

INTRODUCTION- to the Inspection of Mobile Homes for Defects



Ver.3.5 - 04/25/07, updated through 2012 - Steve Vermilye, New Paltz NY and Daniel Friedman, Poughkeepsie NY, Hudson Valley ASHI Chapter Seminar, Newburgh NY, January 4, 2000, NY Metro ASHI Fall 99 Seminar, Holiday Inn Crowne Plaza, White Plains NY, October 2, 1999.

With deep sorrow we report that our friend and associate, Steven T. Vermilye of New Paltz NY (photo at the top of this page) passed away on 19 June 2001, so of course you will have difficulty contacting him by normal means.

Steve was a leader in the home inspection profession, recognized nationally as well as among New York State professional home inspectors for his competence, kindness, honesty, humility, humor, and for his unequivocal commitment to the welfare of his clients.

Steve led our interest in mobile home inspections by offering us an opportunity to join with him to work pro-bono in behalf of agricultural workers in the Hudson Valley -- a service which we continue in his memory.

Definitions: If you are not sure if your home is a mobile home, trailer, double-wide, caravan, or a modular or panelized-built or factory built home, please see [DEFINITIONS of Mobile Home, Doublewide, Modular, Panelized Construction](#)

We found so many unsafe and un-healthy conditions in the trailers and mobile homes occupied by migrant farm workers that there was almost no safe habitable housing at the facility.



The facility owner, responding to suggestions from our report and from the N.Y. Office of the Attorney General and an attorney representing farm workers made extensive improvements in farm worker housing as a result of Steve's initiative. Many of the photographs used to illustrate defects and needed repairs at these mobile homes, trailers, and double-wides came from Steve or from our own photos when we worked together.

We all miss Steve Vermilye and his passing remains a great loss. If the information in this report assists anyone in assuring that their home is more safe and secure than it would have been otherwise, that benefit is thanks to Steven Vermilye -- this information is one of his many gifts to the people for whom he cared deeply -- Daniel Friedman.

See InspectAPedia.com/mobileinspections.htm for latest version of this report.

Consumer Reports (2/98) points out common weak spots surveyed and recommends that buyers hire a home inspector. But many inspectors are not familiar with the special problems found in mobile homes.

- Price: \$15-\$70K; 15 million in U.S.;
- "mobile homes" aka "manufactured housing" per the industry - confused with modulars & panelized.
- single mobile home vs. double-wide trailers (specs)
- single wide mobile homes
 - typical 1000 sq ft, \$24,000.,
 - more problems with floors, roofs, windows, doors
- multi-wide mobile homes, double wide trailers, popout trailers and manufactured homes
 - typical 1600 sq ft, \$43,000.
 - more problems with joining of the sections
- 1x lumber and siding "trailer" construction vs. more recent

- land often not-owned; rented 50% of the time
- 1974 HUD Code (Red seal certification label on newer units); inspections @ factory; HUD-complying homes do not have to comply with local Building codes! HUD regulations have loopholes and need work.
- 7 States: AZ, AR, CA, FL, TX, VA, W. Va. - have funds for warranty claims; NOT NYS.
- 82% of respondents reported overall satisfaction with M. H. (C. R. survey)
- But more than 50% report at least one major problem, even for homes less than 5 years old. (C. r. survey)

Definitions: What is a Mobile Home, Trailer, Camper, Doublewide mobile home, Modular Home, Factory-Built Home, Panelized-Construction-Built Home?

These terms are defined at [Trailer vs Mobile Home vs Modular vs Panelized Construction](#) an explanation of terms and how to identify these structures.

PRIORITIES OF INSPECTION & Reporting of Mobile Home Defects



MOBILE HOME FIRE SAFETY - Fire Safety Defects in Mobile Homes

- Electrical - aluminum wiring, owner-modified or otherwise unsafe wiring
- Heating, flues, chimneys
- Safety Exits - doors and push-out windows; unsafe steps and rails at entry doors;
- Smoke detectors critical - short exit time for this construction

The double-wide home shown at left, as seen from a distance, appears to be in good condition, but only on close and thorough inspection can we become confident about the condition of and potential safety hazards at any home.

Mobile Home & Trailer STRUCTURAL & SAFETY DEFECTS in Mobile Homes



- Movement (impacts electrical & flues) - look for evidence of movement that may have disturbed piers, foundation supports, or mechanical system connections - areas of serious safety hazards
- Storm Damage such as blown off of foundation, roof damage, missing skirting
- Floor Collapse (the extensive use of particle board for subflooring exposes these structures to high risk of hidden damage and floor collapse due to roof, exterior or plumbing leaks
- Mobile home & manufactured home tie-downs - to secure the structure against wind damage

Trailer or mobile home foundations and tie-downs are discussed in detail at [MOBILE HOME STABILIZING SYSTEMS](#)

OTHER COMMON MOBILE HOME & TRAILER DEFECTS



- Roof leaks
- Leaks at windows and doors (photo at left)

- Plumbing leaks
- Heating systems not maintained, possibly unsafe
- Rot and insect damage at points of leakage into walls and floors
- Wet or contaminated crawl areas, especially where enclosed

MOBILE HOME LABELS - Mobile Homes and Manufactured Housing Labels & Certifications



- **INSTALLATION MANUAL** - For new/recent mobile home, every manufacturer is required to provide instructions on site preparation, installation and anchoring.
- **Manufacturer's CERTIFYING LABEL** - on rear section outside or near the main entry door, HUD Insignia
- **DATA PLATE** - near the main electrical panel or other visible & accessible location (under sink for many manufactured homes): name of mfg., serial and HUD ID, zone information (see Structure discussion)
- **DAMAGE DURING TRANSPORT**: if the unit was damaged during transport it no longer conforms to the standards and should not be accepted by the code official;

Definitions: What is a Mobile Home, Trailer, Doublewide, Modular Home, Factory-Built Home, Panelized-Construction-Built Home?

The following is the opinion of the author and has not had a technical review by other industry experts. Various trailer, mobile home, and modular housing manufacturers may disagree with some of these views. Corrections and content suggestions are welcome.

Characteristics of Trailers as Living Space



Trailer traditionally describes a usually small, wheeled, home with a history and image of flimsy construction such as wooden 1x3 wall framing clad with aluminum siding, virtually no insulation, and low quality leaky windows.

"Trailers" up until the 1970's (my estimate) included both **campers** which really were intended to be towed by a car or truck and moved often from site to site (though some were left parked for decades at campgrounds), and also lightweight factory-made homes which were intended to be towed once to a home site and then kept there.

Our photo (left) shows a trailer that was finally abandoned as a living space. The little blue structure used as an addition to the left of the small house in the photo at the top of this page was undoubtedly a small camper.

No one building "trailers" calls them that any longer because of the "flimsy" image. The closest thing to a "trailer" in current products on the market are motor homes and campers. The least-costly campers (such as our pickup truck "slide-on camper") built after 2000 are probably considerably better constructed than the "trailers" of old.

In current language (2009), a "trailer" is either a "mobile home" that is more than 20 years old (see below), or it is a camper designed to be moved easily and often from site to site. (Or in different usage, a "utility trailer" is a utility vehicle intended to haul goods or large items and designed to be fastened to the back of a car or truck, and a "tractor trailer" is of course a larger (typically 40 ft long) hauling system for moving goods by highway from city to city.)

Trailers may have had their wheels left on, but normally they'd be set on a masonry pier foundation and a skirt installed around to hide the under-trailer area.

Characteristics of Mobile Homes as Living Space



In the past few decades (to 2006), "trailer" manufacturers have considerably improved the quality of construction of such homes. The national manufacturing and building code standards for these structures have also been improved. Perhaps in part to escape the less than wholesome image of "trailer", manufacturers use the term "mobile home" to describe what is usually larger and better made home than "trailers" of old, though perhaps with similar materials.

Mobile homes are built in a factory and are designed to be moved (once and uncommonly, perhaps once again) on its own wheels attached to its own frame to a site where a foundation is prepared and connections to utilities are made. In the U.S., states have regulations about the siting, foundation, steps and entry, wiring, plumbing, tie-downs for wind and storm safety that apply to these homes. Some examples of mobile home regulations for New York State are this website. Individual state regulations will vary - you'll want to see what your state requires. Even within states regulations vary as wind and weather conditions do also.

Examples of mobile home improvements include stronger overall wall and roof construction, less leaky roof covering, and windows that are less notoriously leaky. In addition newer mobile homes have, for fire safety, bedroom windows that can be pushed out to a wide opening for emergency exit in case of fire - an important safety improvement. Usually building departments grandfather in older structures, but sometimes they will insist that certain life-safety improvements be made, for example if an older mobile home is being brought to a new site in a new community. If this is the case one or two windows may need to be replaced to provide this important safety improvement.

When there is a severe storm or hurricane, mobile home communities are among the worst damaged as a strong wind can completely turn over or demolish mobile homes. For this reason, mobile homes set up in high wind-risk zones have extra requirements for tie-downs to secure the building against upset during a storm.

Mobile homes may arrive on wheels but they will be jacked enough to be set on some type of approved building foundation, such as masonry piers or a masonry foundation.

In case these terms are not confusing enough, some mobile home makers like to call these "factory built homes". But that use of "factory-built homes" is confusing too since modular homes are also "factory built" but are quite different from trailers or mobile homes.

Characteristics of a "Doublewide" Mobile Home or Trailer

Some manufacturers provide mobile homes constructed to be joined together, side by side to form a double-width living unit. While a double-wide mobile home is basically constructed by the same materials and methods just described above, the tie-down and connection requirements for these living units may be different in some jurisdictions, since their risk of being blown away in high winds is different. Other installation and support requirements, such as connection of the two units and placement of foundation support will also have to accommodate this variation.

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