

ASTM E06.51.11 Fenestration Installation  
MINUTES – INTERIM MEETING July 12-13, 2006

RE: E 2112 Standard Practice for Installation of Exterior Windows, Doors and Skylights

**Notes on the two-day meeting:**

1. Self Introductions
2. Review Minutes of meeting of April 24, 2006 – Toronto – *Accepted.*
3. Report on publication of E 2112-06.
4. Review new “Principles” draft and identify appendices. *Discussed 7/13.*
5. Discuss reorganization of this task group – making this a subcommittee further divided into smaller, rapid-response task groups that deal with a single section of E 2112. *Discussed 7/13.*
- 6 List wall variations and options – report by Steve Johnson and Robert Bateman. *Discussed 7/13.*
7. Review flow chart concept - Tom Murray, Robert Bateman, and Chris Mathis. *Tom Murray heading this sub-task group, creating a flowchart/organization chart. Discussion covered topics for each section. Tabled until next meeting. Further group discussion: Make the new E 2112 electronically friendly, with links to the referenced sections and figures. Barry will check with ASTM on this concept.*
8. Review window and wall option lists developed by Steve Johnson, Jim Katsaros, Leonard Dorin, Kevin Knight, Cordell Burton, and Budd Beatty. *Discussed 7/13. Will add to individual appendices as developed.*
9. Discuss common testing protocols for testing windows in walls- *Deliver protocol for testing to FMA. AAMA working with FMA. See AAMA 504 test method for alternate installations. AAMA 502 field water test. Contains A & B sections, 10 psf. Need air. National Hurricane Testing – incorporate with missile test? Wind loading in field easy at 10-20 psf. Need procedure so it is repeatable. Scott Warner volunteers to draft a procedure – an in situ version of AAMA 504. Separate testing on window with wall from opening/interface failure. Comments – stucco not fully shrunk until 5-6 months later – affects field tests. Test before stucco or cladding. Intent is to test the installation, rather than the window performance. Heath Cobb heading sub-group that will do arrange test for FMA. Will do same test on 1<sup>st</sup> (CMU) and 2<sup>nd</sup> (wood frame) floors. (Note: After the meeting, Scott Warner wrote a 1-page testing protocol, which was forwarded to FMA.)*
10. Discuss symposia to share data. *“Up Against the Wall” symposium proposal has been submitted.*

11. Update on new ASTM Work Items based on FMA 100 and FMA 200 installation practices. *See notes below on WK11254 ballot and comment handling.*
12. Update on progress of new ASTM Work Item – standard on installation of wood frame windows into masonry.
13. Update on FMA activities, round robin testing of installations.
14. Code-ready version of E 2112 – report.
15. Work Item on conversion of AC148 Acceptance Criteria for Self-Adhering Flashing to an ASTM document – report on ballot.
16. Report on Work Item – Design Professional Initiative – *no negatives received to date except one that was intended for a different work item.*
16. Discuss Equivalency Testing Initiative –

Misc - AAMA 711 is being updated for installation section – *Self-adhered flashing going 2 inches beyond the critical interface area, which is described, for a minimum of 4 inches. AAMA is doing multiple, interim meetings, estimating it will be done by Spring 2007 meeting.*

WK11256 (Flashing widths):

RE: Dale Ackerman’s commentary - MARK BOMBERG: – MOTION: Acknowledge that these are real concerns; however, they have a miniscule effect, and the solution is proper design and installation of the wall-window interface, as well as providing some drying ability in the wall assembly. Second: LEONARD DORIN. Unanimous. Will wait for responses to ballot and for AAMA 711 committee action before we act on WK11256.

**WK11254 (Frontal-flanged window installation in masonry openings) – Many thanks to Jim Katsaros for the following notes:**

**WK 11254 (FMA 200) Comments**

Paul Beers’ Negatives

- 1) 6.3 (Note 2): Comment accepted as editorial and made amendments to Note 2. Topic is generally covered under 3.4 definition. Note 2 changed as follows: Add language in note 2 to “the wood shall be naturally durable or preservative-treated complying with the applicable code” rather than “pressure-or chemically treatment”. Additional members shall match the requirements of the existing buck....among others.
- 2) 6.3.3: Comment accepted as editorial and made amendments to 6.3.3

Motion by Phil, 2<sup>nd</sup> by John Jervis. Comments 1) and 2) were found editorial and made amendments.

3) 6.4.2 (Note 4). Actions taken: added statements 1.6 and 1.7 to emphasize need for interior air seal and sill pan system for drainage.

Motion by Monte Jones, 2<sup>nd</sup> by Leonard Dorin: Comment found non-persuasive, due to the fact that a proper air and water seal around the interior perimeter of the window will pressure moderate the wall cavity and allow drainage to the exterior.

Vote: 1 abstention, no negatives, all others positive

Brian Trimble, Brick Industry Association

Section 3.7

Motion by Steve Thorsell, 2<sup>nd</sup> by Dan Felice: Non-persuasive: the detail that is referred to is not germane to this application (through wall flashing rather than fenestration).

Vote: unanimous positive

William M Coltharp, Coltharp Engineering (affirmative with comments)

Note 2, after 6.3.3;

Motion by Budd Beatty, 2<sup>nd</sup> by Lucas: accept as editorial, remove specific reference to stucco material.

Vote: unanimous positive

John Edar, STO

Comment regarding use of flashing.

Response is that addition of flashing that cannot be integrated with stucco without lath does not lend itself to this installation. Not practical.

No vote.

David Nicastro, Engineering Diagnostics

The standard addresses the sealing of the total fenestration opening and its related sill 8” beyond the rough dimension. The window installation is against sealed CMU, not untreated CMU.

This system does not make use of conventional end dam for masonry – masonry interface. Purpose: End dams are used to prevent wind-driven rain penetration. Because

we use the buck as an extension of the CMU we do not need end dams. The ASTM E2112 definition of end dams does not apply to this system.

Matt Shane

AAMA is working on sealant selection guide, which will provide more guidance. E2112 has more detail on this as well. ASTM C920 is best guide available for selection currently. Comment acknowledged and appreciated.

Larry Livermore

Response to Negatives:

- 1) non persuasive, existing text covers essential points (introduction was taken out)
- 2) accepted as editorial, will be done before completion of document, document will refer to whatever ASTM WK11252
- 3) accepted as editorial, depends on whether this becomes a stand-alone or incorporated into E2112
- 4) accepted as editorial, depends on whether this becomes a stand-alone or incorporated into E2112
- 5) accepted as editorial, make edits to section 3.8 to remove reference to width (located under a portion of the lintel)
- 6) not persuasive, using definitions per window manufacturers; flanges are on the exterior plane while fins are inside
- 7) accepted as editorial, changed 3.10 to Pre-formed masonry sill
- 8) non persuasive, sections are identical, just numbered differently due to other sections
- 9) non persuasive, it is meant to be prescriptive and is in line with ASTM language. Most recent version says 'no claddings will be installed'
- 10) accepted as editorial, added 'level' to 6.1
- 11) accepted as editorial, will add number for Note & sequenced at a later date
- 12) Accepted as editorial, removed 'In certain cases', numbered it 6.1.3
- 13) Accepted as editorial, removed 'which includes the formation of an end dam', added 'and ties' and 'continuity of the water seal'
- 14) Accepted as editorial, added "true"
- 15) Accepted as editorial, wording in current revision
- 16) Accepted as editorial, change 'contractor' to 'installer'
- 17) Section has been changed per item 16, changed to be the responsibility of the installer
- 18) Accepted as editorial, added revision from 6.1.2 into 6.2.1.4.1
- 19) Accepted as editorial, notes to be renumbered
- 20) Editorial, task group to consider
- 21) Non persuasive, the use of sill pans is not required in this document
- 22) Accepted as editorial, notes to be renumbered
- 23) Accepted as editorial, concern is the use of sealants with treated wood, definition is in 3.6. Section 5.5 is all-encompassing. See also 3.1.2

- 24) See note 22
- 25) See 23 above
- 26) See note 22
- 27) Accepted as editorial, changed document
- 28) Accepted as editorial, added true
- 29) See note 22
- 30) Accepted as editorial, made change as recommended
- 31) Accepted as editorial, change made as recommended
- 32) See note 22
- 33) Editorial, retained existing language
- 34) See note 22
- 35) See note 22
- 36) Accepted as editorial, added true
- 37) Accepted as editorial, coordinated statements with new statement 7.4

Other ballot comments to be reviewed at next meeting at October Committee Week.

Meeting adjourned 3:00 p.m. July 13, 2006.

Minutes by Jim Katsaros and Jacqueline Hardman  
**Attendee list follows**

## ATTENDEES:

	<u>Organization:</u>
Beatty, Budd	Jeld-Wen
Bomberg, Mark	Syracuse University
Braun, Bob	Dow Chemical
Carriere, Bruce	Sika Corp.
Cobb, Heath	WinDoor, Inc.
Cross, Ben	Covalence Adhesives
Daniels, Mark	Sika Corp.
Day, Nolan	W.R. Meadows Co.
Dorin, Leonard	Fortifiber
Emley, Bill	MI Windows & Doors
Erling, S/v	AWDI
Felice, Dan	Felice Associates
Hardman, Barry G.	National Building Science Corp.
Hardman, Jacqueline	National Building Science Corp.
Jervis, John	AWDI
Johnson, Steve	Andersen Window
Jones, Monte	84 Lumber
Katsaros, Jim	DuPont
Kutch, Barry	Sika Corp.
List, Nelson	Water Out Flashing
Livermore, Russell	Sika Corp.
McKenna, Paul	Valeron Strength Films
Murray, Tom	W.R. Grace Co.
Schmidt, Ron	Masonite International
Sivy, George	Sika Corp.
Sumang, Philip	Engineering Diagnostics
Thorsell, Steve	ICC-Evaluation Services
Turner, Lucas	PGT
Warner, Scott	Architectural Testing, Inc.
Westfall, Mike	Jeld-Wen