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# *High Wind Loads and Model Code for PV Arrays*

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## *Guidance is Lacking*

Frustration, uncertainty, inconsistency, and gross negligence will result from the current lack of guidance.

Particularly in high wind regions.

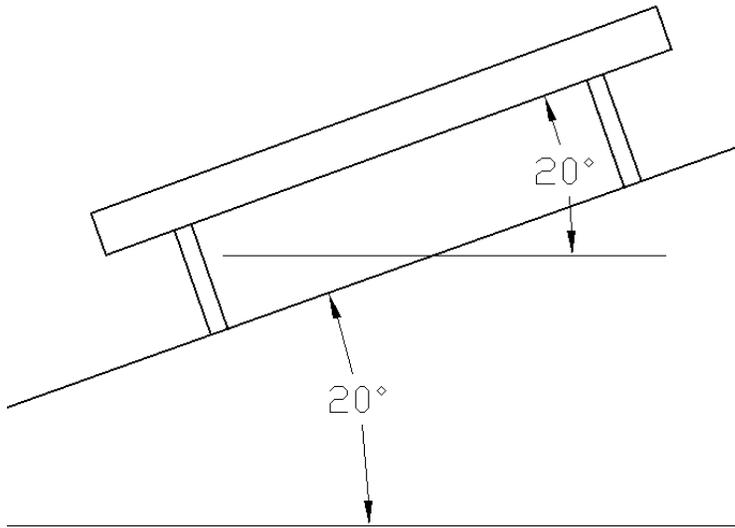


Solar thermal system installed in Orlando, FL (120 mph zone)

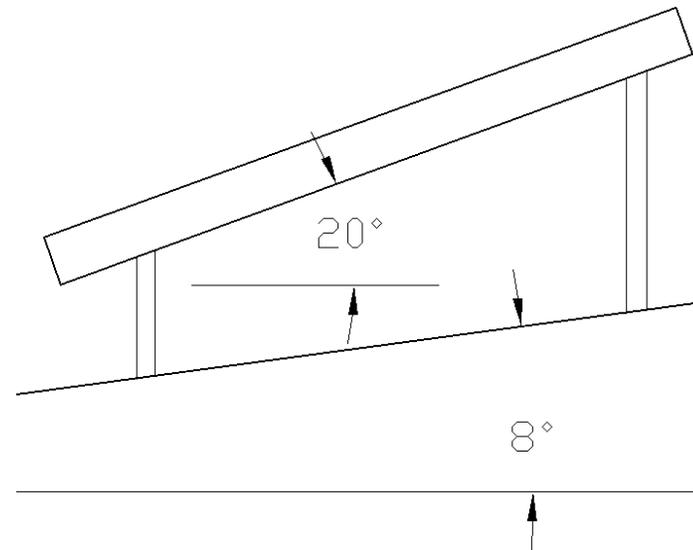


# PV Arrays on Rooftops

Two general categories for roof mounted PV arrays



1) Above and parallel to the roof plane



2) At a tilt relative to the roof plane



# *Current Codes and Standards*

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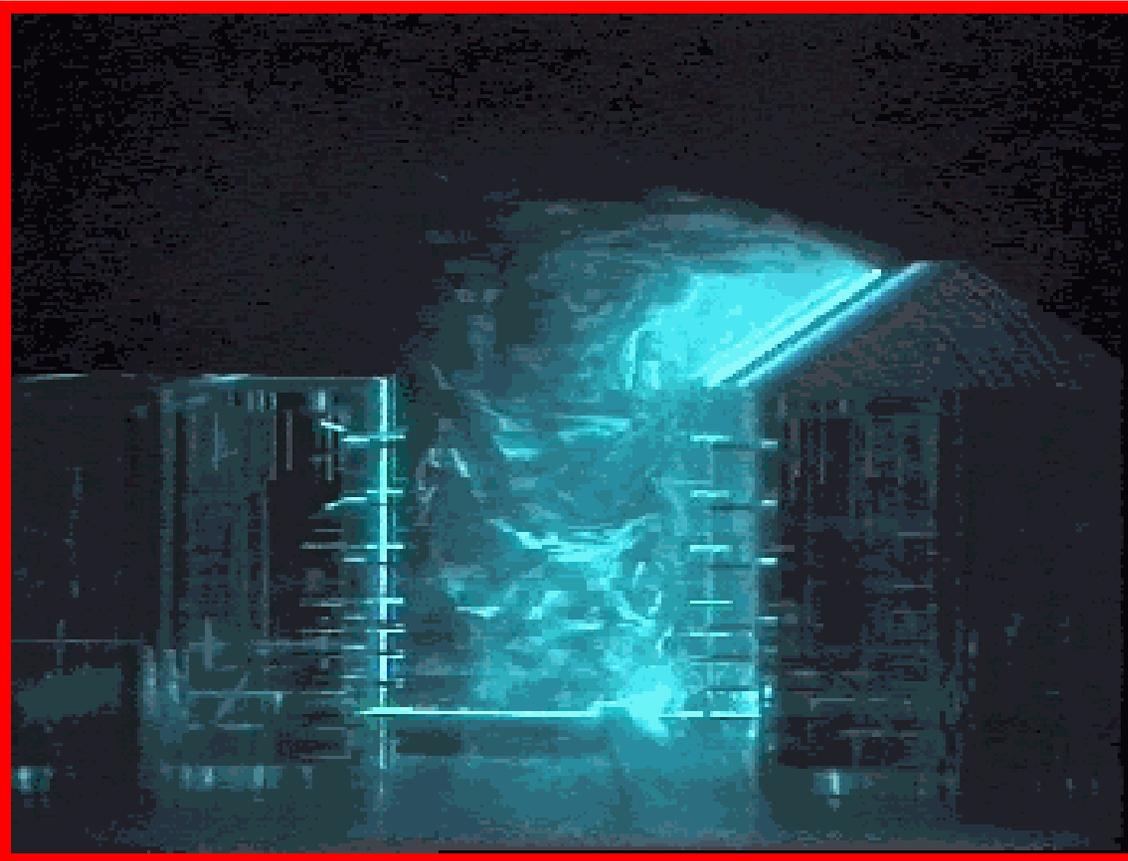
- Sample design calculations have been developed for parallel arrays
- Work has begun on a method for more complex geometries





# Wind Tunnel Testing

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- Tests have been conducted
- Results are proprietary
- Advancement will require additional testing
- Models require empirical data for calibration



## Future work

- Continued development of sample calculations
- Wind tunnel testing
- CFD simulations
- Changes and additions to standards

