



Wood-Frame Seismic Retrofit Program

SCREENING FORM INSTRUCTIONS

About the Screening Form

The purpose of the Screening Form is to confirm which buildings are subject to San Francisco's new Wood-Frame Seismic Retrofit Program and which buildings are exempt. If your building is exempt, the form will help you secure your exemption.

If you received a Screening Form with a letter from the Department of Building Inspection, you are required to complete and submit the form even if you believe your building is exempt from the program.

There is no fee to submit your Screening Form. However, in most cases, the form must be completed by a licensed design professional, who is allowed to negotiate a fee with you.

Deadline for submittal of completed Screening Form

Completed Screening Forms must be submitted by September 15, 2014.

The Department will NOT send you a reminder as the deadline approaches. Because you might need to research your property records or hire a licensed design professional, you should not wait until the deadline is near to begin working on the form.

How to submit the completed Screening Form

You may submit your completed form as a PDF file by email attachment or as a hard copy by U.S. mail. The Department does not allow submittal by fax.

Be sure to:

Have your design professional (if required; see Section 2) stamp and sign the form in Section 5. Sign and date the form in Section 5.

Submit all three pages of the form, even if some sections are not required.

Keep a copy for your records.

By email attachment:

Email your form to: softstory@sfgov.org

In the subject line, please write "Screening Form submittal."

By U.S. mail:

Mail your form to: Wood-Frame Seismic Retrofit Program
Department of Building Inspection
1660 Mission Street
San Francisco, CA 94103

SECTION 1 – ADMINISTRATIVE INFORMATION

Provide your **contact information** so that the Department can reach you with questions about your submittal.

You may have someone act on your behalf as your **authorized agent**. The authorized agent must be an individual empowered to make decisions on behalf of the owner. The Department will contact this individual with questions and approvals.

Condominium owners: Condominium units within a single building are sometimes assigned separate lot numbers. In these cases, separate owners might each receive a notice and form from DBI. However, only one Screening Form for the entire building should be submitted.

Replacement or supplemental form. If this is the first time a Screening Form is being submitted for your building, answer no. If you have already submitted a Screening Form but are now submitting a new or revised form to correct an error or provide additional information, answer yes.

SECTION 2 – VOLUNTARY STRUCTURAL WORK EXEMPTION

1. **AB-094**, which set criteria for voluntary retrofits, went into effect on May 26, 2009. If you completed a retrofit in compliance with AB-094 prior to June 18, 2013, answer yes and provide your AB-094 Permit Application Number.

By answering yes, you are claiming exemption from the program, so you need not complete Section 3, 4, or Section 5.1 of the Screening Form. Please complete Section 5.2 and submit the Screening Form.

2. **Other Retrofits:** SFBC Section 3402B Exception 1 exempts retrofits completed within the last 15 years if they satisfied the requirements now found in SFBC Section 1604.11. However, because this exemption will likely require more careful review of various documents (plans, calculations, etc.), owners seeking this exemption must submit documentation together with the separate **Optional Evaluation Form**, available at www.sfdbi.org/softstory. Please fill out all sections of the Screening Form and submit.

SECTION 3 – SCOPE VERIFICATION

Section 3 requires application of the San Francisco Building and Housing Codes and therefore is to be completed by a California licensed architect or civil or structural engineer (unless you answered yes to the question in Section 2). Section 3 determines if your building is exempt from the program; if the building is exempt, you may skip Section 4.

Constructed before January 1, 1978

If the building was constructed after January 1, 1978, but under a permit applied for before that date, the response should still be yes. This question is about the date of original permitting and construction only. The date of any building addition, alteration, or retrofit is not of concern here. The adequacy of a past retrofit, whether done before or after January 1, 1978, is assessed separately, either in Section 2 or through the separate Optional Evaluation Form.

Stories

For this question, the number of stories may generally be understood as the number of stories above grade plane, and basement may generally be understood as any story that is not a story above grade plane, consistent with definitions in the San Francisco Building Code (which are identical to those in the 2010 California Building Code). In addition, per SFBC Section 3403B, "the first story of any building shall be considered a story, whether or not previously exempted from story count under an earlier edition of the San Francisco Building Code."

For this question, the number of stories is counted independent of whether a story is a Target Story or is of wood-frame construction.

Other conditions may generally be handled as follows:

Mezzanines (as defined in the 2010 California Building Code) generally do not count as stories

In a building with a flat roof, the unfinished space between ceiling framing and roof framing need not be counted as a story

In a building with a pitched roof, if the attic space is enclosed by any vertical bearing walls of any height, so that a story sidesway mechanism is possible, the attic is to be counted as a story. Otherwise, for an attic with a pitched roof and no potential story sidesway mechanism, the attic shall be counted as a story if it contains one or more residential units distinct from units on floors below. The intent of this rule is to account for the additional risk posed by units in occupied attics. (Note: This rule has no bearing on the count of dwelling units required by the next question. If the building has fewer than five dwelling units, it is exempt from the program whether or not any unit is contained in an occupied attic.)

For hillside buildings, the response should be Yes if at any point in plan, a vertical line would pass through three stories or through two stories and a basement or underfloor area that extends above grade.

Dwelling units

For this question, "dwelling units" shall be based on the definition in SFBC Section 3403B:

A dwelling unit shall include any individual residential unit within either an R-1 or an R-2 occupancy building. It shall also include a guestroom, with or without kitchen, within either a tourist or residential hotel or motel but shall not include a "housekeeping room." A dwelling unit shall include an area that is occupied as a dwelling unit, whether such is approved or unapproved for residential use.

Type V (wood-frame) construction.

For this retrofit program, the structural elements of interest are the seismic force-resisting walls or frames in certain targeted stories – what SFBC Chapter 34B calls “critically vulnerable” stories. This requires a more specific understanding of “Type V” construction than is usually meant by the building code. Therefore, the design professional should answer this Screening Form question by using the Type V Worksheet provided here.

The correct answer to the Screening Form question is Yes if two conditions are true: 1. The building has a so-called Target Story, and 2. The Target Story has wood-frame walls.

A Target Story is a story that Chapter 34B intends to identify and retrofit, one that represents a potentially critical seismic vulnerability. Generally, a basement story, an underfloor area, or any story whose walls are substantially different from those of the next story up will be a Target Story.

The concept of a Target Story is needed to screen out those buildings that are technically made of wood but do not have the “critically vulnerable lower stories” or the “most critical vulnerabilities” contemplated by SFBC Section 3401B. As Section 3401B notes, the intent of this retrofit program is to “limit the structural retrofit work to the ground story or to a basement or underfloor area.” Thus, the uniform upper stories of a typical building were never intended to be subject to SFBC Chapter 34B. Similarly, buildings with uniform wall layouts in all stories, from foundation to roof, should be exempted. To be clear, these buildings might have seismic deficiencies and might benefit from retrofit, but they do not have the “critical” vulnerabilities targeted by SFBC Chapter 34B. The identification of Target Stories allows these buildings to be properly exempted from the program during the initial screening phase.

In more technical terms, Target Story may be defined as follows:

TARGET STORY: For purposes of SFBC Chapter 34B, a Target Story is any of:

- 1) A basement story or underfloor area that extends above grade at any point.
- 2) Any story above grade plane whose wall configuration is substantially different from the wall configuration of the story above, except that a story is not a Target Story if it is the topmost story or if the difference in configuration is primarily due to the story above being a penthouse, an attic with a pitched roof, or a setback story.

Notes on the definition:

- An “underfloor area” can be a crawl space or cripple story, finished or not. A partially below-grade story is generally any story that is not a “story above grade plane” as defined in 2010 CBC Chapter 2.
- “Any story above grade plane” can be the first story or any upper story. The first story above grade plane generally means the first story entirely at or above grade, but for sloped sites, see the definition in 2010 CBC Chapter 2. Also see Figure 1.
- In general, “wall configuration” may be measured by length, location, orientation, and openings. Wall construction and strength is also important, so “substantially different from” generally means “substantially weaker than.” However, the Screening Form is not meant to require any structural evaluation, so the judgment of the design professional and the Department will be applied to determine whether a story is “substantially different” from the story above. In practice, if substantial lengths of exterior walls or interior partitions do not line up from story to story, or door and window openings change substantially from story to story, the lower story might be deemed “substantially different.” Wall configuration can be related to occupancy as well: The wall layout or openings of a non-residential first story is usually (but not always) different from the wall layout or openings of the residential stories above.

The following Type V Worksheet will guide you to the appropriate answer to the “Type V” question on the Screening Form. As noted above, the correct answer to the Screening Form question is yes if the building has a Target Story *and* if the Target Story walls are wood-frame. Thus, the worksheet has two steps: one to identify Target Stories, and one to check for wood-frame walls.

The worksheet questions are intended to capture most of the conditions found in San Francisco. However, since they might not cover every possible combination of grade slopes and structural systems, the answers to these questions and to the Screening Form questions are subject to review by the Department.

Type V Worksheet

Step 1. Answer the following questions to identify the building's Target Story or Stories. (Note: It is possible for a building to have more than one Target Story.) See the text above and Figure 1 for additional guidance.

	<u>Yes</u>	<u>No</u>
Does the building have a basement, underfloor area, or other partially below-grade story that extends at any point above the adjacent grade?	<input type="checkbox"/>	<input type="checkbox"/>

If Yes, the basement, underfloor area, or partially below-grade story is a Target Story.

	<u>Yes</u>	<u>No</u>
Are the wall layout and major wall openings of any story above grade plane (not counting a top story or penthouse) substantially different from the wall layout and major wall openings of the next story above?	<input type="checkbox"/>	<input type="checkbox"/>

If Yes, the lower of the two stories being compared is a Target Story.

Exception: If the difference between two stories is primarily due to a setback of the upper story, or if the upper story is an attic with a pitched roof (whether occupied or not), then the lower story need not be considered a Target Story.

If you answered No to BOTH of the Step 1 questions:

- Enter **No** as the answer to the Screening Form question about Type V construction.
- Check the box for "The building has no Target Stories."
- Skip Step 2.

If you answered Yes to EITHER of the Step 1 questions:

- Proceed to Step 2.

Step 2. Considering all of the Target Stories identified in Step 1, answer the following question.

	<u>Yes</u>	<u>No</u>
Does the seismic force-resisting system in any Target Story include any wood-frame wall elements of any height, length, or sheathing type, whether or not they conform to requirements for new construction?	<input type="checkbox"/>	<input type="checkbox"/>

The intent is to target wood-frame walls and cripple walls. If there are no wood-frame walls, and the non-wood wall or frame elements extend to the underside of wood floor framing with a rim joist or solid blocking, the Target Story is not considered to have wood-frame wall elements.

If you answered No to the Step 2 question:

- Enter **No** as the answer to the Screening Form question about Type V construction.
- Check the box for "The building has one or more Target Stories, but they are not wood-frame."

If you answered Yes to the Step 2 question:

- Enter **Yes** as the answer to the Screening Form question about Type V construction.

– End of Type V Worksheet –

SECTION 4 – ASSIGNMENT OF COMPLIANCE TIER

Section 4 requires application of the San Francisco Building and Housing Codes and therefore is to be completed by a California licensed architect or civil engineer (unless you answered yes to the question in Section 2, or the building is determined to be exempt in Section 3).

Section 4 assigns each building in the program to a compliance tier. The compliance tier determines the schedule for retrofit design and construction, but it has no impact on exemption from the program or on the deadline for submitting the Screening Form.

For reference, the compliance tier definitions from SFBC Section 3404B.3 and the related compliance deadlines from SFBC Section 3405B.2 and Table 34B-A are reproduced here:

3404B.3. Compliance tiers.

Each building not exempt from this Chapter shall be assigned to one of the following Compliance Tiers:

1. **Tier I:** Buildings that contain a Group A, E, R-2.1, R-3.1 or R-4 occupancy on any story.
2. **Tier II:** Buildings containing 15 or more dwelling units, except for buildings assigned to Tier I or Tier IV.
3. **Tier III:** Buildings not falling within the definition of another tier.
4. **Tier IV:** Buildings that contain a Group B or M occupancy on the first story or in a basement or underfloor area that has any portion extending above grade, and buildings that are in mapped liquefaction zones, except for buildings assigned to Tier I.

3405B.2. Compliance deadlines.

Compliance Tier	Submission of Screening Form and Optional Evaluation Form	Submittal of Permit Application with Plans for Seismic Retrofit Work	Completion of Work And Issuance of CFC ²
I	September 15, 2014	September 15, 2015	September 15, 2017
II	September 15, 2014	September 15, 2016	September 15, 2018
III	September 15, 2014	September 15, 2017	September 15, 2019
IV	September 15, 2014	September 15, 2018	September 15, 2020

2 All time limits and extensions of Chapter 1A of this Code are applicable, except that all work is to be completed by December 31, 2020, as recommended in California Health & Safety Code Section 19160(1).

Compliance Tier Worksheet

The following questions are related to each other like the steps in a flowchart. Therefore, answer the questions in sequence, following the instructions after each one. Guidance on key terms follows the worksheet.

	<u>Yes</u>	<u>No</u>
Does the building contain a Group A, E, R-2.1, R-3.1, or R-4 occupancy on any story?	<input type="checkbox"/>	<input type="checkbox"/>
<p>If Yes, the building is assigned to Tier I. Skip the remaining questions and indicate Tier I on the Screening Form.</p> <p>If No, continue to the next question.</p>		
Does the building contain a Group B or M occupancy on the first story or on a partial basement story?	<input type="checkbox"/>	<input type="checkbox"/>
<p>If Yes, the building is assigned to Tier IV. Skip the remaining questions and indicate Tier IV on the Screening Form.</p> <p>If No, continue to the next question.</p>		
Is the building located in a mapped liquefaction zone?	<input type="checkbox"/>	<input type="checkbox"/>
<p>If Yes, the building is assigned to Tier IV. Skip the remaining question and indicate Tier IV on the Screening Form.</p> <p>If No, continue to the next question.</p>		
Does the building contain 15 or more dwelling units?	<input type="checkbox"/>	<input type="checkbox"/>
<p>If Yes, the building is assigned to Tier II. Indicate Tier II on the Screening Form.</p> <p>If No, the building is assigned to Tier III. Indicate Tier III on the Screening Form</p>		

– End of Compliance Tier Worksheet –

Occupancy A, E, R-2.1, R3.1, or R-4: Occupancies are defined in San Francisco Building Code Chapter 3. The response should be Yes even if the listed occupancy is contained in only part of the building or story, is part of a mixed occupancy, or is part of a temporary occupancy. The listed occupancies represent higher risks in the event of an earthquake in a deficient building. The intent of Chapter 34B is to include in Tier I any building with any portion of these occupancies.

Occupancy B or M on first story or partial basement: Occupancies are defined in San Francisco Building Code Chapter 3. The response should be Yes even if the Group B or Group M occupancy is not the only occupancy in the story. (If the story also contains one of the occupancies listed in the previous question, however, this question will be moot.) The intent of Chapter 34B is to allow more time for retrofit design and construction in Group B and Group M occupancies by assigning them to Tier IV, as long as no other critical condition exists that would assign them to Tier I or II.

For this question, "first story" and "partial basement story" should be understood to mean "any wood-frame Target Story" as described above in the instructions for Section 2. The intent of Chapter 34B is to allow additional compliance time only where the Group B or Group M occupancy might require complex solutions.

Liquefaction zone: Mapped liquefaction zones are shown as Zones of Required Investigation on the map titled "Seismic Hazard Zones, City and County of San Francisco (California Department of Conservation, Division of Mines and Geology, 2000). The map of liquefaction areas and a searchable database may be viewed at the Department of Building Inspection or online at www.sfcapss.org/softstory.

Chapter 34B does not require mitigation of the liquefaction hazard, but it is the intent of the chapter to allow more time for retrofit compliance where owners might choose to address liquefaction potential voluntarily.

Dwelling units: See the instructions for **Dwelling units** in Section 3. The same rules apply here.

SECTION 5 –DESIGN PROFESSIONAL & OWNER AFFIDAVIT

Section 5.1 is required whenever Section 3 or Section 4 is required. If you answered yes to the question 1 in Section 2 and therefore skipped Sections 3 and 4, you need not complete Section 5.1. If you will be using the **Optional Evaluation Form** (based on Section 2, statement 2) please complete Section 5.1.

Section 5.2 must be completed in all cases.

Figure 1. Examples of story counts, Target Stories, and Type V construction

4 stories w/ first floor parking

Basement: None.

First story above grade plane: Wall layout in parking area differs from story above → Target Story. Wood frame walls → Check Type V: Yes on Screening Form.

1st story above grade plane →



3 stories above grade plane, plus basement

Basement: Extends above grade → Target Story.

First story above grade plane: If wall layout substantially matches story above, not a Target Story.

1st story above grade plane →

Basement →



3 stories, plus underfloor area

Underfloor area (unfinished crawl space): Target Story. If walls include wood-frame, check Type V: Yes on Screening Form. If walls are concrete stem walls, check No.



First story above grade plane: Wall layout matches story above, so not a Target Story.

1st story above grade plane →

Crawl space →



Figure 1, continued. Examples of story counts, Target Stories, and Type V construction

<p><u>Sloped site w/ 5 floor levels</u></p> <p>Basement or underfloor area (indicated by windows / vents at grade): Target Story, even though underfloor area exists under only part of building.</p> <p>First story above grade plane: Not a Target Story if wall layout substantially matches story above.</p>	<p>2nd story above grade plane →</p> <p>1st story above grade plane →</p> <p>Partial basement or underfloor area →</p>	
<p><u>Sloped site w/ 5 floor levels</u></p> <p>Story 1: Partial below-grade story → Target Story.</p> <p>Story 2: Story above grade plane, configuration / wall layout does not match story above (see right side of photo) → Target Story.</p> <p>Story 3: Story above grade plane, configuration / wall layout matches story above, so not a Target Story.</p> <p>Story 4: Story above grade plane, configuration / wall layout differs from story above (see right side of photo), but not a Target Story because change in layout is due to setback.</p>	<p>4 →</p> <p>3 →</p> <p>2 →</p> <p>1 →</p>	
<p><u>4 stories, including concrete podium</u></p> <p>Basement: None.</p> <p>First story above grade plane: Wall layout (parking level) differs from story above → Target Story. But Target Story is concrete podium structure, with no wood frame walls → Check Type V: No on Screening Form.</p>	<p>Concrete podium structure (3 wood-frame stories above) →</p>	