

Stop Scratched Glass - By Daniel A. Fields

The path to stopping scratched glass starts with the choices and decisions every general contractor makes when selecting material suppliers and subcontractors for their projects. Selecting only quality window suppliers and competent subcontractors will have a direct effect on the resulting quality of any house or building. Most scratched glass is related to, or is a directly result of, the following areas.

Window Protection

The best solution for any problem is prevention. The general contractor and all subcontractors have a responsibility to insure all windows are protected during the entire construction process. This will help prevent harmful construction debris, such as paint, texture, plaster, and concrete from coming into contact with the glass surface. The more construction debris that is present on the glass, the higher the possibility of scratching when that glass is cleaned. Protecting windows during all phases of construction must be implemented and enforced if scratched glass is to be significantly reduced or eliminated.

Window Cleaning

The selection of a skilled window cleaner is a vital step in the prevention of scratched glass. It is important that the general contractor understands that this is a very specialized type of window cleaning. Construction window cleaning should never be attempted by anyone who is not qualified or specifically trained to safely remove construction debris from glass. Often plasterers, painters, and other tradesmen unsuccessfully attempt to fill this role.

Glass Quality

All builders should know the difference between high and low quality tempered glass so they can make an educated decision about what is used in the windows installed on their projects. It is frequently encountered in the field, and has been repeatedly confirmed by experts, that some tempered glass will scratch during normal construction window cleaning. This scratching is a direct result of fabricating debris which was not properly removed from the glass surface prior to the tempering process. As a result, these particles are detached during normal construction window cleaning and cause major scratching, usually over the entire glass surface. During the past several years, defective tempered glass has been the leading cause in most cases of excessively scratched glass. The general contractor has a responsibility to select quality window manufacturers that will stand behind their products, if and when scratched glass problems arise.

NEXT STEPS

Once all of the facts regarding the issue of scratched glass and its causes are out in the open, it is important to address the next steps in the resolution of the problem. The key to solving this issue lies in education of builders, window cleaners, and the construction industry as a whole. All parties need to be educated on the importance of high-quality tempered glass.

Builders must know exactly what they are buying and refuse to accept any defective tempered glass that can be scratched when cleaned, either by their window cleaner or a future homeowner. After builders know the difference between high and low-quality tempered glass, most of them will demand only quality tempered glass that can be cleaned by standard construction window cleaning techniques.

Builders would never accept a window from their supplier covered with paint or plaster, so why would they accept defective tempered glass covered with fabricating debris that scratches when cleaned? The only acceptable answer is because they didn't know the cause of the problem.

Construction window cleaners must also educate themselves about the issues. They must be aware of the risk involved in using any scrapers to clean construction debris off defective tempered glass. They should be educated on the causes of this tempering defect and be prepared to advise their builder on the risks of buying such glass. Window cleaners should also notify their builders that all windows should be protected during construction and that any unprotected windows will require the use of scrapers to remove construction debris. Unfortunately, even some types of glass protection require the use of scrapers to be removed which is why it is especially important that glass be free from defects.

The construction industry as a whole must be aware of the differences in surface quality of tempered glass. They must also acknowledge the importance of protecting all windows during construction, and ensure that proper steps are taken to meet this end. And finally, they must not overlook the importance of using skilled construction window cleaners who are trained to clean windows in a construction environment.

A major difficulty in the resolution of the scratched glass issues found in the construction industry is the level and quality of effort put forth by the involved parties to solve the problem. Many of the most recent steps have merely addressed the symptoms or falsely placed blame on innocent parties. Until the glass industry as a whole acknowledges the true issues, and works together to solve them, the volume and severity of scratches has no hope of diminishing. The following is a summary of the current industry position.

There is no standard or regulation to require glass washing prior to tempering. Glass washing obviously has a direct effect on tempered glass quality, as unremoved glass fines get fused to the surface of the glass during the tempering process.

There is no standard for detecting or rejecting tempered glass with fabricating debris on the surface. Any fabricating debris fused to the surface of tempered glass substantially increases the likelihood that the glass will scratch during construction window cleaning.

The safe use of scrapers has been a standard window cleaning technique for construction window cleaners for decades. Failing to address the true issue of glass quality and protection will do nothing but drive the quality of glass in the construction industry lower than it currently is. Until general contractors and their subcontractors protect windows from all construction debris, scrapers will continue to be the safest method for removing this debris from the glass.

It has been stated by some tempered glass manufacturers that the particles found on the surface on their tempered glass is a result of an unknown source that they are unable to identify. This position is an irresponsible attempt to deflect the blame. A simple composition analysis would identify the makeup of these particles, allowing the manufacturer to determine and eliminate the source. Furthermore, regardless of the difficulty involved in determining the source of particles, it is the window manufacturers' responsibility to ensure a quality product, no matter what changes are necessary in their process.

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