City of Newport Beach - Building Department

BUILDING CODE POLICY

| Effective Date | Subject | Policy No. |
|------------------|-----------------------------------|------------|
| Revised 12/14/98 | Structural Analysis for Reroofing | UBC15A |

STRUCTURAL REQUIREMENTS FOR REROOFING

1. Structural Analysis is not required if:

- A. Replacing existing roofing material with similar material or materials that weighs less per square foot of area than the roofing material to be removed.
- B. Reroofing with similar material over existing wood or asphalt shingles unless structural analysis is required by the field inspector during preroof inspection due to field conditions.

2. Structural Analysis is required if:

- A. Reroofing over an existing roofing material not included in Item 1(B).
- B. Replacing existing roofing material with materials that weighs more than 6 lbs. per square foot.

<u>Exception</u>: Analysis is not required if the new roofing material is a maximum of 1.5 psf heavier than the removed roofing material. (1.5 psf É 10% of total weight of roof assembly)

3. Definition of Structural Analysis:

Requires the submittal of structural drawings and calculations prepared by a registered engineer or architect. The analysis must demonstrate that the structure's vertical and lateral systems are capable of supporting the total roof load in compliance with current building code requirements

An alternate method of compliance is to enhance the existing vertical and lateral systems to support the added load in compliance with current code requirement. The structural analysis requirements contained in Paragraphs 1, 2, and 3 are per UBC 3403. This section

provides that the structure is not more hazardous and the new roof complies with the current code after it has been reroofed. Structural improvements to the lateral system such as new roof plywood sheathing and new shear transfer connection to perimeter walls may be accepted as offsetting the added lateral load generated by heavier roofing material.

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4. Notes:

- A. All roofing and reroofing must comply with UBC Chapters 15 and Appendix Chapter 15 and/or with ICBO product approval, as well as with the local amendments to the applicable chapters of the Uniform Building Code and Building Department reroofing requirements
- B. Only class 'C' or better roofing materials contained in UBC Chapters 15 and Appendix Chapter 15 and roofing materials with current ICBO approvals are permitted to be used within the City of Newport Beach.

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