

SHOWER DOORS & HARDWARE



Three-Year Limited Residential Warranty

Alumax Bath Enclosures by Sapa is pleased to warrant to its dealers and residential customers that the products supplied by it shall be free from defects in material and workmanship for three (3) years from purchase of the product, provided they are installed and maintained according to the manufacturer's recommended practices and installation instructions.¹ The Alumax Limited Warranty applies to the original residential owner only, and is not transferable.

**Proof of Purchase and/or Registration of the product required for warranty coverage.
Registration instructions accompany the product or available at www.alumaxshowerdoor.com.**

What Will Alumax Do?

Alumax will repair or replace, at its discretion, any product found to be defective in material or workmanship during the applicable warranty period. Labor is not included. In the case of discontinued products subject to warranty coverage, Alumax reserves the right to substitute comparable product of equivalent function.

What is Not Covered?

This limited warranty applies only to materials and workmanship supplied by Alumax. This limited warranty does not cover glass or outside fabrication provided by others. It excludes all wear items and does not cover defects caused by improper installation of the product. Laws and building and safety codes governing the design and use of bathrooms vary widely. Alumax does not control the selection of product, configurations, operating hardware or glazing materials, and assumes no responsibility for such.

ALUMAX DOES NOT MAKE ANY OTHER REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT ANY IMPLIED WARRANTIES ARE IMPLIED UNDER STATE LAW, SUCH WARRANTIES ARE LIMITED TO THE DURATION OF THE APPLICABLE LIMITED WARRANTY TIME FRAME OF THREE (3) YEARS.

IN NO EVENT SHALL ALUMAX BE LIABLE FOR SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, LOSS OF USE OR PROFITS, PERSONAL INJURY, OR DAMAGE TO OTHER PROPERTY.

Some states do not allow the exclusion or limitation of implied warranties, or the exclusion or limitation of special, incidental or consequential damages, therefore these limitations and exclusions may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

How do You Get Warranty Assistance?

To make a claim under the terms of this Limited Warranty, contact your local Alumax Dealer or call or write Alumax Consumer Service at 800-643-1514, 248 W. Greene St., Magnolia, AR 71753. Proof of Purchase and/or Registration of the product is required for warranty coverage.

¹ The manufacturer's recommended practices and installation instructions are available at www.alumaxshowerdoor.com, by contacting your local Alumax Dealer, or by calling or writing Alumax Customer Service at 800-643-1514, 248 W. Greene St., Magnolia, AR 71753.

CRL

Limited Warranty

SHOWER DOOR HCTFY CTG

WARRANTY INFORMATION

C.R. Laurence Co., Inc. ("CRL") warrants that for a period of three (3) years following the date of sale to CRL's customer, CRL **Shower Door Hinges** are warranted against material defects and defects in workmanship. All other **Uj qy gt 'F qqt 'J ctf y ctg** is warranted for 1 year from date of sale. All warranty claims are subject to inspection by CRL prior to CRL providing a remedy for the warranty claim.

This Warranty will not apply if after inspection by CRL, it is determined that the **Shower Door Hctfy ctg** has been installed and maintained in a manner that is not in conformity with the instructions and guidelines set forth by CRL for proper installation and maintenance.

CRL's responsibility to provide a remedy under this Warranty shall be limited to either a refund of the purchase price, or to provide a replacement of the **Shower Door Hctfy ctg**. The refund or replacement shall constitute the limit of CRL's liability and obligation for any material defect or defect in workmanship in the **Shower Door Hctfy ctg**.

This Warranty is exclusive, and CRL makes no other warranty, express or implied, including without limitation, any implied warranty of merchantability or fitness for a particular purpose. In no event shall CRL be liable under any legal theory (including but not limited to contract, negligence, strict liability in tort, or warranty of any kind) for any indirect, special, incidental, consequential, or exemplary damages (including but not limited to lost profits).



Tempered Glass Standards, Warranty and Disclaimer

Tacoma Glass Manufacturing manufactures glass which conforms with various industry standards. Float glass products comply with the ASTM C-1036. Tempered glass products comply with the ASTM C-1048; 16 CFR 1201 and ANSI Z97.1. In addition, Tacoma Glass's tempered glass is independently certified by accepted industry groups such as the SGCC (Safety Glazing Certification Council), and meets guidelines set by the Glass Association of North America.

Tempered Glass nevertheless may contain matter such as undissolved batch elements and nickel sulfide stones or inclusions. The presence of such matter does not render the glass defective. Under some conditions, however, such materials may cause breakage, sometimes referred to as "spontaneous breakage". So-called spontaneous breakage may also be caused by damage such as scratches, chips or gouges which can occur after Tacoma Glass has sold the glass product. Spontaneous breakage can occur months or even years after installation. **Tacoma Glass does not warranty its glass against the presence of such materials or against breakage of any kind or cause, including spontaneous breakage.** Tacoma Glass's customer understands and accepts that tempered glass may be susceptible to breakage due to these and other causes and, by placing or proceeding with any order for tempered glass, Tacoma Glass's customer agrees that it will not seek to hold Tacoma Glass responsible for any costs, damages, or injuries, including accidental or consequential damages, personal injury, or repair/replacement labor, due in whole or part, directly or indirectly, to glass breakage.

Tempered Glass Breakage

1. There is frequently a misconception that tempered glass is "unbreakable" or "nearly unbreakable". This is NOT true. Tempered glass is definitely breakable and many of the things that can break annealed glass can also break tempered glass.
2. Fully tempered glass as supplied for shower door, patio doors, etc., is four to five times as strong as annealed glass of the same type and thickness and can meet CPSC break-safe requirements for Category I or II safety glazing.
3. Fully tempered glass, when broken, fractures into hundreds of small particles. This is by design and is excellent proof of a well tempered product, not of a defective product. It is this fail-safe characteristic of tempered glass that makes it an excellent product for safety glazing applications.
4. Breakage of annealed glass is usually a simple one or two line fracture attracting little attention or comment (unless the glass has been smashed by a severe impact). Cracked lights of annealed glass have been seen by most everyone a number of times and cause no great surprise. Conversely, breakage of fully tempered glass is spectacular, infrequently seen or experienced by the public, and attracts considerable surprise, attention, comment, and question.
5. Annealed glass is easily broken by mechanical stress, impact, and moderate thermal stress. Fully tempered glass will withstand much greater stresses than annealed glass before failure. However, it is the nature of fully tempered glass that it CANNOT break in the simple fashion of annealed glass but the entire light must "release" completely into small fragments even for a very small initial fracture.
6. Another characteristic of tempered glass is that occasionally a light will not release immediately at the time of damage, but at sometime, perhaps many weeks, later. This adds to the surprise and amazement of by-standers since no apparent cause is immediately evident. This type of behavior is one of the factors leading to the so called "spontaneous or delayed breakage" of tempered glass.
7. Spontaneous or delayed release can occur if the light has been damaged during its manufacture, shipping, subsequent installation handling or use, or there is an inherent weak spot or stress concentration within the glass body. Most all damaged lights or lights with inclusions that cause excessive stress concentrations will not survive the thermal rigors of the tempering operation. Of those few that do survive, most will release within a day or so, leaving a small percentage that may not release until even weeks later. These few lights can be expected to be a small portion of unexplained breakage.
8. Although some spontaneous breakage will occur as noted in #6 and #7 above, much breakage is erroneously called "spontaneous" only because there was no easily visible cause. Frequently, inspection of the surround will reveal damage done to the framing thru installation or abuse so that the glass is stressed near its breaking point and a subsequent movement, or temperature change forces that glass to yield.

9. Accidental or deliberate vandalism can be another cause of unexplained breakage.

SUMMARY: Since glass (including tempered glass) can be broken and because most unexplained breakage is beyond the manufacturer's control, it is unreasonable and impractical for anyone to effectively warrant against glass breakage.

Oldcastle Glass on Spontaneous Breakage of Tempered Glass

Spontaneous Breakage of Tempered Glass

All float glass contains some level of blemishes including stones, seeds and bubbles, which are an unavoidable part of the glass manufacturing process. ASTM C1036, Standard Specification for Flat Glass, is the industry standard that provides the specific requirements for size, intensity and frequency of blemishes that are allowed.

One type of stone (crystalline blemish) is nickel sulfide (NiS). Nickel can be present in any particular batch of glass, derived from trace amounts of nickel in the sand, the fuel, the firebrick, or even the machinery used to mix the batch. Sulfur can come from the fuel or from sodium sulfate, one of the glass batch ingredients. When NiS is present, the quantity is typically extremely small.

Most NiS stones are stable and cause no problems. However, there is a small quantity of very rare NiS stones formed, which, when cooled slowly from about 7500F down to room temperature, undergo a change in crystalline structure (phase change) that results in an increase in volume. In annealed glass (standard float glass) this expansion takes place while the glass is at annealing temperatures and so stress relaxation eliminates the tensile stress caused by the phase change.

NiS inclusions may undergo a phase transformation (shrink) in tempered glass due to the re-heat/quench operations required to fabricate tempered glass. The rapid quench of the tempering process traps the inclusion in its small (Alpha) phase. Over a period of time, these inclusions may revert back (expand) to their original (Beta phase) state. When the inclusion is located in the center tension area of tempered glass, this increase in volume may cause a localized stress increase sufficient to break the glass.

Such inclusions can cause spontaneous breakage in tempered glass, without any load being applied, at any time, even 5 or 10 years after the tempered glass has been fabricated. These inclusions are typically so small (about 0.010" diameter) that they are virtually impossible to locate and identify in an individual unbroken lite of glass.

Glass manufacturers have recognized these details and have instituted programs of batch quality control along with the elimination of any nickel containing materials from their raw material and glass handling systems. Automatic inspection of 100% of the float ribbon has also contributed to the reduction in the number of inclusions of all types present in float glass. Even though these improved quality measures are not capable of eliminating all such inclusions, the success of these programs is evident as a near elimination of spontaneous breakage reports related to current production float glass.

Heat soaking is a process that can uncover some NiS inclusions present in an individual lite of glass. But it is not 100% effective, and carries the risk of reducing the compressive stress in tempered glass.