

TECHNICAL BULLETIN - TB002

Intermittent Circular Marks on Glass – Phantom Suction Cups

On occasion and under certain specific lighting and/or climatic conditions, the appearance of circular marks on glass may become visible. The appearance of these marks are not permanently visible, but can cause wonderment and at times concern.

During the window manufacturing, fabrication, and installation processes, many practices are utilized in order to make, process, store and install the glass. These processes include handling the glass in the safest manner while also attempting to limit contact between the glass and any other surface as much as possible. Nevertheless, contact must be made in certain instances, such as whenever the glass needs to be moved. Suction cups have been adopted across the industry for this purpose as it is a safe way for people to maneuver the glass, provides the strongest grip, and is non-abrasive to the glass.

While these suction cups are manufactured out of soft PVC plastic or neoprene, their use may still microscopically change the surface of the glass at the point of contact. As such, condensation due to fog, rain droplets that trickle down a pane, even sunlight caught at a very specific angle, may allow this phenomena to appear. However, because their appearance is only noticeable in very specific conditions and it does not affect the functionality, performance, or longevity of the glass it is not considered a defect, and further, is not recognized as one by any industry standards.

It is possible that this condition or phenomena will dissipate entirely on its own, over time, due to normal atmospheric conditions, climatic conditions, and regular cleaning. Should the appearance of these marks be disconcerting in the interim, it may be possible to minimize and (potentially) remove the surface demarcation with a very mild abrasive cleanser like cerium oxide. If attempting this method be sure to clean the surface area of the glass first using regular methods. Then apply the cerium oxide and use a wet, clean cloth to assertively rub the surface. We also recommend that you test this method on a small area first.

For industrial purposes cerium oxide may be purchased from C.R. Laurence in Canada and the US.
Canada website: www.crlaurence.ca
US website: www.crlaurence.com

British Columbia, Canada physical address:
C.R. Laurence of Canada
11920 Horseshoe Way
Richmond, BC V7A 4V5

For household use cerium oxide may be purchased in small quantities at various hardware shops and big box stores as well as online at www.amazon.ca. Ensure that you order the high grade optical polishing treatment.

References:

[http://www.vitroglazings.com/getmedia/e60b6f74-f940-41da-85f0-f768b966e9f9/31_TD-107-Residue-on-Glass-\(rev\)_1.pdf.aspx](http://www.vitroglazings.com/getmedia/e60b6f74-f940-41da-85f0-f768b966e9f9/31_TD-107-Residue-on-Glass-(rev)_1.pdf.aspx)

