



★ NASHVILLE, TN ★

BEC

CONFERENCE

★ MARCH 1-3, 2020 ★

NGA

NATIONAL GLASS ASSOCIATION with GANA

Bird-Friendly Glazing Matters Now More than Ever

*Dr. Christine
Sheppard,
American Bird
Conservancy*

*Dan Piselli,
FXCollaborative
Architects LLP*

*Moderator:
Katy Devlin,
Glass Magazine*

Glass is a leading cause of bird deaths in North America

Between 365 and 988 million birds are killed every year in the United States due to collisions with glass

Why does this matter for the glass industry?

The glass industry has faced growing scrutiny in recent years over bird deaths caused by collisions with glass façades. News of bird-deaths at several high-profile projects has brought the issue to the fore.

Over 300 migrating birds smashed into Charlotte's NASCAR building



NFL

HOME

SCORES

SCHEDULE

STANDINGS

DRAFT

...

PLAY WATCH

The Vikings' sparkling glass stadium is killing birds at an alarming rate

Bird watchers say the glass stadium is killing almost 500 birds a year



by Will E.

Buildings are killing up to 1bn birds a year in US, scientists estimate

New report ranks deadliest cities for feathered travelers, who often collide with glass-covered or illuminated buildings



Why does this matter for your company?

Building codes, standards and green certification programs increasingly call for bird friendly design (and bird glass).

Why does this matter for your company?

Jurisdictions in California, Illinois, Maryland, Minnesota, Michigan, New York, Oregon and Washington have adopted some form of bird glass regulations, voluntary or required.

In Canada, requirements are in effect in jurisdictions in Alberta, British Columbia and Ontario.



Birds Contribute Hundreds of Billions in Eco-services



Habitat Restoration



Pest Control

Bird Watching: \$40 Billion Industry



Mostly songbirds: migrating at night, colliding by day



Annual Mortality: North America

Collisions with	Date of reference	Mortality estimate
Buildings/glass	2014	300,000,000– 1 billion Probably closer to a billion
Cats	2013	1.5–3 billion

Look Where You're Going?



People Can't See Glass



Glass or No Glass?

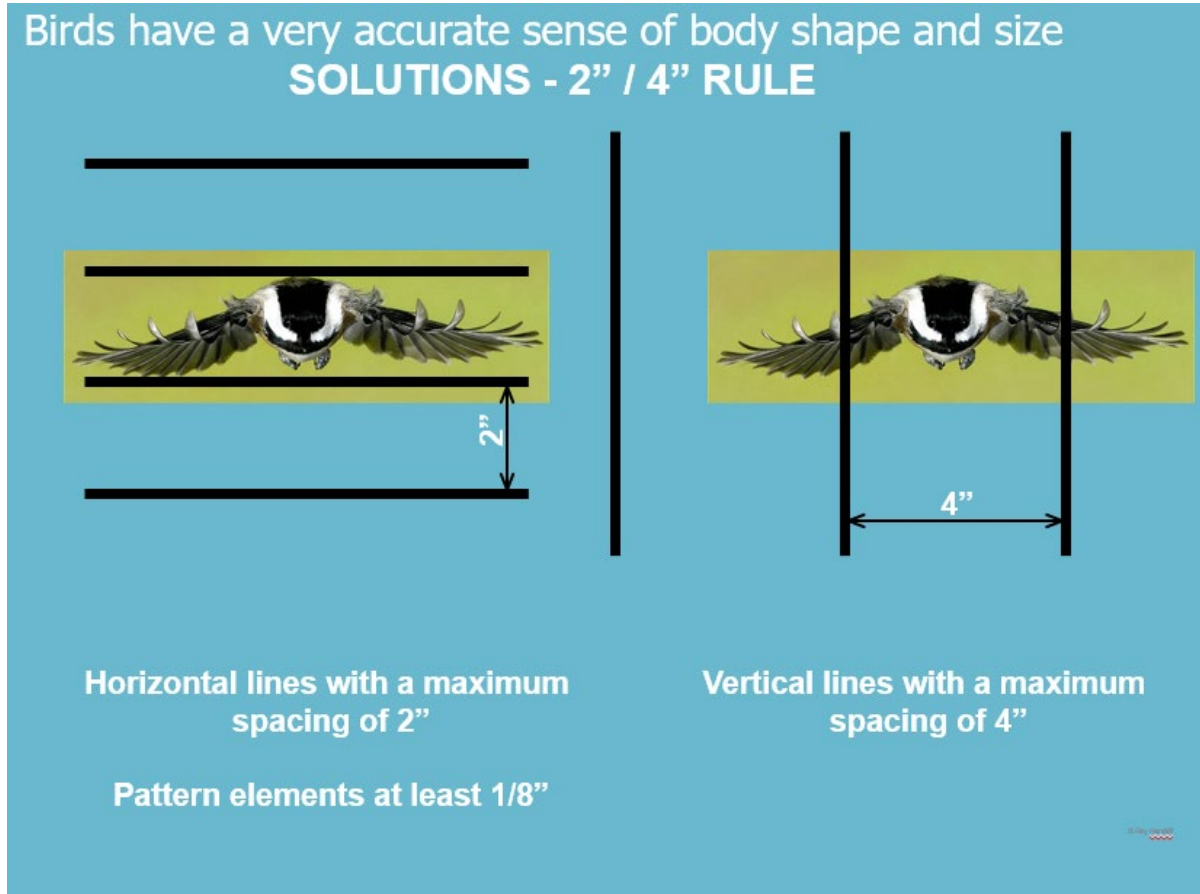


Birds Don't Learn the Concept 'Glass'



How to Stop Collisions

- 2 or 3D patterns
- Proper spacing
- Birds can see far enough away to change course



Intuit HQ



Vancouver University



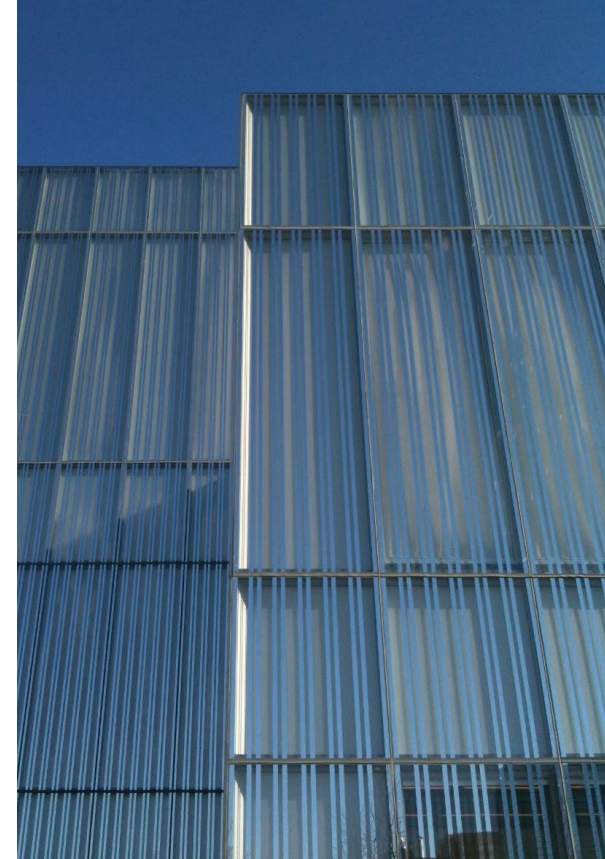
SJ Quinney School of Law

Salt Lake City, UT
SmithGroup



Anchorage Museum

David Chipperfield



Bird-friendly Apartments

New Rochelle, NY





The Javits Center Renovation



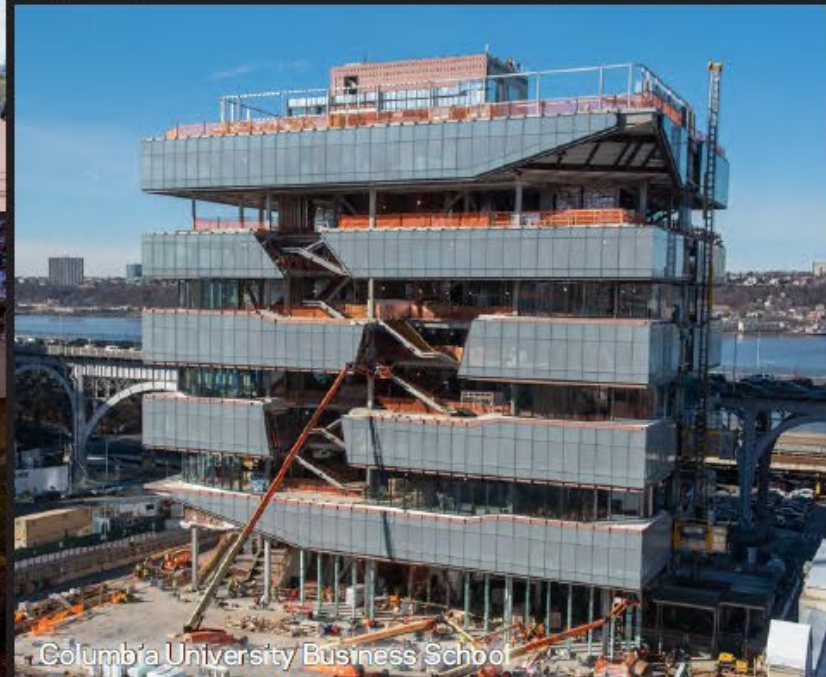
Statue of Liberty Museum



Center for Global Conservation



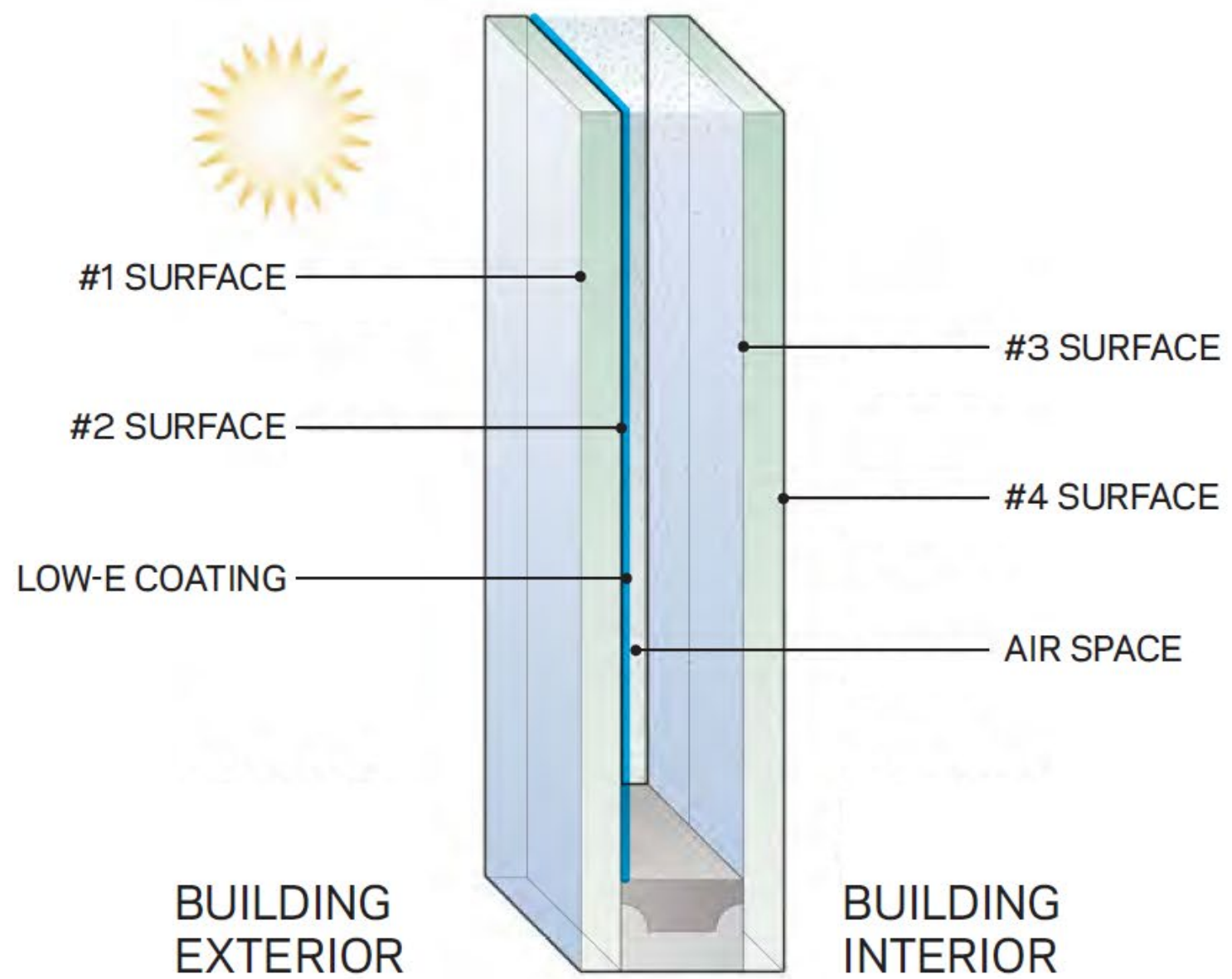
Columbia University School of Nursing

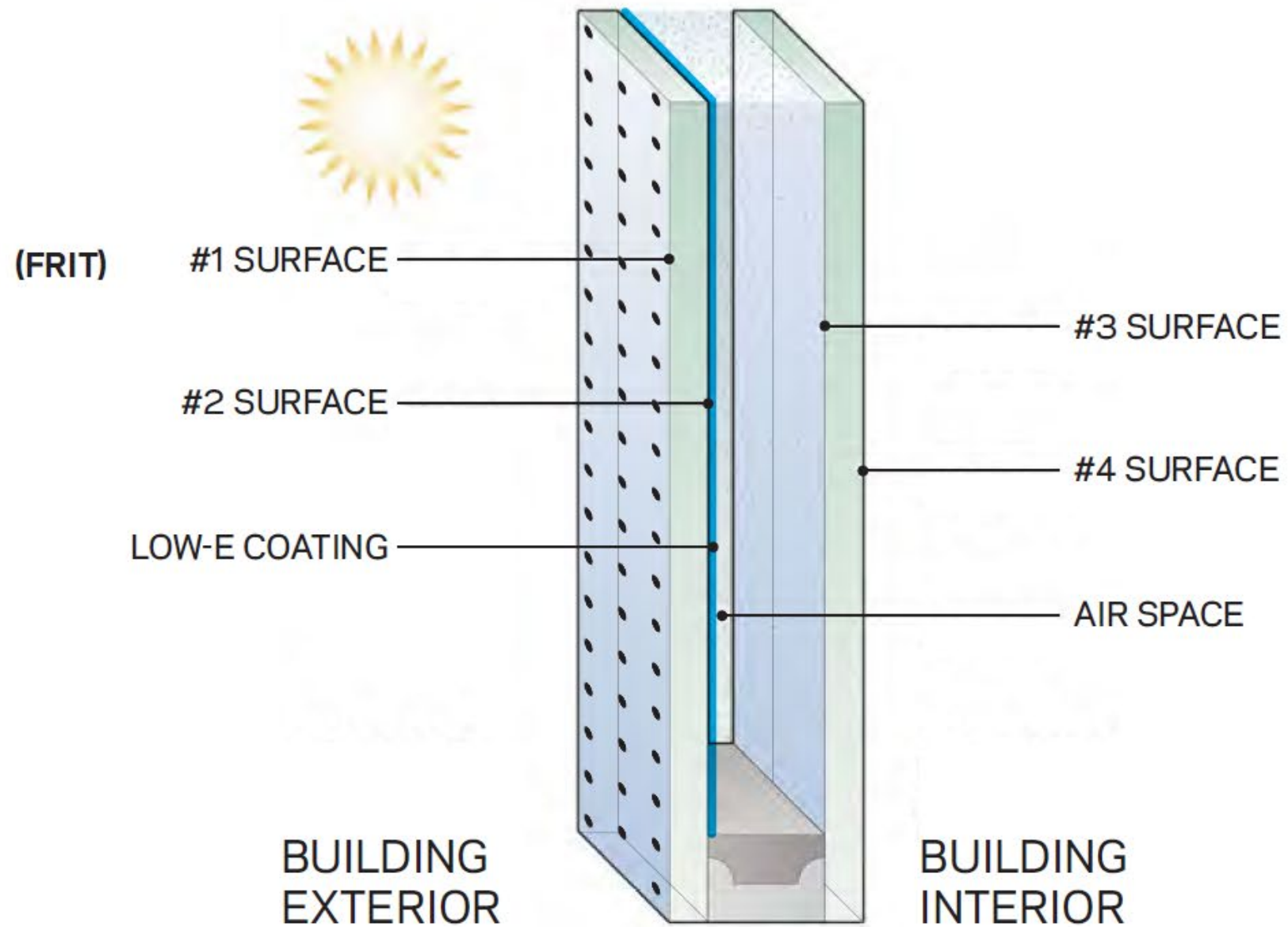


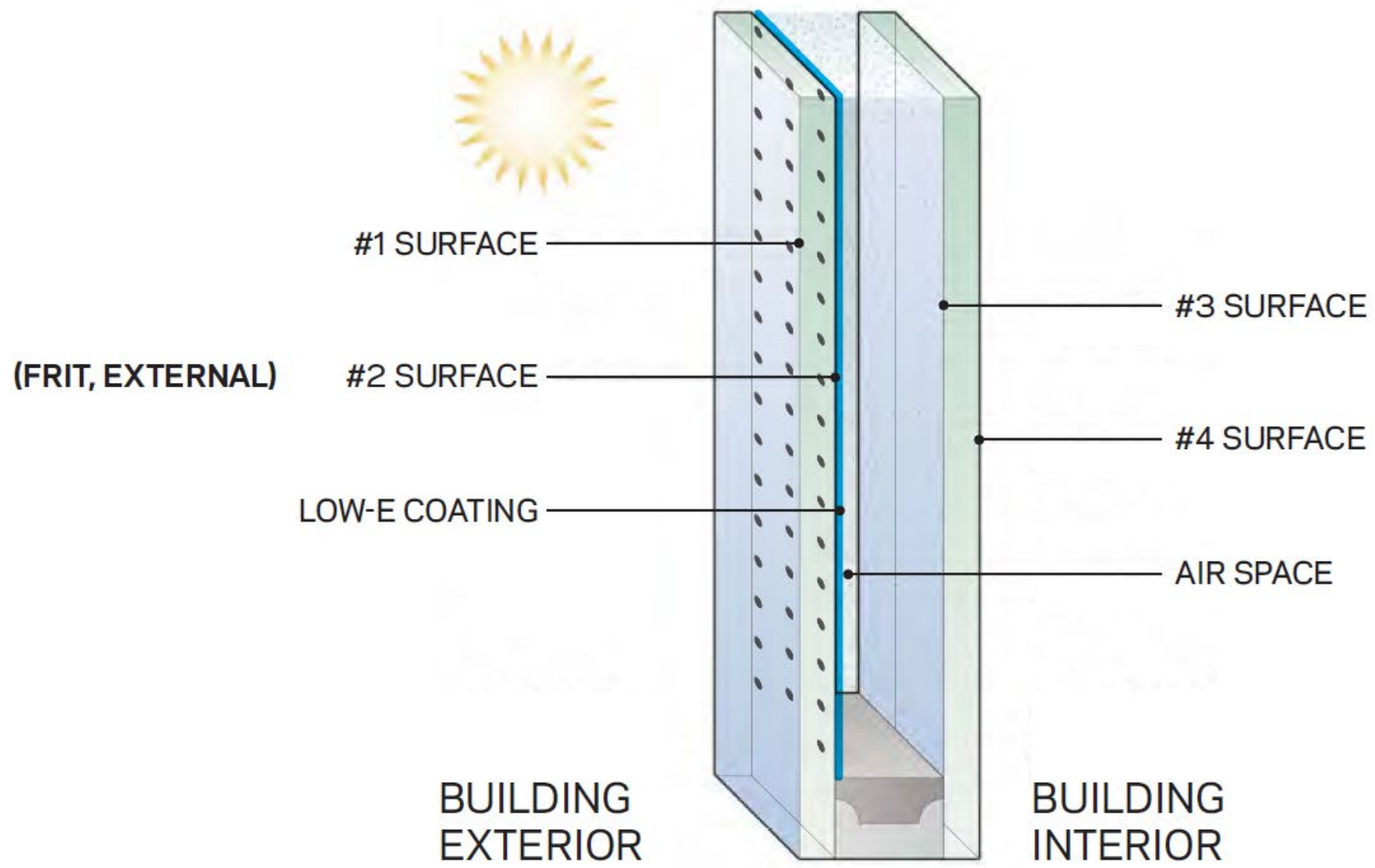
Columbia University Business School

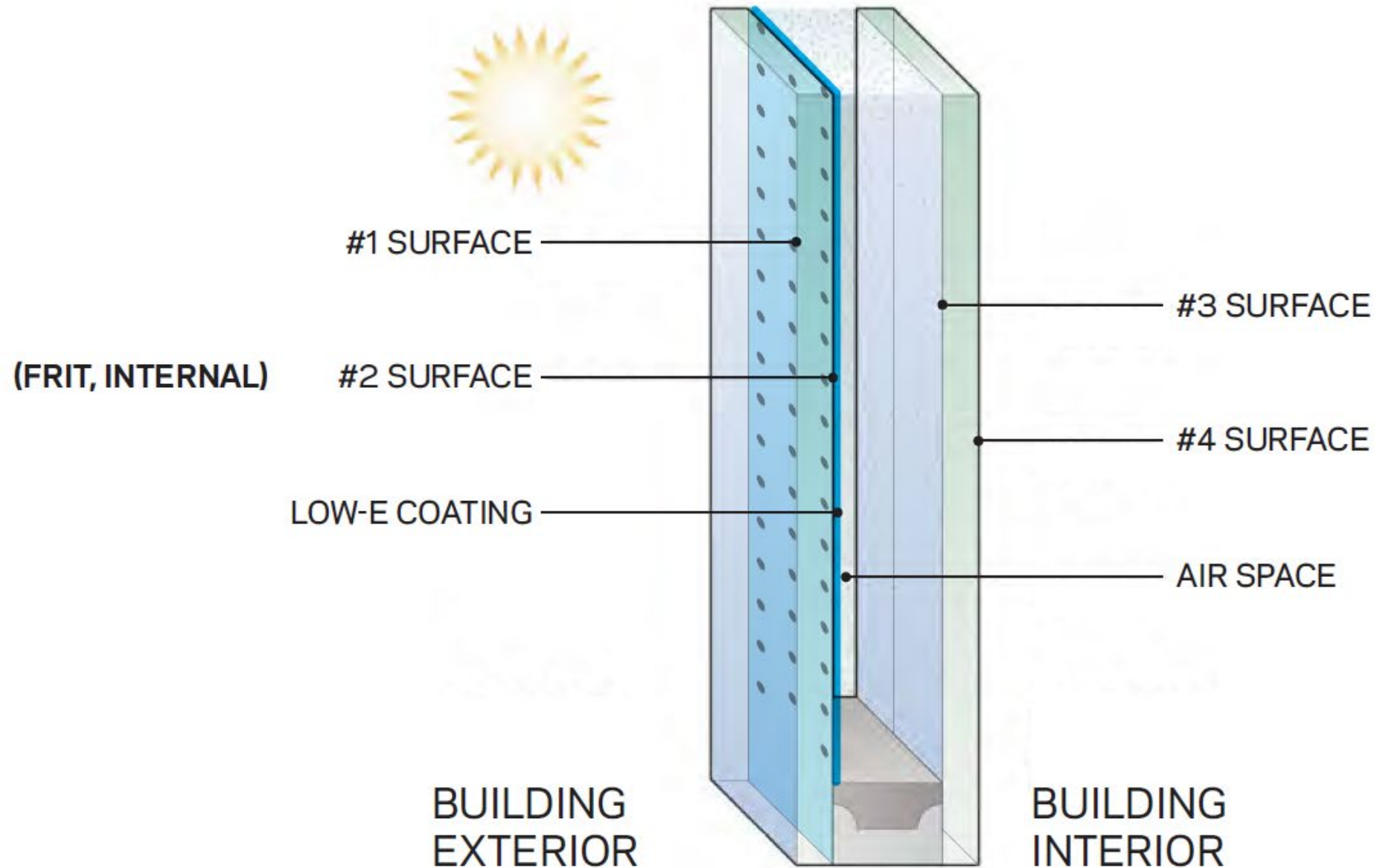


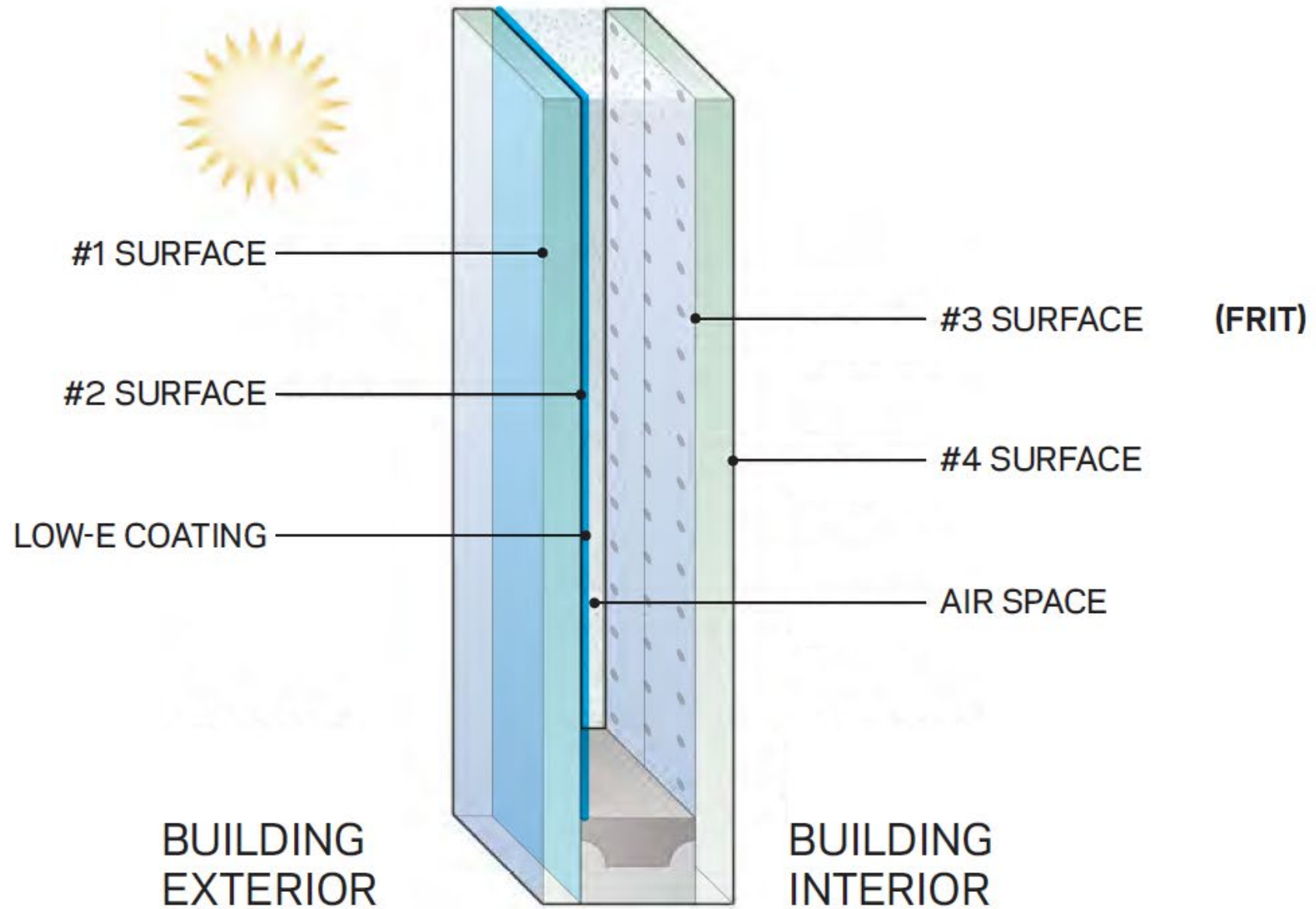
New York Times Building

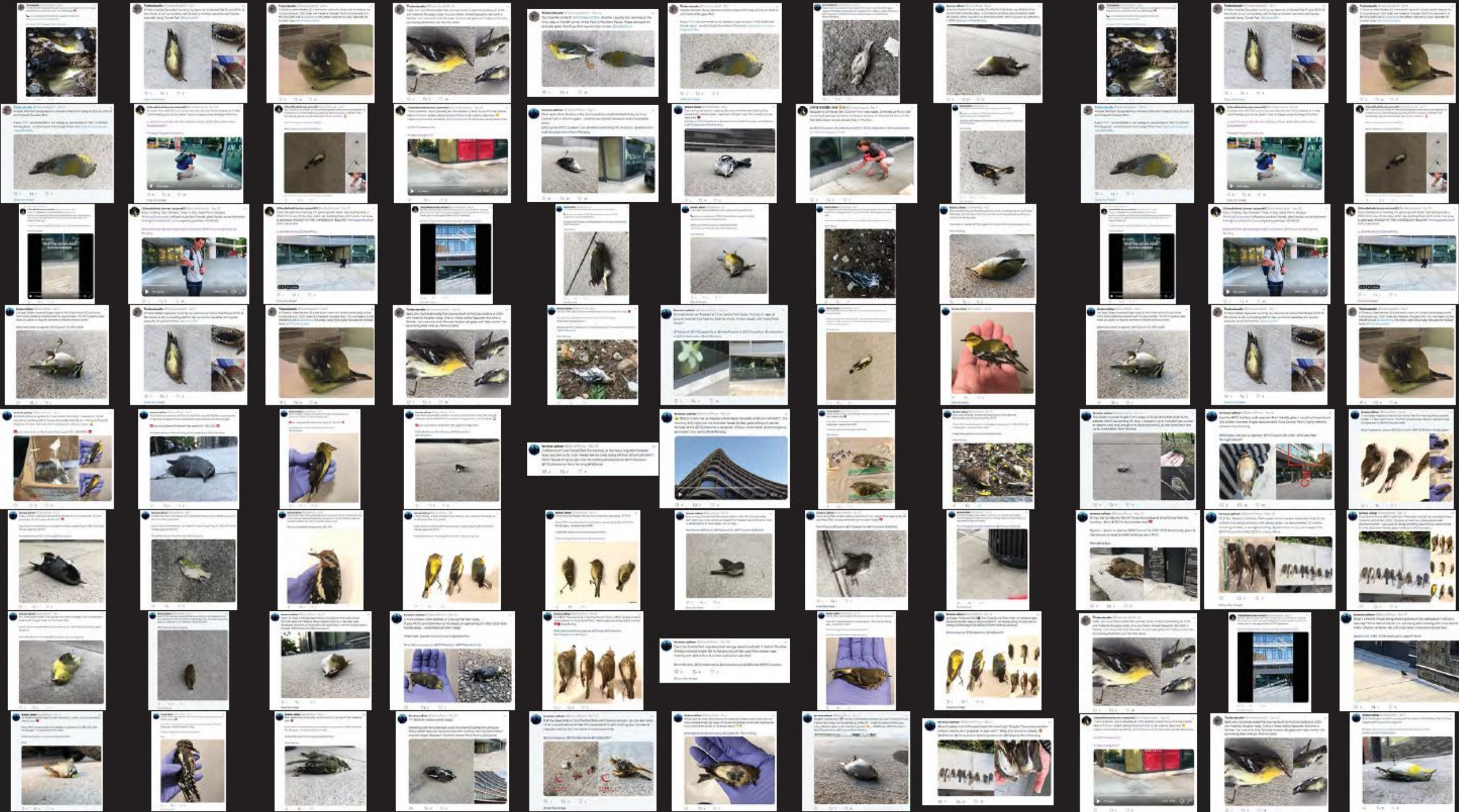




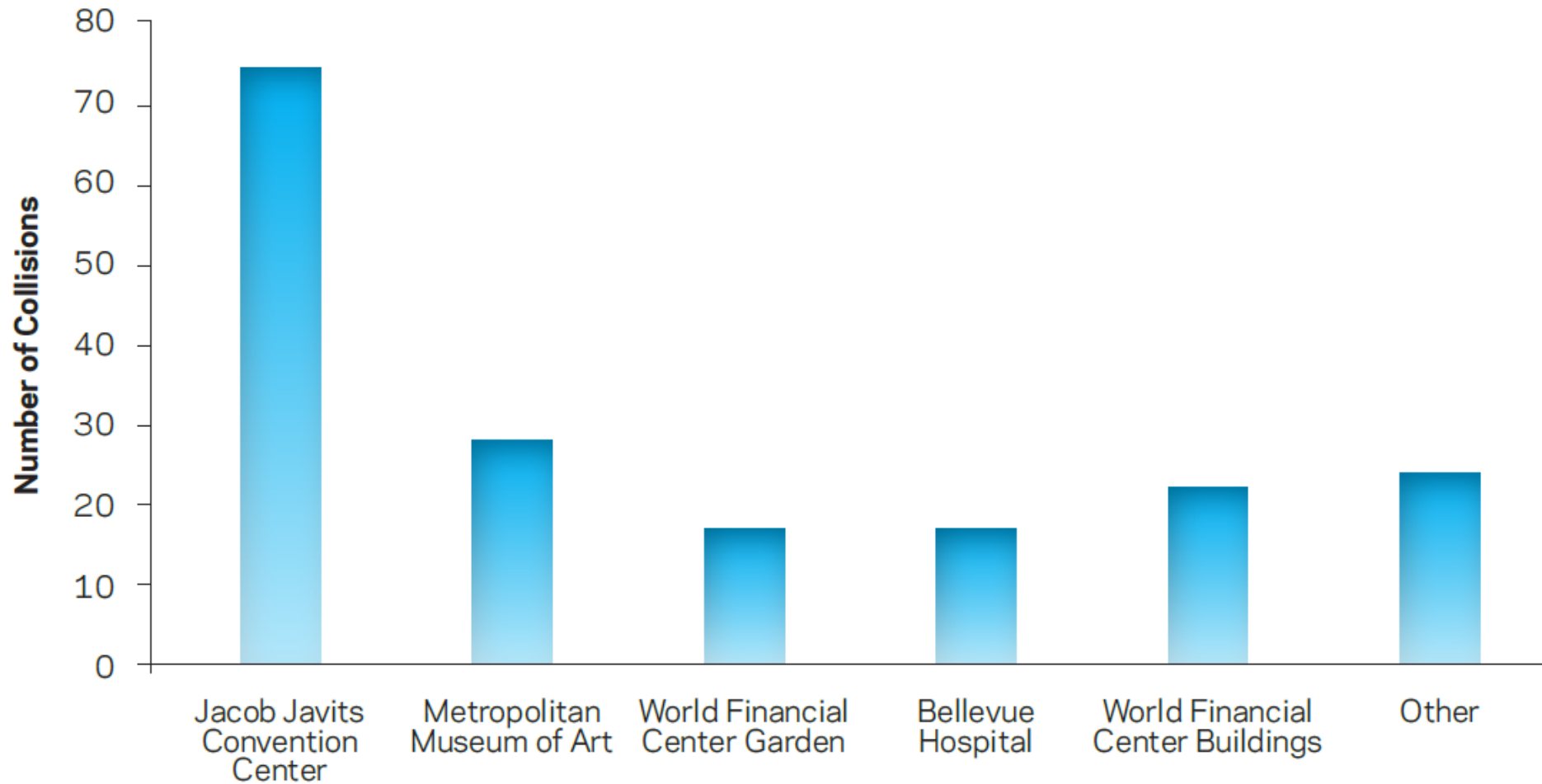








Javits Center Renovation



Bird Collision Location and Frequency - Fall 2007



JAVITS CENTER RENOVATION





JAVITS CENTER RENOVATION



Javits Center Renovation

Results:

- Increased Performance
- Increased Daylight
- Increased Transparency

Spring Migration 2013:

Total of 4 Birds Found

>90% Reduction!



STATUE OF LIBERTY MUSEUM



STATUE OF LIBERTY MUSEUM





COLUMBIA UNIVERSITY SCHOOL OF NURSING











