Post-Disaster Building Assessment

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Safety Assessment Program (SAP)

A program of the State of California Governor’s Office of Emergency Services to deploy Safety Assessment Evaluators trained and certified in the ATC-20 methodology
After search and rescue.....
Safety assessment begins...
and continues........
and continues.....
and continues....
and continues
What is ATC-20?

A methodology developed by the Applied Technology Council to:

- Evaluate the extent of damage to structures after an earthquake
- Placard buildings to inform owners, occupants and the public if a building is safe to enter and occupy
- Provides information to local, regional and state governmental agencies and others as to the extent and location of damaged structures
ATC-20 forms
Rapid evaluation
Detailed evaluation
### Posting
If there is an existing posting from a previous evaluation, check the appropriate box. Previous posting: □ INSPECTED □ RESTRICTED USE □ UNSAFE

If necessary, revise the posting based on the new evaluation and team judgment. **Severe** conditions endangering the overall building are grounds for an **Unsafe** posting. Local **Severe** and overall **Moderate** conditions may allow a **Restricted Use** posting. Indicate the current posting below and at the top of page one.

- □ INSPECTED (Green placard)
- □ RESTRICTED USE (Yellow placard)
- □ UNSAFE (Red placard)

Record any use and entry restrictions exactly as written on placard: ____________________________________________
________________________________________________________________________________________
________________________________________________________________________________________

### Further Actions
Check the boxes below only if further actions are needed.

- □ Barricades needed in the following areas: ________________________________________________
- □ Engineering Evaluation recommended: □ Structural □ Geotechnical □ Other: ____________________________
- □ Other recommendations: ________________________________________________________________

Comments: ________________________________________________________________________________
________________________________________________________________________________________
INSPECTED

LAWFUL OCCUPANCY PERMITTED

This structure has been inspected (as indicated below) and no apparent structural hazard has been found.

☐ Inspected Exterior Only

☐ Inspected Exterior and Interior

Report any unsafe condition to local authorities; reinspection may be required.

Inspector comments:

_________________________________________________________________________

Date ____________________________

Time ____________________________

(Caution: Aftershocks since inspection may increase damage and risk.)

This facility was inspected under emergency conditions for:

_________________________________________________________________________

(Jurisdiction)

Inspector ID / Agency:

_________________________________________________________________________

Facility Name and Address:

_________________________________________________________________________
RESTRICTED USE

Caution: This structure has been inspected and found to be damaged as described below:

________________________________________
________________________________________
________________________________________

Entry, occupancy and lawful use are restricted as indicated below:

________________________________________
________________________________________
________________________________________

Date ____________________________

Time ____________________________

(Caution: Aftershocks since inspection may increase damage and risk.)

This facility was inspected under emergency conditions for:

________________________________________
(Jurisdiction)

Inspector ID / Agency

________________________________________

Facility Name and Address:

________________________________________
________________________________________

Do Not Remove, Alter or Cover this Placard until Authorized by Governing Authority
UNSAFE
DO NOT ENTER OR OCCUPY
(THIS PLACARD IS NOT A DEMOLITION ORDER)

This structure has been inspected, found to be seriously damaged and is unsafe to occupy, as described below:

__________________________________________________________________________
__________________________________________________________________________

Date ____________________________

Time ____________________________

This facility was inspected under emergency conditions for:

__________________________________________________________________________

(Jurisdiction)

__________________________________________________________________________

Do not enter, except as specifically authorized in writing by jurisdiction. Entry may result in death or injury.

Facility Name and Address:

__________________________________________________________________________
__________________________________________________________________________

Inspector ID / Agency

__________________________________________________________________________
Northridge Apartment Building with Red Tag
Single family home with Yellow tag
What is SAP?

• A program of the State of California Governor’s Office of Emergency Services
• Provides resources (volunteers and mutual aid) to local governments to assist in the evaluation of facilities (buildings and infrastructure) after a disaster
• SAP uses ATC-20 methodology to evaluate buildings
Goals of SAP and ATC-20

- Help local governments perform accurate facility safety assessments as quickly as possible
- Help keep people out of unsafe buildings
- Assist communities in returning to normalcy
- Provide residents and business owners with an *initial* assessment of their buildings
California OES has agreements with these participating professional organizations to *train and provide* post-earthquake safety evaluators.

- SEAOC - (Engineers)
- ASCE - (Engineers)
- AIA (Architects)
- CALBO (Building Inspectors)
- ACIA (Construction Inspectors)
Qualifications

• Professionally Registered Engineer
• Professionally Licensed Architect
• Certified Building Official or Inspector
• Have a general knowledge of construction including framing systems and load path
• Professional experience
• Good judgment
A very brief history

- 1971 - SEOC begins plans with OES to use volunteer engineers for EQ evaluation
- 1978 – First draft completed “Safety Assessment Plan for Volunteer Engineers”
- 1987 – Applied Technology Council begins development of ATC-20 and ATC-20-1 – procedures and post EQ evaluation and field manual
- September 1989 - documents made available and initial trainings held
- October 1989 – ATC-20 used after Loma Prieta
- 1991, 1992, and 2003, OES and ATC-20 make additional changes to expand program
Who Inspects What?

Office of Emergency Services
Coordination of all Resources

- Building Inspectors
  - Rapid Evaluation of all occupancies
- Engineers with structures background
  - Rapid evaluation of all occupancies
  - Detailed evaluation of all occupancies
- Engineers with lifeline background
  - Detailed Evaluation of Bridges, Roads, Airports, Treatment Plants, Pipelines, Reservoirs, Water Tanks and Dams
- Architects
  - Rapid Evaluation of all occupancies
  - Detailed evaluation of all occupancies
SAP – Types of Resources

- DSW Volunteer – private sector volunteers engineers, architects, and building inspectors
- DSW Local - building inspectors, engineers, and architects employed by local jurisdictions
- DSW State – State engineers, architects, and building inspectors employed by state agencies
Disaster Occurs

- Local Government determines need for additional resources
- Requests resources from operational area
- Op Area requests SAP resources from OES Regions
Disaster Occurs (Cont.)

- Regions request resources from State OES
- Statewide SAP Coordinator contacts Professional Organizations
- Professional Organizations Mobilize SAP Resources to Report to Staging Area
SAP – Liability and Immunity

- Good Samaritan Law – general immunity
- California Emergency Services Act - amended to provide specific immunity to volunteer safety assessment engineers and architects
SAP – Liability and Immunity

- Registered engineers and licensed architects are protected by Business & Professional Code, Chapter 30.

- Provided volunteers are:
  - deputized by local jurisdiction
  - Evaluation performed within 30 days of event
  - No fee is paid or taken
SAP – Worker’s Compensation

- DSW-Local Resources by home jurisdiction
- DSW-State Resources by State of California
- DSW-Volunteer Resources by State of California (California Emergency Services Act)
OES Contact

CA OES contacts for Safety Assessment Program (SAP). Do not hesitate to contact any of the individuals for coordination, assistance, information, and suggestions.

Statewide SAP Coordinator (Manager): Michael Sabbaghian, P.E.
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Questions?

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