D. Details shall include existing and new anchors and the method of development of anchor forces into the diaphragm framing; existing and/or new cross-ties; existing and/or new or improved support of roof and floor girders at pilasters or walls. [Added by Ord. No. 13-3,845, eff. 1/1/14.]

TABLE NO. 9-1-7-200-A RATING CLASSIFICATIONS

Classification/Occupant Load

Group I 300 or Group II 30 to 299 Group III less than more 30

TABLE NO. 9-1-7-200-B TIME LIMITS FOR COMPLIANCE

Obtain Building Permit Within	Commence Construction	Complete Construction
365 days	545 days	Three years

TABLE NO. 9-1-7-200-C SERVICE PRIORITIES

Rating/Minimum Time Period

Classification Before Service of Compliance Order

Group I 30 days Group II 1 year Group III 2 years

[Added by Ord. No. 13-3,845, eff. 1/1/14.]

DIVISION 3. VOLUNTARY PRESCRIPTIVE PROVISIONS FOR SEISMIC STRENGTHENING OF CRIPPLE WALLS AND SILL PLATE ANCHORAGE OF LIGHT, WOOD-FRAME RESIDENTIAL BUILDINGS

9-1-7-A300: ADOPTION OF CODE:

Chapter A3 of the 2012 International Existing Building Code is hereby adopted by the City of Burbank and made a part of this Code for promoting public welfare and safety by reducing the risk of earthquake-induced damage to existing wood-frame residential buildings. [Added by Ord. No. 13-3,845, eff. 1/1/14.]

DIVISION 4. VOLUNTARY EARTHQUAKE HAZARD REDUCTION IN EXISTING WOOD FRAME RESIDENTIAL BUILDINGS WITH SOFT, WEAK OR OPEN FRONT WALLS

9-1-7-A400: ADOPTION OF CHAPTER A4 OF THE 2012 INTERNATIONAL EXISTING BUILDING CODE:

Chapter A4 of the 2012 International Existing Building Code is hereby adopted by the City of Burbank and made a part of this Code for promoting public welfare and safety by reducing the risk of death or injury that may result from the effects of earthquakes on existing wood-frame, multiunit residential buildings. [Added by Ord. No. 13-3,845, eff. 1/1/14.]

DIVISION 5. VOLUNTARY EARTHQUAKE HAZARD REDUCTION IN EXISTING CONCRETE BUILDINGS AND CONCRETE WITH MASONRY INFILL BUILDINGS

9-1-7-A500: ADOPTION OF CODE:

Chapter A5 of the 2012 International Existing Building Code is hereby adopted by the City of

Burbank and made a part of this Code for promoting public welfare and safety by reducing the risk of death or injury that may result from the effects of earthquakes on existing concrete buildings and concrete frame buildings with masonry infill. [Added by Ord. No. 13-3,845, eff. 1/1/14.]

DIVISION 6. EARTHQUAKE DAMAGE REPAIR OF WELDED STEEL MOMENT FRAME BUILDINGS

9-1-7-600: EARTHQUAKE DAMAGE REPAIR OF WELDED STEEL MOMENT FRAME BUILDINGS:

9-1-7-600.1: PURPOSE:

The City of Burbank is within CBC Seismic Zone 4. This zone is the highest risk for damaging earthquakes. Approximately 30 percent of the City is categorized as an "Active Fault Near Source Zone" (ICBO, California Department of Conservation-Division of Mines and Geology). The Near-Source Zone is an area within two kilometers of an active fault (Class A or B) capable of producing a major earthquake. The Verdugo Fault and the Hollywood Fault are the near-source influences for the City (both are Class B faults). A Near-Source Zone is subject to the largest and most damaging ground acceleration and velocity produced in a seismic event. The resulting structural damage in a near-source zone is generally severe.

The 1994 Northridge Earthquake caused considerable damage to buildings and structures located in the City of Burbank. Experts expect a massive earthquake on one of the faults under the City within the next 30 years and several earthquakes similar in intensity to the Northridge Earthquake during that same period.

Studies have been conducted on the earthquake damage by structural engineers from numerous state and city agencies and the Structural Engineers Association of Southern California (SEAOSC). These engineers have determined that welded steel moment frame buildings located in earthquake-damaged areas were severely impacted by the Northridge Earthquake and its aftershocks.

Section <u>9-1-7-600</u> is in response to the discovery of unexpected and unprecedented damage to welded steel moment frame (WSMF) structures in the Northridge Earthquake. This serious damage was revealed only after detailed structural inspections were performed. In many cases, buildings with significant structural damage showed no outward signs of distress. Given the lack of visual and superficial clues, such as a permanent drift or damaged architectural elements, property owners and building occupants are unaware of the risk to safety and the serious consequences of hidden damage to welded steel moment frames.

Inspection of the WSMF building stock in the City of Los Angeles revealed significant and widespread damage due to the Northridge Earthquake of 1994, when evaluated in accordance with SAC/FENIA guidelines. Sixty percent, or 150, of the buildings within the scope of the City of Los Angeles Repair Ordinance had significant WSMF structural damage requiring repairs. The buildings in Burbank were subjected to similar earthquake forces and ground motions as these damaged buildings in Los Angeles. A building with a damaged WSMF has little or no capacity to resist further earthquake forces.

The Building Code does not allow a welded steel moment frame building to be maintained with damaged connections. It is necessary to insure that repairs to these welded steel moment frame buildings are performed in an expeditious manner.

The damage to these welded steel moment frame buildings could expose occupants of these buildings to potential life-safety risks in future earthquakes, and the City of Burbank must protect its population and property and enforce the Building Code so as to provide effective protection to all its citizens.

Thus, the purpose of this ordinance is to promote public safety and welfare by reducing the risk of death or injury that may result from the effects of earthquakes on welded steel moment frame buildings. [Added by Ord. No. 13-3,845, eff. 1/1/14.]

9-1-7-600.2: SCOPE:

Section <u>9-1-7-600</u> shall be applicable to buildings of more than one story of welded steel moment frame design if construction of the building began before January 17, 1994, provided, however, that the following buildings are exempt from the requirements of this Section <u>9-1-7-600</u>:

- A. Any single family dwelling (CBC R-3 occupancy),
- B. Detached one- or two-story dwellings of CBC R-I occupancy, and
- C. Detached apartment houses containing fewer than five dwelling units and used solely for residential purpose. [Added by Ord. No. 13-3,845, eff. 1/1/14.]

9-1-7-600.3: DEFINITIONS:

CONNECTION: Combination of joints used to transmit forces between two or more members categorized by the amount and type of force transferred (moment, shear, end reaction).

NON-DESTRUCTIVE TESTING: An approved in-situ procedure for examining material continuity, including but not limited to: Liquid Dye Penetrant Test, Magnetic Particle Test, Radiographic Test, Ultrasonic Test.

STRUCTURAL ENGINEER: A person authorized to use the title of structural engineer under Chapter 7 (commencing with Section 6700) of Division 3 of the Business and Professions Code.

WELDED STEEL MOMENT FRAME: A plane (or nearly so) frame structure deriving lateral load stability from rigid interconnection of the beams and columns. Rigid connections may consist either of fully welded connections or connections which are partially welded and bolted. This includes both ordinary moment-resisting frames and special moment-resisting frames as defined by the California Building Code. [Added by Ord. No. 13-3,845, eff. 1/1/14.]

9-1-7-600.4: INSPECTION AND REPAIR REQUIRED:

A. Structural Analysis and Inspection Report.

The owner of each building within the scope of this Section <u>9-1-7-600</u> shall, upon service of an inspection order, cause a structural analysis and inspection report of the building to be prepared by a structural engineer.

The structural analysis and inspection report shall contain the results of an analytical or numerical analysis of the building with the number and location of connections identified as requiring inspection based on the results of such analysis. The number and location of connections to be inspected shall be selected by the structural engineer and approved by the Building Official prior to

inspection.

Inspection and test procedures shall follow guidelines established by the Federal Emergency Management Agency (FEMA), Applied Technology Council (ATC), and SAC Steel Project. The Building Official shall verify the analysis and inspection procedures comply with these guidelines.

The final structural analysis and inspection report shall include the result of any nondestructive tests and the results of other approved methods of testing connections, shall state whether or not the building has damage to these connections, and shall identify the damaged connections.

If no repairs are indicated in the structural analysis and inspection report, the report shall demonstrate that the building's welded steel moment frame structural elements are without damage that may reduce the moment resisting capacity of the structural elements below the building's original minimum design requirements.

If the structural analysis and inspection report indicate that the welded steel moment frame structure of the building is damaged, the report shall include plans and procedures prepared by a structural engineer for the repair of such damage. The repair plans shall indicate the repairs necessary for the structure to meet the standards for strength under which the building was originally designed.

The structural analysis and inspection report must be submitted to the Building Official within 12 months after the service of an inspection order. The structural analysis inspection report is subject to approval by the Building Official.

B. Repair of Damage.

If the structural analysis and inspection report indicates that the welded steel moment frame structure of the building is damaged, the owner of such building shall cause the structure to be repaired to the standards for strength under which the building was originally designed. After repair plans are submitted and approved by the Building Official, the owner shall, within 18 months of the service of the inspection order, obtain a building permit for the necessary repairs. The repairs shall be completed within 24 months after the service of the inspection order. [Added by Ord. No. 13-3,845, eff. 1/1/14.]

9-1-7-600.5: TYPES OF DAMAGE:

Types of damage which may reduce the moment resisting capacity of welded steel moment frame structures below minimum design safety criteria include but are not limited to:

- A. Column to beam connection weld discontinuities detectable by visual inspection or non-destructive testing that are not termed defects per the criteria given in the Welding Code. Weld defects resulting in discontinuity and loss of connection strength below design criteria. Cracked or damaged shear tab or weld.
- B. Panel zone damage such as fracture, buckle, or yield of continuity plate, yield or ductile deformation of web, full or partial depth fracture in web or doubler plate, severed column.
- C. Incipient flange crack, flange tearout or divot, lamellar flange tearing, column splice failure, buckled flange, full or partial flange crack in or outside of heat affected zone. [Added by Ord. No. 13-3,845, eff. 1/1/14.]

9-1-7-600.6: NO ALTERATIONS PERMITTED UNTIL BUILDING REPAIRED:

Once an inspection order has been served, buildings within the scope of this Section <u>9-1-7-600</u> may not be structurally altered, remodeled or added to without first complying with the provisions of this Section <u>9-1-7-600</u>, unless the Building Official determines that the alteration is minor in nature. [Added by Ord. No. 13-3,845, eff. 1/1/14.]

9-1-7-600.7: INSPECTION ORDER:

- A. The Building Official shall issue a written inspection order to the record owner of each building within the scope of this Section <u>9-1-7-600</u> and shall also mail a copy to the person, if any, occupying or otherwise in real or apparent charge and control of the building.
- B. The order shall be served either personally or by mail and shall contain:
 - The street address and legal description sufficient for identification of the building.
 - 2. A statement that the Building Official has found the building to be within the scope of Section <u>9-1-7-600</u>.
 - 3. An order to prepare and submit to the Building Official a structural analysis and inspection report as required pursuant to Section 9-1-7-600.4.
 - 4. A statement specifying the appeal rights of the owner as contained in Section 9-1-7-600.9.
- C. The order shall be served and contents recorded in accordance with the provisions of Subsections (c), (d), (e), and (f) of Article 2 of this Code. [Added by Ord. No. 13-3,845, eff. 1/1/14.]

9-1-7-600.8: REPAIR ORDER:

- A. The Building Official shall issue a written repair order to the record owner of a damaged building directing the owner to repair any damage to the Welded Steel Moment Frame based on the structural analysis and nondestructive testing recommendations approved by the Building Official and shall mail a copy of such repair order to the person, if any, occupying or otherwise in real or apparent charge and control of the building.
- B. The repair order shall be served either personally or by mail and shall contain:
 - 1. The street address and legal description sufficient for identification of the building.
 - 2. A statement that the Building Official has found the building to be within the scope of Section 9-1-7-600.
 - 3. An order to secure permits, physically commence, and to complete all work necessary to meet the repair recommendations proposed in the approved structural analysis and inspection report.
 - 4. A statement specifying the appeal rights of the owner as contained in Section <u>9-1-7-600.9</u>.
- C. The order shall be served and contents recorded in accordance with the provisions of Article 2 of this Code. [Added by Ord. No. 13-3,845, eff. 1/1/14.]

9-1-7-600.9: APPEAL FROM ORDERS:

- A. The owner may request that the Building Official reconsider the Building Official's determination that the building is within the scope of this Section <u>9-1-7-600</u> by submitting building plans to the Building Official that clearly establish that the building's structural systems and connections are not of welded steel moment frame design. Further, the owner may appeal the Building Official's determination that the building is within the scope of this Section <u>9-1-7-600</u> to the Board of Building and Fire Code Appeals. Reasons for a building's exemption from this Section <u>9-1-7-600</u> shall be limited to:
 - 1. the building is not of welded steel moment frame design; or
 - 2. construction of the building began after January 17, 1994.

Such appeal shall be filed within 60 calendar days from the service of the inspection order and shall clearly and concisely state the grounds for such appeal. Any materials that the appellant wishes considered by the Board shall be submitted to the Board 14 calendar days before the hearing. If no request for reconsideration and no appeal are filed within 30 days of the service of the inspection order, the building shall be considered to be within the scope of this Section 9-1-7-600.

B. Appeals or requests for modification from any other determinations, orders, or actions of the Building Official pursuant to this section shall be made in accordance with the procedures established in Section 9-1-1-112.4 of this Code. [Added by Ord. No. 13-3,845, eff. 1/1/14.]

9-1-7-600.10: TIME EXTENSIONS:

An owner of a building may apply to the Board of Building and Fire Code Appeals for an extension of the time limits to submit a plan for repair to the building and obtain the necessary permits and the time limit to complete the repairs to the building. The Board may grant an applicant an extension of up to 12 months additional time to comply with these requirements provided the applicant has demonstrated a good faith effort to meet the requirements of this Section 9-1-7-600. A maximum of three such extensions may be granted for a total extension of up to three years. In no case, shall the time for completion of repairs exceed five years from the service of the inspection order. [Added by Ord. No. 13-3,845, eff. 1/1/14.]

9-1-7-600.11: ENFORCEMENT:

If an owner of a building subject to this Section <u>9-1-7-600</u> does not comply with any order issued by the Building Official pursuant to this section within any time limits set forth in this section, the Building Official may order the entire building vacated and that the building remain vacated until such order has been complied with. [Added by Ord. No. 13-3,845, eff. 1/1/14.]

ARTICLE 8. SOLAR ENERGY REGULATION