# PRESCRIPTIVE BUILDING STANDARD ER 65<70

# BUILDING REQUIREMENTS FOR EXISTING RESIDENTIAL BUILDING IN THE NOISE ZONE BETWEEN 65 db CNEL AND LESS THAN 70 db CNEL.

EXCERPT FROM LOS ANGELES COUNTY BUILDING CODE MANUAL 1208, ARTICLE 4, AUGUST 19, 1999, PAGES 10-12

## 1. Exterior Walls

Exterior walls in this noise zone do not require modification.

## 2. Exterior Windows.

- a. Openable wood frame exterior windows shall be replaced with new openable windows that have a minimum laboratory sound transmission class rating of at least STC 35 db if the existing window has:
  - 1. Missing or insecure glazing putty or other glazing materials, or
  - 2. Broken or cracked glass, or
  - 3. Operating sash that is not securely supported in its frame or does not close tightly against the frame.
- b. Openable wood frame exterior windows that do not require replacement by Item a. above shall be fitted with a secondary window that has a laboratory sound transmission class rating of at least STC 25 db. The secondary window may be mounted at the exterior or interior of the existing window and shall be completely trimmed and caulked in place.
- c. Openable metal frame exterior windows noise shall be replaced with new openable windows that have a minimum laboratory sound transmission class rating of at least STC 35 db if the existing windows has:
  - 1. Jalousie louver, glass sash, or
  - 2. Missing or insecure glazing putty or other glazing materials, or
  - 3. Broken or cracked glass, or
  - 4. Operating sash that is not securely supported in its frame or does not close tightly against the frame.
- d. Openable metal frame windows in rooms exposed to aircraft noise that do not require replacement by Item c. above shall be fitted with a secondary window that has a laboratory sound transmission class rating of at least STC 25 db with a space of at least 2 inches between the glass surfaces of the two windows. The secondary window may be mounted at the exterior or interior of the existing window and shall be completely trimmed and caulked in place.
- e. Fixed windows in rooms exposed to aircraft noise shall be glazed with 1/4-inch glass unless they are part of an acoustic window assembly.

## 3. Exterior Doors.

Exterior doors shall be modified as follows:

- 1. Hollow core or lightweight doors and doors with glazed openings shall be replaced with doors that have a minimum laboratory sound transmission class rating of at least STC 35 db.
- 2. Solid core or heavy panel doors shall be fitted with a drop seal at the sill and vinyl bulb seals at the jambs and head.

#### 4. Roofs.

- a. Accessible attics shall be insulated to achieve a minimum R-30 insulation value.
- b. Attic vents shall be modified as follows:
  - 1. Gable vents or vents that penetrate the roof surface shall be provided with noise control louver vents that meet the noise reduction levels shown in Table 1208A or transfer ducts that are at least 6 feet in length. The ducts shall be of flexible insulated ducting with a 90-degree bend so that there is no direct line-of-sight from the exterior through the duct into the attic.
  - 2. Eave vents do not require modification.
- c. Roofs with a slope of 2:12 or less and open beam ceilings shall be modified as indicated below only if bearing walls are adequate to support the additional load stresses:
  - 1. Existing roof covering shall be removed to expose sheathing.
  - 2. Two-by-six rafters at 24-inches on center shall be installed directly above the existing roof construction and supported by existing bearing walls, shall be insulated with R-19 fiberglass batts, and shall be covered with 1/2-inch plywood sheathing.
  - 3. New roofing shall be installed on the new construction that can be adequately supported by the new framing and existing bearing walls.

## 5. Floors.

Floors in this noise zone do not require modification.

#### 6. Ventilation.

- a. A ventilation system shall be provided that will provide at least the minimum air circulation and fresh air supply requirements of the Building Code, in each room without opening any window, door or other opening to the exterior. All concealed duct work shall be insulated flexible glass fiber ducting that is at least 10 feet long between any two points of connection. Exposed duct work may be sheet metal with 1-inch fiberglass duct liner and shall have a bend in the duct to avoid direct line-of-sight through the duct.
- b. Kitchen cooktop vent hoods shall be replaced with non-ducted recirculating vent hoods with no ducted connection to the exterior.

# 7. Fireplaces.

Each fireplace constructed of a masonry unit shall be fitted with a damper at the top of the chimney that is operated from the firebox and shall have glass doors across the front of the firebox.

# 8. Wall and Ceiling Openings.

Openings in the shell of a residence that degrade its ability to achieve an interior CNEL rating of 45 db or less when all doors and windows are closed are prohibited. Any access panels, pet doors, mail delivery drops, air-conditioning, or other openings must be designed to maintain the 45