TRANSPORTATION AND OTHER DAMAGE
Effects of Wind
Contact with an overpass
Wind fallen tree damage
Contact with a guard rail
Contractor doing repairs for transit damage done by a transporter while shipping the home for a retailer.
Truss damage outside the manufacturer's control.
This is an overhead electrical power line that hung too low over the road. It cut its way down the roof before it was pulled off the pole.
This is what the wire did to the trusses.
Another view of the wire cutting through the roof and trusses.
Contact with a bridge guard rail.
SITE
PREPARATION
Masonry skirting is not sealed or treated to keep water from migrating into the crawlspace.
This obviously wet site is at street level. Where will the water drain?
This stand was prepared over a natural spring.
Organic debris included in engineered fill
No low point drain, no sump pump, inadequate perimeter drainage.
Pit set home with no provisions for drainage.
Downspouts dumping to surface

Grade sloping toward the adjacent site.
Downspouts

Blocked Skirting Vents
This home has a properly graded site
FOOTING AND FOUNDATIONS
Different footings mixed.
Crib for a home. Note the inadequate size of the crawlspace access.
The grade around the home is too steep. The fill is sliding out from under the foundation.
The fill under the slab was not compacted. The home is settling. The slab is broken.
Innovative footing design, not in compliance.
Three pad runners. No provision for drainage between the runners.
This is commonly called a 3 pad pour. It is one of the best. All piers are placed on a uniform surface and exhibit little differential movement.
Another 3 pad with the addition of a poured perimeter foundation wall. This is perhaps the best. Note the crawl space access and tie down bolts.
Full slab. Another very good method. Note the slope for water to run toward a low point drain.
PIERS
The installer must have run out of footing pads and pier blocks.

Improper block orientation

No footer

The installer must have run out of footing pads and pier blocks.
Wrong pier makeup, no footers, improper steps, feeder wires not buried or in conduit.
Properly erected pies on proper footings
Proper assembly of manufactured piers on treated footings.
STRUCTURAL
Field installed door did not have adequate sealant under the threshold.

Void in sealant
Homeowner tried to rebuild this home without obtaining permits.
Leaks at the marriage line led to this damage
Rotted studs
Improperly secured endwall siding applied in the field by an installer.
These marriage line straps are supposed to align with the trusses to hold the two sections together.
An alteration as a part of the sales contract being done in the field by a contractor. Note the lumber stamp.
Flashing installed for a tag unit. Installer did not add the additional length. Result: Leak inside the wall space.
Marriage line - Purloin fell off.

Marriage line air seal ineffective

Excessive gap at ridgebeam

Insulation void
This light single section home was not tied down.
This tie down strap is vertical. It should be on an angle.
This is how a tie down strap should be installed.

Notice the absence of the required perimeter piers.
This is a positive connection pier. In this case it is serving as both a wind tie down as well as an earthquake bracing system.
PLUMBING
Code requires this drain pipe to be buried under 12” of earth. Installer claimed backfill would cover it.

Twelve inches of soil would cover the vents and the two cleanouts.
This installer saved money by using an unapproved flexible RV type drain pipe. It broke and allowed waste to leak out.
Three inch pipe connecting into a four inch pipe without a fitting.
Short turn bend on a horizontal to horizontal change. This requires a long turn fitting.
Uninsulated pressure line
Properly insulated pressure line and access to the shut off valve.
Drain line supported by the installer.
Drain line supported at the factory.
Marriage line column support pier not under the endwall columns.

Uninsulated pressure pipe.

Electrical crossover wires not replaced inside the floor.
Meter bypassed by jumpers. This home was 40 miles from nowhere.

Note the seal has been cut off.
Crossover wires not encased in the junction box.
One of the phase wires was shorted to the box. Energizing from the pedestal caused this.
Underground rated feeders leave the conduit but are not buried.
SER cable used as a feeder but not encased in conduit.

Rodent barrier void
Properly encased feeder

Note the pier shims blocking the vent.
Properly encased crossover wires and insulated crossover plumbing lines.
MECHANICAL
Unapproved flex line for gas crossover
Bent gas line
Bonding wire not connected
Pipe support broken off
No flex line or swing joint at gas connection
Installer never bothered to connect the heat duct crossover. At least they did not open the duct adapter.
Gas water heater air intake damaged reducing combustion air.
Heat duct crossover not mechanically fastened so it easily came off when the duct was pressurized.
Dryer vents are required to be ducted outside the crawl space.
This dryer vent duct will tend to trap water and lint in the dip.
Dryer vent not ducted outside the crawl space. Note the dryer lint buildup.
This gas meter has the required flex connector.

Note the absence of a skirting band.
Properly supported gas line.
Dryer vent roughed in to terminate outside the building line.
SKIRTING
Crawl space access opening too small.
Untreated plywood used for skirting.
Skirting will not prevent water from entering the crawl space.
No skirting vents. Skirting also overlaps the siding. It is untreated wood in contact with earth.
Untreated plywood used in contact with earth. Skirting vents too small for total ventilation requirements.
Skiriting band properly sealed at the factory but not properly sealed by the skirting installer.
Skirting support is braced off the pier.

Unprotected electrical wire
Unsupported vinyl skirting.
Skirting braced off the pier.

Untreated skirting in contact with earth. Note the capillary action of water into the material.
Skirting vents covered or restricted by backfill.
Properly sealed masonry
STORAGE
Home in storage not monitored.
Mold from a home leaking while in storage.
Homes in storage. Not blocked and close-up material missing.
No blocking during storage.
Temporary blocking installed while being stored.
ACCESSORIES
Awning not built properly. Could not hold load.
Fire separation not present between structures on adjoining lots.
Handrails missing
Handrails missing, no support under temporary steps.
Properly installed and constructed temporary steps.
Compliant access