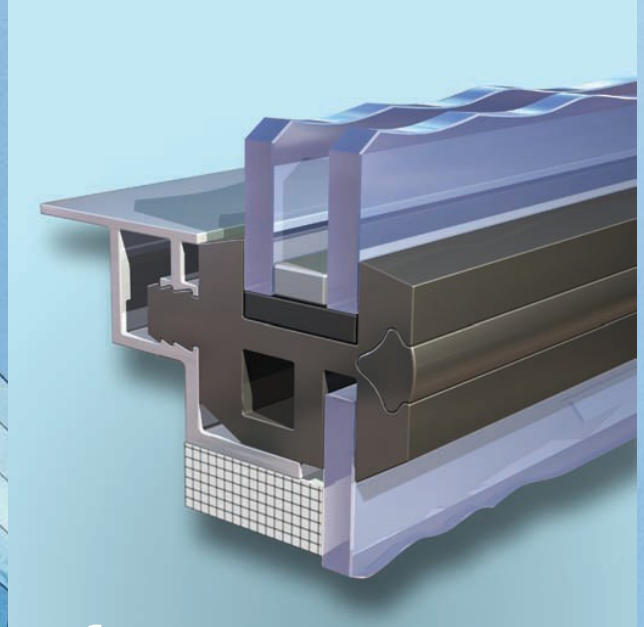


**STANLOCK**<sup>®</sup>  
ARCHITECTURAL GASKET SYSTEMS  
*A PRODUCT OF GRIFFITH RUBBER MILLS*



*Invest in the future*

*With proven performance*

*Invest in StanLock*

*The construction...*

**industry, economic landscapes, and architectural tastes have changed a lot in the last 50 years.**

Technologies have come and gone, as have entire structures. To seal a curtain wall against the forces of nature, there is only one product that has stood these tests of time. StanLock glazing gaskets are preformed elastomeric mechanical seals used to attach glass to a supporting framework of metal, concrete, or other rigid construction material. Since 1955, StanLock has been one of the most trusted and reliable curtain wall glazing systems in the industry. Properly installed, it will keep energy in, while keeping the elements out.



Curtain wall gasket systems provide much more than simple enclosure and protection; they must also function to control the environment within. The system must control solar radiation, temperature, and humidity in its functions as the outer envelope of a building. As a result of these factors, the glass is dynamic – it is always in motion. The very features that give the curtain wall its popularity – its sleek and thin profile combined with lightweight materials – have also contributed to the problems of providing for adequate weather seals. The seal must not only accommodate considerable movement between the panel or frame, but must also permit deflection under wind loads that would shatter a rigidly-held light of glass. StanLock Neoprene glazing gaskets offer an attractive, economical, and long lasting solution to the sealing problems of contemporary curtain wall design.

### **Benefits to StanLock glazing systems:**

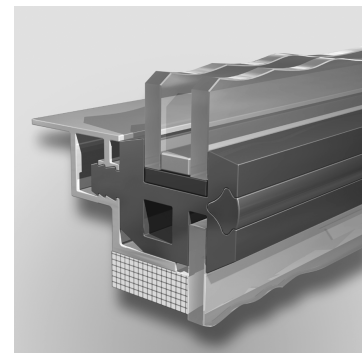
- **StanLock is a Zero Maintenance Product:** With over 50 years of in-field experience in all types of climates, StanLock is proven to last reliably.
- **Energy Efficient:** StanLock provides a complete thermal break from the frame of the building and the glass, providing a highly efficient envelope.
- **Supreme Condensation Control:** No metal is exposed in a StanLock system, greatly reducing problems associated with condensation and drainage.

- **No Field Splicing or Wet Sealant Joints:** StanLock gaskets are precisely engineered and manufactured to your specifications from the factory, providing a seamless, custom-fit gasket that fits right every time.
- **Superior Vibration and Noise Control:** StanLock's gaskets dampen noise and vibration at a level that is far superior than a metal frame system. They absorb shocks, such as gale-force winds, high vibrations of jet planes, and earthquake racking, thus contributing to glass performance.
- **Outstanding Deflection Performance:** StanLock eliminates glass to metal contact during racking or movement. This allows the gasket sealing lip to stay in contact with the glass and assuring continuous sealing before, during and after movement.
- **Exceptional, Enduring Appearance:** StanLock gaskets provide a crisp, black design element. Made from neoprene, they are unaffected by ultraviolet light, salt, and other common environmental pollutants.

### **Converting A Building**

To convert a building to insulated glass is easier than ever. A building that once used 1/4" glass can easily be transformed into an efficient, modern, and long lasting structure with the latest in insulated glass technologies. This can lead to lower energy costs, superior wind load performance, and possible energy related tax

credits. The installation of StanLock to any existing curtain wall building will provide minimum disruption to the function of the building. Every conversion will be a bit unique to the building, but the premise is simple. With the modular nature of a StanLock system (it can be easily detached from the building), conversion is much easier than other systems. Your StanLock representative is familiar with the entire conversion process.

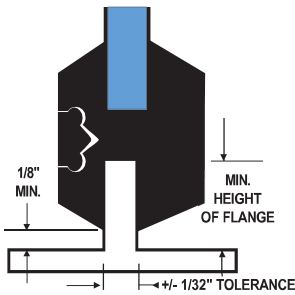


### **Requirements for Retrofitting**

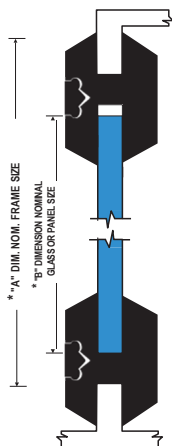
StanLock is a zipper wall system, not unlike many older systems that are no longer manufactured. If your building was originally built using any zipper wall or lockstrip system, StanLock gaskets can easily and affordably provide you a retrofit solution when replacing broken glass, renovating or rehabilitating the building, or converting from a single pane system to insulated glass. Compatible brands and systems include: F.H. Maloney Gasket Systems, D.S. Brown, Chardon Rubber, Cadillac Rubber, Reed Rubber, Ball Brothers, and Wright Rubber. If you are unsure of compatibility, your StanLock representative can provide assistance to determine what profile will work for you.

**“H” Type Gaskets**

Glazing gaskets shaped like the letter “H” mount onto a flange (also called a “nib”) within a frame. The insertion of the locking strip effects a seal against both the frame and the glass (or panel).



This creates a precise balance of mechanical pressures and counter-pressures between the frame and the gasket, and also between the glass (or panel) and the gasket. For the corners of the gasket, StanLock utilizes the exclusive TiteLock sealing lip to ensure maximum sealing pressure around the entire frame corner, while maintaining the conventional appearance of a molded gasket.



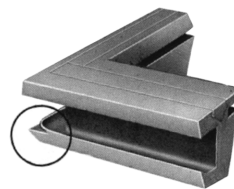
“H” Type

**Metal Nib Requirements**

- Frame dimensions may not deviate more than  $\pm 1/16$ " from nominal.
- Thickness of the flange must be within a tolerance of  $\pm 1/32$ " at all points and height must provide a minimum of 1/8" from metal base.
- The surface of the metal frames must be in the same plane at all points.
- Metal must be smooth, burr and rust free, and be treated to resist oxidation.
- Corners must also be smooth, free of gaps, welds, and offsets.
- Metal cast in concrete is acceptable as long as all tolerances are met.

**Concrete Frame Requirements**

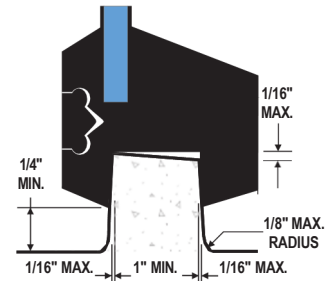
- Frame dimensions may not deviate more than  $\pm 1/8$ " from nominal.
- Minimum size of the nib is 1" wide and 1" high.
- Contact surface must be plaster smooth, waterproofed, and on a plane.
- No offset tolerances for corners.
- Some precast techniques may require a draft on some surfaces, should be on top of nib and taper out.
- Consult your StanLock rep for more details about concrete nib tolerances and installation guidance.



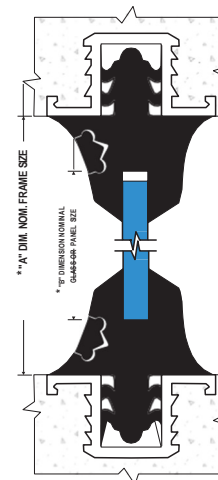
\* TiteLock—U.S. Patent Number 3,445,965

**Spline Type Gaskets**

Spline-type glazing gaskets are designed with a finned spline that fits into a preformed receiver groove. They are sometimes called “tongue-and-groove” gaskets. As with any other gasket design, spline-type gaskets seal by maintaining a precise balance of pressures between the frame and gasket and the glass (or panel) and gasket. The seal against the frame is effected by forcing the spline of the gasket into the groove so that



the side fins on the spline retain the gasket in the groove and thus hold it tightly against the frame surface. (Note that these side fins retain rather than seal.) The seal against the glass or panel in the spline-type of gasket is produced by inserting the lockstrip.



Spline (groove) Type

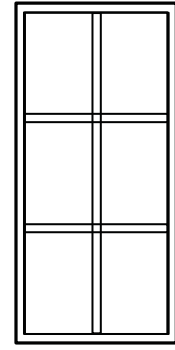
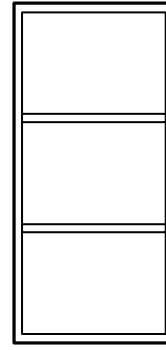
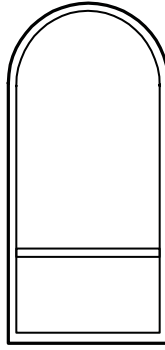
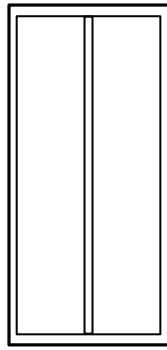
## Fit and Function

The purpose of a glazing gasket is to secure the glass to the structure while providing a sealed envelope of protection against the outside elements of nature. A zipper wall system provides the best of all worlds. It creates a complete thermal break, while allowing for easy installation and maintenance.

To attain the sealing pressures which are required to secure and seal panels to frames, StanLock gaskets are made in two parts: the gasket itself and a separate locking strip.

The lockstrip is harder in durometer than the gasket itself, allowing more pressure to be transmitted to the gasket's sealing surfaces. To effect the seal, the locking strip is inserted progressively, with a special tool, into a groove that is manufactured into the gasket. This puts the entire gasket under sufficient compression to produce the required sealing pressure. Insertion of the locking strip resembles the action of a zipper, hence the term "zipper gasket" is sometimes used to describe this type of product.

StanLock systems can be set quickly and easily. The on-site cost of installing StanLock gaskets is especially low considering the low impact to the building during installation. Walls, ceilings, and other building systems can remain intact during installation, replacement, or retrofitting. This keeps an existing building in operation, or offers more timeline flexibility with new construction.



The greatest cost benefit, however, is a proven zero maintenance track record. No caulking, painting, or special cleaning is ever needed. If a glass or panel is broken, replacement is simply a matter of removing the lockstrip from the gasket, inserting the new glass or panel, and locking it back into place in the same gasket with a new lockstrip.

## Field-tested for over 60 years

The exclusive Neoprene compound developed for StanLock gaskets has itself been proven by over a half century of use in building seals, and has been successfully used by architects in thousands of installations throughout the world.

StanLock gaskets seal against the elements - rain, snow, sleet and wind. They continue to function through wide temperature variations and compensate for thermal stresses. Most important of all, StanLock glazing gaskets withstand exposure to the elements with little or no deterioration.

## Architectural Design

StanLock can be manufactured for any number of possible building elevations. Single punch out openings, simple cross members, and extensive ladder gaskets are all popular configurations. Gaskets may also be made for a radiused frame or in the shape of an arch, oval or circle.

Regardless of your needs, StanLock is a high-quality and custom manufactured product designed to your specifications.

## Smaller Applications and Repairs

StanLock is also sold available in bulk footage for smaller applications and repairs. There are many advantages to this approach.

- Profiles are manufactured in 50 ft. rolls.
- Lockstrips are manufactured in 100 ft. rolls.
- Ideal for small repairs.
- Buy now and use when needed.
- Gaskets are designed to handle most common glass and frame requirements.
- Excellent cost advantage for small structures that can be engineered in the field.

## Wind Load

A primary consideration in design of glazing gaskets is the maximum allowable size of frame opening that may be used. To establish this, StanLock has been rigorously subjected to wind load tests. Float glass was installed into openings of varying sizes, in a wind load test chamber with StanLock glazing gaskets. Static pressures were applied to the point of failure. These test results form the basis for the wind load chart pictured below.

This chart is a modification of the familiar wind load charts for float glass as published by glass manufacturers. With respect to the thicknesses of float glass from 1/4" through 1" insulated glass with 1/4" lights, the blue lines in this chart are identical to those shown for conventional glazing in the glass manufacturers' charts. In these thicknesses, the test-to-failure established that the maximum allowable sizes for

Neoprene gasket glazing were significantly greater than indicated in the glass manufacturers' charts. For 1/2" thick annealed float glass, the maximum allowable sizes of openings for gasket glazing are less than some industry charts. These smaller maximum sizes for these two thicknesses are as shown in the chart.

## Maximum Allowable Sizes for Ladder Gaskets

Wind velocity tests have shown that when a ladder-type gasket with unsupported muntins or mullions are mounted in a frame, the glazed unit has a resistance to blowout pressure substantially lower than the glass or panel when all in one piece instead of subdivided by muntins. Gasket designs, which have both vertical and horizontal muntins within the same frame opening, should have rigid structural backup support in at least one direction. Some muntins

have been developed with tieback supports that anchor the entire installation to structural members of the building. These increase the resistance to blowout pressure for the entire installation. Experience has shown that it is not practical to make, transport, or install a ladder type gasket that is more than 8' x 20'. However, such units may be field joined into continuous walls of any length.

## Size Limitations for Other Types of Panels

It should be emphasized that the maximum allowable sizes apply only to annealed glass (including heat absorbing types) used singly or in insulating glass units.

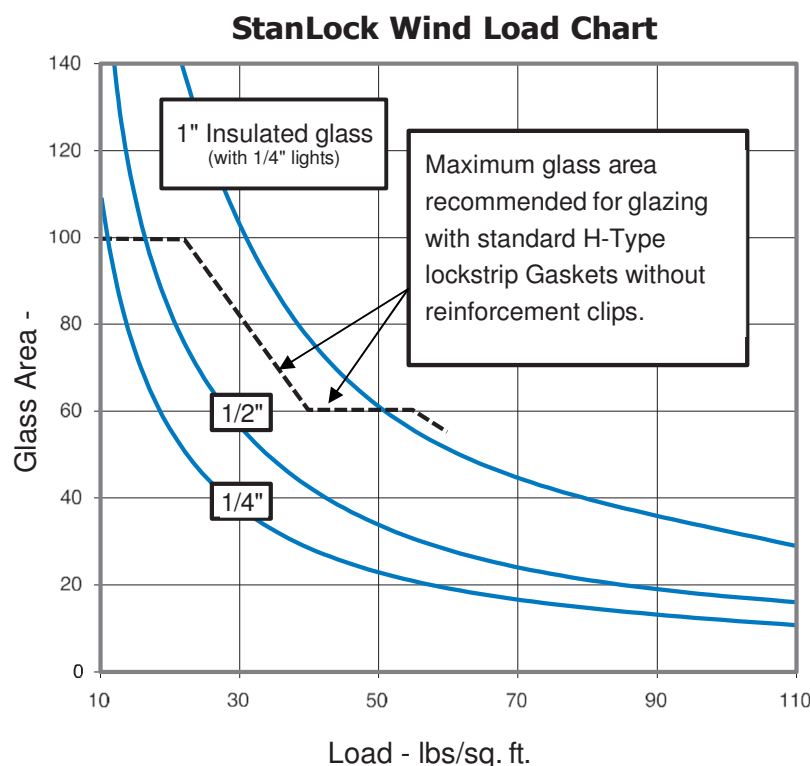
- Insulating glass unit size limitations are scaled from the chart by using a glass thickness 50% greater than the thickness of the individual glazed lights of the insulating unit. (Example: two 1/4" lights separated by 1/2" airspace.)

Find 1" insulated glass on W/L chart).

- For maximum size limitations on other types of glass, and for various types of panels, consult your StanLock representative.

## Calculating Dimensions

To determine the nominal glass (or panel) size with rectangular openings for any perimeter gasket shown in this booklet, simply subtract the "W" factor indicated below the applicable section drawing from the "daylight" frame height and width. In any Neoprene gasket installation, there are two critical sets of dimensions. One set is for the frames; the other is for the glass (or panels) which are to be installed inside the frames.



### Frame Dimensions

Frame dimensions should be taken from the inner surfaces of the frame.

- For “H”-type gaskets, this measurement is taken from the top of the flange or nib.
- For spline (or groove) type gaskets, this measurement is taken from the surface (across the top) of the groove. This opening is shown as the “A” dimension in both diagrams on this page.
- These frame dimensions are commonly called the “daylight” opening. The glass or panel dimension is referred to in the diagrams as the “B” dimension. It should be noted that the “A” and “B” dimensions are to be measured between two opposite sides of a frame as shown in the diagrams.
- In the individual gasket drawings in this catalog (pages 9 through 11) each gasket section is presented without showing the opposite side.

### Glass (or panel) Dimensions

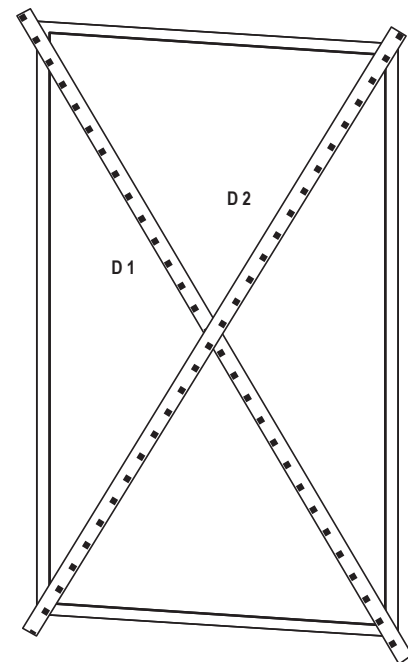
The glass (or panel) that is to be set into a frame must be sufficiently smaller than the frame so that insertion will be possible. In order to compute any glass size for any corresponding frame size, a clearance factor (or “W” factor) must be used.

- This factor depends on the gasket design and is listed in the catalog under every section drawing. To determine the required size of glass or panel for any given opening, subtract this “W”.

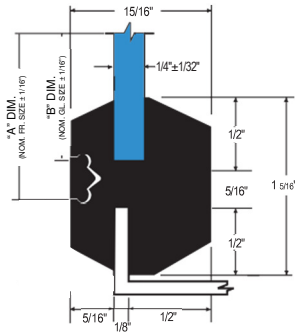
For cutting glass to odd frame shapes (not rectangular) having straight sides, the “W” factor cannot be subtracted from one side but must be translated perpendicular to each side of the unit. The result is a reduction from frame to glass or panel of one-half of the “W” factor from each side.

### Acceptable Tolerances

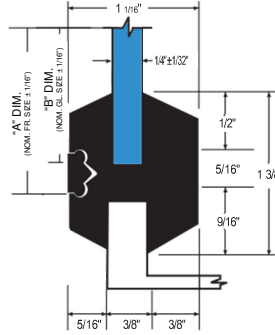
- Accurate frame dimensions are also the basis on which gaskets are produced properly to fit to the frames. Each gasket is made with a carefully computed oversize and is “crowded” when installed for proper functioning.
- For these reasons, any deviations from nominal dimensions must be held within the acceptable tolerances listed with every gasket section drawing in this catalog.
- In addition, it is important to check for any out of square condition, so as to cut the glass or panel to correspond with the frame. The measurements can be taken as shown in the diagram below. The maximum allowable differential is 1/8” between D1 and D2



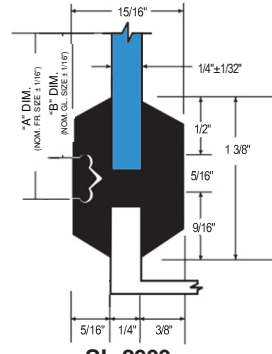
## 1/4" Glass or Panel Gasket Profiles



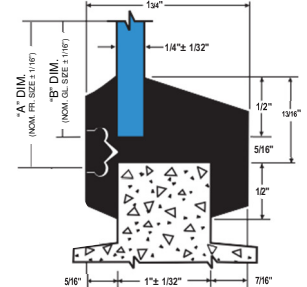
**SL-2008**  
"W" factor=13/16"



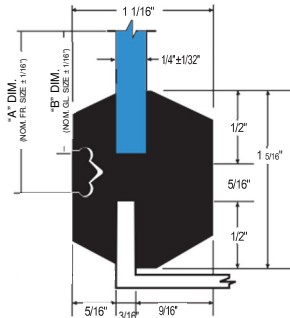
**SL-2011**  
"W" factor=13/16"



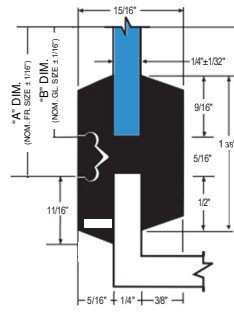
**SL-2000**  
"W" factor=13/16"



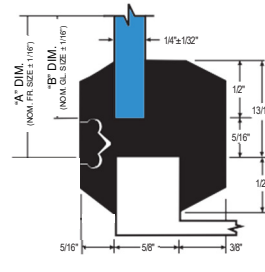
**SL-2026**  
"W" factor = 13/16"



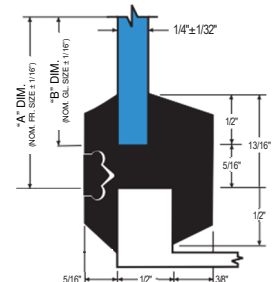
**SL-2036**  
"W" factor=13/16"



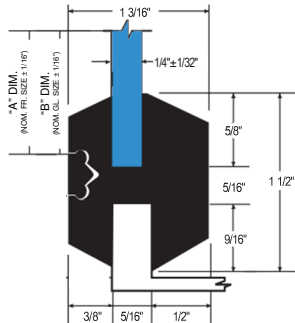
**SL-2101**  
"W" factor=13/16"



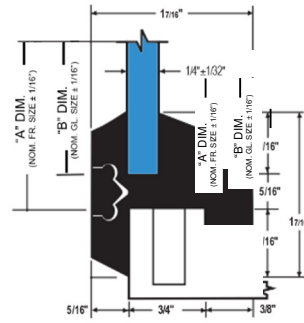
**SL-2064**  
"W" factor=13/16"



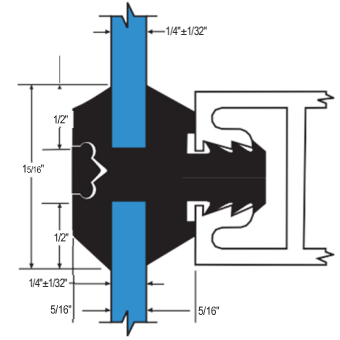
**SL-2043**  
"W" factor = 13/16"



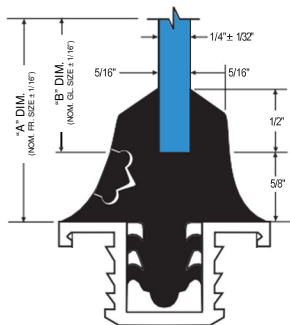
**SL-2051**  
"W" factor=13/16"



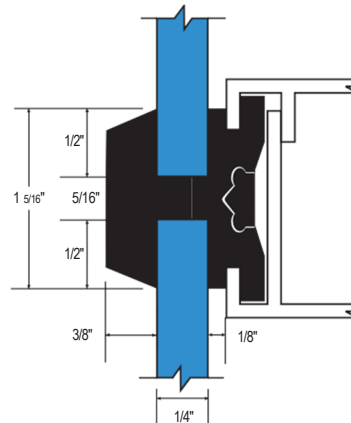
**SL-2071**  
"W" factor=13/16"



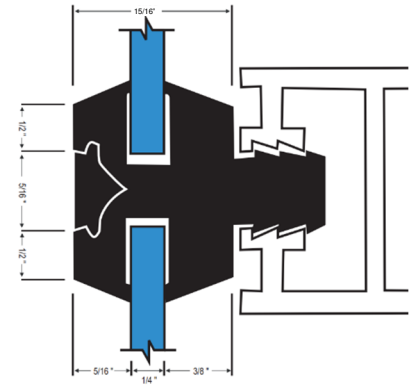
**SL-2086**



**SL-2082**  
"W" factor=1 7/16"



**SL-2085**  
RECOMMENDED FOR VERTICAL USE ONLY

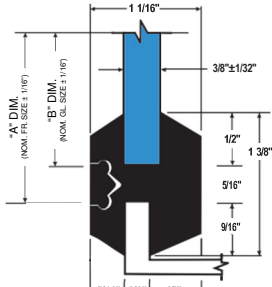


**SL-2055**

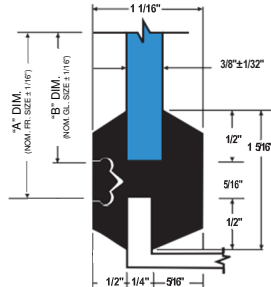
Custom Profiles Available Upon Request



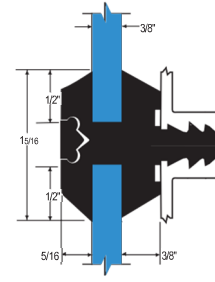
**3/8" Glass or Panel Gasket Profiles**



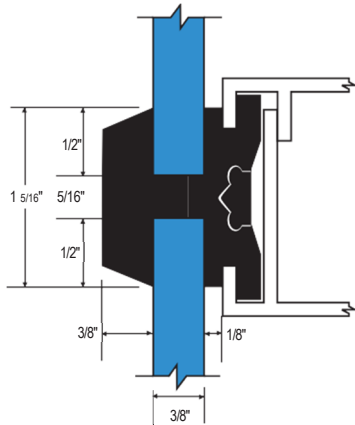
**SL-2250**  
 "W" factor = 13/16"



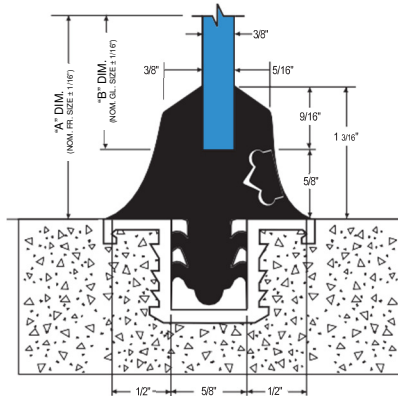
**SL-2252**  
 "W" factor = 13/16"



**SL-2272**

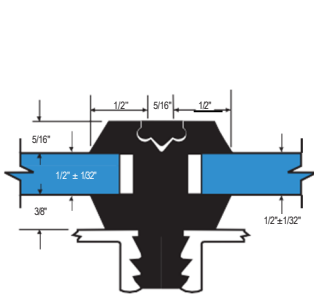


**SL-2298**  
 RECOMMENDED FOR VERTICAL USE ONLY

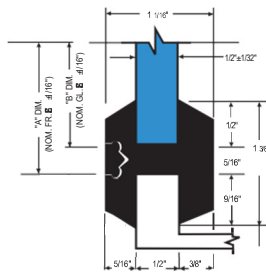


**SL-2300**  
 "W" factor = 1 7/16"

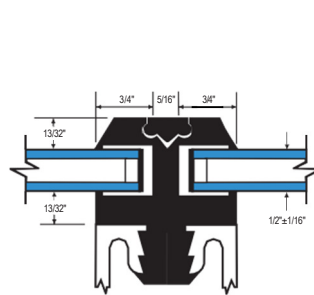
**1/2" Glass or Panel Gasket Profiles**



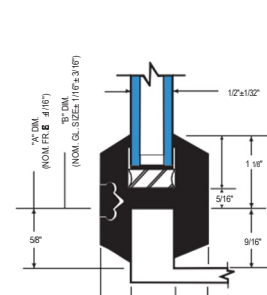
**SL-2392**  
 RECOMMENDED FOR VERTICAL USE ONLY



**SL-2376**  
 "W" factor = 13/16"

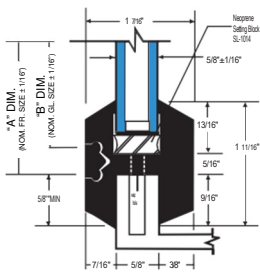


**SL-2391**  
 RECOMMENDED FOR VERTICAL USE ONLY

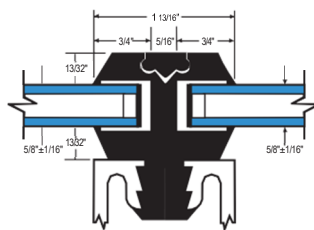


**SL-2380**  
 "W" factor = 15/16" W/O Setting Block  
 "W" factor = 1 1/16" W/ Setting Block

**5/8" Glass or Panel Gasket Profiles**

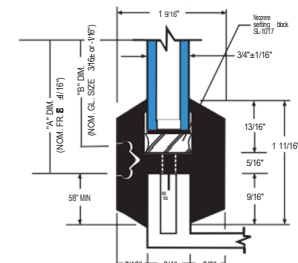


**SL-2480**  
 W factor = 15/16" for width  
 and 1 1/16" for height



**SL-2481**  
 RECOMMENDED FOR VERTICAL USE ONLY

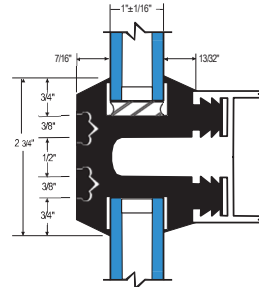
**3/4" Glass or Panel Gasket Profile**



**SL-2580**  
 W factor = 15/16" for width  
 and 1 1/16" for height

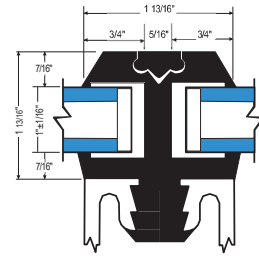
## 1" Glass or Panel Gasket Profiles

The gaskets shown to the right are intended to provide the full support required in applications of vertically stacked insulating glass units.



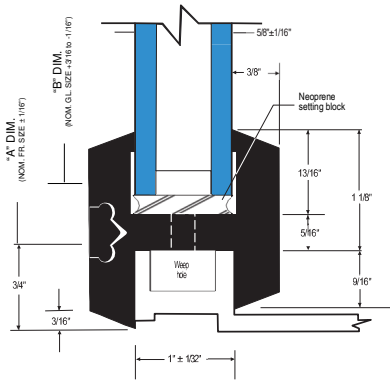
**SL-2791**

\*US Patent Number 3,866,374



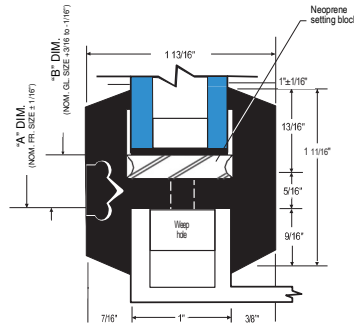
**SL-2778**

RECOMMENDED FOR VERTICAL USE ONLY



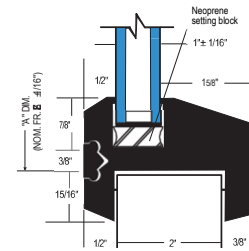
**SL-2799**

"W" factor = 15/16" for width and 1 1/16" for height



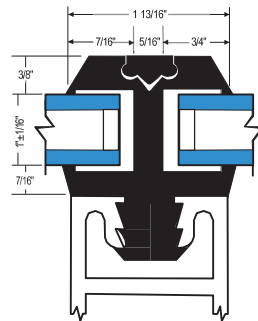
**SL-2752**

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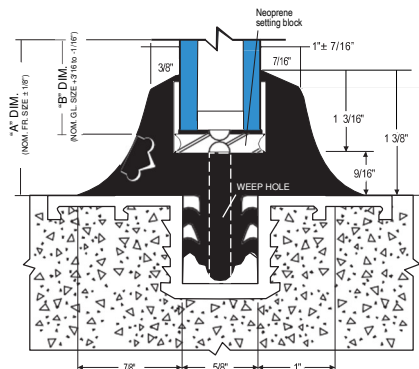
**SL-2793**

"W" factor = 1 1/16" for width  
"W" factor = 1 3/16" for height w/ setting block



**SL-2787**

RECOMMENDED FOR VERTICAL USE ONLY

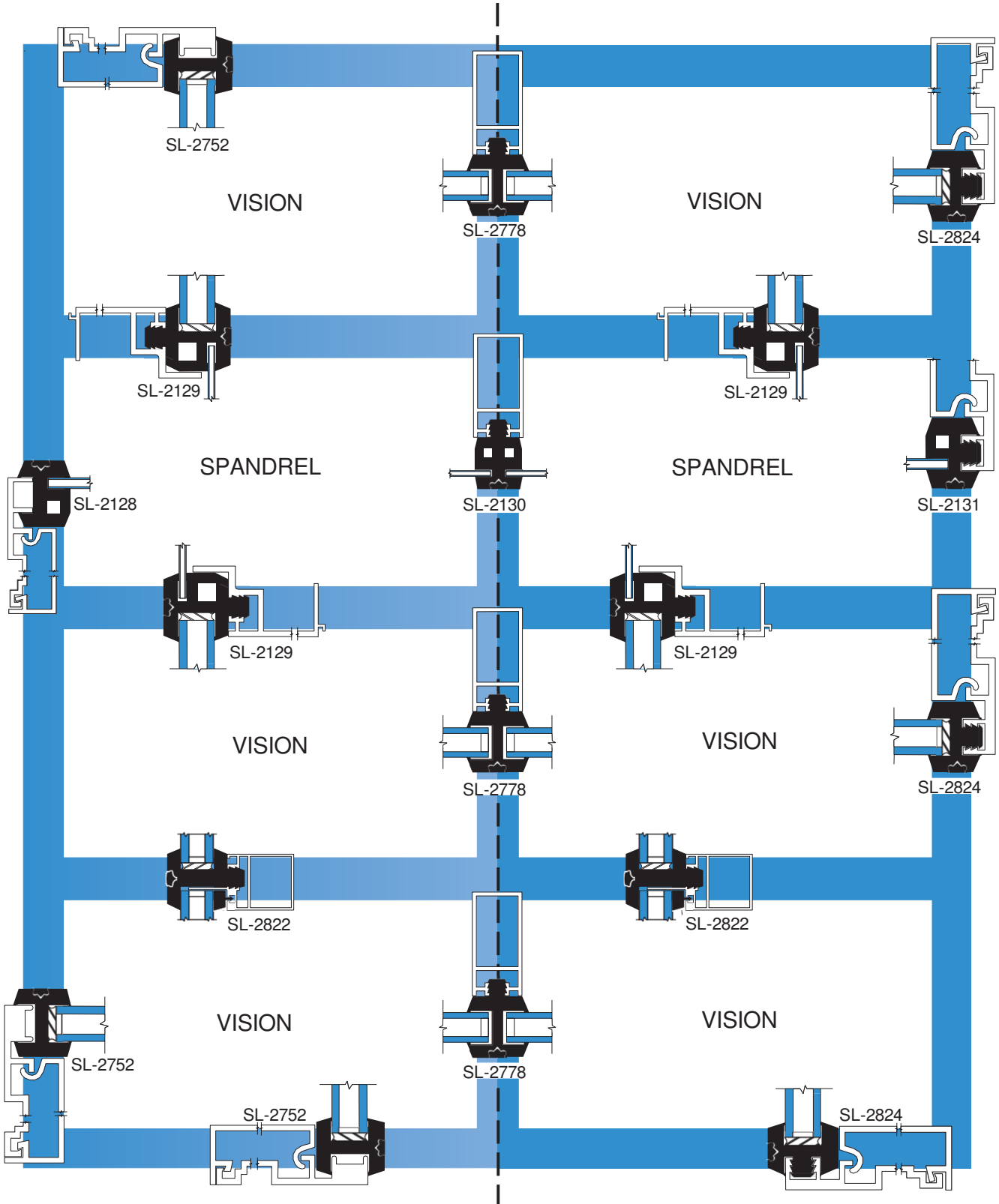


**SL-2782**

"W" factor = 1 5/16" for width  
"W" factor = 1 7/16" for height  
WEEP TO EXTERIOR

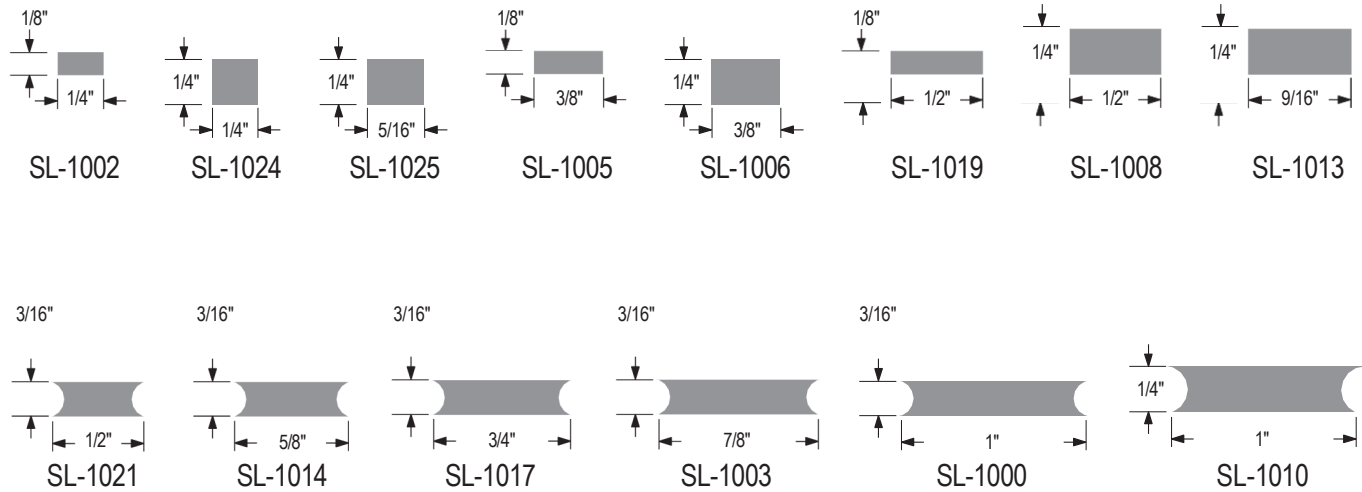
← **StanLock Hi-Rise System** (Not To Scale) **StanLock High Performance Hi-Rise System** →

1" vision  
 1" and / or 1/4" Spandrels



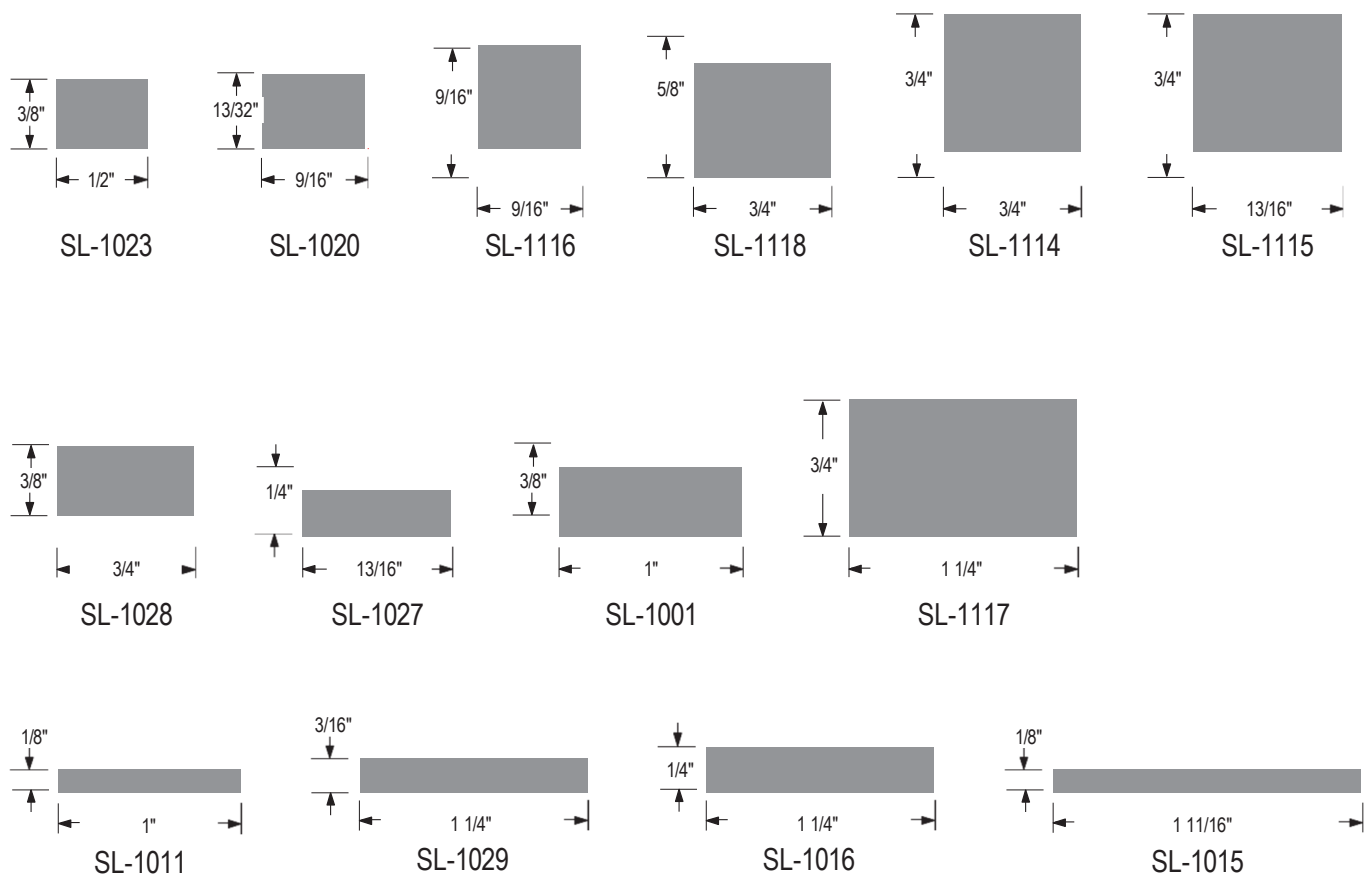
## Neoprene Setting Strips

(85± 5 Durometer) supplied only in 100ft continous rolls



## Neoprene Filler and Spacer Strips

(75± 5 Durometer) supplied only in 100ft continous rolls

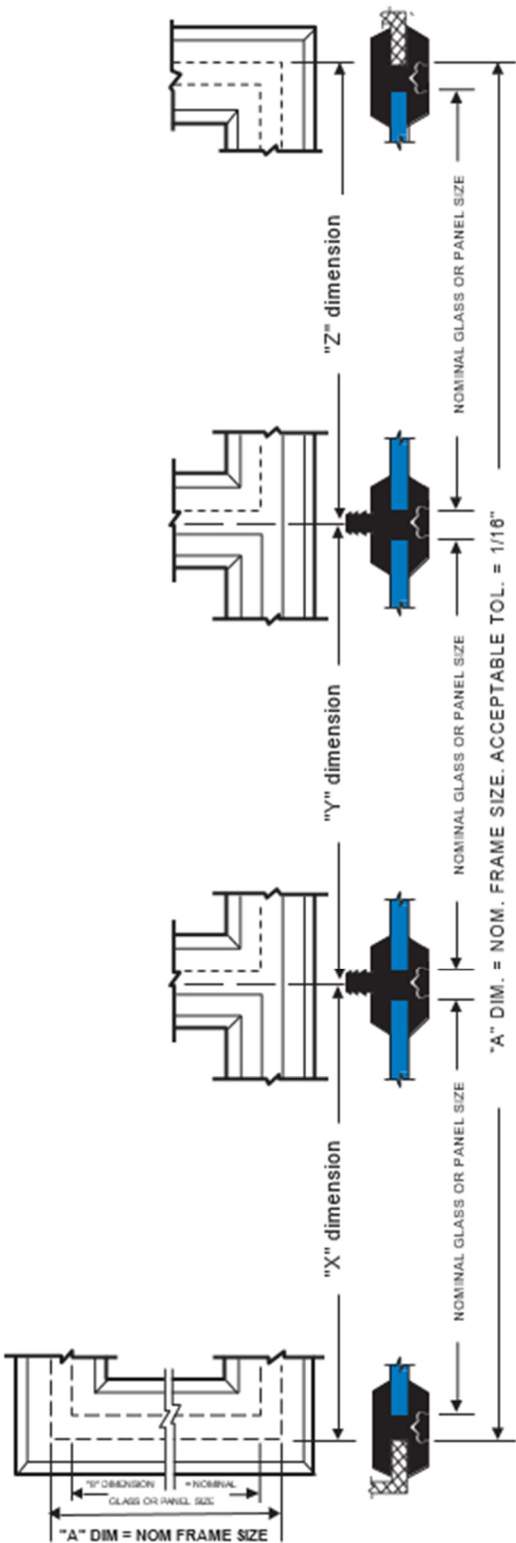


**Dimensions  
 Required for  
 Fabrication  
 of Gaskets**

**Dimensions for Muntin or Mullion Applications**

Where muntin (or mullion) gaskets are specified, the frame dimensions are computed from the inside of the frame (as in a single frame) to the centerline of each muntin (or mullion) gasket.

- In place of the “W” factor given with each section, special muntin (or mullion) factors have been computed. These are referred to as “X”, “Y” and “Z” factors. These factors for the sections having muntins (or mullions) appear in table below.
- To determine the glass or panel size for each section, the only step required is to subtract the “X”, “Y” or “Z” factors from the respective “X”, “Y” or “Z” dimensions.
- For the side having no muntin (or mullion) compute glass or panel size by subtracting the “W” factor from the frame size or “A” dimension. (See bottom portion of diagram at right.) from the frame size or “A” dimension. (See bottom portion of diagram at right.)



Perimeter Section Part Number	Muntin Sections	Factor “X”	Factor “Y”	Factor “Z”
SL-2000	SL-2055	5/8”	7/16”	5/8”
SL-2000	SL-2085	5/8”	7/16”	5/8”
SL-2018	SL-2055	5/8”	7/16”	5/8”
SL-2101	SL-2055	5/8”	7/16”	5/8”
SL-2011	SL-2085	9/16”	3/8”	9/16”
SL-2082	SL-2086	15/16”	7/16”	15/16”
SL-2082	SL-2085	15/16”	7/16”	15/16”
SL-2026	SL-2086	9/16”	3/8”	9/16”
SL-2068	SL-2092	5/8”	7/16”	5/8”
SL-2252	SL-2272	5/8”	7/16”	5/8”
SL-2250	SL-2272	5/8”	7/16”	5/8”
SL-2300	SL-2272	15/16”	7/16”	15/16”
SL-2300	SL-2298	15/16”	7/16”	15/16”
SL-2376	SL-2392	5/8”	7/16”	5/8”
SL-2380	SL-2391	3/4”	5/8”	3/4”
SL-2480	SL-2481	3/4”	5/8”	3/4”
SL-2782	SL-2787	1-1/8”	5/8”	1-1/8”
SL-2782	SL-2800	1-1/8”	5/8”	1-1/8”
SL-2752	SL-2778	7/8”	5/8”	7/8”
SL-2752	SL-2800	7/8”	5/8”	7/8”
SL-2752	SL-2129	7/8”	5/8”	7/8”
SL-2128	SL-2130	5/8”	7/16”	5/8”
SL-2752	SL-2791	1-1/4”	1-9/16”	1-1/4”
SL-2803	SL-2803	N/A	2-13/16”	N/A

These factors are based upon frame and glass tolerances as specified with each gasket section illustrated. When the specified tolerances are not maintained, the factors shown may not apply.

These factors do not allow for the use of setting blocks. When setting blocks are used, the appropriate height dimensions should be reduced by an amount equal to the setting block thickness.

Insulating glass should not be stacked vertically without proper structural support under each glass unit.

**Mockup installation desirable**

Experience has indicated that a glazed mockup of a typical frame opening is highly desirable in order to confirm proper glass sizes and eliminate any potential complication. This simple check can be accomplished by using any rigid panel such as plywood of the proper thickness.

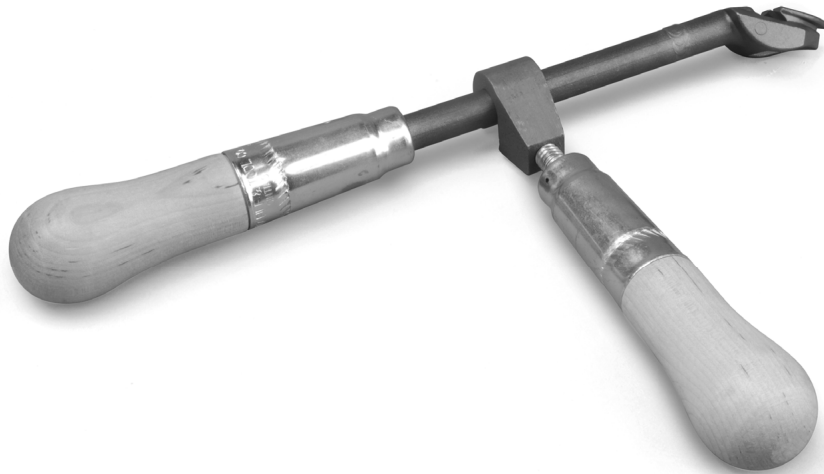
### **Heavy Duty Installation Tool (12224SL)**

A newly designed installation tool makes the lock strip easier to install than any other installation tool tested by StanLock engineers. Comparative time studies made with the new StanLock tool have established an average saving in labor time of up to 20%, as compared to previous StanLock tools.



### **Adapter Handle (12228SL)**

StanLock offers an adapter handle which doubles the manual “zipping” power by turning the new tool into a two-handed operation. The adapter is affixed to the tool at any angle or position required for maximum push pressure.



### **Spatulas (12229SL)**

StanLock also supplies an exclusive spatula. These are used in pairs to open the gasket lips to insert glass.



The Neoprene compound used in StanLock gaskets possesses the necessary physical properties to provide resilience in the sealing lips of the gaskets and, at the same time, to offer resistance to sunlight, ozone, and fire. This compound meets and exceeds test requirements established for glazing gaskets by The American Society for Testing and Materials (ASTM). (See

table below.) For example, The StanLock Compound substantially exceeds ASTM C-542 test requirements for tensile strength, elongation at rupture and compression set. These properties indicate characteristics that are most desirable in glazing gaskets and which produce the optimum amount of resilience and resistance to even the harshest of environments.

## Physical properties of StanLock Neoprene gaskets

Property	Requirements	Test Method
Tensile strength, min	2000 psi (14MPa)	D412
Elongation at rupture, min, percent	175	D412
Tear resistance, min	120 lb/linear in. (214 N/linear cm)	D624 (Die C)
Hardness, durometer Aa	75 ± 5	D676
Compression set, max, percent, 22 h at 212 F (100 C)	35	D395 (Method B)
Brittleness temperature, min	-40 F (-40 C)	D746
Ozone resistance, 1 ppm 100 h at 100 F (37.7 C), 20 percent elongation	no cracks	D1149
Heat aging, 70 h at 212 F (100 C) Change in hardness, max	+10-0 durometer points	D573
Loss in tensile strength, max, percent Loss in elongation, max, percent	15 40	
Flame resistance	gaskets must not propagate flame	C-542

*(a) If a separate stock is used for the locking strip, it may have a hardness of 80 ± 5 durometer points and a minimum tensile strength of 1800 psi (12.5 MPa). In all other respects, it must meet these specifications.*



**STANLOCK GASKET PRODUCT  
LIMITED WARRANTY**

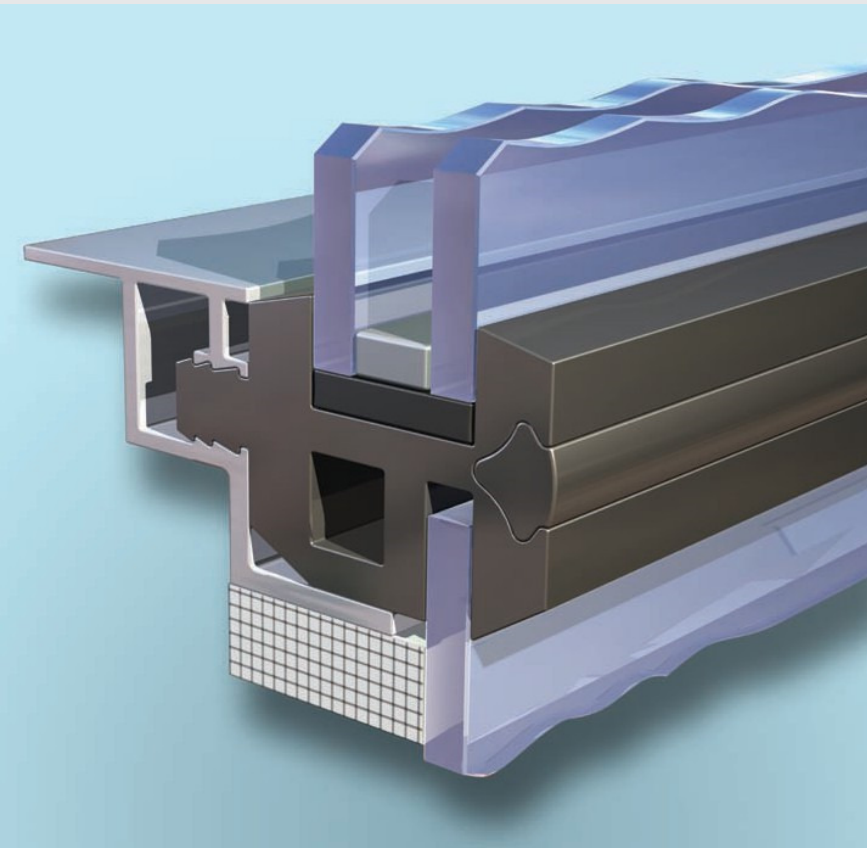
Seller warrants, to the original purchaser only, that all products manufactured by seller ("Product") are free from defects in material and workmanship under normal use and when properly installed for a period five (5) years from the date of delivery to the original purchaser. Any defective product shall be returned to seller's factory, with transportation charges or duties to be paid by purchaser. Seller shall examine the product and determine to its satisfaction that the product is indeed defective. Upon such determination, Seller's liability shall be limited to replacement of the defective product, and under no circumstances shall seller be liable for special, indirect or consequential damages. This limited warranty shall be the exclusive remedy for such defects in material or workmanship. Purchaser hereby waives all other remedies arising by law or otherwise. Seller does not warrant the product to meet the requirements of the safety code of any state, municipality or other jurisdiction, and purchaser assumes all risk and liability whatsoever resulting from the use thereof, whether used singularly or in combination with other product, equipment, machines or apparatus. This Limited Warranty shall not apply to any product which shall have been altered outside of seller's factory or which has been subject to misuse, negligence or accident, or which has not been fitted and/or installed in compliance with seller's written instructions. Seller neither assumes nor authorizes any person to assume for it any other liability in connection with its product. This warranty is the only warranty applicable to seller's product. There are no warranties which extend beyond the description on the face hereof.

All other warranties, express or implied, including but not limited to the implied warranties of merchantability and fitness for a particular purpose are hereby disclaimed.

Purchaser acknowledges that it is not relying on seller's skill or judgement to select or furnish goods suitable for any particular purpose and that there are not warranties which extend beyond the description included herein.







**Corporate Office** 2625 NW Industrial Street, Portland, Oregon 97210 **503-226-6971** or **1-800-321-9677** Fax 503-226-6976

**StanLock Representative:**

A large, empty white rectangular box intended for the representative's name and contact information.