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NEVADA COUNTY
BOARD OF SUPERVISORS

received from
Mr. Merritt

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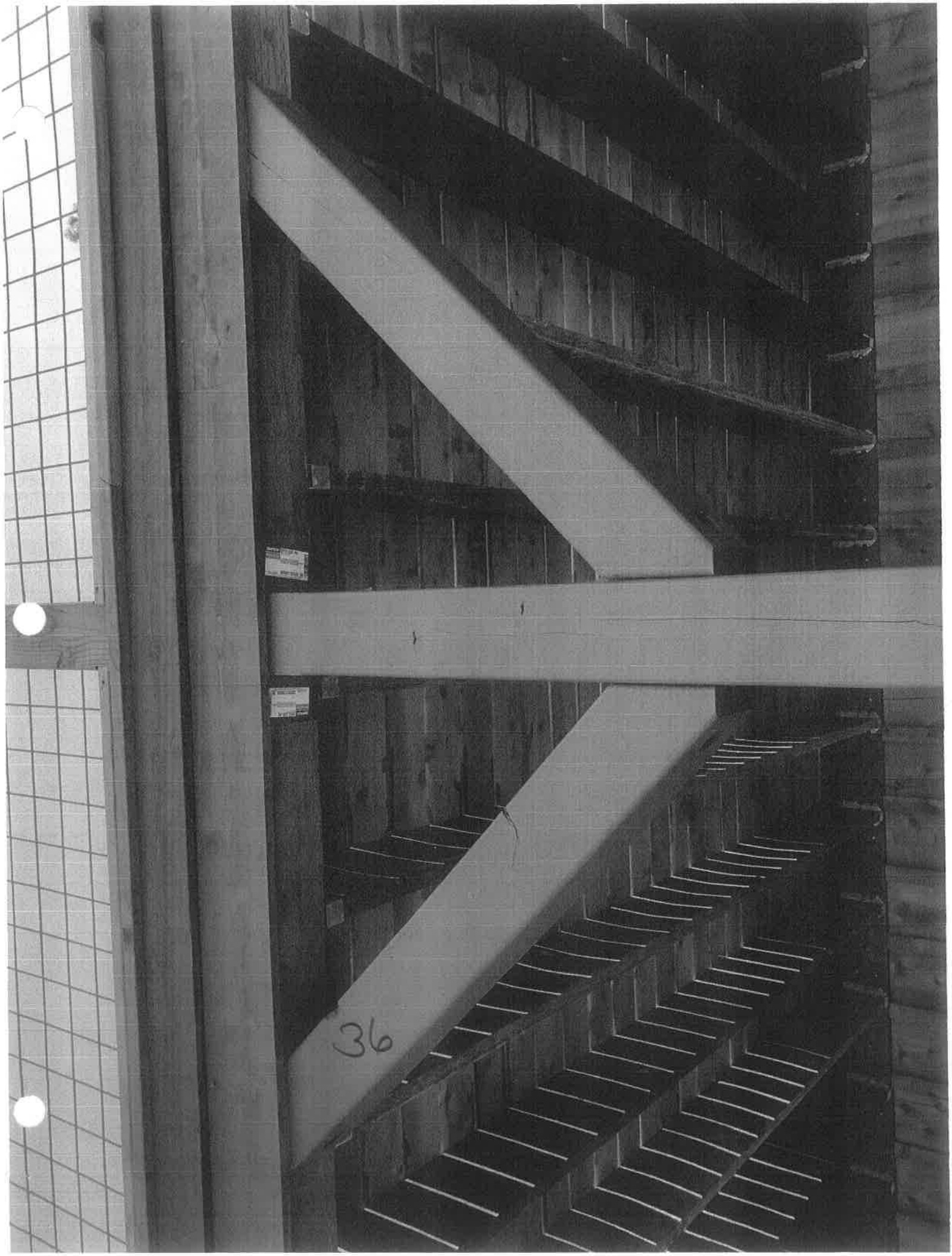
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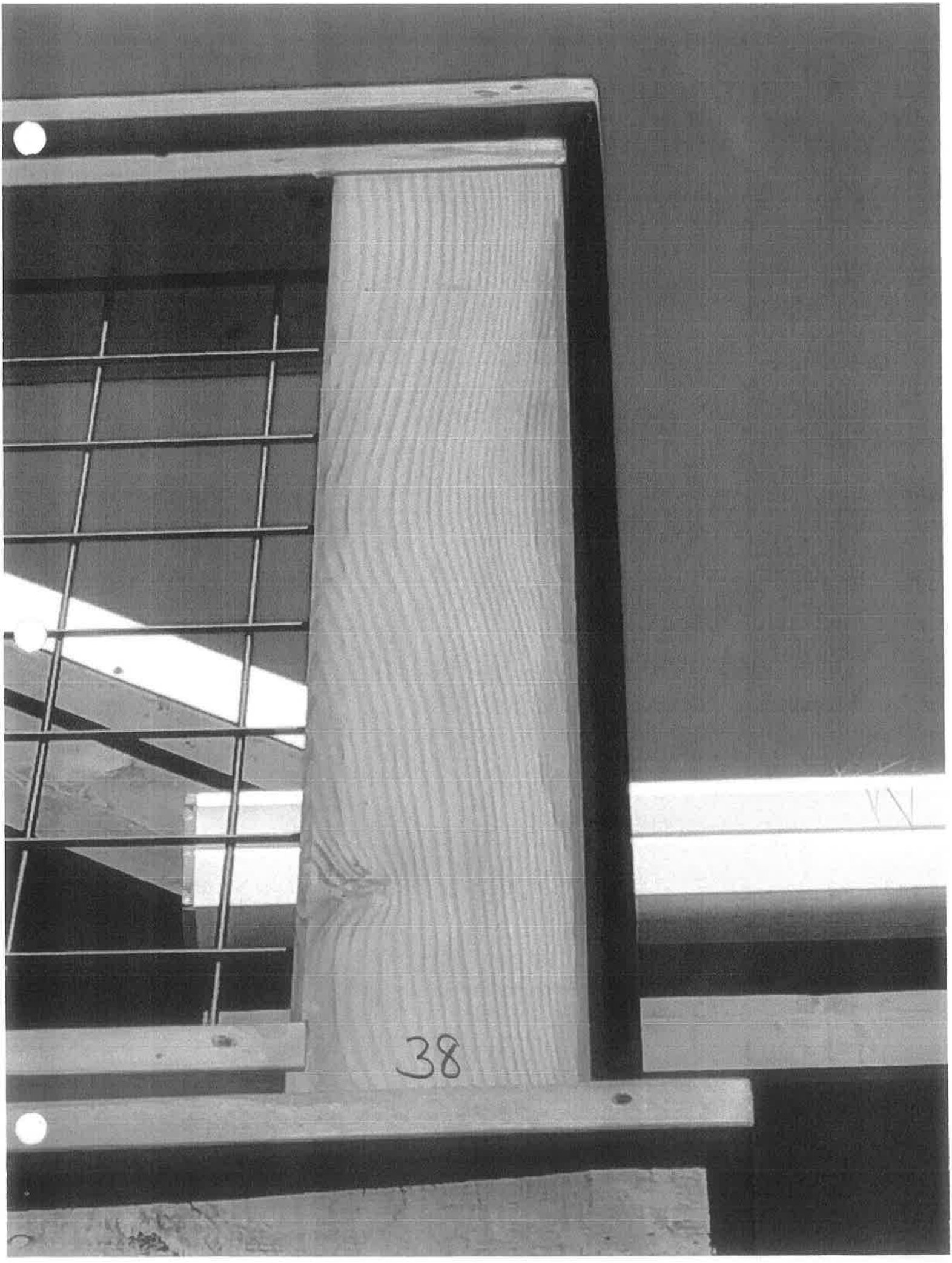
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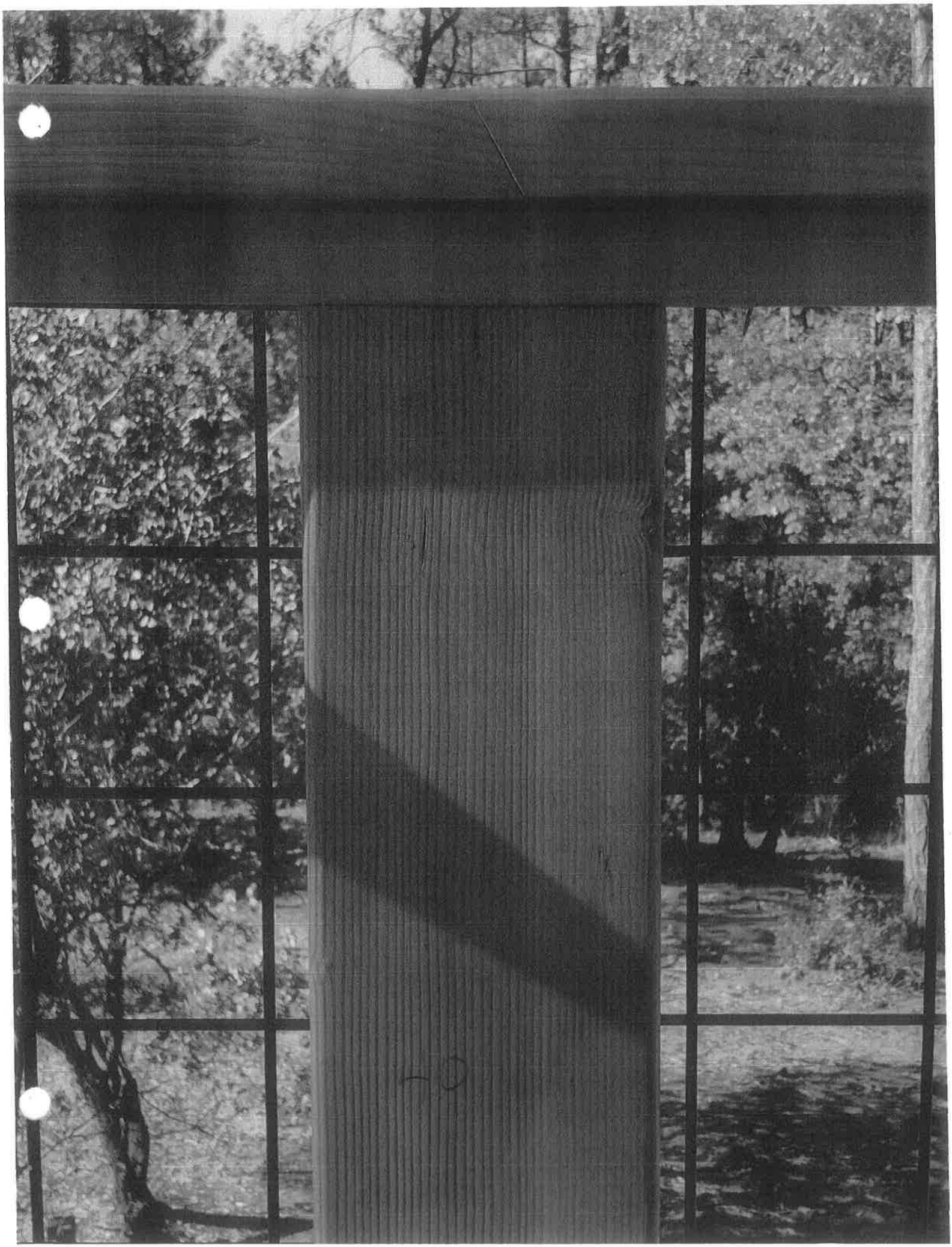


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SPEC CAT PC
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Gmail

Scott Merritt <scottmerritt4@gmail.com>

Inspection result for permit 181444

noReply <noreply@co.nevada.ca.us> Thu, May 9, 2019 at 7:24 AM
To: scottmerritt4@gmail.com
Cc: Applicant@email.com

Permit: 181444

Permit Type: Full Review

Address: 16887 CHAMPION ROAD, Nevada City, CA 95959

Inspection Type: All Rough

Result: Fail

Comment: Date: 05/09/2019 07:24:11 1. provide clarification letter from engineer of record for Nantucket valley rafter connection at wall plates. 2. remove metal straps from abs pipe at master bath and replace with plastic strap 3. provide as built sprinkler plan for submission showing changes to head placement from master bath to master bedroom area above closet and at downstairs entry where door placement changed. 4. submit changes to downstairs entry door placement and omission of entry interior wall. 5. complete main electrical panel wiring 6. address item #2 from correction notice dated 3/20/19

ALL SIMPLE, ALL COMPLETED

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Gmail

Scott Merritt <scottmerritt4@gmail.com>

Inspection result for permit 181444

noReply <noreply@co.nevada.ca.us>
To: scottmerritt4@gmail.com
Cc: Applicant@email.com

Wed, May 22, 2019 at 8:01 AM

Permit: 181444

Permit Type: Full Review

Address: 16887 CHAMPION ROAD, Nevada City, CA 95959

Inspection Type: Wall Insulation

Result: Fail

Comment: Date: 05/22/2019 08:00:58 1. address items number one in five I'm correction notice that it 5/8/19 2. find determination regarding deck material after meeting with building official you nailed my boy again yesterday 3. have Warmboard piping under test prior to final picked up gas line schematic okay to proceed with drywall

?

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Gold Country
Termite Control
144 Hughes Road Unit A / PO Box 1624
Grass Valley, CA 95945

November 5th, 2019

Scott Merritt
PO Box 1674
Cedar Ridge, CA 95924

RE: 16887 Champion Road – Deck

This letter is written for all intents and purposes to identify any possibilities of short or long term damage to wood components from moisture accumulation or from any other wood destroying pests and organisms. The douglas fir supports appear to be select structural wood components set in offset brackets at pier connections. These wood components have also been sealed with high quality paint products. The cedar handrail caps are dual which will add to the durability and protect from any water penetration. The high quality of workmanship which this deck exemplifies will add to the durability and life span of this deck. Recently I have experienced pressure treated wood as being an inferior product to what is currently used to construct this deck. The pressure treated wood is failing with short term cracks and twisting which does not make for a desirable product. It is the opinion of this inspector that dismantling the current support system and handrail system would compromise the integrity of what is currently a well designed and impeccable deck construction. The cedar products used for the handrail system have been sealed with suitable deck oils and will stand the test of time with proper maintenance.

Please do not hesitate to contact me if you have further questions regarding the construction of this deck.

Sincerely,

Richard Stikes

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GV 530-272-2339 * GV Fax 530-272-9263 * AUB 530-888-8917
***TRK 530-582-5765 * TRK Fax 530-550-1163**

THOMAS TERMITE CONTROL, INC.

13827 FAMILY CIRCLE

GRASS VALLEY, CA. 95945

PR-3900

OPR7971

REF: SCOTT MERRIT , 160887 CHAMPION MINE, NEVADA CITY, CA. 95959

POSTS ON DECK

NOTE: We were contacted by Scott Merritt concerning posts on his newly constructed deck.

Forty years of our experience in termite control and fungus damage, he wanted our opinion.

Posts used on this deck are a tight grain doug fir material. As with any wood, decay needs 15- to 20% moisture, 70 to 85 degrees for prime fungus to develop. This usually starts at top of posts and bottom of posts. Rail caps cover tops of posts which sealed moisture entry. Bottom

of posts have stand offs. County building dept. was wanting pressure treated posts, material of pressure treated is a inferior grade material which is what we have seen cracks and checks and allows moisture to penetrate beyond pressure treated areas.

Our opinion is these doug fir posts, due to high grade of these posts, would be a better choice.
Any questions please call us, (530)273-7468.

Mike Thomas

10-6-19

SENT TO: SCOTT MERRITT

scottmerrit4@gmail.com

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November 6, 2019

Mr. Scott Merritt
16887 Champion Road
Nevada City, CA 95959

Project Number: 18-05-293

Re: Deck Posts
16887 Champion Road
Nevada City, CA 95959

Scott,

I am writing you to defend the use of wood posts that are not pressure treated or made of naturally preservative/durable material. Reference approved and permitted construction documents by DC Builders dated 10/24/2018. I am the Engineer of Record and a Principal at Eclipse Engineering. I have engineered many structures throughout the western United States and my team at Eclipse has been part of thousands of projects since 1998.

According to the California Residential Code, Section R317.1.4, exception number 3, the deck posts are not required to be pressure treated if the wood posts are not within 6" of finished grade and are installed on a 1" standoff above the concrete pedestal. The deck posts on this project meet these requirements and are not required to be pressure treated. We are aware that geographical experience may override this exception, but our interpretation of this code item is that insect damage is the governing reasoning for geographical experience dictating a need for pressure treated material.

Douglas Fir posts that were used for the deck support of your project are stronger than the equivalent pressure treated material. The existing posts are #1 grade minimum. All structural design stresses of Douglas Fir #1 exceed those of pressure treated timbers and naturally preservative species of wood like cedar or redwood. The cedar or redwood timber purchased today is not old growth lumber and is, most likely, harvested from a tree that has not fully matured. Because the cedar or redwood trees have not fully matured, they do not contain the same high level of naturally durable resistance they once did. It is a common misconception in the construction industry that these species of lumber and timber can be used without consequence in a very wet and high insect infestation area.

My expertise is not in insect infestation; however, I have engineered many structures up and down the entire west coast that use Douglas Fir in exterior applications. The requirement that an exterior post be pressure treated is rare. Water is not easily absorbed into the side grain unless there is checking or splitting of the wood. Water induced timber rot is almost always a result of water being absorbed into the end grain of wood. The deck posts on your structure have end grain protected at both the top and bottom. Water will not easily penetrate and be absorbed into the end grain of the deck posts.

Another factor that may cause wood to rot is the Equilibrium Moisture Content (EMC). Timbers become saturated, or more susceptible to rotting, when the EMC exceeds 20%. Data from the US Department of

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Agriculture, Forest Products Laboratory, suggests that the EMC in Nevada City is below 20% year round. Timber that has an EMC less than 20% is unlikely to rot due to moisture or water.

The permit for this structure was issued by the Authority Having Jurisdiction with the deck posts designed as Douglas Fir and not pressure treated. You have indicated that the posts are stained and/or painted. This provides another level of protection from the weather that will hinder any rot induced by weather.

It is my professional opinion that pressure treated posts are not required to support the deck of this project. My professional opinion is solely related to the review of timber regarding moisture and rotting due to moisture. Any requirements of pressure treated material due to insect damage is outside my expertise and the scope of this letter.

Sincerely,
Eclipse Engineering, P.C.

Scott Ratterman, P.E.
Principal Engineer

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Gmail

Scott Merritt <scottmerritt4@gmail.com>

Approved Mitigation Measures

Scott Merritt <scottmerritt4@gmail.com> Wed, Sep 4, 2019 at 8:26 AM
To: Craig Griesbach <craig.griesbach@co.nevada.ca.us>

Dear Mr. Griesbach,

We are very concerned with the processes required to dismantle and rebuild our deck in order to meet your requirement to replace the posts. It is difficult to see how it can be done without compromising the integrity of the structure in the end. The two staircases will have to be completely removed and replaced, adding to the complexity. The safety factor for the carpenters is also a real consideration, as the deck is elevated and complicated.

So given that concern, we want to seriously consider the approved mitigation avenues for dealing with similar situations.

Would you please send me details of the various mitigation measures that you approve of? I am asking because I imagine they are very particular, and you have examples that you can share for us to make a decision from. It may prove to be less expensive to follow one of your mitigation details.

I also have a question regarding completion of our home. Will we be allowed to occupy the home before the deck work is completed? The local mill we have used for all of our cedar has told me that they are not planning on milling during the high fire season, so the 6x6 posts we need are not going to be available for several weeks. Then the work on the deck will take another several weeks, so we are looking at mid-December as a realistic completion time. I don't think I need to tell you how that delay negatively affects us. So to get a certificate of occupancy when the rest of the house is complete is our request. Please let me know your stance on that.

Thank you,

Scott

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Gmail

Scott Merritt <scottmerritt4@gmail.com>

Approved Mitigation Measures

Craig Griesbach <Craig.Griesbach@co.nevada.ca.us> Thu, Sep 5, 2019 at 3:53 PM
To: Scott Merritt <scottmerritt4@gmail.com>

Mr. Merritt,

The typical options and construction methods we see are what we mentioned during the hearing and given during pervious discussions. These are to provide the deck to be constructed with preservative treated materials or materials of natural resistance to decay, constructing a listed flat deck roofing assembly over the deck with slope to drain per the manufacturer, or construct a covered roof structure over the deck. I would strongly recommend contacting a licensed contractor to discuss these options and review available listed products. The Nevada County Contractors' Association (NCCA) is a good resource to get licensed and qualified referenced contractors to help with this work. Their contact phone number is 530-274-1919.

As far as the temporary occupancy request you will need to first schedule a final building inspection to verify the project meets the field set of construction plans and minimum code requirements. Generally we will grant temporary occupancies on a case-by-case basis when only minor items are left to be completed for the project and will be corrected within a timely manner. The maximum time period that is granted for temporary occupancies is 90 days. If the only item remaining to be completed following a final inspection being conducted is the deck post issues we can work with you on granting a temporary occupancy if this can be corrected in a timely manner. Attached is the temporary occupancy application so you can review and prepare if you choose to apply in the future following a final building inspection being completed.

Thanks,

Craig Griesbach

Director of Building

- Code Compliance Division
- Cannabis Compliance Division

Community Development Agency

County of Nevada

(530) 265-1583

(530) 265-8794 (fax)

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Gmail

Scott Merritt <scottmerritt4@gmail.com>

Approved Mitigation Measures

Scott Merritt <scottmerritt4@gmail.com> Fri, Sep 6, 2019 at 10:31 AM
To: Craig Griesbach <Craig.Griesbach@co.nevada.ca.us>

Mr. Griesbach,

Thanks for the reply, especially around the occupancy question.

About the methods and materials for avoiding the demolition of the deck, I am asking you directly for the details of how to go about it precisely because I don't trust that anyone else knows. After all, everyone associated with our project was in disbelief that you don't consider the way we constructed the deck as good, solid, conforming construction. I did not take notes when you spoke to the subject at the appeal, so I do not have a good understanding of what you would approve of, and for us to go through another round of issues over this would be intolerable.

The choice to put a roof over the deck seems the least disruptive, so please provide me with what you are looking for us to meet in the construction of that. Is it true that it only needs to extend one inch beyond the deck, for instance? Does the roof need to be a structure with a WUI approved surface, or can it be a waterproof fabric or some other means? Obviously, we are seeing what we can do to keep the costs down, so any information you share helps with that.

I imagine you have approved details that you can share with me. It would save me a lot of additional time, as well as peace of mind, if I knew that whatever approach I take with mitigating the post concerns will be approved without question.

Thank you,

Scott
[Quoted text hidden]

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Gmail

Scott Merritt <scottmerritt4@gmail.com>

Approved Mitigation Measures

Craig Griesbach <Craig.Griesbach@co.nevada.ca.us> Fri, Sep 6, 2019 at 3:53 PM
To: Scott Merritt <scottmerritt4@gmail.com>

Mr. Merritt,

The design and construction is site and structure specific. If you are choosing a roof structure covering that will most likely be a covered patio or porch type of structure with independent structural supports and having a roof drip line equal to or overhanging the edge of the deck surfaces. These are typically wood framed with a conventional roof type (composition, tile, metal, etc).

[Quoted text hidden]

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Gmail

Scott Merritt <scottmerritt4@gmail.com>

Approved Mitigation Measures

Scott Merritt <scottmerritt4@gmail.com> Wed, Sep 11, 2019 at 12:25 PM
To: Craig Griesbach <Craig.Griesbach@co.nevada.ca.us>

Mr. Griesbach,

Thank you for the information. However, I am struck by your confirmation that a roof over the deck "having a drip line equal to or overhanging the edge of the deck surfaces" is a satisfactory measure to protect the posts from moisture. It makes me think that you don't really understand how our deck and railing is actually built if this approach is considered to be an improvement. Please take a moment to consider the discrepancy.

Our deck is made up of pressure treated material and cedar with the only exception being the posts, which are tight-grained Douglas fir that have been painted. Those posts are capped by 2x8 cedar, so there is a one inch overhang on both sides of the posts.

You rejected my application for alternate materials and methods with the explanation that my proposal was not equal or better than the mitigation measures you have approved of in the past. I request that you explain to me how the roof is better. I simply do not understand how a roof that is 8' above the deck provides more protection than a rail cap that is wider than the posts. And if the intent of the provision you are invoking is intended to prevent water from contacting the posts, please explain how the roof solution addresses that concern.

I really don't want to make this a bigger issue than it already has become, but as I sit with the situation I fail to comprehend the approach you have taken with this, and I have not received anything from you that dissuades me from thinking that your insistence on replacing the posts is totally unnecessary.

So please respond with why a roof over the deck is a superior approach to what was designed and built, how that would improve the durability and safety of the deck.

Thank you,

Scott
[Quoted text hidden]

53

Gmail

Scott Merritt <scottmerritt4@gmail.com>

Approved Mitigation Measures

Craig Griesbach <Craig.Griesbach@co.nevada.ca.us> Thu, Sep 19, 2019 at 6:34 AM
To: Scott Merritt <scottmerritt4@gmail.com>

Good Morning Mr. Merritt,

A roof covering is a listed roofing assembly in accordance with the California Building Standards Codes and is designed to shed water away from surfaces that are required to be protected from the weather. A deck surface is not a listed roofing or weatherproof assembly.

DOESN'T ADDRESS MY QUESTION

Regards,

[Quoted text hidden]

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