

Best available refuge area (BARA) assessment

1. Determine how much space is required for the refuge area.

What is the current staff capacity of the building? (Include normally occupied seats, drop-in work stations, and vacant seats/work stations)

_____ +

Are there members of the public in the building?

YES **NO**

If yes, estimate the largest possible number of members of the public at any given time

_____ +

Total number of people in the building

= _____

Total refuge area required:

Total number of people _____ x 5 square feet

OR Total number of people _____ x 0.465 square metres

Total area required

2. Review any available drawings and conduct an onsite assessment of the building to determine the best available refuge area. Assess each proposed area against the list of options below.

Your building's safety or maintenance personnel are potential sources of assistance in the selection of a BARA. You may wish to engage them in the selection process.

The selection of a BARA cannot guarantee safety. The majority of buildings are not built to withstand the forces of an EF4 or EF5 tornado. The identification of a BARA is to provide a safer location in which to shelter.

The selected BARA will not necessarily "check all the boxes" for criteria. Select the area which meets the most number of criteria. Some judgement may be required.

High-rise buildings typically do not collapse during a high wind or tornado event, but may have significant glass cladding. For this reason, an interior space away from windows is required.

Any relocatable structure (ATCO trailers, etc.) that doesn't have a foundation securing it to the ground is unsafe in a high wind or tornado situation. Individuals in these buildings must evacuate to the nearest suitable structure.

Room name	Square footage	Below grade (Y/N)	Handicap accessible (Y/N)	Accessible without key or card swipe (Y/N)	Short roof span ¹ (Y/N)	Interior area ² (Y/N)	Drop hazards ³ (Y/N)	Minimal windows and glass ⁴ (Y/N)	Solid core or metal door (Y/N)	Concrete or masonry walls (Y/N)

¹ A short roof span is defined as 25 feet or less.

² An interior area is defined as having no exterior walls

³ Drop hazards – the area does not contain unsecured shelving or stacking units that could fall or tip over.

⁴ Minimal glass and windows is defined as less than 10 per cent of combined total wall area.

Areas that have more “yes” responses may be considered for a BARA.

NOTES

3. Assess the exterior site.

1. Note any exterior hazards exceeding six inches in diameter, such as trees, lampposts, flagpoles, towers, chimneys and other hazards.
2. Measure or estimate the height of the hazard to determine if the hazard could fall on the building if uprooted. (It's important to note that even hazards located far away from the structure can become projectiles that can affect the integrity of the structure. Use the selection criteria in Step 2 to ensure an appropriate area inside the structure is less penetrable to windborne debris and projectiles.)
3. Using the height and the diameter of the hazard, plot or estimate how far the hazard could reach in the building and what areas could be affected.
4. If possible, avoid designating areas as a BARA that could be impacted by a falling hazard.

Using the criteria in Steps 1 – 3, an assessment about a BARA selection can be made. Remember, it is unlikely that a designated area meets all the criteria. It's acceptable to designate multiple locations as BARAs, especially if one location is not large enough to shelter everyone in the building. The goal is to identify areas that are more likely to be safe in a tornado or high winds.

Once the BARA assessment is completed, notify your safety and maintenance personnel, and ensure that the person responsible for updating the building's Emergency Response Plan is aware of the location of the refuge area.

Name of building: _____

Date assessed _____

When completing the BARA assessment, consult building plans as required, and include any drawings relevant to the BARA selection. Include any drawings with the BARA checklist when submitting.

NOTES

BARA #1

BARA #2

BARA #3

BARA #4

BARA #5

BARA #6

ADDITIONAL NOTES (if required)