

## City of Ann Arbor

## Roof Top Access and Ventilation Requirements for Solar Energy System Installation




This graphic represents the requirements of the 2015 Michigan Residential Code if there are no accepted alternative methods for ventilation.

The ground access area represents the area that is required for the placement of a ladder to access the roof and must be as wide as the roof access and deep enough to allow safe placement of a ladder. These areas shall be located where a ladder will not block opening such as windows and doors and at strong point of construction that are not obstructed buy Limbs, wires or signs per section R324.7.1.

Areas labeled as roof access areas are those areas required to be open allowing access from the eave to the ridge per sections R324.7.2.2, R324.7.2.3 and must have minimal obstructions such as, conduit, vent stacks or mechanical equipment. Not less than one roof access shall be located on the driveway or street side of the roof.

Solar panels shall not be placed on the portion of the roof that is below an emergency escape and rescue opening. A pathway not less than 36 inches wide shall be provided from a ground access area to the emergency escape and rescue opening.

Areas labeled ventilation are those areas required for Firefighters vertical ventilation operations.


To allow roof areas to be maximized for solar panel placement and still allow for firefighting activities alternative size and location to those provided in section R324.7 will be accepted. These alternate installations must comply with all the information in this document. All submitted plans must show in detail that the installation meets these requirements.

The Building official reserves the right to require full compliance with section R324.7 as it appears in the 2015 Michigan Residential Code if deemed necessary on a case by case basis.

Design elements to note:

- Adequate unobstructed ground access is present.
- Ground access aligns with roof access.
- Pathways allow for two directions of access and egress.
- The 2 required roof access areas cannot share a common truss or rafter.
- Not less than one roof access is on the driveway or street side of the roof.


In this illustration an adjoining roof within 24 inches of the array roof can be used as a second access point.

This allows for two points of access and egress that do not share a rafter of truss bay and allow firefighters access areas for ventilation operations.

Ground access areas must still meet the requirements of R324.7.1.


This graphic depicts the two required access points on a standard hip roof. Both roof access areas are 36 inches wide and are a clear path from the eave to the ridge. This arrangement provides access and egress from opposite sides and does not rely on the same roof truss or rafter bay and maintains clear ground access areas leading to the roof access. At least one access Point is on the driveway or street side of the house.


This image shows the 18 -inch clear space from the valley to the array shown in yellow. The Roof access and egress paths are not shown for clarity. This layout must conform to the requirements of section R324.7.2.4. if access and egress paths are provided on the opposite side of the roof they must meet the requirements described and depicted in this document.

