MINUTES - ASTM E06.51.11 Fenestration Installation
E 2112 Standard Practice for Installation of Exterior Windows, Doors and Skylights
October 29, 2007 Marriott Waterside, Tampa, Florida

The meeting was called to order by chairman Barry Hardman at 8:00 a.m.

MINUTES: The minutes of the April 15 & 16, 2007 meetings were approved.

E06 SYMPOSIUM: The chairman reported on the status of the symposium to be held on Nov. 1 (*Up Against the Wall: an Examination of Building Envelope Interface*). Online registrations as of last Thursday numbered 97, and there are more expected on-site registrations. We estimate perhaps 120 attendees. Most of the papers have been reviewed by two reviewers and the authors have been sent the reviews and commentary. The papers will be published in ASTM’s online journal (JAI). Everyone who registered for the symposium will receive the STP.

BALLOT RESULTS: Following will be reviews of the negatives and comments received on balloted work items.

**WK11252 Standard Practice for the Installation of Windows with Flanges or Mounting Fins in Wood Frame Construction**

Discussion: Some negatives were based only on the fact that we do not know where or if it will fit into E 2112, as we are revising E 2112 into Guiding Principles vs. Practices. Shall we approve the content of the proposed document and decide how to incorporate later?

Negative from Non-Member Steve Johnson:

1) Provide definition on how/where will it be included in E 2112. Discussion on this and other negatives revolved around the Guiding Principles group and how E 2112 will be reorganized, and how new documents like WK11252 will fit in.

2) Clarify title to reflect the purpose per the scope (heavy weather).

Recommendation: Change title to “Practice for the Installation of Windows with Flanges or Mounting Fins in Wood Frame Construction for Extreme Wind/Water Conditions”, to clarify the purpose of the document.

Motion: to find the negative persuasive and continue work on it through a sub-task group that will be set up to address the incorporation of all new documents relating to specific installation instructions. Vote: Unanimous.

Sub-task Group: Leonard Dorin, Ben Cross, Steve Johnson, and Jim Katsaros volunteer. Task is to evaluate the document for alignment with E2112 & guiding principles.

Negative from David P. Murrah:

Re: Sections 7.1.2, add verbiage about water vapor barriers and WRBs, permeance.

Discussion: not persuasive because hygrothermal issues are not within the scope of this document. Comment: this should be an issue that is considered in the future. Comment
is non-germane since we are not addressing hygrothermal issues or permeance in this task group. The ballot went out, and the comment is on a section that was balloted. Diffusion through barriers is not covered by this document. This document covers only the interface condition.

**Motion:** To find this outside the scope of this document; non-related because voter is addressing vapor barriers, rather than water-shedding of the interface. Installation group does not select WRBs. In favor: All but 4. Negative: 0. Abstain: 4

Item 2 (Sec. 7.2.9.7) is that the text does not adequately match the figure.

**Motion:** Find persuasive and needs to be addressed per new sub-task group on specific installation methods. In favor: All but 2. Opposed: 0. Abstain: 2.

Item 3 (Sec. 7.2.10.7) “Mechanical fasteners should be covered by the WRB flap at the head flashing.” Discussion: We agree, and fasteners at head jamb are already covered by the WRB flap; it is automatic when the flap is pulled down. Discussion – what about water at fasteners at the jambs? Not practical to so state everywhere.

**Motion:** Find non-persuasive because when the flap is lowered per current instructions, it covers up the fasteners at the head. In favor: All but 1. Opposed: 0. Abstain: 1.

**Negative from Tom Murray:**

Re: Foreword, “No more than three stories in height”. Discussion: This document, based on FMA/AAMA 100, originated in Florida; 3-story height is based on Florida building code definition of low rise residential construction. Q: Should we define per the current IRC? Currently the FMA 100 is regional. Discussion: Is this document balloted as regional only, or could it be used in other regions? Suggestion: Replace with “construction that follows residential code per the region”?

**Motion:** Go back to the sub-task group on specific installations (Leonard, Ben, Steve and Jim K.). Mission will be to create the first installation document that is consistent with the guiding principles. FMA 100 will be a starting document. Larry reminds us that the intent was for FMA/AAMA to vett, then when ASTM publishes, the FMA/AAMA documents will go away. All definitions must match the existing ASTM definitions. Discussion: content vs. procedural.

Re: “extreme wind/water climate exposure” and 1.1 and 1.2 – Discussion: Clarify the exposure regions that are addressed by each document. ASCE-7 exists for exposures. Discussion: following local building code does not always work; e.g., a 2-story house on top of a hill has higher exposure than in the valley – must have exposure criteria. ASTM document must define what exposure the document addresses (by wind, rain, pressures, etc.). Recommendation: Take to the sub-task group on specific installations to address these definition questions regarding exposures. “High Exposure” is defined in this document as 12 psf for water. In Florida, residential is 15% of the positive DP.
**Motion:** Find as persuasive and send to the sub-task group for review. In favor: Unanimous. Opposed: 0. Abstain: 0

**Negative from Carl R. Wagus:**

Re: note 1 – Jim Katsaros says yes, this should be in section 7.2.3.1 instead.

Re: section 7.2.1, Figure 1: Need clearer image.

Editorial comments –

**Motion:** accept as persuasive and forward all on to Leonard’s sub-task group. Approve: All but 1. Opposed: 1 Abstain: 0

Leonard – will do through e-mail and conference calls. By next interim meeting they will have responses for E06.51.11. Then this committee will report to FMA.

**Affirmative with Comment from Ronald D. Bradt:**

To re-title article 6.0 – this will be passed on to Leonard’s sub-task group.

**Affirmative with Comment from Ken Brenden:**

Approve as a standalone ASTM document; isolate this practice from the general recommendations in E 2112 because it addresses specific needs associated with elevated wind driven rain events. Action: forward to Leonard’s group regarding where to place this document.

**Affirmative with Comment from Leonard Dorin:**

Re: consistency in text and figures re: slopes and back dams. Action: forward to Leonard’s sub-task group.

**Abstention with Comment Vote from Non-Member Falcon Foam:**

States that this document, section 7.2.12.2 is the only one he has seen that addresses the issue of a channel for water. No action required.

**Affirmative with Comment from Daniel J. McNicoll;**
**Affirmative with Comment from Michael Steffen;**
**Affirmative with Comment from Richard G. Walker:**

Not specifically addressed in this meeting. Comments to be considered by sub-task group on how to address with regard to E 2112.
WK11259 (Item 46) (Add new section 1.10 to Scope re: acknowledge role of Design Professional):

Negative from J. Nigel Ellis:
States that the design professional must be responsible for safety procedures during installation of skylights and windows. Discussion: Standard ASTM language per section 1.9 states that this standard does not purport to address safety and health concerns.

“1.9 This practice does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and to determine the applicability of regulatory limitations prior to use. For specific precautionary statements, see Section 5, Related Procedures. Where a lead hazard is known or suspected, refer to ASTM Standards on Lead Hazards Associated with Buildings and to applicable state and federal regulations. Where an asbestos hazard is known or suspected, refer to the ASTM Manual on Asbestos Control, and to applicable state and federal regulations. “

Motion: Find non-persuasive because this would go against ASTM policy. In favor: All but 1. Opposed: 0. Abstain: 1.

Negative from Alan M. Winterfeldt:
Concerned about minimizing this practice by adding this section, concerned about a reduced level of flashing installation.

Motion: Non-persuasive, since the content he is looking for is already covered. In favor: all but 2. Opposed: 0 Abstain: 2.

Secretary’s note: Scope section 1.5 states that this practice provides minimum requirements. Scope section 1.8 states, “This standard has not been created to address all issues related to every possible installation situation one might experience in the field. Furthermore, this practice does not purport to provide fail-safe installation methods, assurance or protection against installation deficiencies, or a standard by which architects can specify or ensure delivered performance.” Section 4.0 - Significance and Use- recognizes potential lack of performance by incorrect installations. Section 5.13 provides prescriptive flashing requirements.

Comments by Dale Ackerman:
Discussion: Yes, we need to rewrite the introduction with that quote. This is new business.

Affirmative with comment by Robert Bateman:
Yes, we did include the rationale with the ballot item.

Affirmative with comment by John Edgar:
No response required.

WK 11256 (Item 45) re: Flashing Width:

We will rewrite the work item to incorporate the AAMA 711 reference that replaces the “clean, dry and frost-free” language and will re-ballot.
Negative by Bob Braun:
91.1.2.2 and 8.1.1.1.4 Change to “Self-adhesive type flashing seals itself directly to the sheathing or the WRB and to the mounting flange”…
Action: We will ask Bob which terms he is referring to.

Negative from Kevin Day:

Re: 8.1.1.1.4, “…all self-adhering membranes require primer and termination sealant” –
Discussion: This work item is being rewritten to incorporate the reference to AAMA 711 that was inadvertently left out of the last ballot. That and other verbiage address the issue of primers and when required.
Motion: Find non-persuasive. This is up to the manufacturer of the SAF. In favor: All but 1. Opposed: 0 Abstain: 1.

Negative from Alisa R. Hoffee:

Motion: Find Persuasive. Now the AAMA 711 standard, which will be incorporated, addresses. Specific SAF widths are addressed in the AAMA 711 standard. Motion by Tom, second by Jim: In favor: Unanimous.

Negative from Dave Moyer:

Motion: Find Persuasive: will reinsert the AAMA 711 reference that addresses this. Same as Alisa Hoffee’s comment. Same motion as before. Unanimous.

Negative from Carl R. Wagus: Persuasive. In favor: Unanimous.

Comment from Werner H. Gumpertz:
Recommends that in this paragraph and throughout E 2112, give priority to SI (metric) system. Note: E 2112 uses IP units, with SI units following in parentheses.

No action taken.

Negative from John Edgar:

Re: drainage from sill not accommodated by this language.

Found Non-persuasive because it does not relate to the ballot. In other sections E2112 does address drainage from the sill.

Negative from Alan M. Winterfeldt: Not addressed at this meeting.
Affirmative with Comment from Robert Bateman: Not addressed at this meeting.

There were other affirmatives with comments that were not addressed. This work item is going to be revised and re-balloted.
Symposium: Anticipate good turnout. Most of the papers have been peer reviewed. Papers will only be published after review. Will be published electronically through JAI and will be available as an STP from the symposium.

ASTM and DuPont are sponsoring a reception from 6:00 to 7:00 on October 31.

Next meeting (interim): 2 days. Will have ballot results to go over. Guiding Principles group will present for an hour or two. Plan for January Tues/Wed 15-16 at Bay Club in San Diego. Vote by e-mail re: Jan 15-16 and Feb 5-6.

Chris Mathis summarizes the Guiding Principles group activities and shows a new 6-page document. Chris will e-mail it to Barry, who will put it up on the site and send to all.

Barry asks for replacement window documentation — about half of all window installations are replacements — but there are inadequate, incorrect, and incomplete documents out there. We need an ASTM document that is a good method. Discussion: replacement is much more complex than new construction. You inherit the problems of the prior wall, etc. Best method is to remove all cladding and rebuild the wall.

Adjourned 12:20 p.m.

(Attendee list follows, then attachment of revised WK 11256)

Respectfully submitted,

Jacqueline B. Hardman
**MINUTES - ASTM E06.51.11 Fenestration Installation**

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October 29, 2007  Marriott Waterside, Tampa, Florida

### ATTENDEES

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<td>Beatty, Budd</td>
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<td>Butt, Tom</td>
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