OPERATIONAL CONSIDERATIONS
FOR PV INSTALLATIONS
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SOLAR SYSTEMS
How do they affect us as Firefighters??
- Unfamiliar Territory
- Hazardous Energy
- Weight
- Changes in Tactics

Where do we find them?
- Industrial
- Commercial
- Residential
Residential

Why do we need these Guidelines?

Guidelines developed to assist us
Cooperative with Industry
Painful at times
Consensus of the players
So what does it mean to us as Firefighters?

Guidelines for Installations

Residential Guidelines

Gable or Single Ridge Roof
- 2 - 3 Paths to the ventilation area
- On each roof slope where modules are located
- Modules located 3’ below ridge
Residential Guidelines

- SFD Hip Roofs
  - 3’ Path to ridge on each roof slope
  - Pathway Located on Structural Strong Point
  - Bearing wall or other

- Hips and Valleys
  - Modules located no closer than 1.5” on either side if both sides have modules
  - If only one side, modules can go directly adjacent to the hip or valley

Integrated PV Systems
Commercial & Multi Residential

- 6’ Perimeter Paths
  - Unless axis less than 250’ then 4’ perimeter
- Over structural members
- Paths on both Axis
- 4’ Paths to skylights, vent hatches or standpipes

Commercial & Multi Residential

- Arrays no larger than 150 X 150
- 4’ path w/ 4 X 8 vent cutouts every 20’ alt.
- 4’ path leading to skylight or hatch
- 8’ or greater pathway

Commercial & Multi Residential
Safety Considerations

- Fire Indicators
- Structural Integrity
- Type of roof
  - Commercial or Residential
  - Light weight or Stick
- Areas of travel
  - Barge areas, open field, escape routes

Safety Considerations

- System Structure
  - Framing
  - Panels
  - Wiring
Safety Considerations

• Fire Indicators
• Array arrangement
• Ventilation Tactic
• Time
• Wind
• Experience

Ventilation
- Access and Egress
- Building Knowledge
- Ability of interior crews based on conditions
- Know when to say "Bye Now!"
  - Call the Stripping Truck
Natural Openings

- Utilize where possible
- Make sure have good access and egress
- Are they large enough to do the job
- Effect on fire -
  - Pressure
  - Volume

Natural openings

Natural Openings
Natural Openings

Additional Considerations

- Wiring
  - Conduit
  - Markings
- Disconnects
- Power from the Panels

Operational Considerations

Operating on these types of roofs should not be an extraordinary experience. We should employ the same situational awareness that we would on any fire. The challenge is being able to recognize the added hazards and overcome them.