

**From:** Clifton, Gary (DBI) gary.clifton@sfgov.org  
**Subject:** FW: Acceptable Locations of the Initiation Device for Rapid Shutdown of PV Systems on Buildings  
**Date:** October 19, 2023 at 11:44 AM  
**To:** Peter Hirschberg (peter@makercity.com) peter@makercity.com

GC

Hi Peter,

The following email is from Assistant Fire Marshall Kathy Harold.  
The SFFD has accepted (5) locations. (See Below)

Thank you,

## Gary Clifton

Electrical Inspector  
Department of Building Inspection  
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**From:** Harold, Kathy (FIR) <kathy.harold@sfgov.org>  
**Sent:** Thursday, September 15, 2022 12:41 PM  
**To:** Clifton, Gary (DBI) <gary.clifton@sfgov.org>  
**Cc:** Burke, Kenneth (DBI) <kenneth.burke@sfgov.org>; Doherty, Michael (DBI) <michael.doherty@sfgov.org>; Jusino, Mark (DBI) <mark.jusino@sfgov.org>; Rose, Cheryl (DBI) <cheryl.rose@sfgov.org>; Schlecht, Matthew (DBI) <matthew.schlecht@sfgov.org>; Delos Santos, David (DBI) <david.delossantos@sfgov.org>; LaEace, Robert (FIR) <robert.laeace@sfgov.org>  
**Subject:** Re: Acceptable Locations of the Initiation Device for Rapid Shutdown of PV Systems on Buildings

Hi Gary,

Thank you for coming to my office to speak with me yesterday. I and my staff greatly appreciate the ability of our Departments to work together. The Fire Department will continue to approve the 5 alternative locations you have listed for the rapid shut down device for R3s. Inspector Bela Carreira reviews these plans/PDFs for compliance with the Fire Code. His officers, Captain Rob La Eace and Lt. Kathy Gilbraith will work with him to insure we all have the same understanding of what is considered an approved location.

After reading your code section which clearly states "portable ladders" are not acceptable, I would like to leave the approval of the 8' high shut-off in front of the building as an option when there is not another option. All of our rigs carry ladders and we can interpret SFFD ladders as being different than portable ladders you would find in a home, but for the speed of shutting the system down, I would like to see if we can use 1 of the 5 items listed first if the project can not position the shut-

off in front of the building.

Also discussed yesterday, as a benefit to both of our Departments, would be to have a Fire Inspector also do an inspection of these installed systems. This would take the burden off your Department of enforcing the Fire Code and it would allow the Fire Department to insure we have code compliant access and make an entry into our dispatch computer system detailing the premise hazard and additional information for our responding units. We currently have these inspections pending in our computer tracking system, we just need to come up with a way for applicants to call to pay and schedule an inspection and for there to be documentation for your Electrical Inspector to know we signed off a job before Your Department finalizes the job. I will follow up with David Delos Santos to see if we can come up with a process.

Thank you,

Kathy Harold  
Assistant Fire Marshal  
Permit Center  
San Francisco Fire Department  
628 652-3262

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**From:** Clifton, Gary (DBI) <[gary.clifton@sfgov.org](mailto:gary.clifton@sfgov.org)>  
**Sent:** Wednesday, September 14, 2022 11:48 AM  
**To:** Harold, Kathy (FIR) <[kathy.harold@sfgov.org](mailto:kathy.harold@sfgov.org)>  
**Cc:** Burke, Kenneth (DBI) <[kenneth.burke@sfgov.org](mailto:kenneth.burke@sfgov.org)>; Doherty, Michael (DBI) <[michael.doherty@sfgov.org](mailto:michael.doherty@sfgov.org)>; Jusino, Mark (DBI) <[mark.jusino@sfgov.org](mailto:mark.jusino@sfgov.org)>; Rose, Cheryl (DBI) <[cheryl.rose@sfgov.org](mailto:cheryl.rose@sfgov.org)>; Schlecht, Matthew (DBI) <[matthew.schlecht@sfgov.org](mailto:matthew.schlecht@sfgov.org)>; Delos Santos, David (DBI) <[david.delossantos@sfgov.org](mailto:david.delossantos@sfgov.org)>  
**Subject:** Acceptable Locations of the Initiation Device for Rapid Shutdown of PV Systems on Buildings

Hi Kathy,

In regards to our conversation yesterday of the acceptable locations of the Initiation Device for Rapid Shutdown of PV Systems on Buildings our department would like to clarify what is acceptable to both our departments.

Reference Code: 2019 California Electrical Code (2017 NEC) Article 690.12 Rapid Shutdown of PV Systems on Buildings. **(C) Initiation Device**

**The initiation device(s) shall initiate the rapid shutdown function of the PV system. The device "off" position shall indicate that the rapid shutdown function has been initiated for all PV systems connected to that device.**

**For one-family and two-family dwellings, an initiation device(s) shall be located at a readily accessible location outside the building.**

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**Definition: Accessible, Readily (Readily Accessible).** Capable of being reached quickly for operation, renewal, or inspections without requiring those to whom ready access is requisite to take actions such as to use tools (other than keys), to climb over or under, to remove obstacles, or to resort to portable ladders, and so forth.

Informational Note: Use of keys is a common practice under controlled or supervised conditions and a common alternative to the ready access requirements under such supervised conditions as provided elsewhere in the NEC.

**The rapid shutdown initiation device(s) shall consist of at least one of the following:**

- (1) Service disconnecting means**
- (2) PV system disconnecting means**
- (3) Readily accessible switch that plainly indicates whether it is in the “off” or “on” position**

**In general the Initiation Device will be located outside and in front of the one and two family dwellings with adequate labeling. Comment: This Initiating Device may be lockable in the On Position.**

In some cases this location is not suitable and our Chief, Ken Burke and Senior Inspectors Michael Doherty, Mark Jusino, Cheryl Rose, & Matthew Schlecht have reviewed these alternate locations on a case by case basis with, Assistant Fire Marshall Rich Brown, as what would be acceptable to the SFFD.

The following alternate locations for the Initiating Device on **one and two family dwellings only** were considered acceptable by Rich Brown:

- 1) Outside Breezeway with Locked Gate Comment: This would require adequate signage on the Gate and the Main Electrical Service for one and two family dwellings
- 2) Semi Enclosed Breezeway with Locked Door Comment: This would require adequate signage on the Door and the Main Electrical Service for one and two family dwellings
- 3) Locked Man Door Adjacent to the Garage Door Comment: This would require adequate signage on the Door and the Main Electrical Service for one and two family dwellings
- 4) Locked Door for a Dedicated Electrical Room Comment: This would require adequate signage on the Door and the Main Electrical Service for one and two family dwellings
- 5) Locked Flush Cabinet Outside in Front of the Residence Comment: This would require adequate signage on the Flush Cabinet Door and the Initiating Device for one and two family dwellings

One additional location to be considered would be to mount the Initiating Device at 8 feet, or as high as possible, to minimize someone from turning it off.

Please review and comment.

Thanks,

Gary Clifton, Electrical Inspector  
Mobile: (415) 636-1675

