



# **BUILDING OCCUPANCY RESUMPTION PROGRAM**

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CITY AND COUNTY OF SAN FRANCISCO  
DEPARTMENT OF BUILDING INSPECTION  
EMERGENCY OPERATIONS PLAN

For any questions regarding this program, please  
call Technical Services Division, 415-558-6084

DEPARTMENT OF BUILDING INSPECTION  
EMERGENCY OPERATIONS PLAN

**BUILDING OCCUPANCY RESUMPTION PROGRAM**

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**DEPARTMENT OF BUILDING INSPECTION**  
**City & County of San Francisco**  
**1660 Mission Street, San Francisco, California 94103-2414**

## **BUILDING OCCUPANCY RESUMPTION PROGRAM**

After a major earthquake involving damage to San Francisco buildings, it is important that local buildings can be inspected and reoccupied and that business can resume operations as soon as it is safely possible. The Department of Building Inspection (DBI) and volunteer inspectors will be utilizing standard emergency inspection and posting procedures with priorities geared toward public safety rather than expeditious business resumption. Some building owners may wish to develop programs of private inspection for their buildings to permit rapid, individualized emergency response.

### **I. PURPOSE**

The purpose of a precertified emergency inspection program is to allow a quick and thorough evaluation of possible damage to a structure by qualified persons familiar with the structural design and life-safety systems of the building. This private emergency inspection could facilitate rapid decisions regarding the closure or reoccupancy of building areas. Prearranged emergency inspection could reduce inspection delays, as City inspection personnel typically are dispatched first to areas of greatest damage or public hazard, which may not include the building in question.

### **II. PREPARATION**

Building owners or their authorized representatives may request participation in this program at any time except during the aftermath of an earthquake resulting in a declared state of emergency. A building designated as having met the requirements outlined below in preparing for emergency response shall be placed on a list of buildings, which are accepted for private emergency inspection. There is no DBI fee for participation in this program.

Building owners who wish to participate in the program should take the following steps; more detail is available on referenced sections.

- Select emergency inspection team - (Section III, item A)
- Obtain building plans
- Write inspection plan - (Section IV, item D)
- Develop building information, evacuation plan, inspector response requirements, equipment and drawing locations, and other pertinent information - Use Checklist - Appendix A
- Prepare precertification documentation (Section V)
- Submit written building emergency inspection program, including inspection plan
- Obtain and store emergency earthquake safety and inspection equipment/supplies (Section III, item B)
- Update inspection plan, supplies, personnel changes, and training as necessary
- Submit Biennial Renewal form - Appendix D - before each biennial anniversary of initial approval date every other year

**III. EMERGENCY INSPECTOR REQUIREMENTS** - A minimum of one primary and one alternate inspector shall be retained by the building owner for each applicable inspection discipline. The structural inspection team shall consist of the primary and/or alternate inspector and any additional structural engineer or person trained in ATC 20 procedures, as required. Few architects consider structural inspections within their purview; however, architects can add expertise to an inspection team to address nonstructural hazards such as blockage of exits, facade and ceiling assembly hazards and life safety system performance. Architects/engineers experienced with historical structures should be considered for the emergency inspection of historic buildings.

Approved emergency inspectors for this program will be deputized by the City & County of San Francisco to give them authorization to perform inspections and post buildings which are on the precertified list with official City placards. The extent of responsibility and liability is governed by the agreement between the owner and inspectors.

**A. Minimum Qualifications and Requirements**

1. Structural Inspectors

- a. Current California license as a professional civil or structural engineer or architect
- b. Relevant experience in the structural design and/or inspection of similar buildings
- c. Proficiency in ATC-20 Detailed Evaluation Procedures

2. Elevator Inspectors

- a. Employment by a firm engaged in elevator maintenance and installation as their primary business.
- b. Familiarity with the building elevator installation

3. Life-safety System Inspectors (required for high-rise buildings)

- a. Familiarity with building life-safety system

**B. Required Documents, Equipment and Supplies**

1. Copy of building Emergency Inspection Program including evacuation plan and other pertinent information
2. Structural, architectural, and/or life-safety system drawings; or  
[If building is so old that structural drawings do not exist or are not clear enough to allow a good understanding of the actual structural system] As-built drawings or a clear description of the structural system and any known weaknesses and unique features
3. Personal safety equipment including hardhat, protective clothing, respirator, etc.
4. Inspection equipment including flashlights, measuring devices, ladders, and other applicable items
5. ATC-20 Detailed Evaluation forms (latest edition) for reporting inspection findings to DBI
6. Caution tape and barricades
7. Walkie-talkies or other emergency communication equipment for large buildings, if applicable
8. Sufficient green, yellow, and red official City safety assessment placards to provide one of each color for each entrance to the building - *to be supplied by City upon approval*

**IV. EMERGENCY INSPECTION PROGRAM** - The program shall include the following information. Please use the fill-in-the-blank format - Appendix E - for items A-C below. The form can be downloaded from the Internet (<http://www.sfdbi.org>) or requested on computer disk for easier completion.

**A. List of primary and alternate emergency inspectors for this building with addresses and phone numbers, and email addresses for engineers and architects:**

1. Licensed engineers/architects retained for structural inspection

2. Staff building engineers
3. Elevator firm, if elevator inspection required
4. Life-safety system inspectors, if required

B. Building information

1. Photograph of building
2. Address
3. Description of building including age, number of stories, size, materials
4. Estimated current building valuation
5. Number of building entrances to be posted with City placards
6. Listing of building use(s) - offices, apartments, etc.
7. Description of structural system
8. Description of life-safety system including location of emergency power generator
9. Description of building fire detection and suppression systems
10. Description and locations of potential falling hazards
11. Location, type, and handling instructions for any hazardous material

C. Emergency response requirements and information including:

1. Trigger for activation of emergency response (e.g. declaration of emergency, >6.0 earthquake, client request)
2. Access procedures and/or keys for entrance to the site and all building areas
3. Location of equipment and supplies
4. Location of Emergency Inspection Plan and on-site drawings

D. Emergency inspection plan including:

1. Inspection guidelines consistent with ATC-20 *Procedures for Postearthquake Safety Evaluation of Buildings* including Detailed Evaluation Procedure. Recommended methodology for welded steel joint inspection is FEMA 352, where required. (Note: BORP does not require connection inspection per FEMA 352 for pre-Northridge moment frame buildings.) These inspections may be required by the inspecting engineers, or DBI. For special inspection or materials testing, use only agencies preapproved by the City; a current list is available at 1660 Mission St., 3rd floor.
2. Detailed instructions regarding where to look, what to look for, and how to obtain access to inspection areas.
3. Detailed instructions regarding how to inspect specific structural and non-structural elements and how to interpret observed damage.
4. Detailed instructions regarding additional inspection procedures to be performed following aftershocks.
5. [Optional] Placement of accelerometers. Instrumentation is recommended as part of an Emergency Inspection Program for all highrise buildings in San Francisco. Correct placement of accelerometers per Administrative Bulletin AB-058 can provide valuable post-earthquake information about the performance of a building. This option may be considered in certain cases as a means of reducing the percentage of joints required to be inspected after an earthquake.

E. List of required documents, equipment and supplies and their location

**V. PRECERTIFICATION DOCUMENTATION** - Precertification must occur before the earthquake. No documentation will be accepted for a period of at least three months after a declared state of emergency. Submit two (2) copies each of the following to the Department of Building Inspection:

- A. Completed Emergency Inspection Program Checklist (Appendix A)
- B. Request for Precertification form signed by building owner or authorized representative (Appendix B)
- C. Evidence of emergency inspector qualifications for each individual:
  1. Current California license as a professional civil or structural engineer or architect – license number
  2. Signed Emergency Inspector Authorization form (Appendix C) showing relevant experience in the structural design and/or inspection of buildings of similar size, construction, and complexity
  3. Signed copies of Appendix C for elevator and/or life safety system inspectors, if required
- D. Copy of written Emergency Inspection Program (see content requirements and Appendix E)

**VI. PRECERTIFICATION ACCEPTANCE** - DBI will add the building to the list of buildings approved for the Building Occupancy Resumption Program and provide the following upon acceptance of precertification documentation:

- A. DBI-signed Appendix A, Checklist
- B. DBI-signed Appendix B, Request for Precertification form
- C. DBI-signed copy of each Appendix C, Emergency Inspector Authorization form
- D. Both copies of the accepted Emergency Inspection Program
- E. Official City posting placards requested for main building entrances
- F. Certificate of approval to display in building

## **VII. IMPLEMENTATION**

- A. Upon notification of an earthquake resulting in a declared state of emergency, the goal is to initiate the emergency inspection program within 8 hours of daylight access to building, or as agreed between inspecting engineers and owner.
- B. Contact DBI immediately if building or area (including sidewalk, street, or parking area) presents a public safety hazard or if emergency demolition or shoring permit is needed.
- C. Arrange for barricading of all unsafe areas. Contact the Department of Public Works at 415-695-2020 immediately if areas barricaded include a City street or otherwise adversely affect City services, or if barricades provided by the building owner are insufficient.
- D. Complete detailed evaluation as soon as reasonably possible.
- E. Post building (green, yellow, or red) at the main entry of the building or at all entrances of multi-entrance buildings.  
Elevator and life safety inspection may occur separately from structural inspection.
- F. Take preventive measures regarding gas leaks, release of hazardous materials, or other life-safety mitigation.

- G. At owner's and inspector's discretion, non-structural hazards may be mitigated per DBI procedures.
- H. The goal is to submit ATC-20 Detailed Evaluation report (Appendix G) signed and dated by prequalified engineer(s)/architect to DBI within 72 hours of the declared state of emergency. If reports are not received by that time, an inspection may be made by City inspectors or deputized volunteer inspectors using standard City-wide inspection criteria.

**VIII. DBI VERIFICATION** - The Department of Building Inspection may perform inspection of a building accepted for the Building Occupancy Resumption Program under any of the following conditions:

- A. The emergency inspector has reported the building unsafe and has posted it with a red placard.
- B. There is reason to believe that unsafe conditions exist.
- C. Building owners, tenants, other City agencies, or members of the general public have expressed specific concerns.

**IX. TERMINATION** – Before each biennial anniversary of original approval date, a courtesy reminder notice will be sent to owner or agent via email. If there is no response from the owner within 180 calendar days, or for one or more of the following reasons, the building may be removed from the Building Occupancy Resumption Program:

- A. Biennial renewal forms have not been submitted.
- B. Agreement between building owner and inspection team has been terminated.
- C. Changes in building or inspection team do not meet minimum requirements.

# BUILDING OCCUPANCY RESUMPTION PROGRAM

## APPENDIX A

### CHECKLIST

Building Address: \_\_\_\_\_

- Appendix A - This Checklist, **marked by submitter** to show all items submitted
- Appendix B - Request for Precertification - signed by building owner or authorized agent
- Appendix C - Emergency Inspector Authorization - signed, for each inspector
- Appendix E - Program Format - completed with applicable information including:
  - List of primary & alternate emergency inspectors for this building w/addresses & phone numbers:
    - \_\_\_ 1. Licensed engineers/architects for structural inspection
    - \_\_\_ 2. Staff building engineers, if applicable
    - \_\_\_ 3. Elevator firm, if elevator inspection required
    - \_\_\_ 4. Life-safety system inspectors, if required
- Building information
  - \_\_\_ 1. Photograph
  - \_\_\_ 2. Address
  - \_\_\_ 3. Description of building including age, number of stories, size, materials
  - \_\_\_ 4. Estimated current building valuation
  - \_\_\_ 5. Number of entrances for which placards are requested:
  - \_\_\_ 6. Listing of building uses - offices, apartments, etc.
  - \_\_\_ 7. Description of structural system
  - \_\_\_ 8. Description of life-safety system including location of emergency power generator
  - \_\_\_ 9. Description of building fire detection and suppression systems
  - \_\_\_ 10. Description and locations of potential falling hazards
  - \_\_\_ 11. Location, type, and handling instructions for any hazardous material
- Emergency response requirements and information including:
  - \_\_\_ 1. Trigger for activation of emergency response
  - \_\_\_ 2. Access procedures for entrance to the site and all building areas
  - \_\_\_ 3. Location of equipment and supplies
  - \_\_\_ 4. Location of Emergency Inspection Plan and on-site drawings
- Emergency inspection plan including:
  - \_\_\_ 1. Inspection guidelines consistent with latest edition of ATC-20 *Procedures for Postearthquake Safety Evaluation of Buildings* including Detailed Evaluation Procedure.
  - \_\_\_ 2. Detailed instructions regarding where to look, what to look for, and how to obtain access for inspection.
  - \_\_\_ 3. Detailed instructions regarding how to inspect specific structural and non-structural elements and how to interpret observed damage.
  - \_\_\_ 4. Detailed instructions regarding additional inspection procedures to be performed following aftershocks.
  - \_\_\_ 5. [Optional] Accelerometer placement - may reduce requirement for inspection of welded joints.
- List of required documents, equipment and supplies and their location, including:
  - \_\_\_ 1. Copy of building Emergency Inspection Program incl. evacuation plan & other pertinent info.
  - \_\_\_ 2. Structural, architectural, and/or life-safety system drawings; or as-built drawings or a clear description of the structural system and any unique features
  - \_\_\_ 3. Personal safety equipment including hardhat, protective clothing, respirator, and other applicable items
  - \_\_\_ 4. Inspection equipment including flashlights, measuring devices, ladders, & other needed items
  - \_\_\_ 5. ATC-20 Detailed Evaluation for reporting inspections to the Department of Building Inspection
  - \_\_\_ 6. Caution tape and barricades
  - \_\_\_ 7. Walkie-talkies or other emergency communication equipment for large buildings, if applicable
  - \_\_\_ 8. Sufficient green, yellow, & red official City placards for each building entrance - *supplied upon approval*

Reviewed & Accepted by: \_\_\_\_\_

Date: \_\_\_\_\_

RETURN ONE COPY OF THIS FORM TO BUILDING OWNER AFTER REVIEW & ACCEPTANCE

# BUILDING OCCUPANCY RESUMPTION PROGRAM

## APPENDIX B

### REQUEST FOR PRECERTIFICATION

[When used for Biennial Renewal, complete only if Owner has changed during last two years.]

Precertification of the building at (address) \_\_\_\_\_, San Francisco, California, is requested for acceptance in the Department of Building Inspection Building Occupancy Resumption Program.

I certify that:

1. The owner of the building at the above address is:  
Address: \_\_\_\_\_ Phone: \_\_\_\_\_
2. I am authorized to act as the owner's agent in requesting participation in the program.
3. The enclosed precertification documentation and written emergency inspection program complies with the minimum requirements of the Building Occupancy Resumption Program.
4. Emergency inspectors have been given a copy of the Emergency Inspection Program for the building at the address listed above.
5. Emergency inspectors have been given means of access to all areas of the building at all times of day and night or have been given instructions regarding obtaining accompanied access.
6. Emergency inspectors have access to the most recent accurate copies of all relevant structural, architectural, and life-safety drawings at all times.
7. All emergency inspectors will receive immediate notification of any changes in factors affecting the emergency inspection program (e.g. changes to structural or life-safety systems, access to buildings, etc).

(signature) \_\_\_\_\_ Phone \_\_\_\_\_ Date \_\_\_\_\_  
(typed name)

The precertification documentation for this building has been accepted by the Department of Building Inspection. The building will be placed on the list of buildings for the Building Occupancy Resumption Program.

Accepted by: \_\_\_\_\_ Date: \_\_\_\_\_

*RETURN ONE COPY OF THIS FORM TO BUILDING OWNER AFTER REVIEW & ACCEPTANCE*

# BUILDING OCCUPANCY RESUMPTION PROGRAM

## APPENDIX C

### EMERGENCY INSPECTOR AUTHORIZATION

[When used for biennial renewal, complete only for NEW inspectors]

I request precertification as an emergency inspector for the building at \_\_\_\_\_, San Francisco, California for the following type of emergency inspection:

A.  Structural Inspector

I am a California licensed  engineer  architect Lic. No. \_\_\_\_\_

I certify that:

1. I have relevant experience in the design and/or inspection of similar buildings:

Building Address	Building Type	No. Stories

2. I am proficient in ATC-20 Detailed Evaluation Procedures and will complete any additional and/or refresher training in a manner consistent with maintaining readiness.
3. I am familiar with the emergency inspection plan and relevant drawings for this building.
4. I accept authorization as an emergency inspector by the City & County of San Francisco Department of Building Inspection and will display this form upon request.

B.  Elevator Inspection Firm

I certify that:

1. Employees of my firm are authorized as qualified elevator technicians by the building owner.
2. My firm is familiar with the building elevator equipment, installation, and operation.
3. I will report findings to the structural inspector for inclusion in emergency inspection reports, or submit findings directly to DBI with copy to the structural inspector.

C.  Life-safety System Inspector

I certify that:

1. I am familiar with the building life-safety system and have access to relevant drawings.
2. I will report findings to the structural inspector for inclusion in emergency inspection reports, or submit findings directly to DBI with copy to the structural inspector.

(signature) \_\_\_\_\_  
(typed/printed name)

Date: \_\_\_\_\_

The structural engineers shown above are deputized as emergency inspectors for the above-listed building by the City & County of San Francisco Department of Building Inspection and are authorized to post this building with official City post-earthquake safety evaluation placards.

Accepted by: \_\_\_\_\_

Date: \_\_\_\_\_

RETURN ORIGINAL OF THIS FORM TO BUILDING OWNER AFTER REVIEW & ACCEPTANCE  
BUILDING OWNER TO GIVE ORIGINAL TO INSPECTOR FOR IDENTIFICATION PURPOSES

# BUILDING OCCUPANCY RESUMPTION PROGRAM

## APPENDIX D

### BIENNIAL PROGRAM RENEWAL

*TO BE SUBMITTED EVERY OTHER YEAR  
BEFORE EACH BIENNIAL ANNIVERSARY OF ORIGINAL APPROVAL DATE*

Building Address: \_\_\_\_\_ San Francisco, California.

Estimated current building valuation is \$\_\_\_\_\_.

- No change has been made in the building or any element of emergency inspection program.
- All emergency equipment and supplies for the program have been checked and updated as necessary.
- The building owner has changed. The new owner is \_\_\_\_\_ .  
A Request for Precertification form signed by the new owner is enclosed.
- Emergency inspectors/contact information has changed. Completed Emergency Inspector Authorization forms for *new* inspectors are enclosed.
- Changes have been made to the building that affect the Emergency Inspection Program. Emergency inspectors have been given revised drawings for any relevant changes to the building.
- Emergency inspectors have been given a copy of all Emergency Inspection Program revisions.

Signed by: The designated contact person for biennial update (the structural inspector, or the owner, or the owner's agent):

(signature) \_\_\_\_\_ Date: \_\_\_\_\_  
(typed name)

(Company): \_\_\_\_\_ (Phone No.): \_\_\_\_\_ (Email): \_\_\_\_\_

The updated documentation for this building has been accepted by the Department of Building Inspection. The building will remain on the list of buildings for the Building Occupancy Resumption Program.

Accepted by: \_\_\_\_\_ Date: \_\_\_\_\_

*RETURN ONE COPY OF THIS FORM TO BUILDING OWNER AFTER REVIEW & ACCEPTANCE*

# BUILDING OCCUPANCY RESUMPTION PROGRAM

## APPENDIX E PROGRAM FORMAT

### A. Emergency Inspectors

1. Licensed engineers/architects retained for Structural Inspection:

Name/email address	Address	Work Phone	Pager	Cell Phone	Home Phone
Primary:					
Alternate:					

2. Staff building engineers:

Name	Address	Work Phone	Pager	Cell Phone	Home Phone

3. Elevator firm, if elevator inspection required:

Firm address:

Contact Name	Address	Work Phone	Pager	Cell Phone	Home Phone
Primary:					
Alternate:					

4. Life-safety system inspectors, if required:

Name	Address	Work Phone	Pager	Cell Phone	Home Phone
Mechanical:					
Electrical:					

**B. Building Information**

- 1. Photograph
- 2. Address:
- 3. Description of building:
  - a. Date of original construction: \_\_\_\_\_
  - b. No. of stories beginning at ground floor: \_\_\_\_\_
  - c. No. of levels below ground: \_\_\_\_\_
  - d. Building height and square footage: \_\_\_\_\_ ft.                      Total square feet \_\_\_\_\_
  - e. Dimension of ground floor footprint: \_\_\_\_\_ x \_\_\_\_\_
  - f. Other recommended items:

Sketch or plan of each floor, roof, and basement level, and each exterior elevation. Identify all entrances, location of supplies, primary structural elements, and additional key inspection information.

- 4. Estimated current building valuation: \_\_\_\_\_ \$
- 5. Number of entrances for which placards are requested:
- 6. Estimated number of occupants:
- 7. Listing of building use(s): \_\_\_\_\_
- 8. Description of structural system & materials: \_\_\_\_\_

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- 9. Description of life-safety system including location of emergency power generator:

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- 10. Description of building fire detection and suppression systems:

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11. Description & locations of potential falling hazards:

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12. Information about hazardous material, including known friable asbestos-containing materials:

a. Location: \_\_\_\_\_ Type: \_\_\_\_\_

Handling instructions: \_\_\_\_\_

b. Location: \_\_\_\_\_ Type: \_\_\_\_\_

Handling instructions: \_\_\_\_\_

**C. Emergency response requirements and information:**

1. Trigger for activation of emergency response: \_\_\_\_\_

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2. Access procedures and/or keys for entrance to the site and all building areas: \_\_\_\_\_

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3. Location of equipment and supplies:

a. Drawings (structural, architectural, life-safety); Emergency Inspection Plan; evacuation plan; green, yellow & red official City safety assessment placards (one of each color for each building entrance); inspection report forms for owner; ATC-20 Detailed Evaluation forms:

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b. Hard hats, gloves, safety glasses, respirators, flashlights, tape measures, micrometer, hammer, screwdriver, and walkie-talkies or other emergency communication equipment (if needed):

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c. Ladders or other equipment needed for inspection access:

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d. Caution tape, barricades

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e. Other necessary equipment or supplies:

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**D. Emergency Inspection Plan** - Please attach inspection guidelines for the building which are consistent with ATC-20 Procedures for Postearthquake Safety Evaluation of Buildings including Detailed Evaluation Procedure (Appendix F). The emergency inspection plan **must** include:

1. A detailed evaluation procedure.
2. Detailed instructions regarding where to look, what to look for, and how to obtain access to inspect specific structural and non-structural elements.
3. Detailed instructions regarding how to inspect specific structural and non-structural elements and how to interpret observed damage.
4. Detailed instructions regarding additional inspection procedures to be performed following aftershocks.
5. [Optional] Placement of accelerometers. (This option may be considered in certain cases as a means of reducing the percentage of joints required to be inspected after an earthquake.)

ATTACH AS MANY SHEETS AS NEEDED.

\* \* \* \* \*

Appendices F & G - Pages 13-23 - are the "Detailed Evaluation Method," *ATC-20 Postearthquake Safety Evaluation of Buildings* and accompanying inspection report form, which are not included in the electronic version of the program. For a copy of this material please call Technical Services at 415-558-6084. To order a copy of the entire publication, contact the Applied Technology Council, 555 Twin Dolphin Drive, Suite 500, Redwood City, CA 94065, 650-595-1542; email <http://www.atcouncil.org/>.