## **Rain Water Damage**

Experience of an original owner Rancho Sayante March 2021



# Innocent looking Monier Roof Tiles Fail at repelling Rain water Hundreds of Redhawk homes are affected

Rain water getting under roof tiles year after year speeds up deterioration of the water barrier, typically a Felt underlay that is between the roof tiles and the wood structure. Once this barrier is breached both visible and invisible damage begins to spread rapidly. Water where it doesn't belong will peel paint, stain walls and ceilings, devastate drywall and facilitate large colonies of mold. Structural wood warps and ultimately fails from mold decay.

Some Redhawk homes built in the 90's have roof tiles made by Monier that slowly lose their water repelling ability as they transition to delivering rain water to the Felt underlay rather than keeping the water away. With water being The Universal Solvent, the Felt underlay will be breached. Just give it time.

Damage from Monier tiles will be wide spread on the East, South and West sides of the roof line. For those without Monier tiles keep in mind that ANY roof leak inside or out indicates that the Felt underlay has been deteriorating for many years. Unnoticed structural damage may be underway. Roof inspections are free from most Roofing companies. The sooner the better.

The information provided below is valuable to everyone because repetitive water on the Felt will cause damage regardless of how the water gets there.

#### **Details**

Hundreds of homes in Redhawk built before 1997 have Monier concrete S-shaped roof tiles that lost their ability to repel water 10-20 years ago, decades earlier than expected. The water proofing glaze is gone leaving a faded bare concrete look and feel.

Tile age and condition comparison



The resulting water damage prompted Class action lawsuits against Monier because the tiles were said to be maintenance free for 50 years. Now, after damage has been done, research indicates the tiles must have a water sealer applied periodically to prevent repeat recurrence.

In November of 2019, advisory letters were sent to hundreds of Redhawk residents known to have or were likely to have the Monier defective tiles. Unfortunately the seriousness of this defect was not emphasized in the correspondence.

#### What to do

Look for peeling paint, water stains and damaged wood all around the outside roof line of both first and second floors.

Look for water streaks below drip holes and slots, water streaks/stains on the house side of the Fascia. Look for stained ceilings everywhere on the second floor especially near the outside walls. Include closets. Get a free Roof inspection. Extensive damage may be found. Verify the report.

Get a free Termite inspection. Many Redhawk homes acquired Termites due to exposed wood during construction. The Termites may still be there.

To determine the existence of Monier roof tiles, look for ...

1. The MONIER name molded into the right hand bottom side at the far end as viewed from a ladder.



2. The telltale dull porous surface that allows water to be absorbed instantly.



3. Water damage anywhere around the roof perimeter.

These examples are from an informal less-than-thorough check of just a few Redhawk communities in February 2021.

Rancho Sayante



Rancho Alamos



Rancho Feliz - Nasty



Rancho Feliz - Peeling Paint



Rancho Feliz - This is not just a case of loose nails



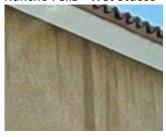
### Rancho Feliz - Very bad



Patches of wet Stucco originating at the roof line. They are visible during and a day or so after the rain. *Rancho Feliz* - Wet Stucco



Rancho Feliz - Wet Stucco



Rancho Sayante - Wet Stucco



# Hidden Damage - Roof & Termite inspections are needed

Ironically the Monier tiles survive the loss of the glaze surface while everything under them suffers for years undetected. The wood sheathing, shiplap and fascia become damaged by black mold, dry rot and peeling paint.

behind the Stucco. Termites can too.

Rancho Sayante - Disintegrated Felt around the roof perimeter. Visible from a ladder.



Rancho Sayante - Extensive perimeter shiplap black mold damage plus Termite damage

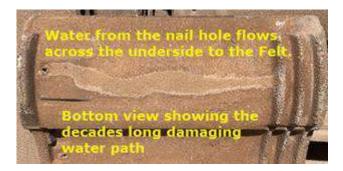


Rancho Feliz - Termites could be involved here as well



## **How it happens**

The water repelling glaze coating wears off allowing some of the Rain water to cling to the porous tile rather than going down to the Rain Gutter. The clinging water wraps around the end, pools on the tile below then proceeds backwards due to wicking action. Wind driven rain enhances this phenomenon. Water easily gets to the nearby nail hole that leads directly to the Felt.



The unwanted water speeds up the aging process to the point where the Felt disintegrates, allowing rain water to reach areas that must remain dry. The escalating water damage can become significant.

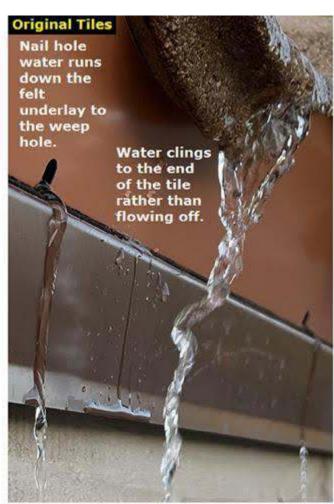
Rancho Sayante



Rain water clings, pools then backs up underneath to the nail hole.

Rancho Sayante Residence Feb. 2021





#### What to do

Make the repairs.

The likely scenario requires removing all roof tiles, replacing damaged wood and installing new <u>more durable underlay.</u>

Then choose between two roof tile options.

1. The lowest cost is reusing the existing tiles. An invisible water based sealer containing siloxanes and silanes is sprayed on after the tiles are back in place to restore the water seal and water repelling characteristics. Cost adder is about \$2000.

Note that at least one section of the roof will require all new tiles due to unavoidable breakage during removal plus the fact that same size replacements are no longer available. Even if they were available, the color wouldn't match.

2. Replace all the tiles. Cost adder is \$12,000 to \$20,000





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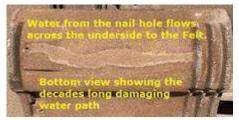




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