



## **Business Continuity Forms**

## **Open for Business<sup>sm</sup>** **Employee Contact List**

Use this form to gather information on employees (and the business owner) so that each person can be contacted at any time or place. After you have entered all your employees, assign a number to "Call Order" for each employee. You may choose to sort your employee list alphabetically or by call-down order.

Maintain an up-to-date copy of contact information for each employee in an accessible and secure location.

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**Name:** \_\_\_\_\_

**Position:** \_\_\_\_\_

**Key Responsibilities:** \_\_\_\_\_

**Home Address:** \_\_\_\_\_

**City, State, ZIP:** \_\_\_\_\_

**Home Phone:** \_\_\_\_\_ **Cell Phone:** \_\_\_\_\_

**Office Phone:** \_\_\_\_\_ **Pager/Beeper:** \_\_\_\_\_

**FAX:** \_\_\_\_\_

**Home Email:** \_\_\_\_\_ **Work Email:** \_\_\_\_\_

**Emergency Contact:** \_\_\_\_\_ **Relationship** \_\_\_\_\_

**Emergency Contact Phone:** \_\_\_\_\_ **Alt Phone:** \_\_\_\_\_

**Notes:** \_\_\_\_\_

**Call Order:** \_\_\_\_\_

**Certifications:**

- |  |  |
|--|--|
| <input type="checkbox"/> <b>First Aid</b>                          | <input type="checkbox"/> <b>CPR</b>          |
| <input type="checkbox"/> <b>Emergency Medical Technician (EMT)</b> | <input type="checkbox"/> <b>Ham Radio</b>    |
| <input type="checkbox"/> <b>Special Licenses:</b> _____            | <input type="checkbox"/> <b>Other:</b> _____ |
| _____  | _____  |

**Open for Business<sup>sm</sup>**  
**Key Supplier/Vendor Information**

Use this form to record information about your current suppliers and ones you could use as an alternate choice.

Disaster-induced operational problems are not always connected to property damage. They include disruptions in the flow of supplies and in the ability to ship those goods or deliver services. Your ability to resume operations also relies on the ability of your suppliers to deliver what you need on time.

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**Status:**     **Current Supplier/Vendor**         **Back Up Supplier/Vendor**

**Company Name:** \_\_\_\_\_

**Account Number** *(If relevant):* \_\_\_\_\_

**Materials/Service Provided:** \_\_\_\_\_

**Street Address:** \_\_\_\_\_

**City, State, ZIP:** \_\_\_\_\_

**Company Phone** *(main):* \_\_\_\_\_

**Primary Contact:** \_\_\_\_\_ **Title:** \_\_\_\_\_

**Primary Contact Phone:** \_\_\_\_\_ **Primary Contact Cell:** \_\_\_\_\_

**Primary Contact Pager:** \_\_\_\_\_ **Primary Contact Fax:** \_\_\_\_\_

**Primary Contact Email:** \_\_\_\_\_

**Alt. Contact Person:** \_\_\_\_\_ **Title:** \_\_\_\_\_

**Alt. Contact Phone:** \_\_\_\_\_ **Alt. Contact Cell:** \_\_\_\_\_

**Alt. Contact Pager:** \_\_\_\_\_ **Alt. Contact Fax:** \_\_\_\_\_

**Alternate Contact Email:** \_\_\_\_\_

**Website address:** \_\_\_\_\_

**Recovery Notes:** \_\_\_\_\_

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## Key Contacts

Use this form to list the key contacts for administration of your business. Key contacts consist of those you rely on for administration of your business, such as your bank, your creditors, your insurance agent, accountant, etc. They also include services in the community you need to help you resume operations, such as utilities, emergency responders, media outlets, business partners and business organizations.

Your key customers are an essential part of this list. If you have more than 20 key customers, you should use the Vital Records form instead of listing each one here to avoid making your business continuity plan too bulky. Nevertheless, you still may want to include some of your major customers or clients in Key Contacts, as they could be involved with one or more of the critical business functions you identify for your recovery plan.

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### Type:

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Accountant                  | <input type="checkbox"/> Gas/Heat Company                     | <input type="checkbox"/> Police Department<br>(Non-emergency)    |
| <input type="checkbox"/> Bank                        | <input type="checkbox"/> Hazardous Materials                  | <input type="checkbox"/> Public Works Department                 |
| <input type="checkbox"/> Billing/Invoicing Service   | <input type="checkbox"/> Hospital                             | <input type="checkbox"/> Small Business Administration<br>Office |
| <input type="checkbox"/> Benefits Administration     | <input type="checkbox"/> Insurance Agent/Broker               | <input type="checkbox"/> Telephone Company                       |
| <input type="checkbox"/> Building Manager            | <input type="checkbox"/> Insurance Company (Claims Reporting) | <input type="checkbox"/> Other                                   |
| <input type="checkbox"/> Building Owner              | <input type="checkbox"/> Key Customer/Client                  |  |
| <input type="checkbox"/> Building Security           | <input type="checkbox"/> Local Newspaper                      | Explain: _____   |
| <input type="checkbox"/> Creditor                    | <input type="checkbox"/> Local Radio Station                  | _____  |
| <input type="checkbox"/> Electric Company            | <input type="checkbox"/> Local Television Station             |  |
| <input type="checkbox"/> Emergency Management Agency | <input type="checkbox"/> Mental Health/Social Service Agency  |  |
| <input type="checkbox"/> Fire Department             | <input type="checkbox"/> Payroll Processing                   |  |

**Name of Business or Service:** \_\_\_\_\_

**Account Number** (If relevant): \_\_\_\_\_

**Materials/Service Provided:** \_\_\_\_\_

**Street Address:** \_\_\_\_\_

**City, State, ZIP:** \_\_\_\_\_

**Company/Service Phone** (main): \_\_\_\_\_

**Primary Contact:** \_\_\_\_\_ **Title:** \_\_\_\_\_

**Primary Contact Phone:** \_\_\_\_\_ **Primary Contact Cell:** \_\_\_\_\_

**Primary Contact Pager:** \_\_\_\_\_ **Primary Contact Fax:** \_\_\_\_\_

**Primary Contact Email:** \_\_\_\_\_

**Alt. Contact Person:** \_\_\_\_\_ **Title:** \_\_\_\_\_

**Alt. Contact Phone:** \_\_\_\_\_ **Alt. Contact Cell:** \_\_\_\_\_

**Alt. Contact Pager:** \_\_\_\_\_ **Alt. Contact Fax:** \_\_\_\_\_

**Alternate Contact Email:** \_\_\_\_\_

**Website address:** \_\_\_\_\_

**Recovery Notes:** \_\_\_\_\_

## *Open for Business<sup>sm</sup>* **Critical Business Functions**

Use this form to identify what business functions are critical to your survival. The following are some key questions to help you decide what they are:

- What are my most critical and time sensitive business functions?
- How much down time can I tolerate for each business function?
- Which business functions are necessary to fulfill my legal and financial obligations and maintain cash flow?
- Which business functions are essential to maintain my market share and reputation, or to strategically adjust to changed circumstances?

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**Business Function:** \_\_\_\_\_

**Priority:**    **High**    **Medium**    **Low**

**Employee in charge:** \_\_\_\_\_

**Timeframe or Deadline:** \_\_\_\_\_

**Money lost (or fines imposed) if not done:** \_\_\_\_\_  
*(If relevant)*

**Who performs this function?** *(List all that apply)*

**Employee(s):** \_\_\_\_\_

**Vendor(s):** \_\_\_\_\_

**Key Contact(s):** \_\_\_\_\_

**Who provides the input to those who perform the function?** *(List all that apply)*

**Employee(s):** \_\_\_\_\_

**Vendor(s):** \_\_\_\_\_

**Key Contact(s):** \_\_\_\_\_

**Who uses the output from this function?** *(List all that apply)*

**Employee(s):** \_\_\_\_\_

**Vendor(s):** \_\_\_\_\_

**Key Contact(s):** \_\_\_\_\_

**Brief description of procedures to complete function:** *(Consider writing procedures for two scenarios, one for a short disruption, the other for loss of everything.)* \_\_\_\_\_

**Recovery Notes:** \_\_\_\_\_

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### Recovery Location

Use this form to provide information on your recovery location, that is, where you will conduct business operations following an event. It could be at an alternate site, at a similar business through a mutual aid agreement, your own home, or if you are location dependent, at your primary place of business.

*Note:* If you have not secured a recovery location at the time you are starting to develop this business continuity plan, create an imaginary name, address, etc., so you can continue with the planning process. You can still select which staff will be assigned to the recovery location and which business functions will be performed there, and then move on to the following forms. When you have finalized all arrangements for the recovery site, return to this record and enter the actual name and address of the location.

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**Recovery Location:** \_\_\_\_\_

(Include street address, \_\_\_\_\_  
city, state, zip code) \_\_\_\_\_

**Building Owner/Manager:** \_\_\_\_\_

**Phone:** \_\_\_\_\_ **Alt Phone:** \_\_\_\_\_

**Pager:** \_\_\_\_\_ **Email:** \_\_\_\_\_

**Directions to recovery location:** \_\_\_\_\_

(i.e. map and directions from \_\_\_\_\_  
Internet site or similar information) \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Business functions to be performed at recovery location:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Employees who should go to recovery location:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Recovery Notes:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

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### Vital Records

Use this form to identify records that are vital to perform your critical business functions. Use "Media" to indicate if the record is print version, on a CD, diskette, etc.

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#### Name of Vital Record:

<b>Media:</b>	<input type="checkbox"/> Network	<input type="checkbox"/> Print Version
	<input type="checkbox"/> Hard drive	<input type="checkbox"/> Microfilm
	<input type="checkbox"/> Laptop	<input type="checkbox"/> Internet
	<input type="checkbox"/> CD	<input type="checkbox"/> Other
	<input type="checkbox"/> Diskette	Explain:

<b>Is it backed up?</b>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
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<b>Media:</b>	<input type="checkbox"/> Network	<input type="checkbox"/> Print Version
	<input type="checkbox"/> Hard drive	<input type="checkbox"/> Microfilm
	<input type="checkbox"/> Laptop	<input type="checkbox"/> Internet
	<input type="checkbox"/> CD	<input type="checkbox"/> Other
	<input type="checkbox"/> Diskette	Explain:

<b>How often is it backed Up?</b>	<input type="checkbox"/> Hourly	<input type="checkbox"/> Quarterly
	<input type="checkbox"/> Daily	<input type="checkbox"/> Semi-Annually
	<input type="checkbox"/> Weekly	<input type="checkbox"/> Yearly
	<input type="checkbox"/> Monthly	<input type="checkbox"/> Never

**Where is it stored?** \_\_\_\_\_

<b>Can the record be recreated?</b>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
-------------------------------------	------------------------------	-----------------------------

**Business function it supports:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Recovery Notes:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_





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### **Equipment/Machinery/Vehicles**

Identify the key equipment/machinery necessary to perform your essential business functions, i.e. the equipment or machinery that would shut you down or severely curtail production of goods or services if it failed. This could include tools and spare parts vital to operation of equipment. You may also want to list company-owned vehicles.

When there is adequate warning about an event, such as a hurricane, you might decide to take some of your equipment or machinery that can easily be moved to a safe place, so that it could be used at your recovery location. In that case, you would want to list equipment or machinery you currently own or lease. Some disasters occur without warning, though, so you want to be sure you have alternatives available.

*Note:* Computer equipment should be listed in the Computer Equipment and Software form; telecommunications equipment in the Voice/Data Communications form; and office furniture for your recovery location in the Miscellaneous Resources form.

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**Item:** \_\_\_\_\_

**Model:** \_\_\_\_\_

**Status:**       **Currently in use**       **Will lease/buy for recovery location**

**Primary Vendor/Supplier:** \_\_\_\_\_

**Alternate Vendor/Supplier:** \_\_\_\_\_

**Recovery location for installation:** \_\_\_\_\_

**Related business function(s):** \_\_\_\_\_

**Backup available:**       **Yes**       **No**

**Order time for replacement:** \_\_\_\_\_

**Recovery Notes:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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### **Computer Equipment and Software**

Use this form to list the computer equipment, hardware and software you will need to fulfill your critical business functions.

If you go to a recovery location, it is likely you will need to lease or purchase computer equipment and replace your software. You may use the form to list what you would order, and in the " Title & Version or Model No.", write "Unknown," or similar words, if you do not yet have that information. Be sure to explain in Recovery Notes. The important thing is that your final plan include what you need to perform your critical business functions.

If you plan to order multiple items of the same type - e.g. keyboards or mouses - you can condense the information into one record. You can list relevant details in Recovery Notes.

When there is sufficient warning about an event, such as a hurricane, you might decide to move some of your computer equipment and software to a safe place, so that it could be utilized at your recovery location. In that case, you would want to list equipment you currently own or lease and/or software that you would take, and in the Status field check "Currently in use." Some disasters occur without warning, though, so be sure you have alternatives available.

If you currently own/lease the item, choose the supplier/vendor(s) based on which one(s) you would use to replace the item if it were damaged in a disaster. It is always advisable to have an alternate vendor, though, in case your primary vendor is not available.

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**Item:** \_\_\_\_\_

**Type:**       **Computer Hardware**                       **Computer Software**

**Status:**       **Currently in use**                       **Will lease/buy for recovery location**

**Primary Supplier/Vendor:** \_\_\_\_\_

**Alternate Supplier/Vendor:** \_\_\_\_\_

**Title & Version or Model No.** \_\_\_\_\_

*(Enter Unknown if hardware/software is to be leased/bought for recovery location)*

**Serial Number** \_\_\_\_\_ **Purchase/Lease Date:** \_\_\_\_\_

**Purchase/Lease Price:** \_\_\_\_\_ **Recovery Install Location:** \_\_\_\_\_

**Quantity (equipment) or No. of Licenses (software):** \_\_\_\_\_

**License Numbers (enter one per line)** \_\_\_\_\_

**Recovery Notes:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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### **Voice/Data Communications**

Use this form to list your voice and data communications needs. Communication with employees, vendors, customers, emergency officials and other key contacts is vital to your ability to resume business operations following a disaster event. This form should be used to determine what telecommunications equipment you need to help you with that communication.

If you go to a recovery location, it is likely you will need to lease or purchase telecommunications equipment. You may use the Voice/Data Communications form to list what you would order, and in the "Description & Model No." field, write "Unknown," or similar words, if you do not yet have that information. Be sure to explain in Recovery Notes.

If you plan to purchase or lease multiple items of the same type - e.g. telephones - you can condense the information into one record. List relevant details in Recovery Notes.

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**Type of Service:**

<input type="checkbox"/> <b>Telephone</b> <input type="checkbox"/> <b>PBX w/ ACD (Private Branch Exchange w/ Automatic Call Distribution)</b> <input type="checkbox"/> <b>PC Data Communications</b> <input type="checkbox"/> <b>Cell Phone</b>	<input type="checkbox"/> <b>Fax Machine</b> <input type="checkbox"/> <b>Two-way Radio &amp; Pager</b> <input type="checkbox"/> <b>Other</b> <b>Explain:</b> _____ _____
--	---

**Description & Model Number:** \_\_\_\_\_  
*(Enter Unknown if telecommunications item is to be leased/bought for recovery location)*

**Status:**

<input type="checkbox"/> <b>Currently in use</b>	<input type="checkbox"/> <b>Will lease/buy for recovery location</b>
--	--

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**Voice Communications Features:**

<input type="checkbox"/> <b>Voice mail</b> <input type="checkbox"/> <b>Speaker</b> <input type="checkbox"/> <b>Conference</b>	<input type="checkbox"/> <b>Conversation recorder</b> <input type="checkbox"/> <b>Other</b> <b>Explain:</b> _____ _____
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**Data Communications Features:**

<input type="checkbox"/> <b>Cable</b> <input type="checkbox"/> <b>DSL</b> <input type="checkbox"/> <b>T-1</b>	<input type="checkbox"/> <b>Dial-up</b> <input type="checkbox"/> <b>Other</b> <b>Explain:</b> _____ _____
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**Quantity:** \_\_\_\_\_

**Primary Supplier/Vendor:** \_\_\_\_\_

**Alternate Supplier/Vendor:** \_\_\_\_\_

**Recovery Install Location:** \_\_\_\_\_

**Recovery Notes:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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**Miscellaneous Resources**

Use this form to list the basics to make your recovery site operational, such as office furniture, safes, mail bins, and other items needed for the recovery location. Consider any unique recommendations for people with special needs.

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<b>Item</b>	<b>Quantity</b>	<b>Primary Supplier/Vendor</b>	<b>Alternate Supplier/Vendor</b>	<b>Recovery Install Location</b>
Chairs				
Desks				
Extension/drop cords, surge protectors and power strips				
File cabinets				
Mail bins				
Portable air conditioners/fans				
Safes				
Tables				
Waste baskets				
Other Explain:				

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### **Disaster Response Checklist**

When disaster strikes, you may be on your own for hours or even several days. Emergency services may not be able to respond right away. Check which supplies you have to help you take care of your employees, customers or others on your premises until help arrives. Be sure to purchase the remaining supplies so you are ready when an emergency occurs.

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- NOAA Weather Alert Radio**

This 24-hour warning monitor is as important as a smoke alarm in homes and businesses. The NOAA Weather Alert Radio with Specific Area Message Encoding (S.A.M.E.) technology that programs the radio for your area can save your life by warning you of severe weather and other hazards at any time. This special radio remains silent until an alert is issued in your community by local authorities. When the alarm sounds, you will be given specific information and instructions on how best to avoid the danger. Most S.A.M.E. Alert Monitors include battery backup.
- Working smoke detectors and fire extinguisher**

Set a schedule to test smoke detectors annually and keep extra batteries on hand. Check the pressure indicator of your fire extinguisher monthly.
- First Aid Kit**

Include scissors, tweezers, a variety of Band-Aids, gauze pads/roller gauze and tape, anti-bacterial wipes, first aid ointment, vinyl gloves, first aid book, and any other items you deem essential. Remember your kit is for “first” aid, not ongoing care.
- Flashlights and Lightsticks**

Keep flashlights and extra batteries in easy to find locations. Non-toxic chemical lightsticks can be taped next to light switches for emergency use.
- AM/FM Radio, battery operated, or wind-up radio**

Maintain a current list of stations in your area that provide emergency updates and that have generator backup to support continuous broadcast. Keep extra batteries for AM/FM radio. Consider a wind-up radio (30 seconds for 30-35 minutes play – solar cells for back up).
- Bottled Water**

Have at least one gallon of water per person per day, to be used for drinking, personal hygiene and cooking. Store in sizes that are easily transportable, should you need to relocate.
- Nonperishable food and utensils**

Stock a supply of non-perishable food such as peanut butter, tuna, beans, crackers, ready-to-eat canned meats, fruits and vegetables, comfort/stress food such as cookies and hard candy, canned juices, powdered milk, etc. Be sure to have a manually operated can opener and plastic utensils.
- Paper supplies**

Keep a supply of note pads, markers, pens, pencils, toilet paper, tissues, paper plates, napkins, and towels on hand.
- Tools and other supplies**

Keep supplies of items such as duct tape, waterproof plastic, shut-off wrench for water and gas, whistle, compass, plastic bucket with tight lid, work gloves, pliers, hammer, plastic garbage bags and ties. A pry bar, shovel, dust masks, eye protection, and a push broom will aid in clean-up operations
- Blankets**

Keep a supply of blankets, pillows if available, cots or mats for sleeping/taking breaks.
- Camera**

Have a disposable camera, or a camera with extra batteries and film, available to record damage.
- Cash/ATM and credit card**

Keep enough cash for immediate needs, and ATM and credit card(s) for emergency use (dependent on electric power availability).
- Emergency Contact List**

Maintain a current emergency contact list for employees and emergency services, such as police, fire and utility companies. Keep in several places, e.g. a PDA, PC at home, or a trusted neighboring business.

## Incident Response, Recovery & Restoration

### **Move to a safe place**

#### Leave building

If a partial or complete building evacuation is required, employees will quickly move to their pre-planned meeting points out of doors. Conduct a roll call and report missing employees (and visitors).

#### Shelter-in-place

A severe thunderstorm, tornado or terrorist incident may dictate that employees seek safety in interior sections of the facility.

### **Determine the type and extent of the incident**

- What happened?
- When did it happen?
- What was suspected cause?
- What is the civil authority response?
- When can you have access to the building?
- What are the security issues?
- What can you do to avoid additional damage?

### **Alert employees** – Notify employees of the incident, its impact, and what you want them to do. (It may be as simple as “stay at home” until further notice.)

### **Activate Business Continuity Plan**

### **Manage the incident**

- Gather your resources
- Prepare your alternate site (if appropriate)
- Activate your critical business functions/procedures

### **Restore your business**

When you have resumed business operations - that is, you have recovered your critical business functions - take steps to fully restore your business.

### **Debrief**

Learn from the business interruption. If needed, modify your business continuity plan to be better prepared for the next incident.



## **Property Protection Checklist**

*Protecting Your Building and Its Contents*

## ***Open for Business<sup>sm</sup>***

### **Property Protection Checklist**

The following checklist is designed to help you look for items that have an important bearing on the safety of your building, and to protect your building and its contents from damage. It is not meant to be an all-inclusive list of how to protect your property from damage in the event of an earthquake, wind (hurricane, high winds, tornado/hail), flood, wildfire or freezing weather occurrence, but it contains key elements for disaster resistance.

Though building owners have more control over their property than renters, business tenants have many of the same concerns, as the issues are virtually the same whether the occupants own the building or rent space in it. Renters may want to discuss items with their landlord or building manager.

The checklist can serve multiple purposes. In addition to giving you an idea of steps for improving building security, the checklist can be used to guide decisions regarding building upgrades and maintenance. Replacement windows and doors, materials for a new roof and other items can have a big impact on building integrity and building safety. These checklist items are also useful for business people considering buying or leasing new space. Going down the checklist as you look over a piece of property may help you decide where to locate.

Regular checks and maintenance of the building exterior and major mechanical components, such as heating and cooling equipment, are important no matter where a building is located. This keeps small problems from becoming big ones, while ensuring building integrity.

**For more detailed information about property protection, go to [www.ibhs.org/business\\_protection](http://www.ibhs.org/business_protection)**

### **In earthquake areas**

#### **Earthquake Risk Assessment**

The following building characteristics describe the types of building configuration or features that can make your building *less* vulnerable to earthquake damage. This does not mean, however, that there is a low risk of earthquake damage.

Additional risk may be imposed on a building due to its irregular features, presence of brick veneer, and vulnerable foundation types. Characteristics that could make your building more vulnerable to earthquake damage may not be so important if your building was designed by a professional engineer. In that case, the building should have been designed in a way that accounts for the features listed below.

- ❑ A simple building design. A box-like building is generally more stable than an irregularly shaped building, or a building with multiple stories that vary significantly in height. One example of this is when a multi-story office building has a grand entrance on the first floor with raised ceilings.
- ❑ A roof that has no openings, such as for access doors or skylights, or only openings with a dimension less than 12 feet or less than 50 percent of the smallest roof dimension. Large openings can weaken a roof.
- ❑ Light roofing materials, such as asphalt shingles and metal panels or tiles. The use of relatively light roofing materials will help keep the building's center of gravity low, thereby improving its performance and reducing the likelihood of damage during an earthquake.

- ❑ Absence of a large garage door, first story parking, or other large ground floor openings in multiple-story buildings. Presence of these features increases earthquake damage risk.
- ❑ Absence of brick or stone veneer on the exterior of the building. Not only is brick and stone veneer cracked and easily damaged in an earthquake, but it also introduces extra loads into the exterior walls – above and beyond the forces they would otherwise have to carry.
- ❑ Type of foundation. The foundation of a structure plays a crucial role in the structure’s performance during an earthquake. There are several types of foundation systems. The first is a foundation system built directly on the ground as a slab-on grade system. The other three examples are of foundation systems where the bottom floor is elevated above grade.

The first two types are the most resistant to earthquake damage.

The foundation types are

- ❑ slab-on-grade with integral footing (the footing and slab are a single unit)
- ❑ crawlspace or basement foundation wall system consisting of a continuous concrete or reinforced masonry wall system
- ❑ crawlspace or basement foundation wall system consisting of a wood stud cripple wall or unreinforced masonry wall
- ❑ pier or pile foundation system consisting of wood, concrete, or steel

*Note:* A professional engineer should always be consulted when any structural improvements are being considered.

Refer to the following checklist for additional actions that should be taken to protect your employees, customers and visitors as well as your building, contents and inventory, regardless of your building’s configuration.

*Check for:*

- ❑ Windows, skylights and doors with either tempered glass or safety film applied on the interior side of the glass, to reduce the chances of the glass shattering. Check for etching in the corner of the window that says “tempered” or “laminated.” Safety film is an adhesive film applied to the inside of the glass.
- ❑ Natural gas lines with flexible connections and an automatic shut off valve. A flexible gas line is not rigid. It is made of a material such as rubber or plastic that you can bend yourself. This reduces the chances of the line rupturing, resulting in a fire. The automatic shut off valve is typically installed near the gas meter.
- ❑ Flexible supply line to toilet(s).
- ❑ Flexible couplings on fire sprinkler system.
- ❑ Major appliances, such as boilers, furnaces, and water heaters, braced to the wall and/or floor such that the appliance will not overturn or shift in the event of an earthquake.
- ❑ Hangers (usually strips of sheet metal or stiff steel rods) less than 12 inches long that support your mechanical and plumbing systems. Longer hangers may allow too much sway during a tremor.

- ❑ Computer and other electronic equipment secured to the floor or desk with braces, Velcro, or some other means of attachment, so it will not overturn.
- ❑ Suspended ceilings braced to the structure to limit the amount of displacement during an earthquake.
- ❑ File cabinets with locks or latches that must be released manually in order to open the drawers. Locks or latches will keep cabinet drawers from swinging open during an earthquake and spilling contents.
- ❑ Cabinets, bookcases and storage racks secured to the walls and/or floor, to keep them from tipping over.

If you are in an earthquake area, consider adding earthquake coverage to your insurance policy.

### **In windstorm areas (hurricane, high wind, tornado/hail)**

*Check for:*

- ❑ Roof condition. A roof in good condition has all metal flashing secured to the structure and free of rust, preventing uplift and peeling off of roof coverings. Roof coverings are secure and show no signs of weather damage (cracking, rust, punctures, etc.). All vents and other roof penetrations are flashed and sealed, and all roof equipment is bolted down. The roof drainage system is working properly, with no “ponding” of water. There are no leaves or other debris blocking drainage.
- ❑ On asphalt shingle roofs, shingle tabs that overlap and adhere to the shingles below. Loose shingle tabs can be fixed by applying a dab of asphalt cement on their underside.
- ❑ If you have a low slope roof (“flat roof”), and/or a steep slope roof with any kind of roof covering other than asphalt shingles, have a roofing consultant evaluate your roof’s condition to determine if there is a need for repair or replacement.

Re-roofing in hail-prone areas:

- ❑ If you plan on using asphalt shingles or metal roofing, consider an impact resistant product that has been tested to meet the UL2218 Class 4 standard.
- ❑ If you plan on using wood or tile as your roof covering, consider an impact resistant product that meets the FM 4473 Class 4 standard.

Re-roofing in hurricane or high wind areas:

- ❑ If you plan on using asphalt shingles, consider using a wind-resistant shingle that meets the ASTM D 3161 (110 mph) standard.
- ❑ Roof-to-wall straps, brackets, or other connectors that attach each rafter or roof truss (whether wood or light frame steel) to the wall, to keep the roof from blowing off the building.
- ❑ Carports, canopies, and/or overhangs secured to the structure with rust-free anchors and tightened bolts/nuts.
- ❑ Signs, vent stacks, rooftop mechanical equipment and other vertical projections secured to the structure or the site foundation with rust-free anchors, tightened bolts/nuts, guy wires, or other secure methods -- *do not use sheet metal screws alone.*

- ❑ Exterior windows and doors with a minimum design pressure rating of 50 pounds per square foot. Look for a label or sticker in the corner of the glazing or inside the frame itself or contact the window/door manufacturer.
- ❑ Exterior doors with a deadbolt and supported by at least three hinges. In general, the more hinges your doors have, the more wind resistant they are. A deadbolt latching mechanism adds to wind resistance and security.
- ❑ Exterior double doors with head and foot bolts on the inactive door, or another method of securing the door, such as locking it into a mullion/center post.
- ❑ Impact-resistant windows and doors. Look for a sticker or label in the corner of the glass or frame itself, indicating it meets one or more of the following standards: ASTM E 1996 (91b), SSTD 12, Dade County PA201, or FBC TAS201.
- ❑ An exterior lightning protection system. Look at your roof to see if there are metal rods or probes. The lightning protection system needs to be securely anchored to the roof. Otherwise it may whip around in a storm and damage the building.
- ❑ Surge protectors on all computer systems, telephone lines, and other electronic systems, to protect against lightning damage that often occurs in windstorms.

## In flood areas

*Check for:*

- ❑ Whether your business is located in a Special Flood Hazard Area – V Zone, Coastal A Zone or Non-Coastal A Zone. If so, what is the base flood elevation (BFE) or design flood elevation (DFE) at your location? Contact your local building or planning department for this information.

BFE: \_\_\_\_\_ DFE: \_\_\_\_\_

The base flood elevation (BFE) is the elevation shown on the Flood Insurance Rate Map (FIRM) developed by the Federal Emergency Management Agency. This flood elevation is the elevation that has a 1 percent chance of being equaled or exceeded in any given year (100-year flood).

The design flood elevation (DFE) is the locally adopted regulatory flood elevation. The DFE is always greater than or equal to the BFE.

- ❑ Whether your community participates in the National Flood Insurance Program (NFIP). Go to <http://www.fema.gov/fema/csb.shtm>, click on your state and you will see a list of participating jurisdictions. If you are in a Special Flood Hazard Area, be sure you have flood insurance. Remember, even if you live in an area that is not flood prone, it is advisable to have flood insurance. Twenty-five percent of the NFIP's loss claims are filed in low to moderate flood risk areas.
- ❑ If you are in a Special Flood Hazard Area, ensure that electrical, plumbing and Heating/Ventilation/Air Conditioning (HVAC) equipment are installed above the flood elevation applicable at your location. Examples of plumbing equipment include water heater, pump (if applicable) and all piping system openings for the water and sewage systems, including openings for toilets, sinks, showers, tubs, etc. Electrical equipment refers to the entire electrical system, including the power supply, circuit breaker, all wiring and outlets, and any electrical appliances that are more or less stationary and permanent. HVAC equipment includes the condensing unit, air handler, furnace and all ductwork. Electrical, plumbing and HVAC equipment installed above the base flood elevation, or better yet, the design flood elevation, is most likely to survive a flood.

- ❑ If you are in a Coastal A Zone or V Zone, make sure that you have an open foundation (piles, piers, etc.) or breakaway wall system designed by a registered Professional Engineer for any portions of the building below the BFE. These features allow floodwaters to flow through.
- ❑ In an A Zone, either coastal or non-coastal, a minimum of two openings on multiple wall of each enclosed area. This means that there should be two openings on one wall (minimum) and two openings on an opposite wall (minimum) for each enclosed area. The openings must be on exterior walls and not into another enclosed area. The flood vents should be located within 1 foot above grade and with at least 1 square inch of opening for each square foot of enclosed area.

Flood vents are openings in a wall that allow floodwaters to freely enter and exit the foundation.

## In wildfire areas

### Wildfire Risk Assessment:

Wildfire is a potential risk everywhere. Wildfire danger occurs where there is a wildland/urban interface – that is, wherever buildings are nestled among trees and other combustible vegetation such as grasses, brush and shrubs. Whether near large urban areas or remote rural locations, interface areas exist all over the country. Determine how much you are at risk by reviewing the factors listed below. Then continue with the wildfire checklist for additional actions to take to protect yourself from wildfire.

Your risk is the *highest* if:

- ❑ there is a history of nearby wildfires,
- ❑ you are in a climate with a dry season of more than 3 months,
- ❑ there is wildland within 100 feet of your building,
- ❑ there is steep forested terrain with grades that average over 20 percent in any direction from the building,
- ❑ there are other fuel sources (wood piles, brush, furniture) less than thirty feet from your building,
- ❑ you are in a rural area,
- ❑ the nearest fire hydrant is over 500 feet away,
- ❑ there is limited access for fire trucks.

Ideally, the nearest fire hydrant should be less than 300 feet away. If there are no fire hydrants in the area, firefighters must truck in water or pump it from a pond or other water source. As a result, the building has a higher fire risk.

Check for:

- ❑ “Survivable” space around the building. This is space that is cleared of brush and other fuel sources and maintained so that a wildfire will not spread to the structure. The survivable space recommendations are: 30 feet in low-risk fire areas, 50 feet in moderate-risk areas and 100 feet in high-risk areas. Survivable space should be increased on any side where there is a downward slope away from the building, and if the exterior of the building is combustible.

- ❑ Roofing materials with a UL 790 Class A, ASTM E108 Class A, or UBC 15-2 fire rating. (You will find the rating label displayed on the packaging of the roofing material.) Class A fire-rated roof coverings provide the best protection for a business during a fire.
- ❑ Eaves enclosed with fire resistant materials and screens over soffit vents. Fire resistant materials include aluminum or other metals and plywood 1/2 inch or greater thickness. Combustible materials include vinyl, PVC, and plywood less than 1/2 inch thick.
- ❑ Attic, crawlspace and/or foundation exterior vents of non-combustible materials (e.g. aluminum, other metals, or plywood 1/2" or more thick). The vents should be less than one foot by one foot and covered with non-combustible screening with openings of 1/4" or less. This prevents sparks from entering your building.
- ❑ Exterior walls covered with a non-combustible siding/veneer. Examples of non-combustible siding include stucco, brick veneer, and concrete block. Examples of combustible siding/veneer include vinyl siding and wood veneer.
- ❑ Double-pane tempered glazing or other windows tested in accordance with ASTM E119. Double-pane tempered glazing filters out extreme heat better than single pane or non-tempered window glazing. Check for etching in the corners of your windows that says "tempered" or "laminated."
- ❑ A monitored smoke alarm system, to automatically alert the local fire department if fire breaks out.
- ❑ A fire sprinkler system, to automatically start fire suppression.
- ❑ Underside of above-ground decks and balconies enclosed with fire resistant materials. Examples of fire resistant materials include aluminum, stucco, brick veneer, concrete, and plywood greater than 1/2 inch thick.
- ❑ Address numbers that are non-combustible, at least 4 inches, reflectorized, on contrasting background, and visible from the road from both directions of travel. Address numbers must be easily viewed from the road so firefighters can find your building.
- ❑ Access route with a minimum width of 12 feet with at least 13.5 feet of vertical clearance near the structure. The main approach to your business must be large enough for a fire truck to have easy access in the event of a fire.

## In freezing weather areas

Check for:

- ❑ A secondary moisture barrier that extends from the edge of the eaves to at least 24 inches beyond the inside of the exterior wall, if the roof is sloped. Heat that escapes into the attic space warms the underside of a sloped roof, causing snow to melt and refreeze when it reaches the roof eave, outside the area of warmth. Moisture barriers prevent melted snow that backs up underneath the roof covering from entering the building.
- ❑ No attic or mechanical room with heat sources directly under the roof. Heat sources directly beneath a roof can cause ice damming and water backups.
- ❑ Sealed and insulated recessed light fixtures that may be installed in the ceiling immediately below the attic space or mechanical room. This keeps heat from melting snow on the roof and causing water backups.
- ❑ Attic penetrations properly sealed and insulated to prevent heat intrusion into the attic.
- ❑ Access doors to attic space or mechanical room properly insulated, sealed, weather-stripped or gasketed to prevent heat intrusion into the attic.
- ❑ Insulation installed over water or sprinkler supply piping located in exterior walls, unheated drop ceilings, or other unheated spaces, to prevent frozen or burst pipes.

If space is unoccupied for more than 24 hours (e.g. holidays, vacation, weekends, etc.), there should be a plan in place to inspect the building once a day for freezing pipes during the winter months.