FISHMAN RESEARCH TECHNOLOGY AND ANALYSIS

Energy Code and Window Repair versus Replacement

Research memo for a mid-century mid-rise multifamily building (Group R-2) in a California coastal city

Research date in a recent review period. Citations are to the California Energy Code (Title 24, Part 6) and related state and local rules as then in effect.

SAMPLE PORTFOLIO DELIVERABLE. Names, places, amounts, dates, and other identifying details have been changed or generalized. This is not a document from a real client matter. It is not legal advice.

Bottom line

• Repair-only work does not trigger an energy-code upgrade. The Energy Code says repairs shall not increase the preexisting energy consumption of the repaired component. The multifamily compliance manual is blunter: “The Energy Code does not apply to repairs.” The Existing Building Code asks only that the work not make the building less complying. Green-building rules likewise treat repairs as not alterations. Nothing retrieved requires replacing windows because gaskets, sealant, flashing, weatherstripping, thresholds, or glass were repaired.

• No cost or percent-of-facade trigger exists for windows in the Energy Code. Part 6 uses area thresholds only, and only for replaced or added fenestration: a modest square-footage threshold for replaced vertical fenestration (relief from some solar and visible-transmittance rules, not from U-factor) and a smaller threshold for added fenestration. A dollar threshold found in the green-building code applies to nonresidential work and does not reach this residential occupancy.

• What does trigger compliant windows: (a) replacing a window or glazed door, including a sliding glass door, because replacement of a component that has requirements is an alteration, not a repair; (b) adding fenestration area; (c) in this city, a building permit, which is required for whole-window or whole-door replacement (glazing repair and replacement in an existing sash is treated more narrowly), with labeled ratings checked at inspection. Glass replaced in an existing sash and frame, or sashes in an existing frame, are repairs but must be at least equivalent to the original in performance.

• Compliance values for this climate zone under the then-current Energy Code: ordinary windows and glazed doors (including sliding glass doors) have a published maximum U-factor on the order of 0.28, with no solar-heat-gain requirement in this zone for that row; curtain wall and storefront have a higher U-factor limit; taller buildings also have a minimum visible transmittance that depends on product type. The prior code cycle used a slightly higher U-factor limit, which explains a “maximum U-factor” note on a permit filed in that earlier cycle.

Open points

• Whether the local department reads a mid-rise R-2 building under the high-rise residential alteration section or under the multifamily section. The code text is internally cross-referenced in a way that can confuse a non-specialist; the department’s published values and a recent permit condition in the file matched the tighter multifamily numbers, but that reading should be confirmed with the department.

• City-specific amendments that could not be retrieved in this pass because the official code host blocked scripted access.

• Historic status of the building, which was not determined and can change the path under the Historic Building Code.

How the code draws the line

An alteration is a change to a covered system or component that is not a repair. A repair is reconstruction or renewal for maintenance that does not increase preexisting energy consumption. Fenestration repair is reconstruction or renewal of a fenestration product, component, or system; a fenestration alteration is any change to exterior fenestration that is not a repair. Windows, glazed doors, skylights, and curtain walls are all fenestration products. Glazed doors must meet the fenestration requirements.

For multifamily buildings, glass replaced in an existing sash and frame, or sashes replaced in an existing frame, are considered repairs and must be at least equivalent to the original in performance. Where more than a stated area of the building's vertical fenestration is replaced, the replaced units must meet the U-factor in the applicable table. The same repair-versus-alteration idea appears in the nonresidential and high-rise residential chapter, with different U-factor numbers.

Local permit practice, as documented

The city's building code, as reviewed, exempts only certain glazing repair and replacement from permit, not whole-window or whole-door replacement. In the file, a unit-level window replacement permit from the prior code cycle carried a maximum U-factor condition that matched that cycle's multifamily table. That is useful context for any new application filed under the current cycle.

What this means for a window program

Repairing gaskets, sealant, flashing, or glass in place is not, on the rules retrieved, an energy-code trigger to replace the whole opening. Replacing the whole window or sliding door is an alteration and must meet current labeled performance, with a permit. Partners and counsel can use that distinction when they evaluate a proposal that treats replacement as required. This memo does not say which path is wiser for a given opening; it says which path the energy code requires.

Code research, not a permit determination or legal advice. Building-specific identifiers, permit numbers, and exact street or ZIP details have been omitted. Quotations in a full internal memo were checked against official captures; this sample states the rules in plain language rather than reprinting long statutory blocks.