

## Masonry Information Technologists, Inc.

304 Kachuba Court – Altamonte Springs, FL 32701

407 834 1976

[jim@masonryinfo.com](mailto:jim@masonryinfo.com)

### Cracking Evaluation

#### Evaluating Cracks in Stucco:

It is well known and understood that oftentimes stucco will crack and the cracks need evaluation and appropriate repairs.

This is a guideline to evaluate cracks and determine appropriate crack repair.



First:

Determine what is the size of the crack?

← 0.010 inch

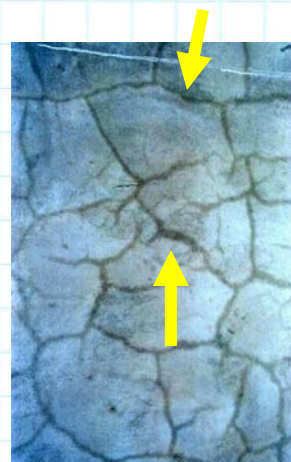
Second: The issue becomes: *Is the cracking excessive?*

Answer:

A consultant on the West coast has determined that in 100 sq. ft. of stucco (10 ft x 10 ft) a hairline crack of 1/16 inch wide and one lineal foot long is NORMAL. More than that is excessive. Or a crack of 1/32 inch at two lineal feet long would be Normal, more than that is excessive.

Additionally:

Determine if the crack is a “working” crack, i.e. is the crack “moving” at the edges of the crack is it fraying and becoming deteriorated?



Yellow arrows show that this is a “working” crack-fraying at the edges and deteriorating.

**Masonry Information Technologists, Inc.**

304 Kachuba Court - Altamonte Springs, FL 32701

407 834 1976

[jim@masonryinfo.com](mailto:jim@masonryinfo.com)**Cracking Evaluation**Finding:

Reviewing this project the stucco does appear to have Excessive Cracking.

However, any cracks, even small ones are an invitation to water intrusion so any cracks found should be treated as per following recommendation.

Recommendation:Delaminated areas in conjunction with cracks:

12 to 14 inch diameter with one crack up to 0.010 inch and not a “working” crack need not be removed and replaced.

14 to 18 inch diameter with a small crack up to 0.007 and not a “working” crack need not be removed and replaced.

24 inch diameter delamination with any crack shall be removed.

An acrylic paint coating with appropriate preparation prior to painting may be considered.

The following preparation would be recommended:

fine cracks shall be filled with a product such as “Paint Grade-Porter-Flex”.

larger cracks shall be filled with the “Knife Grade- Porter Flex”.

Porter Flex is an elastomeric product that will fill the crack and will seal it.

The paint grade should be applied with a ½” brush and the knife grade shall be applied with sufficient pressure to penetrate into the cracks.

No more than a ½” width of “elastomeric flex” shall be applied.

Elastomeric patch compound may be used for cracks up to 1/16” in width.

Cracks larger than 1/16” shall be routed out and repaired with Sika

Dur.



0.013 inch



0.013 inch

**Masonry Information Technologists, Inc.**  
 304 Kachuba Court - Altamonte Springs, FL 32701  
 407 834 1976 [jim@masonryinfo.com](mailto:jim@masonryinfo.com)

## Cracking Evaluation

### Cracks w/well bonded stucco:

Cracks in conjunction with well bonded stucco on both sides of the crack are illustrated at the right.

In this case- the crack needs to be repaired- depending on the size of it, If smaller than 1/6" inch it can normally be repaired with an elastomeric patch compound. If larger, it should be repaired with Sika Dur. Often times, after the Sika Dur has set for 7 days, the joint should be done again with elastomeric patch compound.

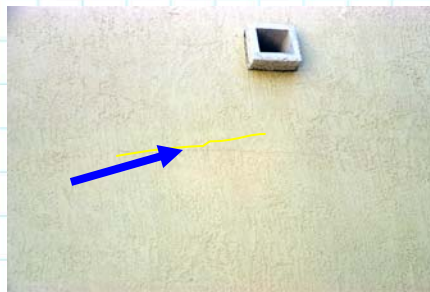


Photo at the right shows elastomeric patch compound filling the cracks prior to painting.



## **Masonry Information Technologists, Inc.**

304 Kachuba Court - Altamonte Springs, FL 32701

407 834 1976

[jim@masonryinfo.com](mailto:jim@masonryinfo.com)

### **G. Spider Cracking:**

Much stuccowork in Florida exhibits spider cracking. Some projects do exhibit an unusual amount.

Care must be exercised when using a bonding agent or an additive to stucco. One example: Conproco has a product, i.e. K88. Sometimes used both as a bonding agent on the wall prior to the stucco application and also as an additive in the stucco mix.

#### Conproco K88:

MIT has found that Conproco makes two versions of K88, one is a primer and the other is an admix.

The primer is equivalent to Acryl 60 and like Acryl 60, it meets ASTM C 932 requirement. Stucco must be applied when it is tacky.

The K88 Admix is recommended as an additive to the mix. It actually is not recommended to be rolled on like the primer.

MIT does believe that the improper use of this product may have added to the excessive cracking and also to delamination.

Attached are the data sheets on both products, i.e. the primer and the admix.