



Determining Severe Weather Shelter Areas in Buildings

from the
Rock Island Arsenal CBRNE Office

BEST AREAS

- Basements
- Rooms constructed of reinforced concrete, brick or block with no windows and a heavy concrete floor or roof system overhead
- Small interior rooms with no windows such as locker rooms and lavatories
- Hallways, away from doors and windows and not open to direction of tornado
- Any protected area away from doors and windows

WORST AREAS

- Gymnasiums and auditoriums
- Rooms with large windows and doors
- Hallways exposed to direction of tornado
- Rooms with chimneys or beneath large, heavy roof-mounted equipment
- Mobile homes are not considered to be “buildings.” They are considered to be dangerous in any severe wind storm and occupants are urged to take shelter in designated shelter areas.

These factors were used in making up the checklist that follows. To use the checklist, simply select an area based on the above factors that you wish to check as a possible shelter area. Assign the point values indicated and total them. The highest total point value of any area evaluated would indicate the best location within the building.

Remember, you are simply trying to locate the safest area in your building. Even if point totals are relatively low, the area with the highest total in your building would still be much safer than being in a car, a mobile home or outside.

These guidelines should be used with considerable caution and judgement to establish only the relatively better severe weather shelter areas. It may be noted that a severe weather shelter in the absolute sense may not exist in an existing building unless there are areas designed for that specific purpose.

SUMMARY

The factors covered by the checklist (located on the back of this page) are considered to be of major importance but in no way are intended to be a complete list. There are other additional factors which could affect the final choice of a shelter area. Among these are concern over the direction of the windstorm or tornado, age of occupants, required floor space per person, “two ways out,” and many others.

If you feel the need for professional assistance in a making a “Severe Weather” shelter decision, please contact the Rock Island Arsenal Garrison CBRNE Office.

CHECKLIST FOR DETERMINING SEVERE WEATHER SHELTER AREAS IN BUILDINGS

1.	Lowest Level in Building	Points	
	A. Basement (below grade) with 2 exits	40	
	B. Basement (below grade) with 1 exit	30	
	C. First floor (at grade level)	4	
NOTE: If point value is 30 points or more after this first evaluation, you may disregard all the following factors. Basements (A or B above) will be the preferred location.			
2.	Interior location within building or number of walls to outside	Points	
	A. Three or more walls - including outside wall	3	
	B. Two walls - including outside wall	2	
	C. Hallways with turns or other baffle walls	1	
	D. Outside wall only	Avoid	
3.	Glass area of walls in selected room	Points	
	A. No glass	10	
	B. Up to 4% reinforced glass or glass block	2	
	C. Over 5% glass	Avoid	
4.	Inside wall construction of selected area within building	Points	
	A. Concrete block	3	
	B. Stud wall with sheetrock	2	
5.	Ceiling span between supporting walls in selected room	Points	
	A. Less than 15 feet	5	
	B. Over 15 feet but less than 25 feet	2	
	C. Over 25 feet	Avoid	

6.	Ceiling construction in selected room	Points	
	A. Pre-cast concrete	5	
	B. Standard wood joists with sheetrock	2	
	C. Standard wood joists with ceiling tile	Avoid	
Disregard the next two items if construction of roof or outside walls is the same throughout entire structure.			
7.	Roof construction of building	Points	
	A. Pre-cast concrete	5	
	B. Standard corrugated steel, insulation, tar, gravel	3	
	C. Wood frame, shingles	1	
8.	Outside wall construction of building	Points	
	A. Reinforced concrete	10	
	B. Pre-cast concrete	5	
	C. Concrete block and/or brick	3	
	D. Wood frame	1	
Total			