



Protecting Exterior Fenestration & Glazing Surfaces

BEC Conference – Las Vegas
February 18, 2008

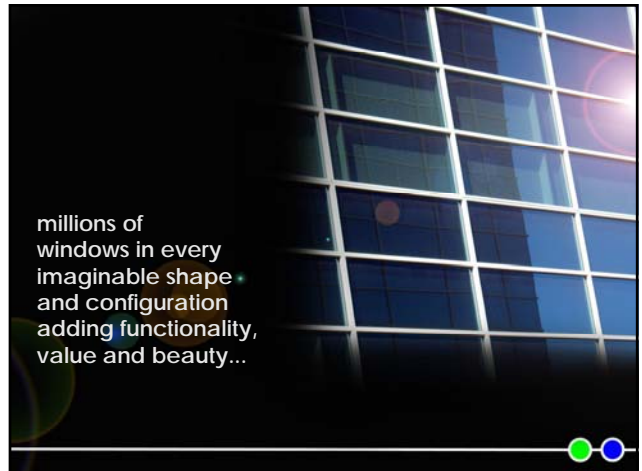
Mike Burk – Edgetech IG



a serious & growing challenge:



around the globe
tens of thousands of
buildings are under
construction



millions of
windows in every
imaginable shape
and configuration
adding functionality,
value and beauty...



What percentage of new projects need glass units replaced because of scratches caused during post-construction cleanup?

e-glass poll

Percent of respondents	Percent of replacements
33.33%:	< 1 Percent
42.86%:	1 to 5 Percent
15.48%:	5 – 15 Percent
3.5%:	15 – 25 Percent
4.76%:	> 25 Percent

e-glass poll

University of Saskatchewan
ON CAMPUS NEWS

Scratched Spinks windows replaced. Insurance covers cost of replacing three-quarters of windows in new building.

By Colleen MacPherson

Mysterious scratches, probably caused in a cleaning process, have necessitated the replacement of about 75 per cent of the windows in the Spinks Addition.

A "protracted investigation" by the university and the company insuring the Spinks Addition project could not determine definitively the cause of the scratches, said Colin Tennant, director of planning and development and University architect with Facilities Management Division.

It is known that the scratching occurred after the windows were installed and ultimately, "we ended up replacing the claim". Tennant added that as with the Spinks Addition, the University typically carries its own insurance on projects of over \$1 million.

Cliff Rempel, associate director of major projects and engineering with IMD, said the insurance company did its own investigation to determine if the scratches were "a claimable occurrence" or a result of a manufacturing defect. Although he had not seen the report, Rempel too suspects the scratches occurred during cleaning.

"The windows had dust particles and particles from masonry work on them, and if you want to call it that, it stands to reason that some of that would cause problems when they're cleaned."

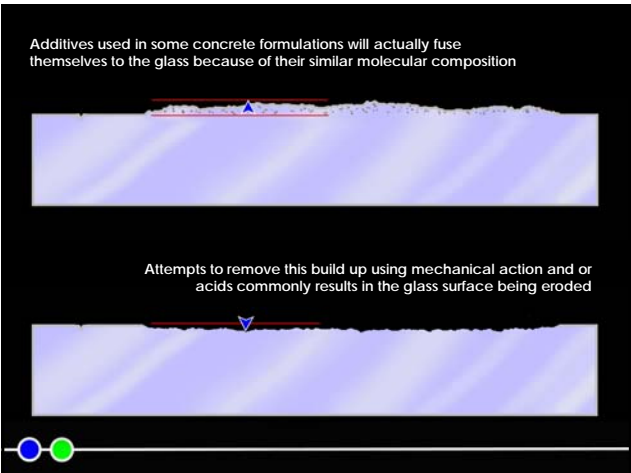
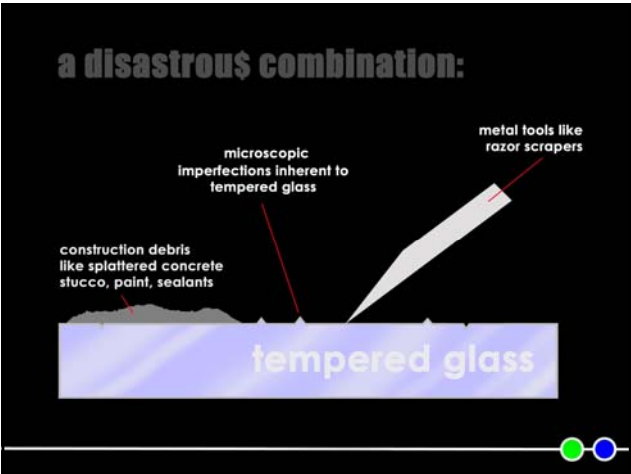
He pointed out that because the contractor on the project paid the premium on the policy and the insurance company will cover the estimated \$400,000 cost of the windows, "this didn't cost (the university) a cent."

The window replacement began in mid-November and is expected to be completed by the end of the month.



Small Sign of Access Glass between scratched windows in the Spinks Addition
Photo by Colleen MacPherson





"Common Myths:"

"Window cleaning scrapers scratch glass:
If used properly, a scraper will not scratch glass. This includes any size or style of metal scraper."

"A nick in a scraper will scratch glass:
This is also incorrect. Aside from leaving sections of the glass inadequately cleaned, a nick in the scraper will not adversely affect the glass."

"Steel wool (#0000) will scratch glass:
This is also false. Experimentation has shown repeatedly that #0000 steel wool will not scratch the glass surface."

<http://www.peepercompany.com/storm.cfm?funnelaction=268>



"The Facts:"

"Construction window cleaning carries a very high risk of glass damage if excess construction debris is present or if the window cleaner is not trained. Here is a list of what can cause scratches.

1. Construction debris.
2. Construction debris behind a scraper or rust on a scraper.
3. Construction debris or rust in steel wool.
4. Construction debris in a strip washer.
5. Fabricating debris fused to the surface of low-quality tempered glass during the tempering process."

<http://www.peepercompany.com/storm.cfm?funnelaction=268>



Choices:



Some 'stakeholders' have been drawn into lengthy and costly legal actions



Suggested waiver posted on the International Window Cleaning Association's website:



Tempered Glass Waiver: Releasing *Window Cleaner* From Any Liability On Tempered Glass Scratching During Cleaning

Due to widespread problems with poor quality tempered glass scratching during construction window cleaning, INSERT COMPANY NAME will not be liable for any scratches on any tempered or heat strengthened glass.

It is accepted and understood by ALL parties that properly used razor blades and scrapers are standard tools and techniques for construction window cleaning and can safely remove limited amounts of construction debris (plaster, paint, texture, tape, stickers, etc.) from quality glass, without scratching the glass surface.

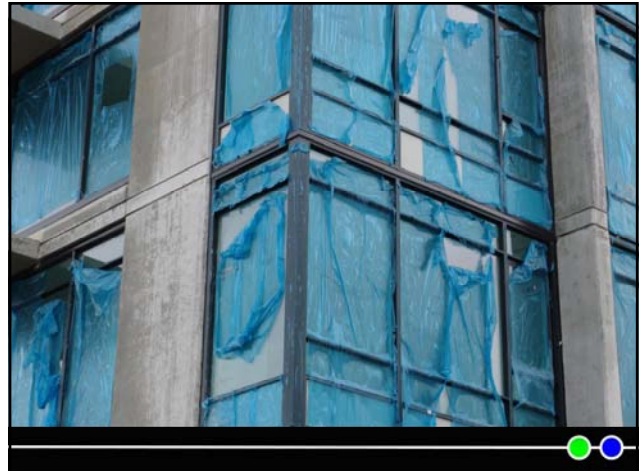
Furthermore, it is accepted, the use of razor blades and scrapers will be employed on all construction window cleaning and no other cleaning method will be offered by INSERT COMPANY NAME to remove construction debris from any glass surface.

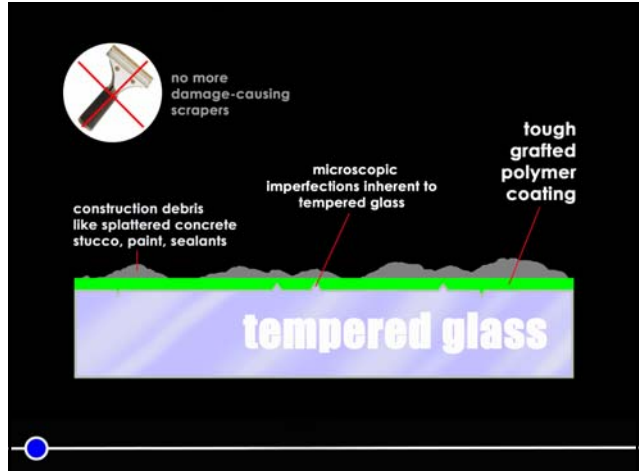
If Builder does not choose to have window cleaner use razor blades or scrapers, Builder must cover all glass during entire construction process, which would protect glass from any construction debris and eliminate the need for INSERT COMPANY NAME to use razor blades and scrapers to clean the glass.

This clause must be included on all contracts. If this clause is not acceptable, there is no contract between INSERT COMPANY NAME and Builder.

INSERT COMPANY NAME Authorized Signature Date

The plastic film approach:





no more
damage-causing
scrapers

converter & water

construction debris
like splattered concrete
stucco, paint, sealants

tempered glass

Conversion / removal is done as part of the preoccupancy window washing program

Proactive Steps by Industry Organizations

Proper Procedures for Cleaning Architectural Glass Products

Glass Information Bulletin GANA 01-0300

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Training

GANA – Glass Fabrication & Glazing Seminars

IGMA – Preventing IG Failures Seminars

NGA – myglassclass.com

Trade Journals

Meeting Presentations

Technical Bulletins



Comments or Questions?

