Protecting Mobile Homes from High Winds

Mobile homes should be anchored securely to withstand high winds. To ensure safety during high winds, do the following:

1. Consider positioning your mobile home with narrow side facing direction of prevailing winds or most damaging storm winds. Check with local weather service for information. You may have to compromise position for view, solar heating, air flow, or layout. Proper positioning alone won't ensure safety, so your unit should be tied down securely (see below).

2. Establish a windbreak if possible. Natural barriers such as trees provide excellent windbreaks. Two or more rows of trees are more effective than a single row. Four rows are best. Trees which are at least 30 feet high are most effective.

3. Seek shelter. Even if your mobile home is well anchored, seek shelter elsewhere when warned of an approaching tornado or hurricane. Hurricanes and heavy rains can also cause flooding, especially in low-lying coastal areas and mountain valleys. Know the location of nearby shelters.

4. Install a tiedown system. Tiedowns should be installed by all mobile home owners. Tiedown systems are easy to install on existing units. When buying a new mobile home, be sure it has built-in, over-the-top tiedown straps which can be anchored to the ground.

Two types of ties are needed:
- Over-the-top tie, which keeps the unit from overturning.
- Frame tie, which prevents the unit from being blown off its supports.

For maximum protection use four sets of both over-the-top ties and frame ties to secure 10, 12, and 14-foot-wide mobile homes. Double units 24 feet wide need frame ties only.

Ties are made of wire rope or rust resistant steel straps attached to anchors embedded in the ground. Several types of ground anchors can be used: screw augers, expanding anchors and concrete deadmen. The anchors are usually installed to a depth of 4 to 5 feet, depending on the soil's holding strength. Anchors should have a holding power of at least 4,800 pounds. Use only high-
quality materials, and install anchors exactly as specified by manufacturer, being sure to place the anchors deep enough.

5. Install piers and footings under the supporting steel frame of your mobile home. Piers and footings should be heavy enough to carry the weight of the home.

Construct piers of standard 8" X 8" X 16" concrete blocks placed on a footing, with the long dimension of the blocks crossways (perpendicular to the main frame members and centered under them.) Footings should have minimum dimensions of 16" X 16" X 8".