



# EARTHQUAKE SAFETY

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Earthquakes are inevitable, but the damage from earthquakes is not.

- Damage may be limited by preparation
- Secure your building & its contents
- Learn more about earthquakes now
  - Less frightening
  - Increases our safety
  - Reduces our losses

# PREPARE A PLAN

- “Duck, cover and hold”
- Identify safe spots in every room
- Teach everyone how to turn off the gas-but only if they smell, hear, or see a leak
- Establish an out-of-area contact person who can be called by all family members to relay information
- Store supplies and prepare a personal earthquake bag.

# PRACTICE YOUR PLAN

- Habit can overcome fear
- Work with neighbors to prepare a neighborhood plan
- Support of friends and neighbors can reduce the stress for everyone.

# DUCK, COVER and HOLD

- **Duck** under a sturdy desk or table if possible, or crouch near an inside wall
- **Cover** your head and eyes, and turn away from breaking glass or falling objects
- **Hold** onto the desk or table so that it doesn't move away from you

# REMEMBER...

- Exterior walls of buildings are the most dangerous place to be.
- Stay inside a building and outside if you are outside during the earthquake.
- Do not try to run outside or to another room – severe shaking will make it difficult to move.
- Doorways are no safer than elsewhere in the home.



# REMEMBER (cont'd)...

- If your building begins to collapse, you are safest under a sturdy piece of furniture that can shield you from falling debris.
- Focus on personal safety when covering yourself.
- Turn away from potential flying hazards.

# WHAT TO DO DURING AN EARTHQUAKE

## ■ INDOORS

- Duck, cover and hold. If not near a desk or table, drop to the floor against an interior wall and protect your head and neck with your arms. Avoid exterior walls, windows, hanging objects, mirrors, and tall furniture.







# WHAT TO DO DURING AN EARTHQUAKE

- In a kitchen:
  - Get away from the stove, refrigerator, and cabinets with heavy objects.
  - Leave the kitchen if necessary.
  - Get under a table.
  - Duck, cover and hold.

# WHAT TO DO DURING AN EARTHQUAKE

- In a high-rise:
  - Duck, cover and hold.
  - Avoid windows and other hazards.
  - Do not use elevators.
  - Do not be surprised if sprinkler systems or fire alarms activate.



# WHAT TO DO DURING AN EARTHQUAKE

## ■ Outdoors:

- Move to a clear area if you can safely do so.
- Avoid power lines, trees, signs, buildings, vehicles, and other hazards.

# WHAT TO DO DURING AN EARTHQUAKE

## ■ Driving:

- Pull over to the side of the road, if safe to do so, stop, and set the parking brake.
- Avoid overpasses, bridges, power lines, signs and other hazards.
- Stay inside the vehicle until the shaking is over.
- If a power line falls on the car, stay inside until a trained person removes the wire.







# WHAT TO DO DURING AN EARTHQUAKE

- In a mall:
  - Move away from display shelves.
  - Look for sturdy furniture or an interior wall.
  - Duck, cover and hold.

# WHAT TO DO DURING AN EARTHQUAKE

- In a theater or stadium:
  - Stay at your seat and crouch on the floor.
  - Protect your head and neck with your arms.
  - Don't try to leave until the shaking is over.
  - Then walk out slowly watching for anything that could fall from aftershocks.



# Life With Aftershocks

- Risk of fire, potential lack of utilities and basic services, and the certainty of aftershocks.
- Electrical, water, transportation, and other vital systems can be disrupted for several days after a large quake.

# Life With Aftershocks

- Emergency response agencies and hospitals could be overwhelmed and may be unable to provide immediate assistance.
- Be prepared to be on your own for 5 days or more. Knowing first aid and having supplies will make life more comfortable and help you keep your sanity after the next earthquake.



The term "nonstructural hazards" is used in the earthquake field for the contents in a building that can cause injury or damage if shaken. This section summarizes some of the earthquake remedies so that they can be applied to any kinds of objects.



# Inappropriate Storage Hazards

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**Inappropriate Storage**



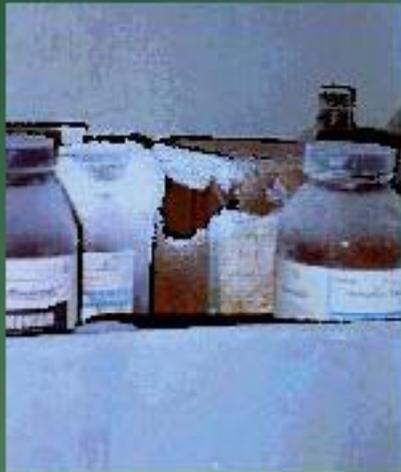
**Too Much Material to Store**



**Still Too Much to Store**

Gary L. McGavin, AIA

# Science Facilities / Hazards



EERI Photo



**Old Chemicals, Acids  
w/Organics, and High  
Unrestrained Items**

Gary L. McGavin, AIA

# Inappropriate Remedies

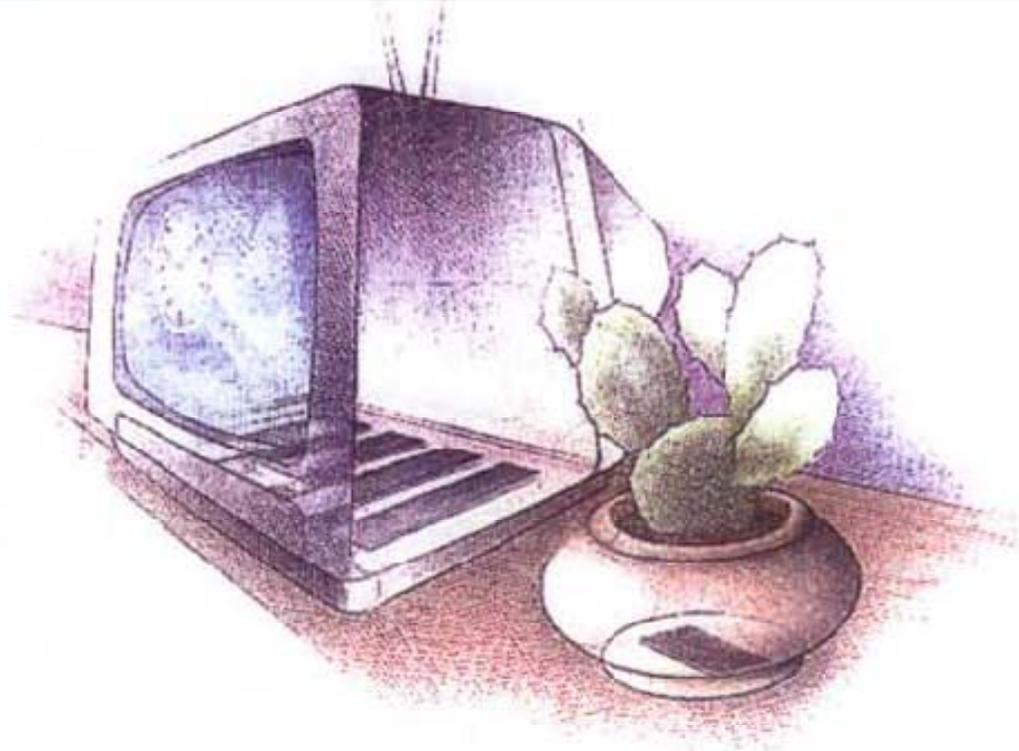
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**Inappropriate materials, bracing, and fasteners.**

Gary L. McGavin, AIA

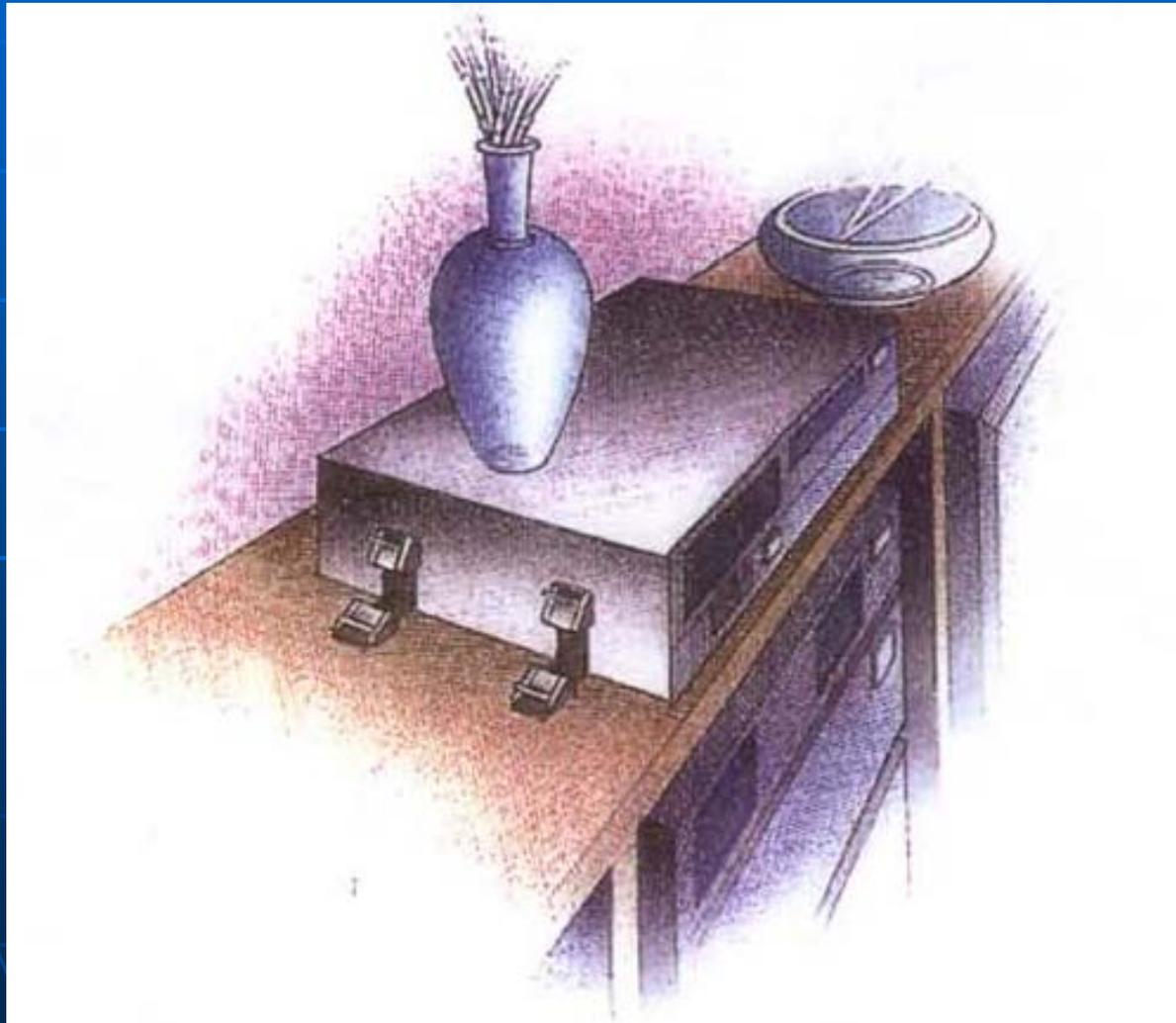
Velcro fasteners are glued to the tabletop.

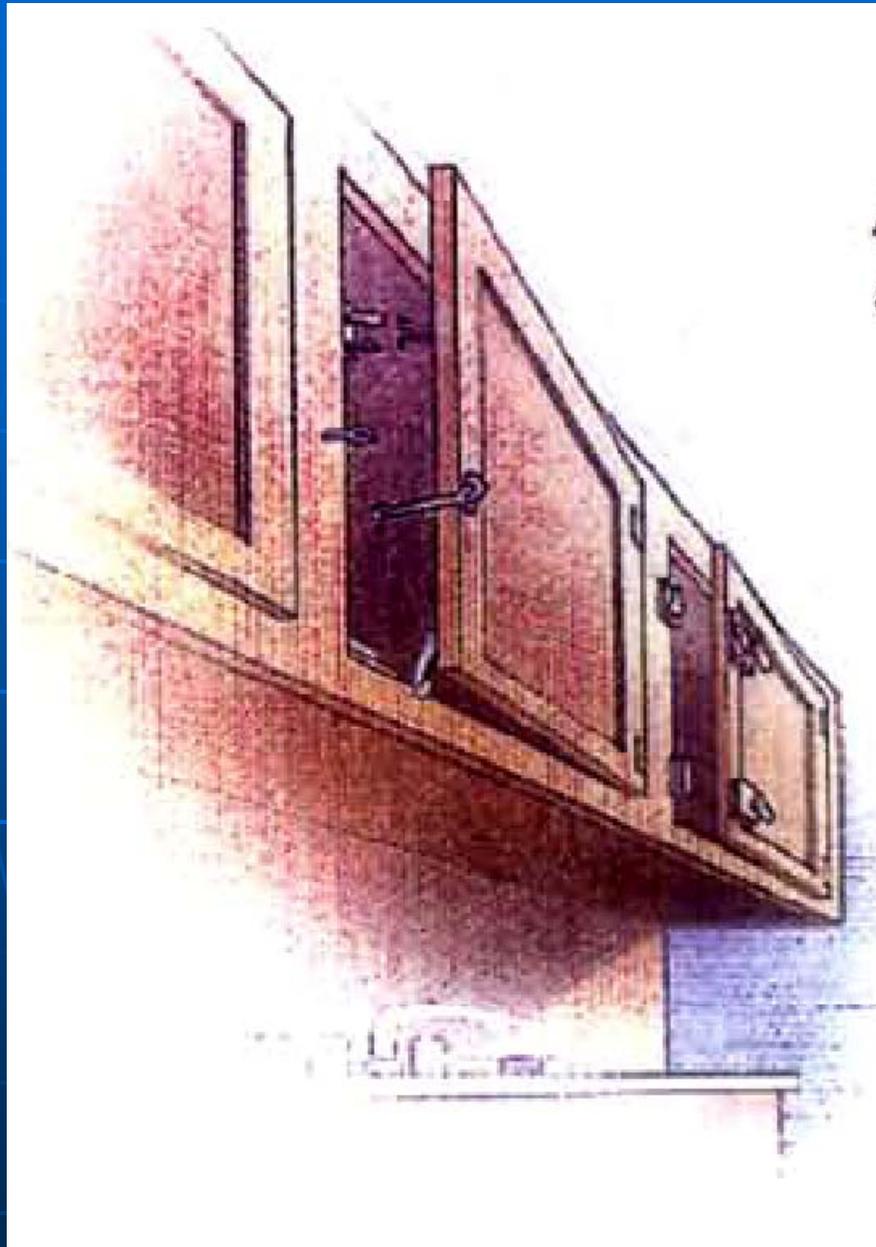


**Securing tabletop objects**

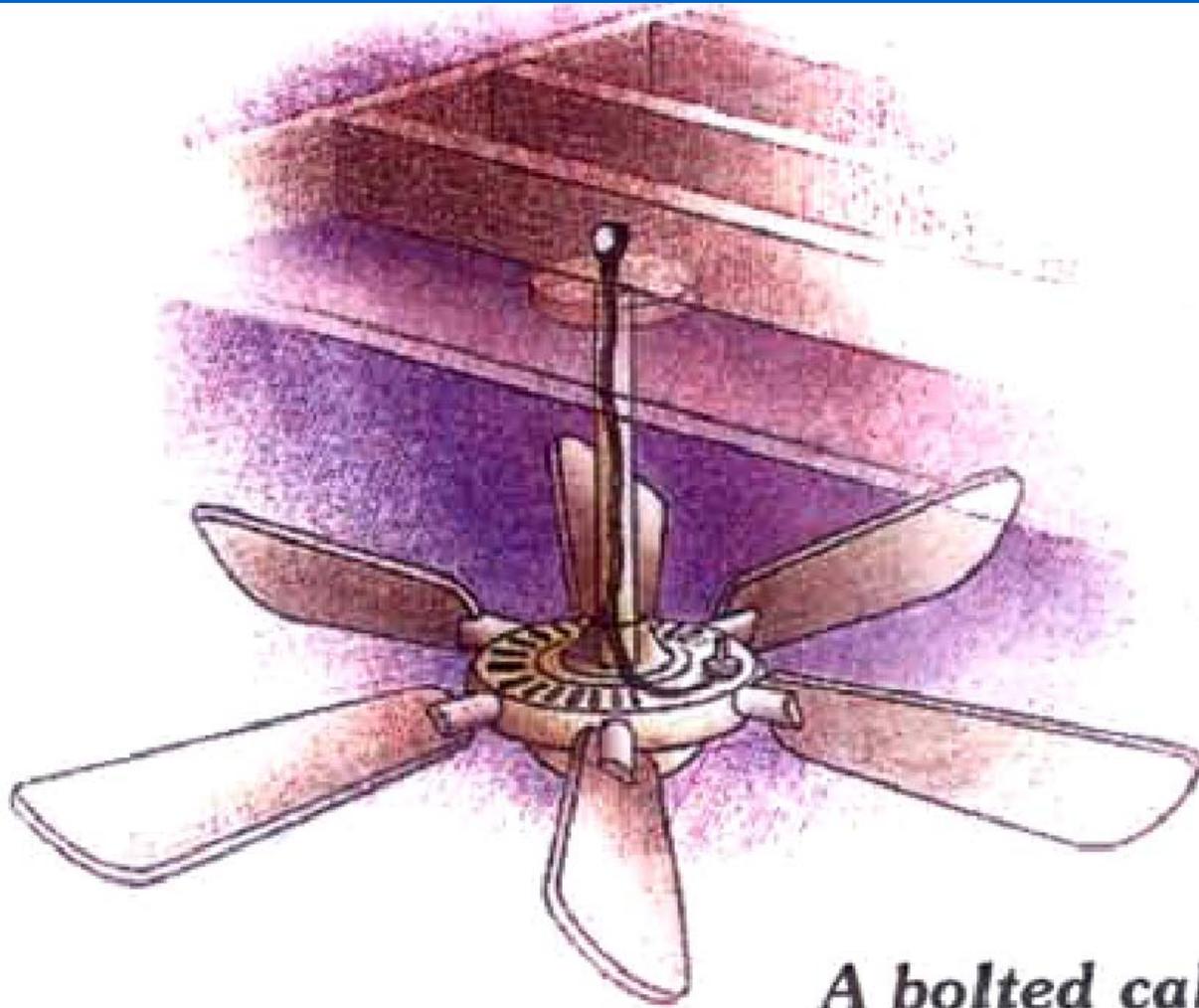


Anchor tabletop objects with straps and  
nondrying putty.



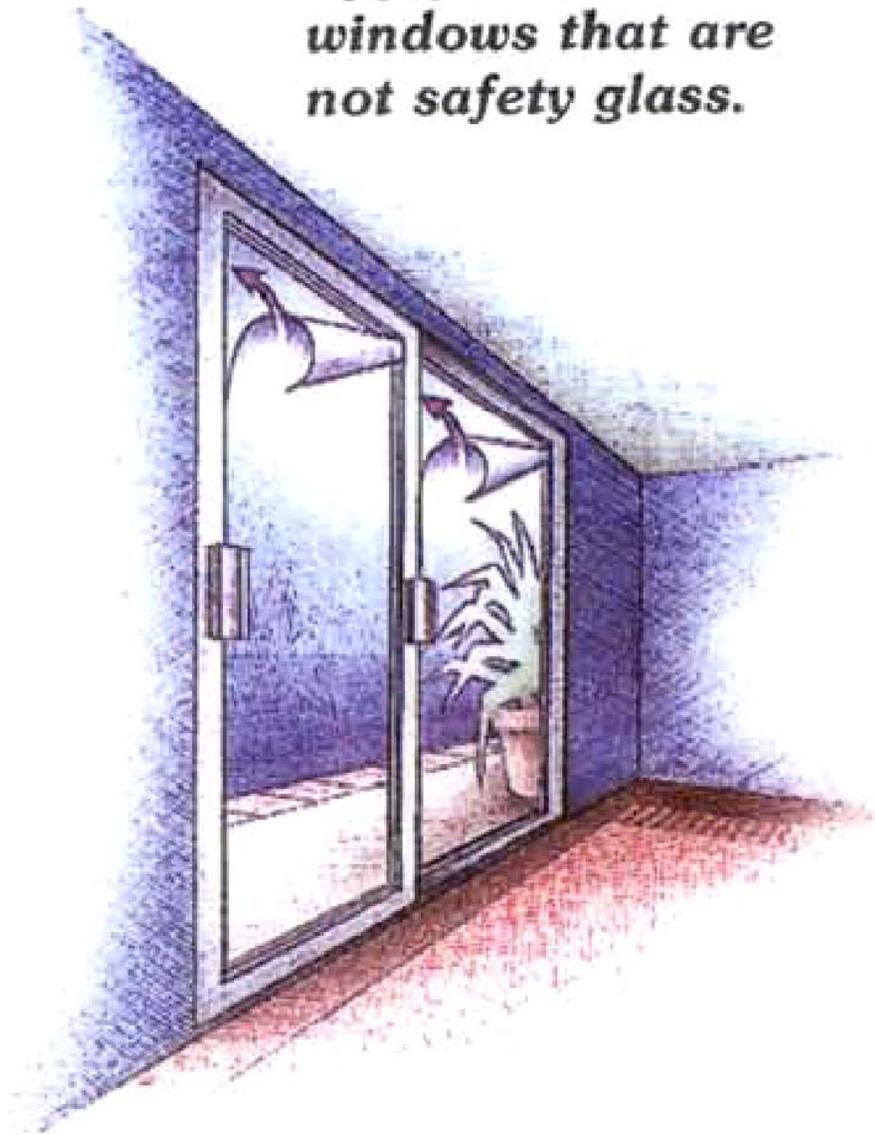


*A variety of latch systems can be used.*

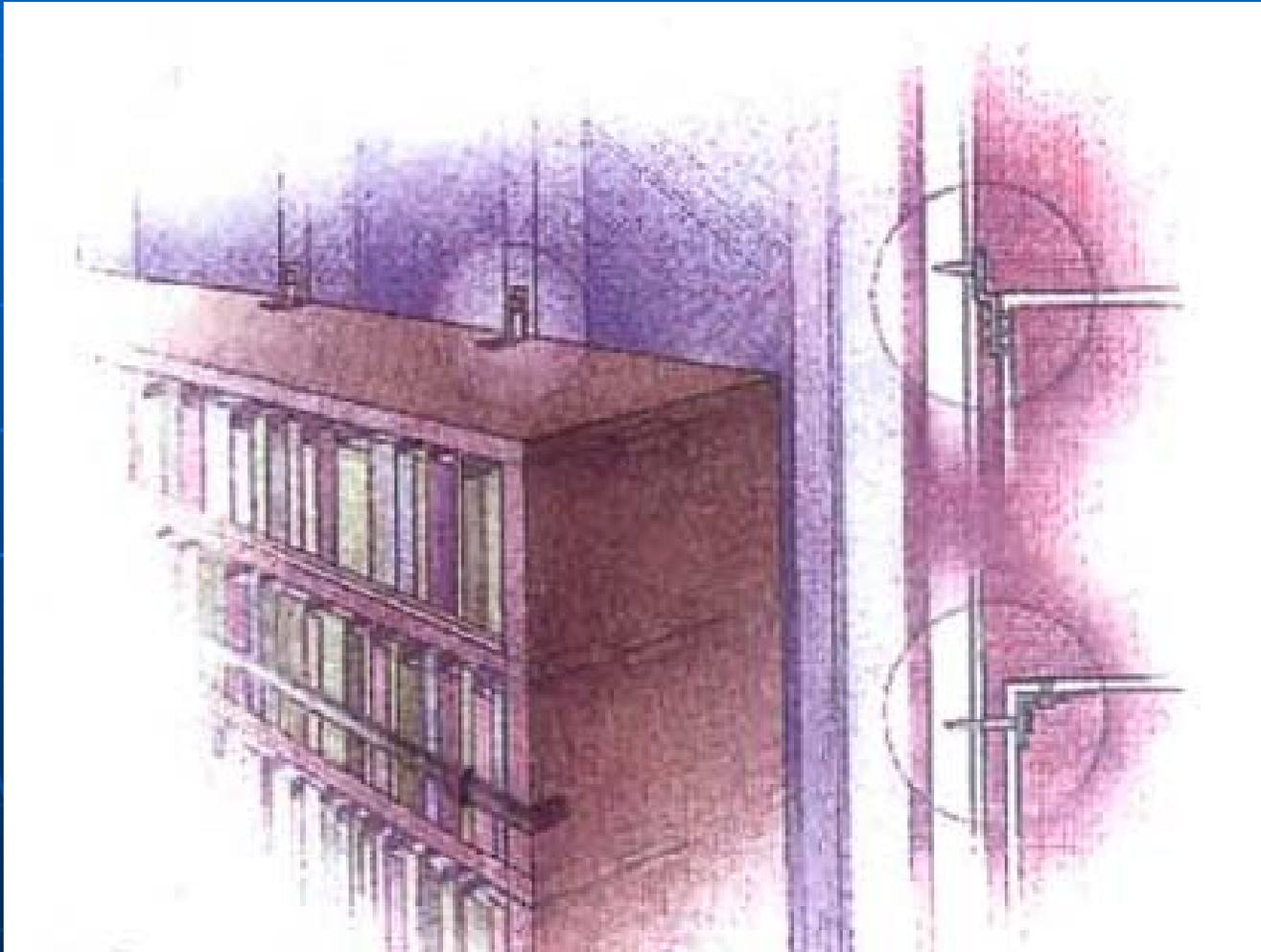


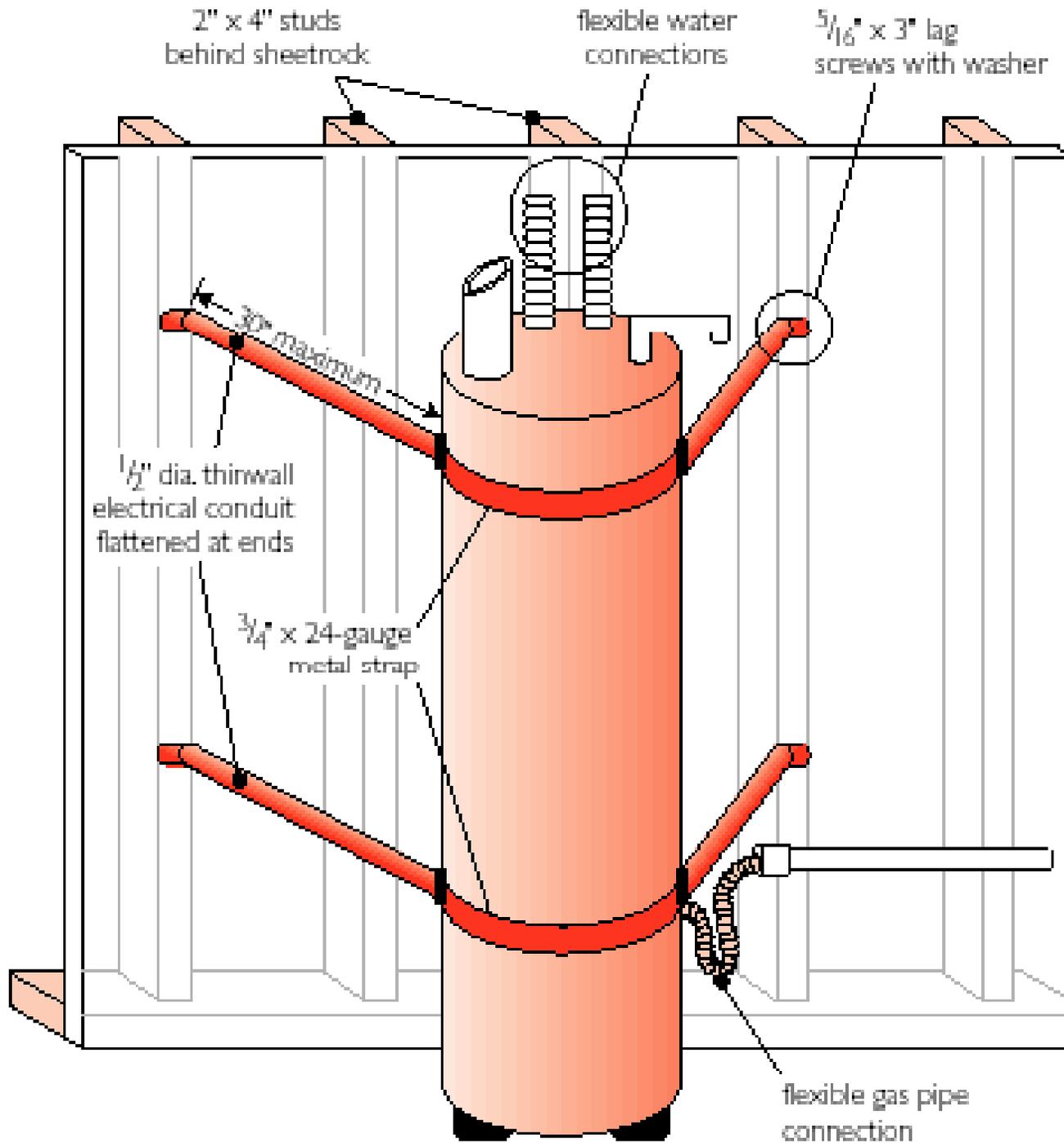
***A bolted cable  
attaches fan to  
ceiling joist.***

*Apply film to  
windows that are  
not safety glass.*



Use nylon straps or L-braces for tall furniture.





# Disaster Kit

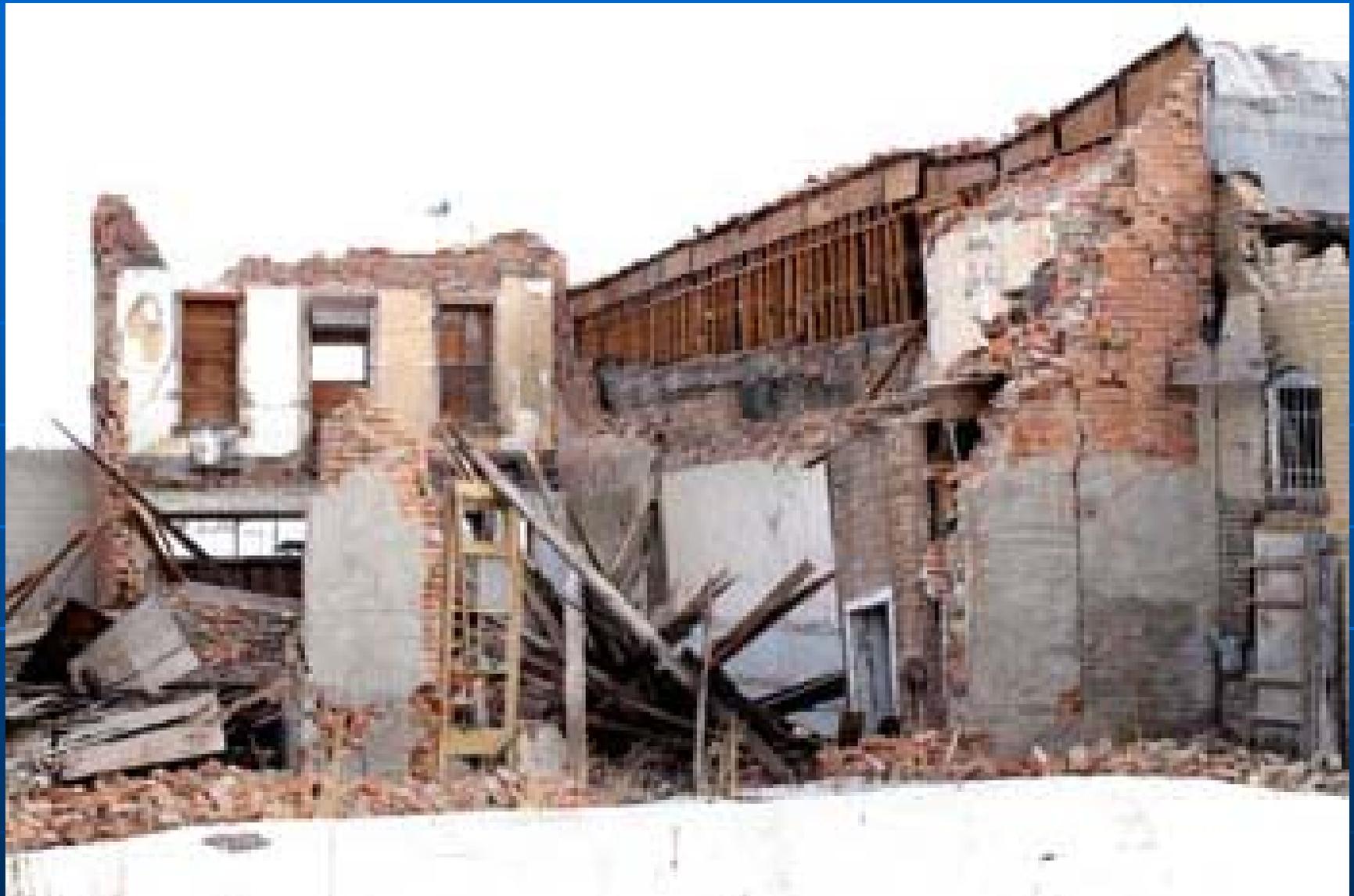
- Medications and medical consent forms for dependents
- First aid kit and book
- Emergency cash
- Copies of vital documents
- Spare eyeglasses and shoes
- Snack foods, high in water and sugar
- Working Flashlights, radio and extra batteries

# Disaster Kit

- Lightsticks
- Personal hygiene supplies
- Plastic bags for tarps, waste, rain ponchos, and other uses
- Comfort items such as games, crayons, writing materials, outgrown teddy bears (children regress under stress)
- Tools (a crescent wrench for example)

- Store these supplies in easily accessible locations such as hallway closets.
- Change stored water every 3 months.
- Check and rotate food every 6 months.
- Rethink your kit once a year.









Earthquake Awareness  
and  
Preparedness Week