# TechTalk



into Your Plans

#### FALL- 2022

## $SMA \ {\rm Newsletter-bold} \ {\rm new} \ {\rm look}$

Formed in 1957, the SMA goal was and is to promote and educate on stucco. Lath and plaster are technical and have more variations than most other trades, including regional practices. The SMA is national, getting calls from all over the US. Why the SMA ?

- 1. SMA is only about lath and plastering and not about other trades or conflicted with other competitive claddings.
- SMA is national; SMA covers Florida, Texas, and California markets and knows they are different. SMA also knows New York, Minnesota, Alaska and Colorado as well.

What do our members need & want? Help in stopping losses with better code and standard knowledge to make them profitable. Since lath and plaster have many technical variables, a newsletter strongly devoted to technical issues was the direction the SMA board opted for. Tech Talk will be quarterly and focused on technical issues. Tech Talk will also cover regional sections and concentrate on improving stucco and communication and cohesion between regions.

**INDUSTRY STANDARD** an established standard, norm or requirement in a particular area of industry or tradecraft. These are generally written by an authoritative source.

**INDUSTRY PRACTICE** customs or practices that are considered normal among businesses or the trades.

Many industry practices are not covered in standards. That does not make them wrong. Section 104 of the code makes it clear that alternates are acceptable when approved by the building official. The SMA can help in that area.

#### WHY BE SMA CERTIFIED?

The SMA spent almost 2 years developing an on-line training course for lath and plastering (stucco). The course consists of 5 free 30-minute Modules in English and Spanish. Module 6 (English only) is for supervisors and available after passing the required testing on lath and plaster. The course was reviewed by lath and plastering experts, code authorities and building envelope experts.

MODULE 1&2	LATHING
MODULE 3	MATERIALS
MODULE 4&5	PLASTERING (STUCCO)
MODULE 6	SUPERVISORS

Watching the videos is free. To obtain a picture ID and verify passing the test, requires a nominal processing fee. The picture card lists the Modules completed, including Silica Competent Person training if desired.

SMA Certified contractors must have one SMA Supervisor with a valid card. This certification verifies formal training by the person overseeing the work.

## SMA (Central US)

The Texas Lath and Plastering Contractors Association (TLPCA) is a long-standing group representing lath and plaster for the great state of Texas. TLPCA held their annual convention in San Antonio with some great educational programs including a trade show. Golf and other events encourage industry networking. The final night was awards and a casino night. The best part is this convention is that it is **only** for lath, plaster and EIFS. While not a huge in scope or size, it is more personnel and focused on our industry- **lath & plaster**. The awards accomplish promotion for lath and plaster work and honor contractors and materials worth noting. The TLPCA



seems like good direction to follow. The SMA was invited and presented at the convention with a live streamed presentation, many SMA members logged on. The TLPCA and SMA are working on some joint projects with great collaboration. After all, we are stronger when we work together. SMA training Class in Denver Colorado



**SMA LIVE:** The SMA has been doing some live webinars for architects, some webinars have attracted over 2000 log-ins. This explains why our tech line is ringing off the hook

# SMA (Eastern US)

The SMA receives calls from all over the US about stucco related issues. Some are regionally specific such as the call for an architect looking for a Product Approval Number for stucco. The firm was based in New York and the request was from the local Florida building department. Florida code requires these numbers on all proprietary systems. This can be confusing for those who specify generic cement plaster. Generic cement plaster does not require these codes. This is stated in the Florida code Title XXXIII Chapter 553.842 (10) and re-forced in Section 2507 (2014) requiring materials for lath and plaster conform to table 2507.2 6 which lists ASTMs and relevant products. The Florida Lath and Plaster Bureau (FLAPB) publishes an excellent Technical Paper covering this (SA- ST#01-03.21) for our friends in Florida. BECOMING SMA CERTIFIED MAY NOT BE EASY, BUT HAS VALUE TO YOUR CONTRATCORS POSTION IN THE INDUSTRY AND COST IS NEGLIGIBLE TO SMA MEMBERS.



DISPLAY YOUR KNOWLEDGE

# SEALANT JOINT AROUND WINDOWS:

One of the biggest concerns facing stucco contractors is leaks and windows top the list. Leaks generally come from the window itself or through the connection or joint between the frame and the cladding (stucco). This is the reason AAMA has two Methods for water testing field installations, Method A ( the window itself) and Method B ( the flashing around the window). For any installation



#### STORE FRONT or FLANGELESS STYLE WINDOW

must not leak. The Performance Grade dictates the Design Pressures the window can withstand. While the window itself is beyond the plastering contractor's realm, they do have some liability regarding water circumventing the window frame and entering the wall cavity by bad or missing flashings. This Tech Talk will focus on the requirements and practices for a sealing around the window frame with cement stucco cladding.

#### NAIL-FLANGE WINDOWS

The issue is more complex for nail-flange style windows. The SMA believes that a sealant joint is still imperative to keep water out. However, that joint does not always have to be a traditional backer rod and sealant between the casing bead



and a window frame, as illustrated in the flangeless window. The SMA defines the two most common sealant joints around nail-flange windows, the "exposed" sealant joint and the "concealed" sealant joint. Each method of sealing has pros, cons, and limitations.

THE EXPOSED SEALANT JOINT: This is the traditional sealant joint. A casing bead is typically held 1/4 to  $\frac{3}{4}$  inch away from the window frame. The gap is then filled with a round backer rod (optional), allowing a sealant

## **SMA POLICY**

The SMA publishes a **Technical Paper on** "Flashing a Nail- Flange Style Window". Caveats and limitations are listed for the concealed joint installation. Many contractors and even manufacturers prohibit the use of the concealed joint and may require the exposed joint and the concealed joint is not an option. This is their right and the SMA supports that right to mandate exposed sealant joints around all window flanges.

However, there are regions, buildings and conditions that can allow the concealed joint. They have been tested per AAMA requirements and pass water penetration test when installed per manufacturer's recommendation and flashed per AAMA, ASTM or SMA recommendations.

Regional practices have rules to follow, the SMA Tech Times paper on Flashing a Nail-Flange Window provides guidance on those rules. to be tooled and form an hourglass shape (preferred). An exposed joint provides a "visible" and effective seal to prevent moisture entry. Most home inspectors prefer to see these type of joints. **NOTE:** Joint design and preparation can be critical to make them function as intended.

**CONS**: the installation requires skilled installers with sealant. The type of backer rod and sealant selected are also important.

One concern is that homeowners tend to be poor at periodic inspections and replacement of these joints. When they fail due to aging, they can leak.

### THE CONCEALED SEALANT

JOINT: This is a popular method of installation in the western US for nail-flange style windows. While frowned upon by some it is acceptable with caveats and specific limitations. The "concealed joint" principle is based on moving the sealant from the visual or "exterior' to under the nailing flange. This can only be done when the window is being set in place on framing/sheathing. Properly done with flashing strips, water is kept out of the wall and re-directed down and out. This has been



Correctly tooled shape of sealant with depth

1/2 of width.

verified by several AAMA water tests. The benefit for the concealed joint is the sealant becomes protected from Ultraviolet (UV) rays. This practice can also eliminate the reliance on homeowner maintenance of an exposed sealant joint.

**CONS:** The concealed joint cannot be inspected after cladding is installed. Home inspectors see stucco abutting a window frame and tend to get scared. This method relies on the builder and subcontractor during construction Installing strip flashing (shingle-fashion) and sealant under the nail-flanges. There are caveats, such as the a limitation to lower Design Pressures, height of structure, size of opening, etc.



NAIL-FLANGE SET ON A BED OF CONTINUOUS SEALANT CREATES A WATERTIGHT JOINT. CONCEALED UNDER THE CLADDING

## Protect yourself: Know the rules:

**CODE LANGUAGE**: Flashing shall be installed in such a manner to prevent moisture from entering the wall or to re-direct that moisture to the exterior. Flashing shall be installed at the perimeters of exterior doors and window assemblies...." 2015 IBC Section 1404.5

The term "entering the wall" refers to the wall cavity and not the skin or cladding on the wall. The rest of the code language expressly allows for a flashing that re-directs moisture to the exterior of the wall. The 2018 code section is now 1404.4 and added the language "Where self-adhered membranes are used as flashings for fenestrations (windows), those self-adhered flashings shall comply with AAMA 711. Fluid applied flashings shall comply with AAMA 714.

AAMA 711 is a specification to establish test methods and performance for the strip flashing used at rough openings of windows and doors. Contractors should verify fluid applied flashing comply with AAMA 714 by asking the manufacturer for verification of compliance.

**REGIONAL PRACTICES:** There are regional preferences and we should recognize, respect and allow other regional preferences as the SMA approves their accepted industry practice. Examples include woven wire instead of metal lath and concealed sealant joints. Regions may vary on what industry practice is. Contractors should be aware when making a choice and ask "are we allowed to?". If the architect illustrates an exposed joint, you must install an exposed joint. If they specify metal lath, you must use metal lath. You can submit a substitution request. You should have a backup that your request is equivalent to or better to what is contractually required and if there are any impacts to schedule or cost. It helps to know the rules, limitations, and potential pitfalls.

**NOTE:** Saying "this is the way I always do it", is not formal backup and is likely to be denied.

## **ASTM UPDATE:**

The new 2022 ASTM C-1063 has been published and released. Section 7.4.5.1 states "Where vertical and downward facing horizontal exterior weather-exposed plaster surfaces meet, provide means to facilitate drainage."

This is meant to force designers and contractors to install drip screeds at all wall to soffit conditions. The push is primarily from the plaintiff experts who seek out "defects" for insurance payouts. This is akin to the issue of no-control joints: Both cases rarely have any associated damages. Historically the only code-required weep location was the base of the framed wall asking for a weep screed. The SMA stands by the statement that not all wall to soffit returns require a weep point. Factors in making the decision are penetrations, structure height, and exposure. Designers are welcome to contact the SMA for an opinion and can get written confirmation of the SMA recommendation. Contractors should not make

## AAMA

AAMA stands for the American Architectural Manufacturers Association. AAMA merged with another association and was renamed the Fenestration and Glazing Industry Alliance or FGIA.

Many of the historic documents, especially technical papers and certifications established by AAMA will remain AAMA labeled as they have established name recognition.

Contractors should understand that all windows are not created equal. They should have a Design Pressure rating that puts them into a Performance Class. Ratings are based on structural ability, water, and air resistance. Energy ratings are separate. For more information, visit www.AAMAnet.org or www.fgiaonline.org that decision but inform the designer to contact the SMA and that you will install as directed per SMA and the designer directives. Protect yourself!]

## STUCCO TAKES THE LEAD

According to the annual data from the Census Bureau's <u>Survey of</u> <u>Construction (SOC)</u>, *stucco* was the most common principal siding material on new single-family homes started in 2021 (28 percent), followed by *vinyl siding* (24 percent), *fiber cement siding* (such as Hardiplank or Hardiboard (23 percent) and, *brick or brick veneer* (19 percent). Being an SMA member helps keep stucco at No 1.



## WANT TO GET INVOLVED?

If you have read the SMA newsletter to this point, you may be what the SMA is looking for, to help us be better at helping our collective industry. The SMA is a recognized and national voice for lath and plastering. Tech Times (SMA Tech Bulletins) and Tech Talk will likely gain more attention and we would love more eyes for review and comment before it is published.

It is meant to be a recognized industry-allowed and supported practice for lath and plaster. SMA members wanting to be on a TECH TALK review committee should contact the Executive Director (<u>Mark@stuccomfgassoc.com</u>). You will get an advanced copy for comment and editing. Understand it is not a personal platform to advocate for "your" best practices. It will also not put products

in a more favorable light than its competitor. This is industry-wide and for all dealers, manufacturers, contractors, and consultants. Lath and plastering have many regional practices, and we need to account for all the regions of the US.

www.stuccomfgassoc.com

(714)473-9579



## Principal Exterior Wall Material Used on New Homes in 2021