

Anchor Recreational Vehicle (RV)

Overview

- If your recreational vehicle cannot be moved out of the floodplain prior to a flood event or if you live in an area where there is not enough warning prior to flash flooding events, the RV should be anchored securely to the ground or to a permanent platform in order to prevent the RV from floating and/or moving laterally during flooding.
- Anchoring a recreational vehicle involves ties, anchors, and anchoring equipment. Ground anchors transfer the load of the RV to the ground.
- The anchor system must meet local ordinance load requirements.
- Prior to installation, the structural soundness of the RV, soil type, anchor depth, and the load configuration must be determined. Therefore, a competent design professional is recommended for anchor installation.
- Types of anchors:
 - Helical earth anchors
 - Concrete anchors
 - Cross drive anchors
- The RV will need to be anchored any time that it is not in use if located in an area where flash flooding occurs.
- Moving the RV out of the floodplain prior to flooding events is preferred. Anchoring the RV does not protect the actual RV from flood damage. Anchoring only prevents the RV from causing flood damage to other structures and property.
- Anchor systems may also help the RV withstand wind forces during wind and seismic events.



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Key Takeaways

During flood events, recreational vehicles can float and/or move laterally in the floodwaters. If the RV moves in any way, there will likely be major flood damages to the recreational vehicle as well as surrounding structures and neighboring properties.

In order to avoid the cost of severe property damage, the RV can be anchored to the ground or to a permanent platform.

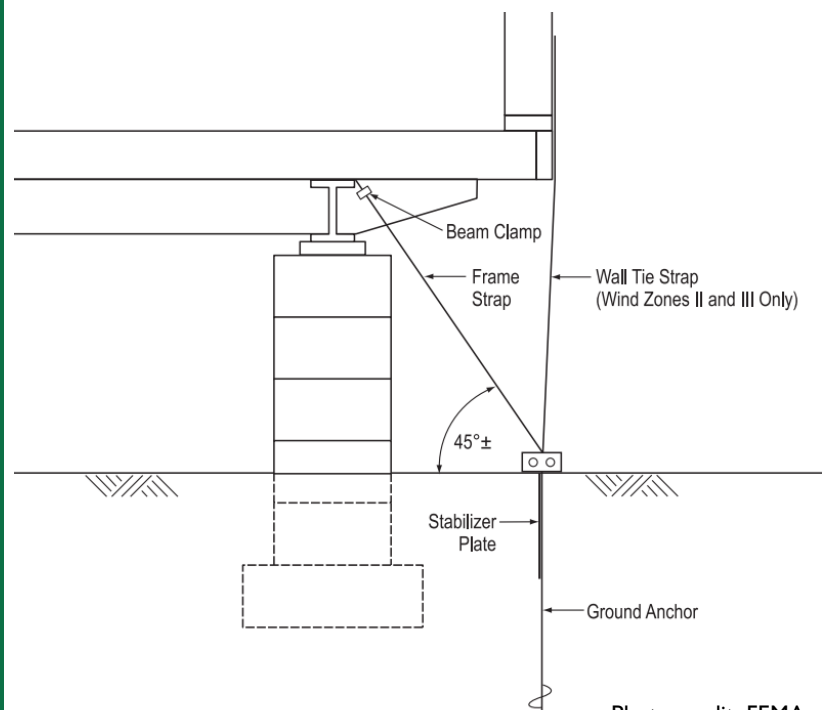
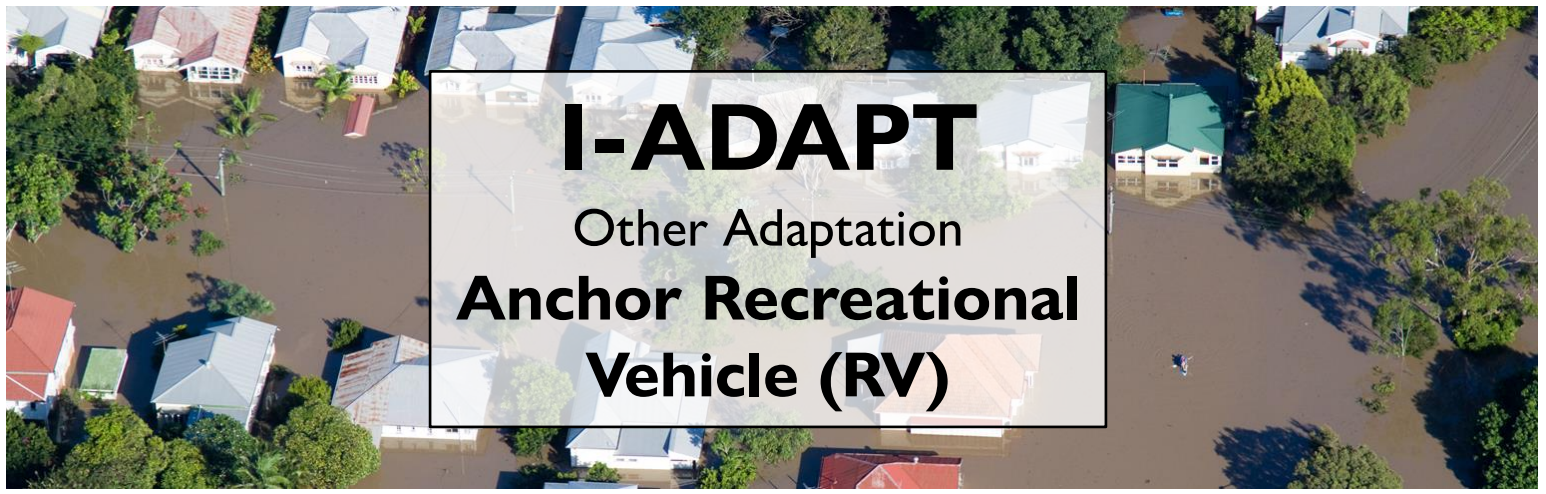


Photo credit: FEMA



Estimated Costs/Benefits

*U.S. dollars (2022), estimates are subject to change

Potential Costs		Potential Benefits	
Item	Estimate	Post-Flood Recovery Actions	Estimate
Anchors	\$110-\$250	Cost of new RV	\$10,000-\$300,000+
Installation	\$1,500-\$2,000	Repair damage to the siding of the primary structure	\$200-\$5,000
ESTIMATED TOTAL COST	\$1,610-\$2,250	ESTIMATED TOTAL SAVINGS	\$10,200-\$305,000+

Additional Resources

- [AARP Mobile Home Anchors and Tie-Downs](#)
- [FEMA Protecting Manufactured Homes from Floods and Other Hazards](#)
- [FEMA Recreational Vehicle](#)

Resources can also be found at <https://de.gov/iadapt>

Expected Maintenance

- Inspect the anchoring equipment for loose straps and failing anchors monthly and after hazard events. Loose straps must be retightened and loose anchors must be reset.
- Make sure that the RV is re-anchored to the ground after every time it is used.

Additional Actions

- Create and practice an evacuation plan which includes moving the RV out of the floodplain if possible.

Permitting Agencies

Contacts for permitting requirements include but are not limited to the following:

- Your city and/or county government for local flood ordinances or regulations
- Your city and/or county government for building permits
- [Wetlands and Subaqueous Lands Permit](#)

Who to Contact

- [811 Call Before You Dig](#)
- Design professional or engineer
- General contractor

Technical definitions and more information are located on the I-ADAPT website: <https://de.gov/iadapt>.



This information is intended to be used for planning purposes. It is not intended to substitute or take precedence over the guidance of design engineers, contractors, utility companies or regulatory agencies.

For more information, contact DNREC's Division of Climate, Coastal and Energy at DNREC_IADAPT@Delaware.gov

