Vail Racquet Club

Window & Door Replacement Guidelines

Homeowner interest in window and door replacement has risen dramatically in recent years driven by:

1. Existing windows and doors that are showing their age (deteriorating, delaminating, drafty…)
2. Significant improvements in window technology (thermal performance and sound attenuation)
3. The desire to update units and enhance property values
4. To take advantage of energy tax credits.

Condominium and townhome windows and entry doors are the responsibility of the homeowner. There are, however, HOA and Town of Vail requirements that must be complied with. These guidelines are intended to assist homeowners in selecting replacement windows and doors, permitting, and installation.

1. **HOA Requirements**: The replacement of exterior doors and windows requires design review approval by the VRC Board of Directors (design review applications can be downloaded from the homeowner section of the VRC website). If the proposed replacement falls within the conditions already approved by the Board, then design review applications can be processed and approved by VRC management (these conditions are set forth below), typically within a week of submittal. Otherwise the application will likely require Board approval. The Board meets four times per year and reviews any pending design review applications as part of those meetings.

2. **Town of Vail Requirements**: All exterior door and window replacements require Town of Vail Planning approval and, in most cases, a building permit (the exception is when only the door or window panel is replaced and the existing door jamb or window frame is left in place). There are several building code requirements related to life-safety for window replacements, including emergency egress for bedroom windows and safety glass in certain locations, as well as energy code requirements.

   Normally, the homeowner's installation contractor submits the permit applications, starting with the **Planning Exterior Alteration** application**.** Once approved, the **Building Permit** is applied for. Below is a link to the Town of Vail Portal which provides access to all necessary applications: **https://vail.onlinegovt.com/**

3. **Conditions for Expedited VRC Approval:** When proposed window and door replacements meet either of the following conditions, HOA design review applications can normally be processed and approved by VRC management.

- Same-for-same replacements: When the proposed window or door replacement involves no change in window or door dimensions, no alteration to the building framing, no change in window or door style (e.g., the replacement window will still be a casement,

slide-by…), and the exterior is an accepted color and material, the door stile width is adequate (see paragraphs 6, 8 and 9, below), and the doors and windows are from a vetted product line (see paragraph 12, below), then the proposal would normally qualify for expedited design review approval.

- A number of homeowners have replaced an existing slider entry door with a window and standard hinged door (the photo below is a typical example). New proposals that conform with those that have been routinely approved in the past would normally qualify for expedited design review approval, presuming the proposed replacement otherwise meets the accepted standards for color, material, etc. and vetted product lines.

If neither of the above conditions are met, homeowners should anticipate that the Board will need to review the application at its next regular meeting.

4. **Installation Contractors**: Be selective – you want a perfectionist! Window and door installation requires a specialized set of skills to achieve proper fit, function, seals and weather-proofing. Most contractors can install windows and doors, but few do it well. A seal that leaks cold air or a door or window that's a struggle to operate is a high price to pay to save a little money on the installation. Doing it properly is time-consuming and requires great attention to detail. Please also note that your window or door installation contractor must comply with the VRC Outside Contractor Rules which cover areas such as allowable work hours, insurance requirements, parking rules, etc.

5. **Energy Code**: In addition to building code requirements for windows that primarily focus on life-safety issues, the Energy Code also applies (2018 version as of now). The primary requirement, which describes insulating performance, is for a u-factor of 0.30 or lower. To

put this in perspective, this means you will lose about 6 times as much heat per square foot through your new windows as you will through your wall areas, but this is a huge improvement! Your existing windows likely lose something like 20 times the amount of heat per square foot as your walls. Note that the u-factor requirement applies to windows, slider doors and also to entry doors with glass.

All of the major manufacturers should be able to provide windows and doors that meet the Energy Code requirements and that are designed for high altitude, at least in their better window product lines (high altitude glass is critical). It may be difficult, however, to source windows that meet the requirements through stores such as Lowe's or Home Depot that more typically carry the lower budget product lines of windows.

Although the Energy Code doesn't establish requirements for it, the next most important measure of energy performance (after the u-factor) is the solar heat gain coefficient (SHGC). This is a measure of how much solar heat gain you will experience indoors when sun hits the glass. Note that there are SHGC requirements if you plan to seek energy tax credits. In our area, the desired SHGC performance depends on your situation. For windows that see a lot of direct sun and cause the room to overheat, particularly in the summer, you might prefer a low SHGC (<0.25). On the other hand, if you want to heat the room via sunlight coming through the windows, a higher SHGC is preferred (>0.35). For windows that rarely see direct sun, the SHGC doesn't really matter. Nevertheless, SHGC and u-factor tend to go hand in hand; glass with the lowest (best) u-factor usually comes with a low value for the SHGC (but u-factor is by far the more important measure of energy efficiency).

6. **Window Exteriors (Including Sliding Doors)**: Fiberglass composite window frames or windows with aluminum cladding are preferred for durability and aesthetics and would normally qualify for expedited HOA design review approval. The approved colors are listed for several of the major window manufacturers, below (the approved colors all correspond to a dark bronze finish). Vinyl clad windows have a poor track record, particularly in our climate, and should be avoided.

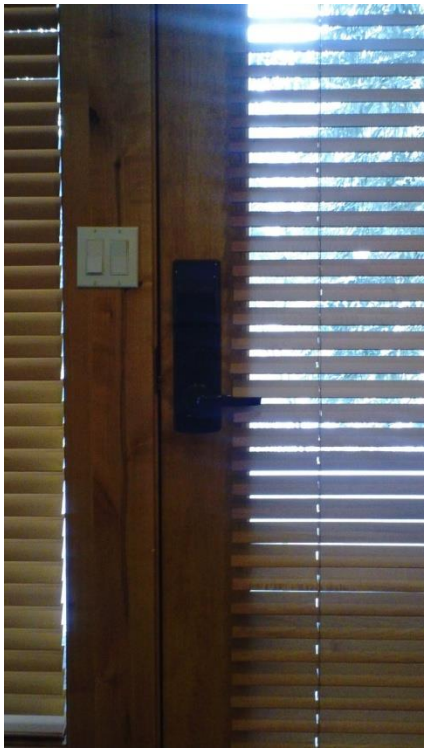
7. **Window Interiors**: Most of the better window lines come with wooden interior finishes. These are attractive and popular, but it's critical that all exposed wood be sealed perfectly. Condensation that forms on the interior surface of the window is a fact of life in cold climates and, if that moisture comes in contact with unsealed wood, over time mold is likely to develop. Window coverings worsen the problem by preventing adequate ventilation which helps prevent condensation from forming. As you'd expect, humidifiers greatly exacerbate the condensation problem. All exposed wood should be coated with a high quality sealer such as polyurethane (a minimum of 3 coats properly applied). Note that most wood stains do not provide a waterproof seal.

   Fiberglass composite windows are good option to consider. Both the window frame and sash, exterior and interior, are constructed of fiberglass composite (no wood), so condensation won't lead to mold problems. The fiberglass comes pre-finished with a durable powder coating (interior and exterior), so you avoid the costs of sealing and finishing the interior compared to windows with wooden frames. If you use a humidifier, fiberglass is even a better choice.

8. **Entry Door Exteriors**: Metal (steel or aluminum) or fiberglass cladding are preferred for durability and aesthetics and would normally qualify for expedited HOA design review approval. As with windows, vinyl products are discouraged. The approved colors are listed for several of the major window manufacturers, below (the approved colors all correspond to a dark bronze finish).

9. **Entry Door Stile Width**: Stile width is also very important. The stiles are the vertical side panels of the door to which entry hardware or hinges are mounted. For the full lite entry doors that are found in most condominium units, the product lines for most door manufactures have moved toward narrower stiles and correspondingly wider glass panels. This has several disadvantages:
    - More glass means more heat loss through the door and less privacy
    - Door entry hardware has to be installed with a smaller backset (little room for your hand between the doorknob and the jamb and any window coverings on the door)
    - Lever-style doorknobs have more interference with window coverings (particularly hanging blinds)
    - Narrow stiles are not compatible with certain door hardware (such as the Ving locks used for the rental program).

A minimum stile width of 5.5” is required which most of the major manufactures can provide, at least in there better product lines.



Note that for the raised panel doors found in the townhomes, some door manufacturers have moved toward narrow stiles which, as with the full lite entry doors, are not compatible with Ving locksets. Again, most of the major manufactures can provide raised panel doors with stiles that meet the 5.5” minimum width requirement.

10. Window Coverings for Full Lite Entry Doors: Most homeowners install some type of window covering on their full lite doors that are found in most of the condominium units, primarily for privacy but also to reduce heat loss. The most popular window covering is probably hanging wood blinds which have drawbacks:

- Lever-style handsets tend to catch between the blinds, interfering with raising or lowering the blinds and operating the handset. The blinds are the weak link and often get damaged.
- Even relatively normal swinging and shutting of the door can cause the blinds to swing violently, leading to premature failure.

Many full lite door models are offered with blinds between the glass panels which avoid these headaches. If hanging blinds are preferred, limiting blind width to that of the glass helps.

11. **Creativity**: There are a wide variety of high quality door products on the market that could enhance property values and provide some differentiation. The Board is very much open to proposals of this nature so long as they don't compromise architectural themes. A good example is the leaded glass entry door shown here. (Please note this door is no longer available and is shown as an example only)

12. Vetted Product Lines & Product Rep Contact Info:

- **Pella:** Mike Triebel (local sales rep)
  (970) 406-1775 cell
  (970) 945-4419 fax
  mtriebel@pellacolorado.com
  www.pella.com
  - Pella “Impervia” windows (fiberglass composite windows & sliding glass doors)
  - Pella “Proline” doors & windows (aluminum clad, wood interior, windows & doors)
  - Pella “Architect Series” doors & windows (aluminum clad, wood interior, windows & doors)
  - Pella “Designer Series” doors & windows (aluminum clad, wood interior, windows & doors)
  - Approved cladding color: Pella “Brown”

- **Sierra Pacific Windows**: Chuck Hair (local sales rep)
  970-471-0974 cell
  970-569-2096 office
  CHair@spi-ind.com
  - Windows & Sliding Doors: Sierra Pacific Aspen Series
  - Hinged Doors: Sierra Pacific Aspen Series (available with a 5-5/8” wide stile)
  - Approved cladding color: Sierra Pacific “Bronze 024 Heritage Collection”

- **Andersen Windows and Doors:** Bill Coughlin (local sales rep)
  303-903-5194 cell
  303-670-9298 fax
  eaglecoughlin@Q.com
  - Andersen E-Series
  - Approved cladding color: Andersen “Dark Bronze”