

The meeting was called to order at 8:00 a.m by the newly appointed chairman, Chris Mathis.

Self introductions.

Moment of silence for Barry Hardman, former chair.

Documents referenced at meeting and posted on Section08 web site:

<http://www.section08.com/ASTM/Guiding-Principles-040708.pdf>

http://www.section08.com/ASTM/ASTM-2112-Sub-Task-Group-1_28_08.doc

<http://www.section08.com/ASTM/XYZ-New-2008-Draft-6.doc>

MINUTES: The minutes of the October 29, 2007 meeting were approved.

Review our mission:

- Overall Objective
- Plan the Work
- Building a family of documents that will work together with the guiding principles.

Tom Murray reports on upgrading and making E 2112 more user-friendly.

Sub-Task Groups:

Guiding Principles –Chris Mathis, now Jim Katsaros leading. Members: Steve Johnson, Kevin Remsen, Leonard Dorin, Ben Cross, Kevin Knight, Rick Perry.

Ancillary products – Phil Sumang leading. Members: Bob Braun, Collins Ofori-Amanfo, Lucas Turner.

Installation documents – Leonard Dorin leading. Reports they are leaning on FMA/AAAMA documents as a model.

Window-Wall Interface Task Group

Jim Katsaros – Pre-Installation procedure, installation, and post installation procedures will be addressed as general guidelines in guiding principles. Chris Mathis – Replacement installation documents will be separate from new installation documents.

Jim K. – will have a decision tree for exposure classification (to specify the right window for the job and region).

Will post this on <http://www.section08.com/ASTM/e2112.htm>. Members will be able to post their comments after this function is set up. Chair points out that we need a volunteer for the replacement window section (no raised hands seen).

Phil Sumang - now looking at shimming and anchorage, sec 5-7 may be better placed at the end of the guiding principles. Then specifics will be in the installation documents. Reorganizing the flow to match up with the installation sequence.

Chris M – rather than separate standalone standards, we could have a family of standards that is sold as a package.

Phil S – Sections 8 & 9 could be set up as standalone documents; will streamline and get rid of redundant language. Conducive to slightly changing to make specific installations. Sections 5 & 6 are about coordination and compatibility issues that are general in nature. Pick out the general principles on each section; e.g., flashing. Sec 6 is like a checklist for continuity, can be added to guiding principles section.

Tom Murray – Get semi-finished (draft) submittals from each team and put together as a draft complete document, so everyone can visualize it. Phil suggests we have a redline copy with original section numbers, put into the new order so everyone can see. Robert Bateman – separate standalone documents on the ancillary items such as flashing, anchoring, etc., and then integrate specifics into the installation docs.

Larry Livermore – will be much clearer when we have say, 3 dozen docs, not worry about how many pages each section is.

Jim K reminds us that there are documents by other organizations that can be referenced, such as AAMA 711, that we do not have to reinvent.

Leonard Dorin -- FMA/AAMA 100 & 200 docs – had interim meeting Jan 23 in Orlando. Went over FMA 100 based on comments from ASTM ballot. Except for title, there were no substantial changes – changed to add “for Severe Wind and Water Conditions”. See

Jim K – There is a new AAMA task force to take responses back from ASTM to evaluate whether to integrate into the FMA/AAMA document. Goal is to have coordinated documents for ASTM and AAMA.

Tom Murray wrote to the presidents of FMA and of AAMA for permission to reference and reprint the FMA/AAMA standards under ASTM, got permission.

Larry L –has anyone talked to ASTM about referencing other documents such as AAMA docs, or are we balloting through ASTM?

ACTION: Tom will talk to Steve Mawn about referencing.

Chris M – keep consumer in mind. They need 2-4 page docs that are specific to what they do. Will this be E2112 having hundreds of parts, or separate docs? For now we need to work on each part.

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Jim K reports on FMA work. This is a very focused organization specific to the region. Committee formed in 2005, made up mostly of manufacturers from Florida. AAMA joined effort for aluminum, WDMA for wood. Original intent was to adopt standards for Florida Building Code. Intent was for eventual adoption into E2112.

Typical houses in Florida have barrier wall of CMU with directly applied stucco on first floor, with a drainage cavity wood framed wall on top floor. Standards have 12 psf water (70 mph). FMA standards:

FMA 100 flanged or mounting fins in wood frame construction

FMA 200 Frontal flanged (alum & vinyl) for surface barrier CMU

FMA 250 Non-frontal flanged wood in CMU

FMA 300 & 310 sliding glass doors in wood frame

FMA 400 Sliding Glass Door in CMU

Are balloting.

Chris – we can plug references to these documents in our draft matrix of window-wall combinations.

Jim – these docs also have general guiding principles, but can add references to the guiding principles doc. Are waiting on validation testing.

FMA installation doc is about 10 pages with pictorial sequence of installation.

FMA/AAMA 100: ASTM edits are being reviewed to see if will be adopted by AAMA.

FMA/AAMA 200: Major emphasis is to be focused on sealing the surrounding area of the window's masonry opening in such a manner as to restrict liquid water at the window opening. Debate – this is a bad wall and we should not offer any installation instructions for it. On the other side, builders there insist on building them so we cannot change it.

The FMA standard does have a caveat that this is not a good wall. Codes basing on incorrect test report by stucco industry. Chris – reminds us that we need test data to back up references to other docs. FMA is testing. Have tested block wall with waterproof sealant. Will test with University of Florida (Dr. Forrest Masters) "Wall of Wind" project. There will be 36 wall specimens to test different window systems in different walls. Will test standard E2112 and FMA/AAMA configurations. Also working with ORNL on aging protocols to generate cracks and window fatigue.

FMA/WDMA 250 non-frontal flange (primarily wood)

RE: AAMA Liquid-applied flashing performance standard – task group formed in October 2007. Phil's group should also reference liquid-applied flashing.

FMA focusing on sliding glass doors, will add other types later.

Chris – these will fill in parts of our matrix. At each meeting we will review our matrix.

Leonard's group not yet addressing replacement windows. New Business will address.

Steve Johnson – replacement much more complex than new construction. We have a ton

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of work to do on the new construction practices. Chris is looking for volunteers for the replacement section.

Tom M – would like to see by June – first draft of each new doc on the web site. Each will reference the matrix. Post segments in sequence to see how the whole document will look. Will point out flaws in the concept.

ACTION: Tom will call in early June to get this out to Chris or Jackie -
Updated matrix with references to FMA/AAMA/WDMA docs.
Commentary by July 1.

Chris will talk with ASTM to continue Barry's concept of a family of standards that all go together, electronic format.

ACTION: Jackie Hardman will send reminders to task group leaders, ask for comments by members.

Chair opens discussion to comments in turn by all attendees:

- Standalone ASTM documents a good idea.
- May be confusing as to what revision of other (AAMA/FMA) standards we are referencing.
- Different test methods are used on different documents because of different objectives (test window, test interface, test wall).
- Deviations on workmanship – methods must not be so sensitive that those differences affect the performance.
- There is a comment that focus should be more on how do we test the installation as opposed to developing the installation methods, as this is what ASTM does. Explanation – we had significant problems because of installation methods, and ASTM does offer guidelines and practices, even though not as usual as the test specifications.
- Prescriptive vs performance-based standard was done because people needed specific step by step instructions for the interface.
- Guiding principles need to discuss drainage vs. barrier systems, with pros, cons, risks, etc. Discuss when and why you choose one over the other. How moisture-sensitive are the materials, etc.
- EIFS folks have developed methods that may be able to be plugged into the matrix. Other industries may be able to contribute in the same way.
- Work being done now will simplify the document and make more functional.
- Windows in some areas are not adequate for the rain and wind loads, but they will not pay the money for the proper window, so the installation methods must compensate for the fenestration product.
- Concern about documents in transition, go back to original authors with ASTM ideas – need to keep track.
- Refreshing to see the matrix as a reference tool.
- Like idea of cross references among documents.

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- Poor wall construction – what is ASTM’s position to drive different wall conditions of different regions? This task group can make recommendations and send up the chain. Can rock the boat. Can write code-intended standards.
- Charlie Carll, US Forest Products Lab, reminds us that he represents the people of the US, not wood industry. Kernel of E2112 is that window installer understands the water-shedding properties of the building – drainage or barrier system.
- Exposed flange window is used for indexing rather than anchoring – must anchor by other means.
- CMU Wall system problematic – urges caution!
- Symposium – Charlie is making progress on finishing review process for the 11/1/07 symposium.
- Larry L – When E2112 changes the document, ATI InstallationMasters changes the training program. In the process of doing the training manuals, they note there are significant omissions in new E2112-07. E.g. added sealant at top of flashing, but only added to Method B but should have been done throughout all methods. There are details that did not get referenced in the text. Robert Bateman is going to work with Larry to watch for missing pieces. Larry volunteers to lead a watchdog team to look for inconsistencies like this.

ACTION ITEM: New task group to look for missing content – Larry, Robert Bateman, Jackie. The whole task group also needs to review all content. New group to issue a redline copy by June 1. Jackie will go through a global search of the Word version for each figure number to see where references are in the text. Missing ones will be brought to this new group.

- Direction of task group good – break into an electronic format.
- Guiding Principles – need some guidance on where to go – risks of barrier or drainage methods. Need to identify conditions that govern decisions.
- Principles of testing for performance – not clear now. No way to simulate the products in use, simulate the actual use and aging.
- Don’t confuse unit performance with *installed* unit performance. Lab testing and field testing can be in a new section.
- Is there a pressure that is going to be used globally to validate these procedures? No – depends on expected exposure, and installation methods will be written for these – but there should be guidance. Note: some codes ask for tests on walls, windows, etc at 6.24 psf. Is that another task group altogether? Note: AAMA 502 field test is at 2/3 the design pressure.
- Establish performance standards for walls? Scope section on 1105 is self-contradictory.
- Other ASTM groups address field and lab testing.
- What is constructability and what is durability of constructions?
- Challenge – get ASTM and AAMA aligned on performance.
- Current E2112 hard to read. Fine-tune to make easier to use. Take out duplications and repetitions. Do interim version before this family of docs is published, which will take some time. Answer – this is the purpose of the new task groups.
- Incorporate mass storage walls in detailing.

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- Also need review of the matrix to include more wall types and cladding systems.
- ACTION: Invite task group to review the matrix and add to it.

Should this group become a subcommittee? Chris will meet with Steve Mawn and John Smith to explore.

Charlie – symposium – no papers totally through the acceptance process – all have gone through the process. Charlie took over for Barry. Most of the papers were reviewed, and there needs to be an editorial board member decision to complete the review. If JAI said there are mandatory changes to be made, Charlie has your paper and can discuss with you. Hope to have completed by next meeting in October.

Larry – ASTM staff – InstallationMasters program wants to have the CAD files for the drawings. AAMA developed many drawings with ASTM members to be used by both (for E2112-01).

Make this task group a subcommittee? Would work if we still had the same time slot (Mondays 8:00 – 12:00).

Chris – wants to push to complete. Much is already complete, just needs to be fine tuned, chain-sawed for redundancy.

Asks for volunteers to contact the task group chairman.

Don't be afraid to take on change, or to state that a wall type is not recommended.

Meeting adjourned 11:07 a.m.

Respectfully submitted,
Jacqueline Hardman

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ATTENDEES

Bateman, Robert	Simpson, Gumpertz & Heger
Brenden, Ken	AAMA
Braun, Bob	Consultant
Butt, Tom	Interactive Resources
Curkeet, Rick	Intertek Testing
Elbert, Chad	Jeld-Wen
Carll, Charlie	US Forest Products Lab
Dorin, Leonard	Fortifiber
Hardman, Jacqueline (Sec.)	National Building Science Corp.
Hunter, Donnie	Kawneer
Johnson, Kate	Dow Chemical
Johnson, Steve	Andersen Windows
Jones, Damon	Valéron Strength Films
Katsaros, James	DuPont
Krahn, Jim	Marvin Windows
Livermore, Larry	Architectural Testing, Inc.
Marino, Lori	Schnee-Morehead
Mathis, R. Christopher	MC ²
McKenna, Paul	Huhtamaki
Modtland, Dave	Pella Corporation
Murray, Tom	WR Grace
Nunes, Frank	Lath & Plaster Institute, California
Ofori-Amanfo	Collins
Perry, Rick	WDMA
Remsen, Kevin	Pro-Build
Sandin, Marc	Cosella Dörken
Schwartz, Tom	Simpson, Gumpertz & Heger
Stoll, Tim	Marvin Windows
Sumang, Philip	Engineering Diagnostics, Inc.
Turano, Stephan	Kawneer
Turner, Lucas	PGT Industries
Williamson, Joel	Simonton Window