FISHMAN RESEARCH TECHNOLOGY AND ANALYSIS

Window Replacement: Specifications, Necessity, and Cost Comparison

Memo for the limited partners of Sample Residential Limited Partnership · Sample Tower

Subject: Contractor X's Phase One proposal and a related letter from the general partner. Market ranges below are published or typical external figures, not quotes.

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.

Short answer

- Replacement looks genuinely needed on the documents reviewed. The proposal itself describes decayed gaskets, separating joinery, leaking door thresholds, and water eroding concrete. City inspection records for two units show repeated water-intrusion notices on windows and sliding doors.
- The proposed product is a premium European thermally broken aluminum system with double-pane glass. It is not "top of the line": the proposal says plainly it is dual-pane, not triple-pane; it mentions no impact rating; and the glass specification is not stated. The manufacturer's own catalog offers triple glazing and higher-spec options that were not chosen.
- State energy and building rules require labeled products that meet a published U-factor limit (or a stated alternate for certain window classes), safety glazing in and next to doors, and a building permit. They do not require impact rating, triple glazing, laminated or acoustic glass, or a premium finish in this city.
- Price cannot be judged from the proposal alone because it gives one lump sum and no opening count. Sample arithmetic, using a scaled lump sum of about $1.65 million: that is about $5,500 per opening at 300 openings and about $13,800 at 120 openings (counts assumed). A companion memo estimates openings from public imagery.
- Several product and energy claims (a U-factor said to "exceed" a future standard, an "exclusive" finish, and certified compliance) were unverified and should be backed by documents before any deposit is paid.

What is and is not known

From the proposal and the general partner's letter: Phase One covers the south-facing stacks only, as the first of three phases. Mock-ups were said to have been installed in three units. The product is Manufacturer M's thermally broken aluminum window and lift-and-slide door lines, with a coastal-type finish and dual-pane glass. The price in this sample is a single lump sum of about $1.65 million, with a multi-month install, permit fees extra, and about half the price payable before installation begins. Work is described as swing-stage in an occupied building, typically a couple of days per unit, with a limited warranty.

Not in the proposal: the number of windows and doors; a schedule or sizes; per-opening prices; the glass specification; certified U-factor and solar-heat-gain values for the actual configurations; test reports; whether concrete repair, flashing, engineering, or access costs are separate lines; or any competing bid. The only prior local data point in the file is a small permitted job of five sliding windows in one unit, a different product and scale, at a few thousand dollars per opening.

The proposed product, in general terms

Manufacturer M is a European aluminum systems supplier. Its catalog lists thermally broken window and lift-and-slide door lines with foam-filled chambers, insulating bars, and gasketed frames. Published frame U-values for the window line fall in a low range typical of premium European aluminum. Whole-unit values depend on the glass and are not a substitute for a U.S. certified label. The door line is a heavier, more expensive type than a standard patio slider. U.S. importers of comparable European lift-and-slide doors publicly list supply-only prices in the mid-to-high thousands of dollars for a large door, before freight, duty, and installation.

• Frame and hardware sit in the premium European category. The glass, as proposed, is the standard-tier part (dual-pane). Triple glazing and laminated or acoustic configurations appear in the catalog as options.

• Certification is the open question. California requires each fenestration product to carry a certified label, or be rated at default values that would not meet current limits for this building type. A manufacturer's "thermal simulation" is not a certified label. No product-specific U.S. certificate for the exact configurations was found on public pages in this pass.

• A claim that the products "exceed" a future energy standard has no published benchmark that could be checked. The current state energy code, not a later unpublished edition, is what a permit filed now would be reviewed against. European test figures use different reference sizes and are not interchangeable with U.S. labels.

• A premium finish process is described in the manufacturer's materials and is plausible, but an "exclusive" claim was not independently confirmed. The written warranty quoted in the proposal covers material or glass defect or failure and should be compared with a finish warranty in writing.

Current market pricing (installed unless noted)

Every figure below is an external published or typical range, with its type and year, not a quote for this building. No public price list exists for high-rise window replacement in this metro area. Use the ranges for order of magnitude only.

Tier	Per window (typical published range)	Per door / opening	Notes
Standard / good: double-pane low-E, thermally broken aluminum or vinyl, non-impact	About $500–$1,500 in regional residential listings; sliding windows often less	Patio doors often about $1,000–$3,300 depending on material	Multifamily and commercial per-square-foot ranges also exist and are different building types.
Mid / high performance: better aluminum, laminated or acoustic glass	Laminated or acoustic often adds about 15–30%	Premium European lift-and-slide, supply only: mid-to-high thousands for an 8-foot door; freight and install extra	Lift-and-slide is a distinct, heavier door type than a standard slider.
Premium: triple-pane, impact-rated, or architectural systems	Impact aluminum windows often several hundred to a few thousand more; high-rise assemblies vary widely	Large impact sliders in the high thousands	High-rise access, staging, and occupancy add cost that residential lists do not capture.

Published premiums in the same period: triple-pane over double-pane often about 15–40%; impact-rated over standard often about 25–35% for stock sizes; custom sizes about 10–40%; laminated or acoustic about 15–30%. High-rise cost drivers include exterior access (swing stage, boom, or crane), work in occupied units, coastal finish, and mock-ups.

Code, in brief

A companion memo treats repair versus replacement in more detail. Replacement of a whole window or glazed door is an alteration and must meet the current energy-code U-factor for this building type (a published limit on the order of 0.28 for ordinary windows and glazed doors in this climate zone, with different numbers for curtain wall). Repair of glass in an existing sash, or sashes in an existing frame, does not by itself require a full product upgrade, but a permit is still required in this city for whole-window or whole-door replacement, and labeled ratings are checked at inspection.

What to ask for before any deposit

An opening count and schedule of values; certified labels for each actual configuration; test reports and stamped calculations; a written contract with insurance, bond, and retention; competing bids; and an independent envelope review. Until the opening count is known, a lump-sum comparison to published per-window ranges is only a wide band, not a verdict on whether the price is fair.

Not a bid, an appraisal, or legal advice. Exact proposal dollars, product trade names, and unit identifiers have been changed or omitted.