



# Building Structures--Masonry Buildings

Event/Date: \_\_\_\_\_ Investigator: \_\_\_\_\_

Short description of observation: \_\_\_\_\_ Date of observation: \_\_\_\_\_

## I. Location (please be as detailed as possible)

Number	Address		Additional Address (room, suite, floor, etc.)	City	State	Zip	Country
	Street	(indicate street, road, avenue, lane, etc.)					

Alternative description or name: \_\_\_\_\_

### Map Reference

Latitude	Longitude	Direction	Thomas Bros. Page No.
----------	-----------	-----------	-----------------------

## II. Building Behavior

What is the type of masonry structure?

- Unknown
- Brick masonry
- Concrete masonry units
- Stone masonry
- Other \_\_\_\_\_

How many wythes are there in the lower floors?

Value: \_\_\_\_\_

How many wythes are there in the upper floors?

Value: \_\_\_\_\_

Is there reinforcement within the masonry?

- Unknown
- Yes
- No

How are the wythes joined together?

- Unknown
- N/A
- Not joined
- Interlocking blocks
- Steel ties
- Separated by a filled cavity with no ties
- Exterior metal anchors
- Other \_\_\_\_\_

Are there omissions in the placement of the reinforcement?

- Unknown
- No reinforcement
- No horizontal reinforcement
- No vertical reinforcement
- Reinforcement not tied
- Inadequate corner reinforcing details
- Inadequate reinforcing details for intersecting walls
- Other \_\_\_\_\_

Rate the quality of the workmanship in the application of the grout/mortar.

- Unknown
- Poor
- Fair
- Good

What is the quality of the block/brick?

- Unknown
- Poor
- Fair
- Good

Is this a corner building?

- Yes
- No

Is this a building within the interior of a block?

- Yes
- No

What is the quality of the mortar?

- Unknown
- Poor
- Fair
- Good

Are the shear walls load-bearing?

- Unknown
- Yes
- No



## Building Structures--Masonry Buildings

### II. Building Behavior (cont.)

Are there adequate boundary elements in the shear walls?

- Unknown
- Yes
- No

What structural damage is present?

- No damage
- Fallen elements
- Chimney collapse
- Veneer delamination
- Parapet failure
- Individual blocks fallen
- Wythes separated
- Corner cracking (roof)
- Corner cracking (floors)
- Out-of-plane wall failure
- Diaphragm failure
- Separation of wall and floor
- Separation of wall and roof
- Horizontal cracks at anchorline
- Horizontal cracks at top of wall
- Horizontal cracks at bottom of wall
- Cracks at corners of openings
- Spandrel cracks
- Pier cracks
- 'X' shear cracks
- Other \_\_\_\_\_

What is the average crack width?

- None
- Hairline
- < 0.8 mm (1/32 in)
- ~1.6 mm (1/16 in)
- ~3.2 mm (1/8 in)
- ~6.4 mm (1/4 in)
- > 12.7 mm (1/2 in)

Through which medium do most cracks generate?

- No cracks
- Mortar
- Masonry units
- Joints
- Other \_\_\_\_\_

Is there evidence of permanent drift?

- Unknown
- Yes
- No

Is there any damage from the debris of adjacent buildings?

- Unknown
- Yes
- No

What type of retrofit system was applied before the earthquake?

- No retrofit
- Parapet braced
- Veneer ties
- Roof to wall anchors
- Floor to wall anchors
- Wall out-of-plane bracing
- Repointing of mortar
- Diagonal braces
- Moment frames
- Diaphragm strengthening
- Isolation
- Secondary columns at trusses and/or beams
- Bond beams at tops of walls
- Other \_\_\_\_\_

Is there evidence of damage in any retrofit element?

- Unknown
- Yes
- No

Sketches/Comments: