The 2016 US Stucco Market

- US Census Data
- Regional Data
- Trends ImpactingStucco Market Share



SMA Marketing Committee



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The SMA makes no warranty express or implied on the data supplied, predictions on trends or state of the industry

STUCCO MANUFACTURERS ASSOCIATION (SMA)



The SMA was incorporated in 1957 by the major stucco manufacturers. The mission statement was to promote the use of plaster and the exterior cement plaster siding, called stucco. SMA objectives include establishing standards, promoting best practices and developing a venue for innovative products to ensure continued growth of the stucco market. Over the last several decades, the SMA has grown to include architects, dealers, contractors and various experts involved with stucco.

Today stucco has grown to incorporate several variations of the traditional three-coat cement stucco: Insulated one-coat stucco, acrylic finish coats, decorative foam shapes, rainscreen assemblies, crack supression and cement board systems are all examples of innovations in stucco. The undertsanding and proper implementation of these variations/options are important as they can affect design, asthetics, performance and the installed price. The SMA has always been on the forefront of innovation and will continue to be the industry leader in stucco with regard to design, product selection and best practices for installation. Stucco is a proven siding material, it is the duty of the SMA to clear up missconceptions about stucco.

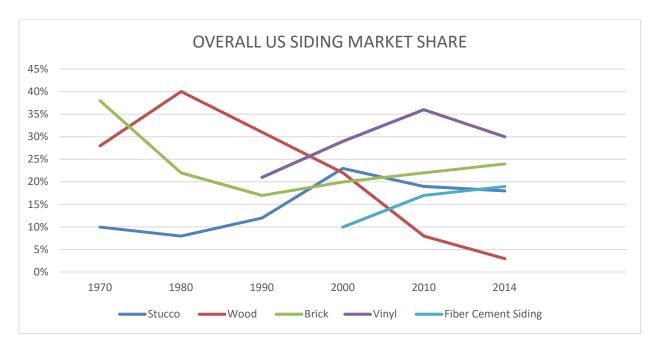


The Lath and Plaster Committee is the contractors conference within the Stucco Manufacturers Association. The Lath & Plaster Committee was formed to allow plastering contractors a forum and a voice in the industry. Members of the L&P committee are contractors who recognize the need for education, best practices and programs that will result in keeping stucco a favored siding. They know stucco should last the life of a building and require minimal maintainence, but must be designed and installed correctly. These members are experienced and can provide insight into current practices, industry trends and other factors that impact overall stucco market share. They have been an important part of the research for this report.

Contractors of the Lath and Plaster Committee have input on SMA details, specifications, quality control procedures and technical bulletins. The SMA acknowledges their commitment to the industry. They recognize that architects need a quality assurance clause in specifications to provide the best stucco value for their clients.

INTRODUCTION

The residential siding market of the United States has been tracked for the last forty years by the US Census Bureau. The data in this report is from new homes constructed, then calculated to provide a percentage comparison of all major siding materials. The market share time chart illustrates the shifts in trends for various siding materials. The Bureau tracks traditional basic siding materials such as wood, brick and stucco. Newer siding materials, such as vinyl and fiber cement siding, have been introduced and only recently have been tracked by the Census Bureau. Some sidings have been part of the survey and then dropped when market share becomes irrelevant to reporting. An example is aluminum siding, which once had notable market share. However, in 1985 and after years of decline, it was dropped. Wood siding will likely be dropped from US Census data as market share has drppoed to 3% with no sign of recovery. Materials trending upward are fiber cement siding and brick. Vinyl siding suffered a recent drop in market share. However, vinyl has recently instituted programs to recover lost market share and has recently begun gaining market share again. Stucco trended strongly upward from the 1990's and suffered a slow decline in the 2000's. Brick instituted an aggressive marketing program and has regained lost market share. Fiber cement siding is relatively new. The commericial siding market is seeing gains in the use of panels, such as fiber cement and metal. This has translated in a loss of stucco market share for both commerical and institutional construction.



Source Data

The US Census Bureau "Survey of Construction (SOC)" and University of Kentucky report "Historical Trends of Exterior Wall Materials used in the US residential Market" copyrighted 2014 by the Associated Schools of Construction. The Kentucky report provides an overview picture of siding trends in the United States. The Kentucky report broke down the data to various regions, specific markets and

considered past and current siding trends in the United States to make some predictions in future siding market share. The SMA report uses this data to focus on the stucco market. There are factors that make the stucco market unique to other claddings. The SMA also interviews experts in the stucco market as well as designers and developers who are the decisions makers on siding selection. The information is meant to help understand shifts in stucco market share.

Trends in construction are important when preparing strategies, marketing plans and related management issues. Examining past and current trends relating to information technology, advances in materials, project delivery methods, labor supply, shifts in management principles, defect litigation is useful in predicting futrue trends

SIDING MARKET SIZE

Catalina Research Inc. report number SR070 "First Look at Siding" was released February 2016. This nationally respected research firm researched 14 lines of various claddings including wood, vinyl ,metal, brick, concrete, stone, fiber cement and stucco. Factors included are building starts, sales, contractor revenues and factors driving demand. The Catalina report mentions the United States has a reported \$11.9 billion in annual sales for the siding industry. The Catalina Research is available at www.CatalinaReports.com. The most recent US Census Bureau estimates that all stucco like siding represents 19 to 22% of the total US exterior siding market. This would translate to the stucco industry being over a two billion dollar industry.

WHAT IS STUCCO

Traditional stucco is typically a mixture of sand, cement and lime applied to masonry or framed walls. This relatively thin cement shell has proven to protect buildings for centuries. Stucco is desired for aesthethics, integral colors, fire ratings, high abuse resistance, and low maintenance. Life Cycle Costing, per ASTM STP 1269, has stucco rated the lowest life cost siding over a 30 year span. The desire for stucco will likely continue, even in the face of past challenges such as cracking and climate suitability. New challenges for stucco are concerns of water intrusion or the ability for the cladding to dry-out.

The term stucco for the SMA is considered the entire cement membrane and lath (not just the cement finish coat). For the US Census marketing data, all stucco like products, including EIFS, one-coat, and Direct Applied Systems were classified as "stucco".



The primary function of siding is to provide protection of the interior building. Moisture management is a key factor in keeping rain from intruding into the wall cavity. Stucco siding has a distinct methodology to deflect, drain, and dry buildings. The recent industry trend to classify cement stucco as a "reservoir cladding" may impact stucco market share as this is considered a drawback in cladding selection.

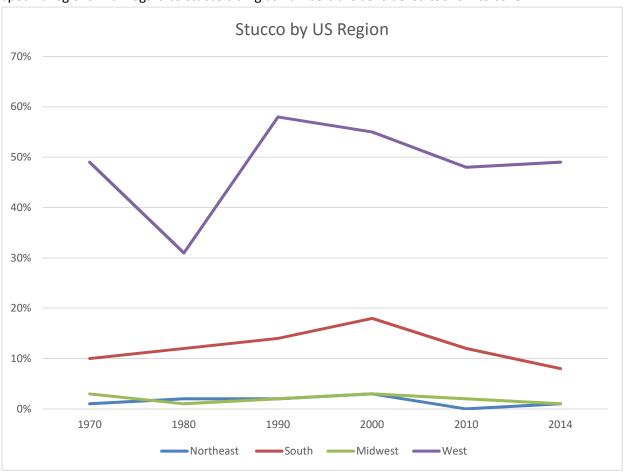
REGIONAL MARKET SHARE FOR STUCCO

The "Stucco by US Region" graph below illustrates the percentage of stucco used in the different regions of the United States.

The West represents the vast majority of stucco market share for the U.S. In 1990, 58% of new homes had stucco siding in the Western U.S., but in 2014 the market share was 49%. Stucco has been the dominant siding for several decades in the West, particularly in the southern half of the west coast. The West is further broken down to the Mountain Region and the Pacific Region, which will be discussed in greater detail in the following sections.

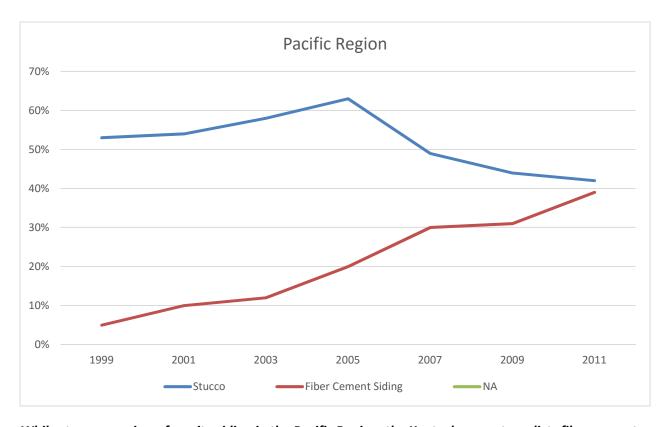
The South is the second largest stucco market with a market share of approximately 10%. The South region is broken down in to smaller regions, such as Atlantic region that is discussed in greater detail below. Texas was considered in the South and further broken down to the West South Central region. Unfortunately, the West South Central did not include stucco in the data provided.

The Midwest and Northeast are very small markets for stucco. The stucco market for the South is primarily Florida and specific regions of Texas. The northeast and central U.S. are not broken into more specific regions with regard to stucco siding as numbers are considered too low to cover.



Pacific Region

The Pacific Region consists of *California, Oregon, Alaska, Hawaii and Washington*. Stucco had as much as 62% market share in 2004-2005. While in 2012 stucco market share was at 43%. Only two siding materials are tracked by the Census Bureau in the Pacific Region, stucco and fiber cement siding. Most of the stucco market share for the Pacific Region is in California. Central and Southern California have always been strong stucco markets. Washington and Oregon were never large markets, but have seen recent losses in stucco market share to fiber cement siding.

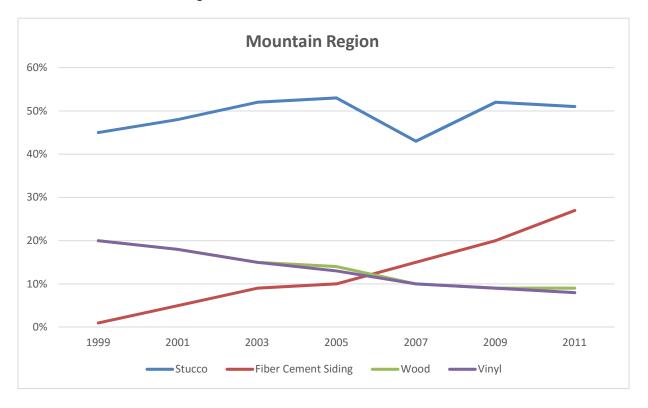


While stucco remains a favorite siding in the Pacific Region, the Kentucky report predicts fiber cement siding will overtake stucco as the major market share for siding by the end of 2017. Interviews with various consultants and designers confirm these predictions are accurate.

Mountain Region

The Mountain Region of the West consists of *Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, and Nevada*. The Mountain Region has four exterior sidings tracked by US Census Bureau data: Stucco, Fiber Cement, Wood, and Vinyl. Stucco remains the predominant siding of the mountain region. In 2005, stucco reached 52% market share. The low point was 1999 with 47% market share. In 2012 the mountain region remained a good stucco market at 52%; most of market share is represented in Arizona, New Mexico and Nevada. The current trend for stucco in the Mountain Region is predicted to remain stable.

The prime competition for stucco is the introduction of fiber cement siding in the more northern states of the Mountain Region. Fiber cement siding is currently 27% market share, but trending upward. Fiber cement siding is the second most popular siding material in the mountain region. Wood and vinyl siding have remained flat with slow declines from 2006 to 2012 with equal market share at about 10%. Data was unavailable for 2014 in regional breakdowns.

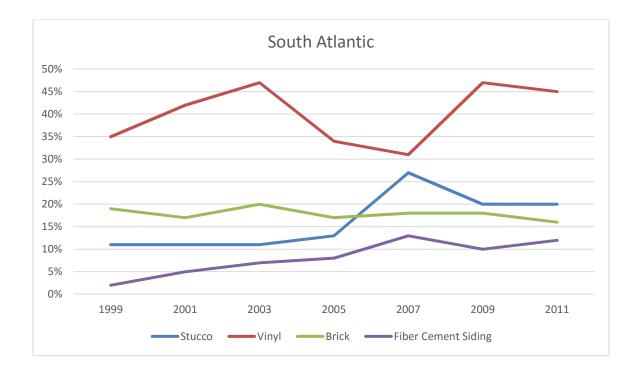


South Atlantic Region

The South Atlantic Region is comprised of *Delaware, Maryland, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida*. The US Census Bureau reports on four sidings for this region: Stucco, Vinyl, Fiber Cement Siding, and Brick. Vinyl is the dominant siding for the entire region. It is difficult to compare as Florida represents the vast majority of this stucco market.

Vinyl siding market share fluctuated from a high of 47% in 2002 and 2010, with a low of 31% in 2006. Vinyl has leveled out at 43% in 2012. Brick has averaged 17% market share and been very stable throughout the region. Fiber cement siding had minimal market share in 1999 and reached a peak in 2006 of 13%. In 2012 market share was reported at 11%. Most experts agree the market share for fiber cement siding is again trending upward for the region and making an impact in Florida's multifamily market.

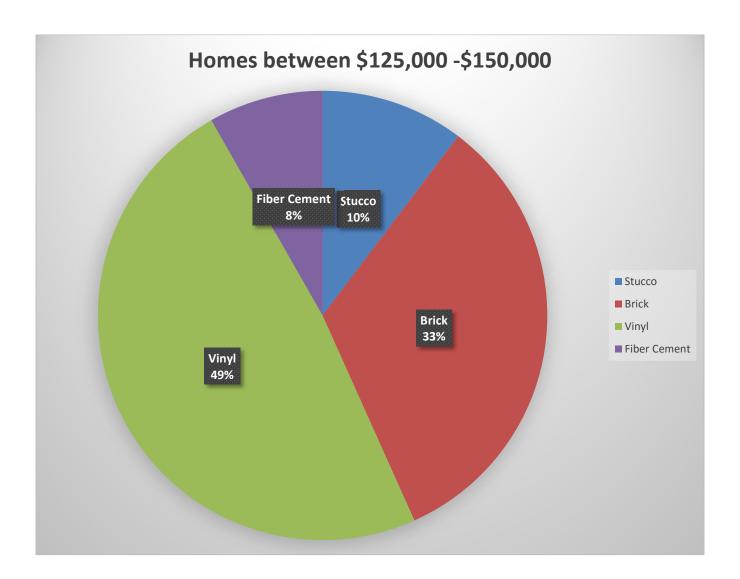
Since 2010, stucco market share has stabilized, holding around 20%. Interviews with designers and consultants state the trend of framed, multi-family projects in Florida being switched from stucco to fiber cement siding as being a cause. This may impact overall market share for stucco for the region in future reports.

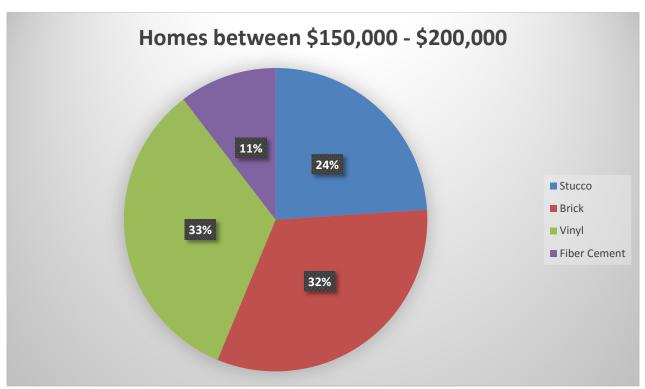


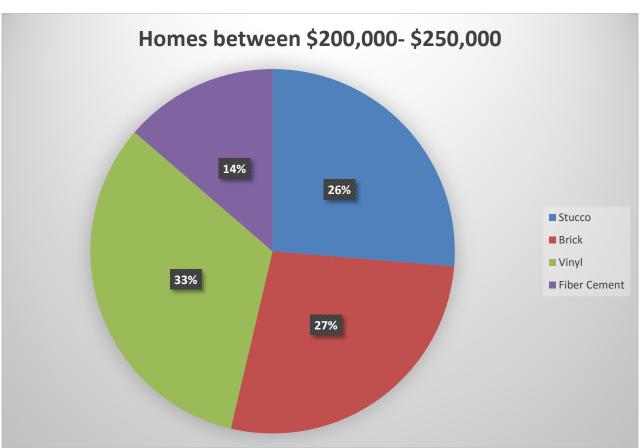
STUCCO BY HOME VALUE

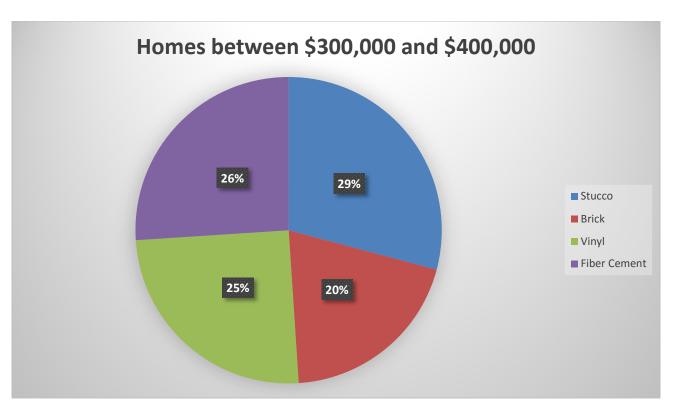
U.S. siding market share has also been tracked by home value. The U.S. census data for 2014 recorded the primary siding used on all new homes sold and then broke them into nine categories. These categories are from homes sold for under \$125,000 to homes sold for more than \$750,000. Data reveals stucco market share increases as home prices increase.

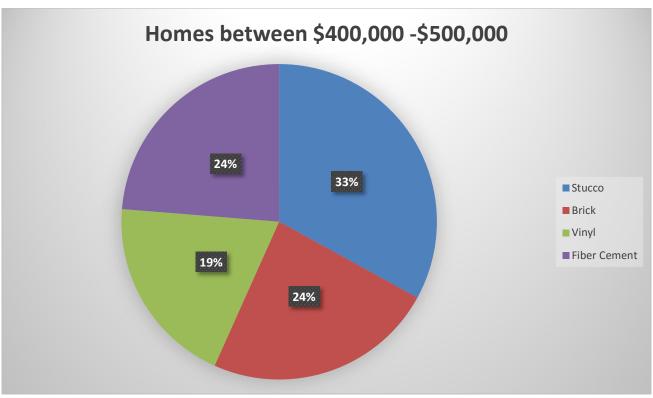
Stucco is considered a low cost siding in the Southwest, Florida and Texas. These are regions where the labor supply in to apply stucco is stronger and when combined with high volume plaster pumps, optimizes production and results in lowered installed pricing. The higher volume production allows stucco to be a more dominant siding in these regions. The price point will keep stucco siding strong in the southern housing markets.

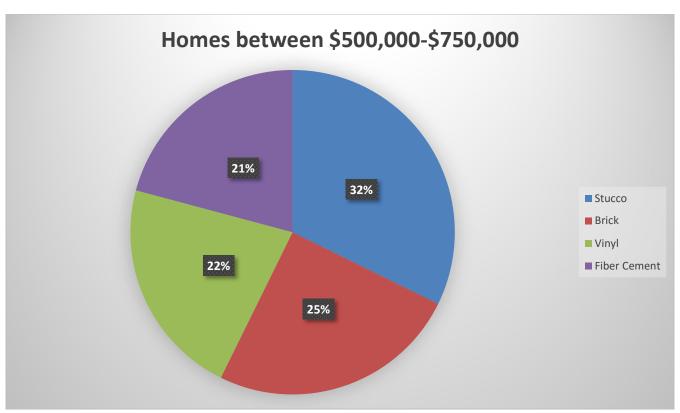


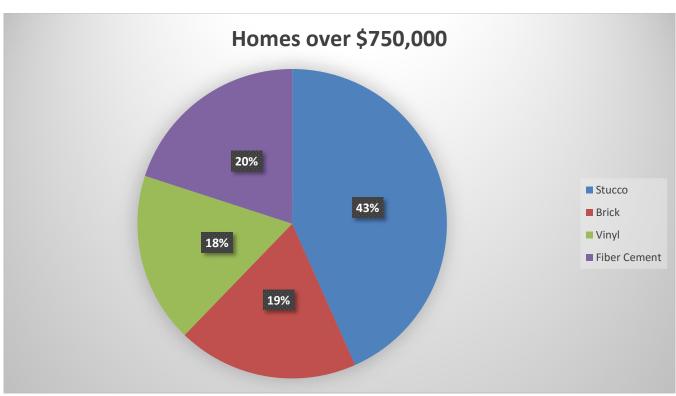












REGIONAL PREDICTIONS

This report breaks the US into four quadrants and provides predictions for stucco based on interviews for each region. Each region is unique.

Southwest: This is the strength of the stucco market. Market share will continue to dominate in

residential markets due to low install cost and a long history of proven success. Predictions are a moderate decline in mid-rise structures. The commercial market is predicted to noticeably decline as designers opt for other exterior claddings for a variety of reasons and new trends, which are discussed in the Factors Impacting Stucco Market Share section. Texas will likely remain steady and be influenced by dealer support and available labor supply. Skilled labor is problematic in most regions.



Northwest: This market will likely continue to see stucco decline both in residential and commercial. The residential market will see stucco limited only to expensive custom homes and only on small accent sections. The growth of fiber cement siding will continue to push stucco out of the market. Condominiums, once a good stucco market, will move to other claddings. Commercial and institutional projects currently have minimal stucco and designers are using metal panels or other types of rain screen panels.

Southeast: Florida should remain a strong stucco market in the Southeast. The single family stucco home market in Florida should not suffer loss of market share as cost to value ratio will keep stucco popular, along with a long history of success. However, the recent negative publicity on leaky homes, predominately in central Florida, will likely have a negative impact throughout the region. The Florida market is experiencing another construction boom, and this need for workers fuels unskilled labor that install defective siding. This has already impacted the multi-family market as re-clads are moving away from stucco to more fiber cement siding. Other Southern states will see a negative impact in stucco market share as the lack of skilled tradespeople and the public trust in stucco suffers, which adds to a downward pressure on overall market share in the Southeast. Developers will likely move to other claddings on high end projects as the crisis will likely be exploited by other manufacturers to gain market share.

Northeast: Stucco has never been strong in the Northeast and is often considered not suitable for colder climates. This is in direct contrast to overwhelming popularity of cement stucco in countries like Germany, where freeze thaw issues are common. Stucco will remain only a small percent of the siding market. More overwhelming than the freeze thaw concerns is the cost to install. Stucco is generally much higher in cost than other comparable sidings. The high end market where designers push for stucco, will remain. Large projects will likely suffer as the designers are more connected to the envelope consultants that promote the use of expensive rain screen stucco systems. Most the Northeast consultants are unfamiliar with stucco.

FACTORS IMPACTING STUCCO MARKET SHARE

Labor

The cost to install stucco has great impact on market share. Labor is a major component and influences pricing to install stucco. Stucco requires two skilled trades: lathing and plastering. Both must be knowledgeable and trained for stucco to be installed productively and correctly. The industry is suffering in passing along trade knowledge and skills needed to have stucco succeed. Recent trends in labor training and contracting will likely be a challenge for stucco market share. The commerical market will be see greater impact.

The trend of moving towards the large universal wall and ceiling subcontractor and away from the specialty subcontractor impacts stucco. These contractors install drywall, framing, various panels, insulation, acoustical ceilings and plaster as a sideline. Plaster contracting is more specialized than installing panels. The complexity is in recogizing issues, blending materials on site, and still being productive. There are multiple variables and issues to overcome. The large wall and ceiling contractors endeavor to eliminate variables, simplify the process and have workers equally universal in basic disciplines. Drywall hangers are a better fit for this universal worker. Lathers and plasterers are more specialized and limited to a singular skill set. This is simply a good business decision for large wall and ceiling contractors. The future will likely see greater moves toward more universal workers and less special skilled workers. Factors that will likely further drive this trend:

- General Contractors preference for "bundled" subcontracts
- Board or panel hangers being more versitile than lathers/plasterers
- More Design Build/Assist allowing wall and ceiling contractors to drive siding selections

Commercial work is generally more complex and expensive than residential stucco. This complexity adds to why commercial stucco market share is suffering. Complex designs are considered ventilated stucco and a lack of universal details is driving architects to turn to paid envelope consultants for design assistance. This can add substantial costs to unfamiliar or skill intensive claddings.

Residential stucco in the southwest can be as low as \$ 2.00 a square foot, where commercial stucco can be as much as \$20 a square foot in the same region. Union wages often receive the blame for higher

stucco prices, particularly for commercial markets. The blame on higher wages seems unsupported as the residential stucco market was once Union and remained competitive even with high wages. The relation between wages paid and achieved production rates to apply stucco are a more likely a factor. High production lowers prices, while the lack of production makes prices climb. Higher production in stucco requires three factors to be in place:

- 1. A skilled labor pool adept at high stucco production
- 2. Contractors/supervisors who know plaster production
- 3. Designs that allow for production stucco work

The Southwest residential stucco market has all three factors, and prices are low. Regions with low stucco market share or markets losing market share lack one or more items. The Southwest commercial market lacks items number two and three. There are obviously plasterers available, but supervision is often poor and/or project wall designs do not allow for high volume production.

Skilled workers to install lath and plaster is related to demand. Low demand facilitates low supply, such

as the Northeast. Prices remain high and market share stagnates. When supply meets demand, production is achieved and quality maintained; prices are affordable and market share is strong. The Southwest residential market is an example. When demand drives supply that is untrained, the result is what is currently happening in Florida.

Production in applying stucco requires all three factors listed above. Ultimate production is related to optimal utilization of mechanized technological advancements in plastering. This means production relies on high volume plaster pumps and workers

High Volume Plaster Pump

capable to run them. Contractors must also have the knowledge of production plastering, the talent to spot problems and ability to fix them. This process to install production plaster is in opposition to a more universal worker and does not fit large wall and ceiling contractor's business models.

Other Factors Impacting Stucco Market Share

- **Leaky Buildings**: The leaking building crisis in North America has created the cottage industry of building envelope specialist. The stucco industry has not been unified with a reponse or solution. This division has allowed others to take the lead and direct stucco design, installation and even code changes.
- Cracks: Stucco cladding is a brittle and can crack as a form of stress relief. Owners are concerned and too often contractors use this fact to explain away poor workmanship. Cladding competition uses cracking to exploit cement stucco as defective.

Continuous Insulation: as energy codes push for more rigid insualtion of the outside of

buildings, it would seem insulated One-Coat Stucco would be a natural transition. Three-coat stucco over rigid insulation has tacit approval through ASTM. One-Coat Stucco over rigid foam has explicit code approval and a track record of success. However, the lath and plaster contractors continue to resist change. One-Coat Stucco was developed over rigid foam, has vairous Evaluation Reports and proven to work.



Negative perceptions are derived from past

failures in markets where unqualifed installers were targeted to install the system. Failures insued and the name of One-Coat Stucco has unfairly been tarnised in some markets. More data may be needed to move the industry to verify that One-Coat Stucco meets the Continuous Insulation challenges presneted to developers. Three- coat stucco can be done over rigid foam, but most engineers are concerend over issues such as cantilevering, where to place the water-resistive barrier and explicit code compliance. The preference of Three or One-Coat Stucco is regional in the southwest. Metropolitan areas tend to favor traditional three-coat stucco while outlying rural areas and production homes in suburbs see more One-Coat Stucco installations. Plastering contractors tend to resist One-Coat Stucco for a variety of reasons:

- Tradition
- Learning curve for crews
- Material availability
- Urban myths

ASSOCIATIONS AND CERTIFICATION

SIDING ASSOCIATIONS: Most states have little or no licensing requirements for installing siding. Poor installations and perceived success and/or and failures will impact a sidings reputation. The reputation of a cladding is important in the decision process of building owners, developers and architects. Bad reputations impact long term market share, even proven siding materials, such as stucco can be impacted by poor installations.

Associations in siding materials have instituted programs to promote quality installations, inspections and provide design assistance. Designers and building owners have generally supported these programs, provided the cost to value ratio was in balance and they are third party inspections/reviews.

The **masonry industry** provides architectural assistance with generic design details through the International Masonry Institute (IMI). The IMI and other such groups have substantial budgets to provide a variety of services. They have been effective in turning market share.

Special Install Programs: The Vinyl industry has suffered recent loss in market share, but equally are responding to the challenge and made changes. To combat negative perceptions of inferior quality materials, they provide a material certification. To combat concerns over poor install practices, they have implemented an installation "certification" program to building owners. The vinyl siding industry has taken the unusual step to certify the product and the installation of vinyl siding. The Vinyl Siding Institute (www.vinylsiding.org) heavily promotes and markets this as "the only siding industry with dual certification programs".

Other **certification and accreditation programs** sponsored by various trade associations are gaining popularity. Whether it is the certification of individuals, products or services, the credentialing of professionals, or the accreditation of programs, services or institutions, these programs confer an array of valuable benefits not only to associations and association members, but also to the industry, government, and the general public. Proper care in establishing and operating certification programs can go a long way toward minimizing those risks. Even with potential litigation issues, Legal risks can be effectively managed. Caution should be taken to avoid establishing an inspection agency to appear third party, but is in reality under the control of those being inspected. While courts are very reluctant to interfere with certification programs operated by trade associations, industry perception can destroy a programs intent or reputation. Courts generally favor on the side of the association as they assume they have greater knowledge base on the subject than the court. In general, associations have prevailed in the vast majority of certification disputes.

Despite trade associations impressive track record of success in certification-related litigation, the risks cannot be ignored. Certification programs raise risks of legal liability under various laws, including the antitrust laws. In addition, there are common law theories of negligence, warranty, due process, and defamation, among others. There are steps associations can take in structuring and administering a certification program to minimize the risk. Proper procedures and protocols can help ensure that the association will prevail in the unlikely event of litigation.

CONCLUSION

The data from the U.S. Census Bureau provides a reality that stucco market share is flat or trending down. This report provides observations as to possible reasons why and predictions for future market share based on trends. Key points.

- The University of Kentucky has predicted fiber cement siding will soon overtake stucco as the in the western region.
- Commercial and multi-family markets are the most likely markets to see a shift away from stucco for reasons provided.
- The single-family home market will likely remain stable.

A strong factor impacting stucco market share is the cost to install. When costs are in line with other sidings, stucco is often selected. There are markets where stucco is more economical than other cladding and stucco has major market share. In all regions quality installations is the long term issue with regard to market share.

Comprehensive promotion, marketing plans, training and educational programs have worked for other siding materials. Labor Unions, dealers, installers and material manufacturers should work together to protect overall stucco market share. Focus should be on markets vulnerable to loss. Stucco also has opportunities in most regions of the country to gain market share. Notably, the Southeast, Central and Northern states where stucco has minimal market share. Considerations:

- Benefits of a third party study on "why stucco is good for your building"
- A plan to publish nationally recognized generic specifications and details
- Developing a certification program for installation to win consumer confidence
- Consider establishing an entity similar to the Masonry or Vinyl Industries.
- Educational classes on production plastering

This report is based on data and interviews supplied by various groups and individuals. The SMA has made reasonable attempts to verify all information is accurate but does not provide any guarantee. The report is not meant to disparage any group, person, products or industry. It is an observation of current factual data from the US Census Bureau on siding market share and observations to trends that may ultimately impact stucco market share.

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