

thirsty **THURSDAY**

Quench your thirst for knowledge!

ASTM Updates related to Insulating Glass



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Trulite Glass and Aluminum Solutions™

October 17, 2019

MARK YOUR CALENDAR FOR THESE OTHER UPCOMING EVENTS

Thirsty Thursday – SGCC Plant QA Requirements for 2020
November 21, 2019
webinar

Thirsty Thursday – Preventing Scratches and Edge Damage
December 12, 2019
webinar

Annual Conference
January 13-15, 2020
La Jolla, CA

REGISTER NOW!

BEC Conference
March 1-3, 2020
Nashville, TN

REGISTER NOW!

Topics

1. Review of the Standards
2. Overview of ASTM
3. Current Task Group Activities
4. Update and Take-Aways

Herding the Cats at ASTM



ASTM Structure



ASTM INTERNATIONAL
Helping our world work better

Technical Committees: (154, w/ 32,000 members)

E06—Performance of Buildings (1247 members)

Subcommittees under E06: (22)

E06.22—Durability Performance of Building Constructions (231 members)

Task Groups: 4

E06.22.05 Sealed Insulating Glass (Haberer) (45 members)

E06.22.02 Gas Filling (Ernst) (45 members)

Committee Structure

Main Committee:

E06—Performance of Buildings

Subcommittee:

E06.22—Durability Performance of Building Constructions

Task Groups:

E06.22.05 Sealed Insulating Glass (Haberer)

E06.22.02 Gas Filling (Ernst)

Current Activities

E2188-10 Accelerated Weathering Test Method

E2189-10 Chemical Fog Test Method

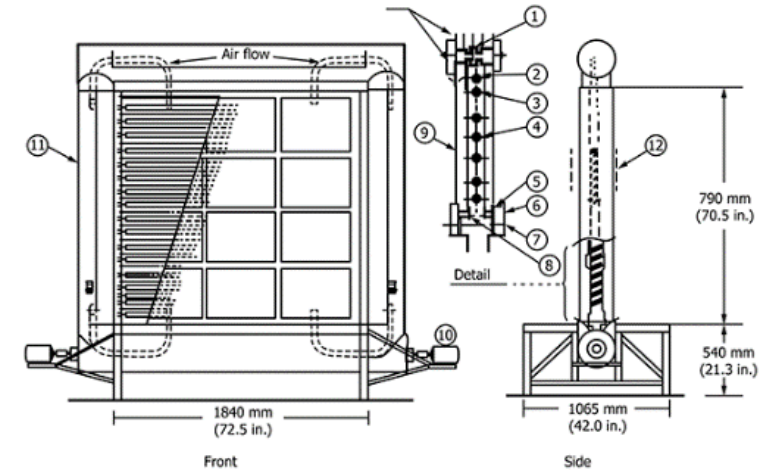
E2190-10 Specification

- 5 year renewal period, 3 year grace
 - Renewal **HAD** to be completed by end of 2018
- Goals:
 - tighten tolerances/procedures
 - Reduce lab variability



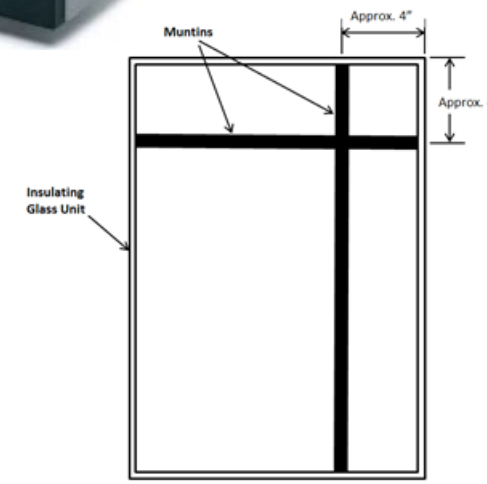
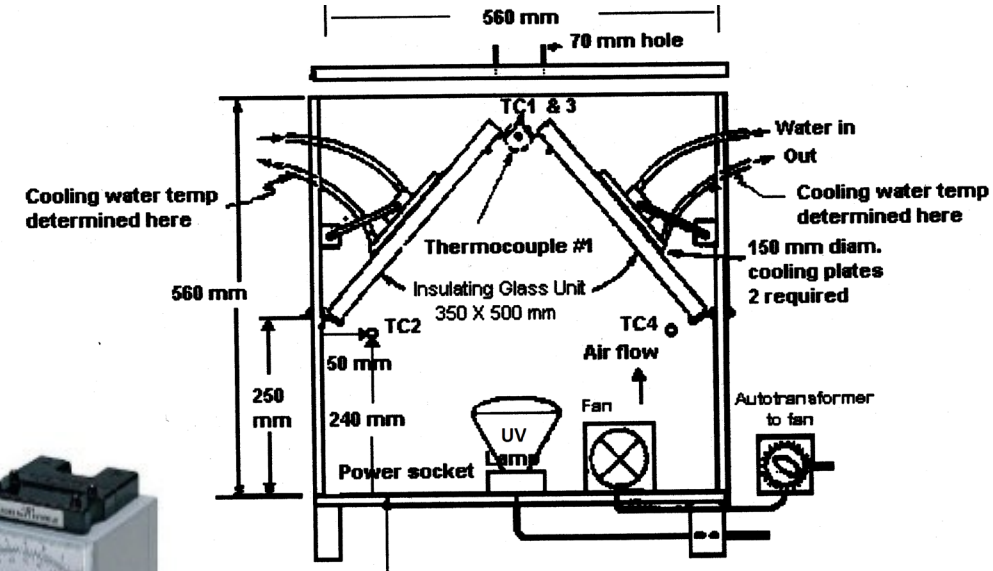
E2188 – Accelerated Weathering Test Method

- **Moisture insertion**
 - Allow steam, mist, or spray
 - Specimens to always be wet during humidity phase
- **UV measurement/control**
 - Upper UV limit set
 - Other UV meters allowed
- **Revised figure showing AW chamber**
 - Chamber design was from 1970's
 - Design revised in various ways with no verification
 - Corrections made to chamber figures
- **Various other clarifications:**
 - Number of cycles (not just days)
 - Frost point measurement (up to 7 days)



E2189 – Chemical Fog Test

- UV lamp/meter:
 - Lamp height clarified
 - Voltage specified (230 VAC)
 - UV meter options included, and better specified
- Internal Components:
 - Muntins reduced to 2 bars
 - Allow components allowed (art glass, blinds, etc.)
 - Proportion components
- Fog Inspection:
 - No change (Improvements not complete)



E2190 Specification

- Decouple internal components
 - **Baseline Set** testing **w/o** internal components
 - Still requires one set passing moisture, fog, glass fill—
 - **BUT** no internal components
 - **Internal components** tested for fog **separately**
 - Use same spacer/sealant system as Baseline Set
- Other items
 - Gas Fill for Triples
 - Disqualify triples when AVERAGE of cavities is <50%
 - Revised report form

Ballet Results (Litter Box)

4 rounds of balloting

1st round (May 2017): 1 Negative

2nd round (Aug 2017): 16 Negatives

3rd round (July 2018): 3 Negatives

4th round (Nov 2018): 0 Negatives

**ALL 3 STANDARDS NOW
PASSED AND PUBLISHED!**



E2188

E2189

E2190



Major Take-Aways From Revisions

1. New Standards will be issued in 2019
2. Procedures should have less variability
(--AND...more work to be done)
3. Muntin specimens need only 2 bars
4. Internal Components decoupled from Baseline Set

Gas Filling: Current Activities

- Gas Filling Standards (Randi Ernst)
 - E2269-14 Argon GC Test
 - Add 2nd method for Ar carrier gas (v. He)
 - E2649-12 Argon SES Test
 - Record all 5 SES readings
 - Hazard Warnings (pacemakers)
 - Verification improvements
 - Physical standards can be used
 - New Laser method being reviewed



Questions?

- Next meetings
 - 21 October, 2019, Houston
 - 30 March, 2020, Boston



2020 ANNUAL CONFERENCE

JANUARY 13-15

Hilton Torrey Pines

La Jolla, CA

- + Important Work
- + Essential Information
- + Great Connections



Register Now: glass.org

Registration
Open!

The background of the entire image is a composite of a Nashville skyline at sunset and a large, semi-transparent acoustic guitar. The skyline features prominent buildings like the AT&T Building, and the guitar is positioned diagonally across the frame. The text is overlaid on a dark, semi-transparent rectangular box in the center.

★ NASHVILLE, TN ★

BEC

CONFERENCE

★ MARCH 1-3, 2020 ★

NGA
NATIONAL GLASS ASSOCIATION with GANA

REGISTRATION OPENS IN 2 WEEKS!

Thirsty Thursday

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