope, or any HVAC climate controlled space." Our Insulated Frame System, also enhances acoustical performance; STC = 36± What is the point in having Insulated Glass Panels, if the frame leaks Air or Water?

**bp** Insulated Line glazing options consists of: 1/2" Krypton or Argon filled IG units. Each glass panel is sealed during fabrication process, to ensure an air-tight fit. Glazing options are available in transparent, obscured, low-E glass, and in a variety of color tints, to suit your design. Every glass type has a unique set of energy ratings: U-Values:  $\pm$ /- 0.22 - 0.99, SHGC:  $\pm$ /- 0.15 - 0.45, and VT: 0.02 - 0.46; and is ultimately determined by the glass specified on your project.

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

The **bp** - NFRC Air Resistance Package provides an airtight seal; where building code compliance is required. **bp** doors have been certified as a "whole system", and not just glass alone. Testing reports and CPD (Certified Products Database) #'s for various glass types can be found at the National Fenestration Rating Council: www.NFRC.org - Per: NFRC 100, 200, 400, U-Factors, SHGC, VT, & ASTM E283

<b>bp</b> - Air Leakage Resistance Package*								
Air Leakage Resistance Results ( Per N	NFRC 400 / ASTM E283 / DASMA 105)							
B 11 11101 1 1	0.0.0514							

Residential Standard 0.3 CFM **Commercial Standard** 0.4 CFM

**bρ** - Glass Garage Doors results

0.06 CFM

- \* Note: The lower the CFM = the Better Air Leakage Resistance Results...
- \* Thermal date ratings for U-factor, SHGC, & VT are avail. upon request. Call bp for info...













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. This CAN NOT BE INSTALLED AFTERWARDS!

Note: Doors or Windows WITHOUT Certified "NFRC" labels, are simply FALSE ADVERTISING, and ILLEGAL per the "IECC ENERGY CODE". Insulated Glass alone WILL NOT make a Door or Window Insulated, unless it has been certified by the NFRC.org

## 24ft. wide x 18ft. high (max.)



FACTORY DIRECT - WORLDWIDE SHIPPING - 1511 W 2nd St. Pomona, CA 91766 - TF: (877) 422-1716 - Fax (626) 579-5320 - Web: www.glassgaragedoors.com



## Hurricane Line (US Pat.)

Glass Garage Doors meet hurricane requirements for wind load, impact, and cycling, in accordance with Miami-Dade County Test Protocols TAS 201 (<a href="Irg./sml. missile impact">Irg./sml. missile impact</a>), TAS 202 (<a href="structural">structural</a>, air, forced entry</a>), and TAS 203 (<a href="cyclical pressure">cyclical pressure</a>). **bp** Glass Garage Doors have been certified, and issued a Florida Product Approval # 13380, and Miami-Dade NOA (Notice Of Acceptance) for our **bp** - 350 / 450HD / 550SHD: 18'w x 8'h or 24'w x 16'h size series.

Glass Garage Doors are engineered for impact resistance & structural performance, per ASTM E1886, & HVHZ: High Velocity Hurricane Zones

An optional NFRC Air and Water Leakage Resistance Package, is available for airtight openings, where energy code compliance required. Per NFRC 400.

• Glass Garage Doors "Fully Insulated Frame Technology" (US & Intl. Pat.) reduces air leakage below the allowable residential and commercial standards.

Note: For Custom Design Pressures Requirements between +/- 65 & +/- 50, a One Time NOA or FPA can be provided for your specific project. Call **bp** for info...

#### **Design Pressure & Impact Rating**

MIAMI-DADE COUNTY
APPROVED

NOA +50.0 NOA +65.0 20- /-50.0 20- /-65.0 1123.02 PSF 1123.02 PSF Lrg. & Sml. Missile Impact Rated









Rating Council®

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

Residential Standard	0.3 CFM
Commercial Standard	0.4 CFM
<b>bρ</b> - Glass Garage Doors results	0.06 CFM

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

### 24ft wide x 16ft high (max.)





FACTORY DIRECT - WORLDWIDE SHIPPING - 1511 W 2nd St. Pomona, CA 91766 - TF: (877) 422-1716 - Fax (626) 579-5320 - Web: www.glassgaragedoors.com

## **Classic-Standard Line**

**op** manufacturers, ships, and / or Installs "Full Vision Aluminum & Glass Sectional Overhead Doors". The **bp** - <u>Classic Standard Line</u> (our base model) is primarily used for residential & commercial garages, mechanic bays, warehouses, partition walls, and more.

## Model Lines: 24ft wide x 18ft high (max.)

**bρ** - Classic-Standard Line: Garages, Warehouses, Partitions (Non-Insulated)

**bρ - Insulated Line**: Seals the Building Envelope (Airtight - HVAC Spaces)

**bρ -** <u>Hurricane Line</u>: Miami / Dade NOA, Wind, & Impact Rated (<u>HVHZ Zones</u>)

**bρ - Storefront Garage Combo Line**: Entry Door w/ Garage (Retail Spaces)

**bρ** - Entry Door & Gate Line: Matches **bρ** Glass Garage Doors (Ext. & Interior)



Warehouses



**Residential & Commercial Garages** 



**Partition Walls** 

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## Storefront Garage Combo Line (US & Intl. Pat.)

manufacturers Glass Garage & Matching Entry Doors (in combination), to comprise our **bp** Storefront Garage Combo Line. This Architectural blend focuses on Form and Function, allowing the end user to implement an operable window wall, or limit access to just an entry door... All while sealing the bldg. envelope.

The **bp** NFRC Air Resistance Package provides an airtight seal; where building energy code compliance is required. **bp** Glass Doors have been tested and certified as a "whole system", and not just glass alone. The **bp** "Fully Insulated Frame Technology" (US & Intl. Pat.) is the key component for eliminating air leakage, when using Full Vision Type Doors to seal the building envelope, or any HVAC climate-controlled space... Our products far exceed the allowable resi. & com. standards.

















28ft wide x 16ft high (max.)







## **bp** - Water Resistance Option



24ft. wide x 18ft. high (max.)

Note: The **bp** - Water Resistant Option must be combined with the **bp** - Air Resistant Package, to function as tested! CAN NOT BE INSTALLED AFTERWARDS.

The **bp** - Water Resistance Option has been Certified for: Residential, Lite Commercial, and Commercial performance.

The following testing methods were utilized:

- ❖ ASTM E331- Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls, by <u>Uniform</u> Static Air Pressure Differentials.
- ❖ ASTM E547 Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors and Curtain Walls, by <a href="Cyclical">Cyclical</a> Static Air Pressure Differentials.

Test Method E331 and E547			W	Title of Te ater Resist		Results No Leakage		
Classification			DP	Pa	PSF	mph	" H20	
Res.	Lite Com.	Com.	30	220	4.59	42	0.88"	

















## **Green Building References**

#### LEED NC 3.0

#### MATERIALS AND RESOURCES

**bp** meets criteria

Recycle Content

**Garage Doors** 

Cr. 4, Cr. 5

#### AIR INFLITRATION

**Garage Doors** 

EAc1 - Optimize Energy Performance

#### **LEED V 2.2**

#### MATERIALS AND RESOURCES

be meets criteria

FFP

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** 

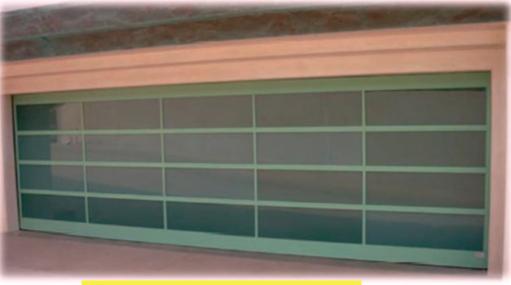
E.2











### 24ft wide x 18ft high (max.)

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

**bp** Glass Garage Doors has historically streamlined its operation to minimize waste of materials, and maximize the ability to use recycled content.

**bp** Glass Garage Doors & Entry Systems manufacturing plant utilizes 25-40% (by weight), of post-industrial (pre-consumer) and 60-75% (by weight), of postconsumer recycled materials within our products. In addition, 95% of our raw materials are manufactured regionally; withing 500 miles of our factory.

**bp** Glass Garage Doors has committed to utilize recycled materials, while meeting the needs of our valued customers, and sustaining the environment.



## **POWDER COATING - FRAME COLOR OPTIONS**

RAL 1000	149/15200	RAL 1001	149/15190 138/15001	RAL 1002	149/22590 138/20002	RAL 1003	149/22580	RAL 1004	149/22570	RAL 1005	149/22560
RAL 1006	149/22550	RAL 1007	149/22540	RAL 1011	149/15180	RAL 1012	149/22530	RAL 1013	149/11280 138/10013	RAL 1014	149/15170 138/15014
RAL 1015	149/15320 138/15015	RAL 1016	149/22520 138/20016	RAL 1017	149/22510	RAL 1018	149/21830	RAL 1019	149/13660 138/15019	RAL1020	149/22500
RAL 1021	149/22280	RAL 1023	149/22490	RAL 1024	149/22480 138/20024	RAL 1027	149/22470	RAL 1028	149/22460	RAL 1032	149/22450
RAL 1033	149/22240	RAL 1034	149/23910	RAL 1037	149/20096	RAL 2000	149/24570	RAL 2001	149/24560	RAL 2002	149/24550
RAL 2003	149/24540	RAL 2004	149/24530	RAL 2008	149/24340	RAL 2009	149/24360	RAL 2010	149/24520	RAL 2011	149/24580
RAL 2012	149/24690	RAL 3000	149/33120	RAL 3001	149/31120	RAL 3002	149/31110	RAL 3003	149/31100	RAL 3004	149/33900
RAL 3005	149/31900	RAL 3007	149/31910	RAL 3009	149/31920	RAL 3011	149/31090	RAL 3012	149/31940 138/30012	RAL 3013	149/31950
RAL 3014	149/31080	RAL 3015	149/33670	RAL 3016	149/31980	RAL 3017	149/31060	RAL 3018	149/31050	RAL 3020	149/31040
RAL 3022	149/33700	RAL 3027	149/33660	RAL 3031	149/34730	RAL 4001	149/43160	RAL 4002	149/31030	RAL 4003	149/32270







# Architectural Matte, Satin and Semi Gloss POWDER COAT - (Matte) FRAME COLOR OPTIONS



#### 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<sup>®</sup> 38/70056 **Grey Classic 310** 85±5\*



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



TIGER Drylac<sup>®</sup> 38/70054 **Grey Classic 308** 85±5\*



TIGER Drylac<sup>®</sup> 38/90015 **Pearl Dark Grey Metallic** 

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



www.GlassGarageDoors.com

DS 403

2505/01

DS 402

2902/03

DS 403

2507/01

DS 403

2504/01

DS 402

2502/01

DS 403

2503/04





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 mathching upon request]



### Lasting Choices with Architecturally Tested Coating Systems

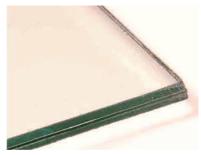
Kynar coatings meet the industry's toughest performance requirements, including AAMA 2605 (Voluntary Specification), for Performance Requirements, Test Procedures, and Superior Performing Organic Coatings; on Aluminum Extrusions and Panels.



#### 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"



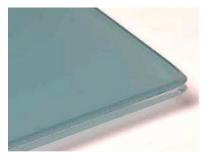
CLEAR LAMINATED



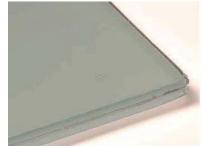
OBSUCRED LAMINATED REG. WHITE (SLIGHT GREENISH HUE)



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%)



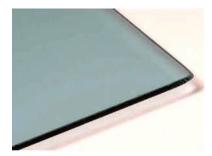
OBSCURED OR TRANSPARENT LAMINATED (GRAY 24%)



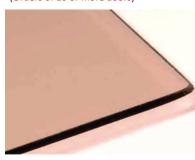
OBSCURED OR TRANSPARENT LAMINATED (EVERGREEN) (Orders of 10 or more doors)



OBSCURED OR TRANSPARENT LAMINATED (BRONZE)



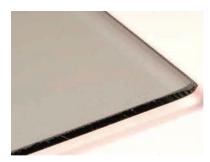
TEMPERED (AZURLITE) (Orders of 10 or more doors)



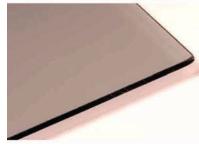
TEMPERED (BRONZE)



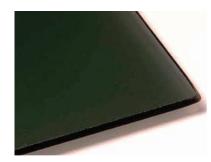
TEMPERED (EVERGEEN) (Orders of 10 or more doors)



TEMPERED (SOLEX GREEN)

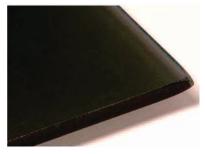


TEMPERED (GRAY 61%)



TEMPERED (GRAY 24%)

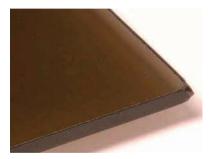
## bp - Glass Garage Doors "Glass Panel Options"



REFLECTIVE TEMPERED BLUE RC



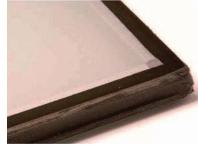
REFLECTIVE TEMPERED BRONZE RC



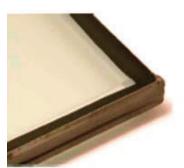
REFLECTIVE TEMPERED GRAY RC



REFLECTIVE TEMPERED GREEN RC



OBSCURED or TRANSPARENT <u>INSUL.</u> STARPHIRE via SANDBLAST (WHITE)



OBSCURED or TRANSPARENT <u>INSUL.</u> via ACID ETCH (SLIGHT GREEN HUE)



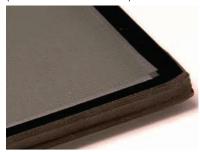
OBSCURED or TRANSPARENT <u>INSUL.</u> via ACID ETCH (AZURLITE) (Orders of 10 or more doors)



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



OBSCURED or TRANSPARENT <u>INSUL</u>. via ACID ETCH (BRONZE)



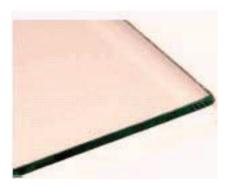
OBSCURED or TRANSPARENT <u>INSUL</u>. via ACID ETCH (GRAY 60%)



OBSCURED or TRANSPARENT <u>INSUL</u>. via ACID ETCH (GRAY 24%)



OBSCURED or TRANSPARENT <u>INSUL</u>. via ACID ETCH (SOLEX GREEN)



CLEAR: TEMP., LAMI,  $\underline{\text{INSUL}}., \& \text{LOW-E}$