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LARRY S. FISHER CHAIRMAN

March 7, 2024



Board of Fire Prevention Regulations 527 CMR 1:00 Code Change Proposal Department of Fire Services PO Box 1025, State Road Stow, MA 01775

Code Change Proposal submitted on behalf of November 7, 2023.

Submitted Proposal:

Official use Only	
11.12.3.2	

on

11.12.3.2 One- and Two-Family Dwellings and Townhouses.

11.12.3.2.1 (no change proposed)

Photovoltaic systems installed on one- and two-family dwellings and townhouses shall provide roof access in accordance with 11.12.3.2.

11.12.3.2.2 (no change proposed)

Designation of ridges shall not apply to roofs with 2 in 12 or less pitch.

11.12.3.2.3 Access Pathways.

11.12.3.2.3.1 (edits to original text)

Not less than two 36 in. (914 mm) wide access pathways, on separate roof planes, from gutter to horizontal ridge, shall be provided on all buildings.

11.12.3.2.3.2 (edits to original text)

One access pathway shall be provided on the street or driveway side of the roof building.

11.12.3.2.3.3 (delete and replace with new text)

For each roof plane with a PV array, a 36 in. (914 mm) wide access pathway from gutter to ridge shall be provided on the same roof plane as the PV array, on an adjacent roof plane, or straddling the same and adjacent roof planes.

Access pathways shall be provided either:

- On the same roof plane* as a PV array; or
- On an adjacent roof plane; or
- Straddling the same and adjacent roof planes**; or
- On a non-adjacent roof plane.

*Two access pathways may be provided on the same roof plane provided that the access pathways are greater than six feet apart.

**An access pathway may straddle a hip or valley of a roof, provided that the roof pitch is 4/12 or less. Hips or valleys on roof pitches greater than 4/12 shall not be acceptable as access pathways. An access pathway that does not straddle a hip or valley must be perpendicular or parallel to the horizontal ridge.

11.12.3.2.3.4 (add new language for gable overhangs)

Access pathways shall be located in areas with minimal obstructions such as vent pipes, conduit, or mechanical equipment.

Access pathways shall not be located on the gable overhang of a roof where the roof rake extends greater than 24 inches from the building's exterior wall.

11.12.3.2.4 Setbacks at Ridge (delete both subsections and replace with new text)

11.12.3.2.4.1

For PV arrays occupying up to 33 percent of the plan view roof area, a minimum 18 in. (457 mm) setback shall be provided on either side of a horizontal ridge.

11.12.3.2.4.2

For PV arrays occupying more than 33 percent of the plan view roof area, a minimum of 36 in. (914 mm) setback shall be provided on either side of a horizontal ridge.

Where PV arrays are installed only on one (1) side of a horizontal ridge, the array shall not be located less than 18 inches from the ridge.

Where PV arrays are installed on both sides of a ridge, the arrays shall not be located less than 24 inches from the ridge.

11.12.3.2.5 Alternative Setbacks at Ridge

11.12.3.2.5.1 (edits to text)

For one- and two-family dwellings with an automatic sprinkler system installed within the dwelling in accordance with 13.3.2.19, for PV arrays occupying up to 66 percent of the plan view roof area, a minimum 18 in. (457 mm) setback shall be provided on either side of a horizontal ridge.

11.12.3.2.5.2 (delete section)

For PV arrays occupying more than 66 percent of the plan view roof area on sprinklered one- and twofamily dwellings, a minimum 36 in. (914 mm) setback shall be provided on either side of a horizontal ridge.

Approved Proposal Language:

11.12.3.2.3.3

One of the required 36 in. (914 mm) wide access pathways shall be perpendicular to the horizontal ridge shall be provided on one of the following:

(1) the same roof plane.
(2) on an adjacent roof plane.
(3) or straddling the same and adjacent roof planes as other access pathways.

11.12.3.4.1 An 18" setback, from the horizontal ridge, shall be provided for PV arrays installed only on one side of the horizontal ridge and where both roof planes meet at the horizontal ridge.

11.12.3.4.1.1 For PV arrays installed on a roof, where one roof plane is higher or lower than the opposing roof plane on either side of a horizontal ridge and one or both roof planes have a pitch greater than 2 in 12, a minimum 36" setback shall be provided from the horizontal ridge.

<u>11.12.3.4.1.2</u>

For PV arrays installed on a single slope roof with a pitch greater than 2 in 12, a minimum 36" setback shall be provided from the horizontal ridge.

<u>11.12.3.2.4.2</u>

For PV arrays installed on both sides of a horizontal ridge, where both roof planes meet at the horizontal ridge, a minimum 36 in. (914 mm) setback shall be provided on both sides of the horizontal ridge.

Definition to be added to Chapter 3:

Single Slope Roof – is a single pitch roof that has slopes in one direction only and has a pitch greater than 2 in 12.

Horizontal Ridge – the highest edge of a roof plane. If you have any questions or need any additional information, please contact me.

Sincerely,

Larry S. Fisher

Larry S. Fisher, Chairman Board of Fire Prevention Regulations