

Hi!

What follows this introduction is a publication that will open your eyes to what having a manufactured home, a mobile home, skirted with vinyl mobile home skirting should be like.

I owned and operated my company, Teleho Enterprises, until I was forced out of the vinyl mobile home skirting business in 1996 by unscrupulous competitors. I simply could not continue to compete with their cut-rate pricing.

Frankly, the quality of the work done in the vinyl mobile home skirting industry in the CSRA area is beyond substandard; as it has been since the advent of vinyl mobile home skirting products. As some of you have discovered, what looks good the day that it's installed may look completely different after six months to a year.

I originally wrote this publication in order to give folk the opportunity to get the most for their money, and to ensure that I was not the only one in the CSRA area doing the installations right!

In my personal opinion, the blame for the majority of the substandard vinyl mobile home skirting installations must fall on the heads of the manufactured housing (read "mobile home") dealerships. If they would hire vinyl mobile home skirting installers based on the quality of their work, rather than on how many jobs that they can get done for the least amount of money, mobile home owners would get the quality installations that they deserve.

A bill to a new mobile home owner for \$750.00 for a vinyl mobile home skirting installation on a newly purchased mobile home, may reflect only \$400.00 or less in materials and \$100.00 or less in labor cost. For \$750.00 you should get the best quality job and materials that that money can buy!

Yes, the ultimate responsibility falls on the installers themselves, but they would not stay in business long if they lost jobs because of their substandard work.

I would like to see the states of Georgia and South Carolina, as well as all of the counties in the CSRA, pass and enforce regulations that would ensure the proper installation of vinyl mobile home skirting. The current regulations do not seem to be strong enough or possibly enforced strongly enough to make a difference.

In any case, please use this publication as a learning tool and a guide to the installation of your home's vinyl mobile home skirting.

Sincerely yours,

Michael J. Jackson
June 01, 2000

Buyer's Guide to: Vinyl Mobile Home Skirting



What you need to know before having your mobile home skirted with solid vinyl skirting.

Published by Mike Jackson, Former proprietor of Teleho Enterprises, a CSRA-based company that professionally installed **Everlock Systems, Inc.'s**© solid vinyl mobile home skirting product.

Mr. Jackson was a licensed professional skirting installer for three years and had a close working relationship with, and the endorsement of, Everlock Systems Inc. Mike personally developed or adapted fifteen tools specifically for use in installing vinyl skirting, as well as developed unique methods of skirting around the hitch assembly and windproofing skirting panels on homes up to 72" (6' feet) above the ground.

This Buyer's Guide was created and published, because of Mike's concern that mobile home buyers and owners need honest advice from someone in the industry, to guide them through the purchasing and installation of their home's vinyl skirting.

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What Is Mobile Home Skirting?

"Mobile Home Skirting" refers to the materials used to create a curtain wall enclosure to conceal the exposed framework of a set up mobile home. Sometimes skirting is mistakenly referred to as underpinning ("underpinning": the supporting structure under a mobile home). There are many different materials that can be used to skirt a mobile home; wood, cinder block, brick, fiberglass, metal, plastic, & vinyl. This buyer's guide will deal specifically with solid vinyl mobile home skirting.

There are a number of reasons for skirting a mobile home. Skirting provides protection against pet and animal damage. It prevents individuals and pets, especially children, from going under your home. Skirting protects against the weather and wind blown debris, and creates an air barrier that helps to insulate the home. It also provides additional sound-proofing against outside noises.

Why should you have your home mobile home skirted? First, you might not have a choice in the matter, as many communities have or are enacting ordinances to require mobile home owners to have their homes skirted. Also, some mobile home insurance companies require that the home be skirted in order for the homeowner to obtain coverage.

Let's put the ordinances and insurance aside for a moment, however, and look at those reasons why you might want to have your mobile home skirted.

First, it transforms the appearance of your mobile home; adding beauty, giving your mobile home a "permanent" look. To quote my eight-year-old son, "It makes your mobile home look like a HOME!"

Second, skirting your mobile home protects it from damage. One of the most common sources of damage to your home's subfloor (soft underbelly of home) is small animals, especially cats, raccoons and squirrels.

Third, and most important to families with children and pets; skirting your mobile home will prevent your children, pets, and others from straying under or playing under your home and risking injury.

Fourth, skirting provides protection for your home's utility hookups; and not just from physical damage, but also from the weather and extremes in temperature. For example, while it's still important to properly insulate water lines, and take proper precautions in cold weather conditions, skirting your mobile home will offer you a better degree of protection against extremely low temperatures.

Fifth, the air barrier trapped beneath your home (but constantly refreshed by the skirting's ventilation system) will help to lower your heating and cooling costs.

Putting it all together, skirting your mobile home will offer you protection against potential problems and save you money in the long run. For the \$400 to \$1000 that you invest in skirting your home, you will get protection that can save you the cost of possible repairs to your home or utility hookups, you will avoid the possibility of minor or even serious injury to your loved ones, the air barrier trapped by the skirting provides insulation against heat and cold, and can save you some of the cost of cooling and heating your home, AND some mobile home insurance companies will provide a discount on your home owner's insurance if your mobile home has skirting installed!

What To Look For In A Quality Vinyl Installation.

This publication deals specifically with Solid Vinyl Mobile Home Skirting, and any references to "skirting" should be understood to refer only to solid vinyl skirting.

All of the materials should be new, and unused, and only a high quality vinyl skirting product should be used. Check with the supplier, the manufacturer, local installers and other mobile home owners about the quality of the skirting. Don't accept just one person's or one company's opinion, and be careful when you finally purchase your home's vinyl skirting! Panel lengths and widths, and rail lengths can vary greatly from one manufacturer to another. For example, uncut panels can vary as much as 3 1/2 feet in length and up to 8" in width! That can make a short and/or narrow panel more expensive per foot than a longer one, even if they are the same price. Some companies pack twelve (12) panels in a carton or box, but at least one company packs fourteen (14). Shop carefully. All of the accessories and other materials should also be of the highest quality. The dryer vent kit, for example, should include a louvered vent, and both kit duct and any extra duct should be flexible "soft" aluminum, not vinyl.

Basic vinyl skirting installation involves a rail system and panels that fit into the rails. Quality systems involve top back & top front rails that snap together, a bottom rail, and solid and vented panels that lock securely together. Lessor quality systems may have only one top rail, and solid and/or vent panels that do not lock securely together.

All quality skirting systems come with installation instructions! A proper installation can only be done by following the instructions. Most of these system's warranties ***insist*** that the skirting be installed according to the instructions, or the warranty may not be valid; and not following the instructions could result in an unsatisfactory appearance, and/or an installation prone to "blowout". "Blowout" is a term used to describe what happens when the wind gets the best of your home's skirting.

Installer's styles vary, but expertise and skill should not. The installer that you hire should appear competent, and familiar with the installation process, and the installer's installation method should not differ very much from the manufacturer's instructions.

Installation Time. The average man-hours for a typical 14' x 70' installation are six (6) to eight (8) hours.

- a. One man = 6 to 8 hours.
- b. Two men = 3 to 4 hours.
- c. Three men = 2 to 2.5 hours.
- d. Four men = 1.5 to 2 hours.

Larger homes, or more complicated installations, may require as many as fifteen (15) man-hours to complete.

- a. One man = 15 hours.
- b. Two men = 7.5 hours.
- c. Three men = 5 hours.
- d. Four men = 3.75 hours.

For the most part, if an installer does the job in much less time than these average figures, ***check out the installation!*** There are certain installation procedures that force an installer to take a certain amount of time to complete the installation. Too little time can mean an improperly installed system.

Each installation has unique features that can have an effect on the cost. The cost can vary quite a bit from installer to installer, too. The average cost of an installation for a 14' x 70' metal-sided home should run from around \$600 to around \$900.

How To Choose A Reliable Installer.

As you would with hiring any craftsman, take your time and really check the installer out. Does the installer present a good appearance? Is the sales pitch honestly presented and well-documented? There are a LOT of skirting jobs "out there", so there should be no need for a high pressure sales pitch from a legitimate installer.

Are there a number of good references available from previous customers? Does the installer have photos of previous jobs? Mobile home communities are a good place for references; if you live in or near one, check with your neighbors.

Base your judgment of a reference from an installer's commercial customer (usually a mobile home dealership or mobile home community) on the reputation of the commercial customer in the community. Some commercial customers may be more interested in low cost and quick installation, rather than a quality installation using quality materials installed by a competent installer.

References from commercial sources are better if you call several on your own and ask about the installer and his work. This goes for references from suppliers (usually mobile home parts and supply businesses), too.

A very good place to check on an installer's reputation is with the manufacturer(s) of the product(s) that the installer uses. Does the manufacturer know of the installer and his work? Ideally, an installer should have a good working relationship with the manufacturer. This indicates a real effort on the part of the installer to know his craft. Manufacturers will rarely endorse someone who improperly installs their product.

It's also a good idea to take the opportunity to watch the installer actually at work on an installation. This may tell you more about the installer's work than any reference could.

A business license is a must. This verifies that you are working with a legitimate business, and not with someone with whom you might run the risk of getting ripped off.

Liability insurance is also a must. Protect yourself and your property by insisting on an installer with a verifiable minimum of \$100,000.00 of liability insurance.

A professional installer will have a **Performance Bond**, which offers you, the purchaser, protection should the installer receive payment from you and not perform the installation according to the installation agreement. A performance bond gives you a legal opportunity to attempt to get your money back. The bond should be for at least \$1000, or for more than the cost of the installation.

Is it obvious that the installer has a deep knowledge and understanding of his craft? Can the installer clearly and simply explain about your home's installation? Can the installer answer all of your questions satisfactorily? These are all questions that you should have the answers to before you hire an installer.

There should always be a written estimate, good for at least 30 days, and a contract or invoice upon payment. These should provide a clear record of what you are paying for, and should expect to get. A simple receipt is not enough.

There are a number of possible ways an installer may ask you to pay for your installation:

1. A down payment, and regular payments on the balance.
2. No down payment, but regular payments on the entire balance.
3. Materials cost up front, and the balance upon completion of the installation.
4. Entire balance due after installation.
5. Materials cost up front, and the balance due before installation.
6. Entire balance up front before installation.

Do not use the last two methods, unless you are absolutely sure that you are working with a reputable installer; and as always, **NEVER** pay for anything up front in cash. Avoid cash when you do pay, use a check or money order. **NEVER** write out a check or money order to an individual. A legitimate business will have a commercial checking account. Write out the check or money order to the business, not to the installer.

Always check to see if the installer will offer you a **written** manufacturer's warranty on the materials, and the installer's own two (2) to five (5) year **written** warranty on the installation. Some manufacturers offer less than lifetime warranties, usually for 15 to 25 years. It makes a good deal of sense to consider purchasing skirting with a lifetime warranty, when there's not much difference in price with the skirting that comes with only a 15 or 25 year warranty. Make sure that you get a **written** warranty **from the installer** for the installation itself, *because no manufacturer's warranty will cover the installer's work!* If there are no written warranties, you may have no way to guaranty service should you ever need it.

All quality skirting manufacturers have written warranties for their products. Almost all manufacturer and installer warranties cover only defects in the materials, or defects in the installation. None will cover damage due to high winds, storms, flood, or other natural acts. Warranties may vary on other points, and your rights may differ from state to state.

When doing the estimate on your home, the installer should take at least the following minimum measurements:

1. The width and length of your home.
2. The height of your home at each corner, from the ground to the lower edge of your home's bottom trim or siding (not the corner trim).
3. The height of your home at the center of each long side, including the ends on double-wide, triple-wide and quad-wide homes.
4. The width and length of any extensions on your home; for example, an extension that slides out to enlarge the living room or a bedroom.
5. If you plan on having the skirting installed around a deck, the width and length of the deck.

What To Watch Out For During Installation.

All of the materials should be new and unused. All "bright and shiny". No bits and pieces from other installations (paid for by some other customer, and then paid for again by you!). In most cases, the materials should arrive in the original cartons or boxes.

Vinyl skirting can come in five or more colors depending on the manufacturer. Try to pick a color that will complement your home's colors. Most folks try to match the color of their home's trim or the secondary color of the siding. Others just match the primary siding color. Pick a color you will enjoy seeing every day. If you can't find a color to match your home's color scheme, try white or gray skirting. Then try using lawn accessories, fencing and driveway borders to match the color of the skirting. Try to avoid using very dark-colored skirting, **especially brown**. Dark colors have problems with heat, and we've got plenty of that here in the CSRA. Another reason to avoid brown skirting is the cost. Brown skirting can cost anywhere from 25% to 100% more than the other colors, and it does not wear as well as lighter-colored skirting.

Cut and uncut vinyl skirting can give you minor and possibly even major injuries if you're not careful when handling it. It can sometimes be especially sharp on cut edges and rail ends. Be careful!

There should be some skirting left over after the installation for future repairs. There should be at least one whole piece of each rail type (2 to 3 pieces), and at least one whole solid panel and one whole vent panel. Any cut pieces of rail, and any cut pieces of panel large enough to fit your home as a replacement panel, **are yours**; make sure that the installer leaves them behind.

Are the installer's tools in good repair and adequate for the installation? Will the installer need access to electricity, and do you have an outdoor receptacle for this? Does the installer keep the job site clean and organized and free from hazards?

The installer is probably going to request that you move objects and personal items away from the home to provide access for the installation. Make sure to cut the grass just before the installation, undercutting the home a few inches.

If you have a serious problem with fire ants near or under your home, you will need to treat your yard so that the installer can safely work around and under your home.

IMPORTANT NOTE: It is vitally important that you inform the installer if you have been using any type of insecticide or poison around or under your home! Especially if you have used them in the last 30 days. As the homeowner, you are responsible for the use of insecticides, poisons, and/or chemicals on your property; and any liability that may arise from their use.

Make sure that pets and livestock are **SECURELY** restrained, and that any droppings are cleared from around the home. (Trust me on this one, I've got this true story about a loose, ill-tempered bull ...)

Were you given a copy of, or free access to, the installation instructions? Is the installation being done to the manufacturer's specifications? Be very clear and definite to the installer about the installation being done properly.

Weather can play a crucial role in the installation. Most installers will not work in the rain or extremely cold conditions; water wrecks havoc with their powered and cordless tools, and with their other tools and equipment. When the temperature drops below 50° F, the vinyl can become very difficult to bend and form without splitting. It must be warmed indoors, or with a heating device in order to form corners, angles and locking tabs without damaging the panels or rails (On a 35° F day, I "folded" a partially-filled carton of top front rails; nice sound, and lots of pieces). Below 40° F, it's not a very good idea to work with the skirting outdoors, as even just trying to cut the panels may result in cracking and shattering. Trying to punch locking tabs at low temperatures is nearly impossible, too. The installation should be finished without them, and the tabs punched at a later date when the temperature is above 50° F. The installer should do this as soon as possible after the installation, without charging you for the service call. It would be possible to work with the skirting indoors, but it'll cause quite a mess, and most occupied homes would not have enough space indoors for this.

IMPORTANT NOTE: If your home is not level, or is going to be leveled by the dealer, it is better to wait until **after** you have had this corrected before having your skirting installed.

Plastic Vapor Barrier (PVB).

Some local ordinances require a plastic vapor barrier to be installed on the ground underneath the mobile home before skirting can be installed. It has been my experience that a PVB usually isn't necessary, if proper venting is used in the skirting installation; ***but you need to comply with your local ordinances if they do require a PVB to be installed underneath your home.***

The best time for having this done is just before the setup crew starts to block up your home. The installation of a PVB, after your home is setup, can add significantly to your home's skirting installation cost; as much as \$150 to \$450 (possibly even more for triple-wide and quad-wide homes). If you decide to not install a PVB when your local ordinances require that one be installed, the skirting installer should ask you to sign a form releasing the installer from all liability resulting from not installing the PVB.

Top Back Rail (TBR).

The TBR should be installed first. Screws or nails should be centered in every hole (expansion slot) in the rail, unless the instructions state otherwise. It is very important that the fasteners should be screwed or driven in until they just barely touch the TBR. They need to be loose to allow the rail to expand and contract. It's also better to use a fastener in every hole, no matter what the installation instructions suggest or require. 1/4" hex-head, washer base, zinc-coated 3/4" to 1 1/2" screws work best, and allow for easy removal in the event that you need to have the siding on your home repaired. The TBR's should be installed with a 1/2 inch gap between them and at the corners, to allow for expansion (1" gaps should be used at inside corners). The TBR's should never be folded to fit around corners; this prevents them from properly expanding and contracting when the temperature changes. They should be cut to fit within 1/2" of the corner of your home. The screws or nails used should be long enough to securely fasten into the substrate (the surface and/or frame-work that is just behind the siding or trim). Most TBR's have a small lip on the bottom edge that laps over the bottom edge of your home's siding for easy installation. Some homes have an unusually-shaped bottom trim that may require shifting all of the TBR's up or down a bit during installation in order to get a secure and good looking installation.

Wood, fiberboard, and vinyl-sided homes need special care at the corners. Some installers work around the corner molding on these types of homes. Other installers cut the corner molding away to allow for the installation of the TBR's. If the corner molding is cut away on a wood or fiberboard-sided home, **ALL** cut and exposed surfaces must be sealed with an exterior grade sealant; **especially** on fiberboard-sided homes, as any unsealed area on the home will act like a sponge, and you'll end up with major water damage. After sealing the cut and exposed surfaces at each corner, cut a four inch by six inch flat piece out of a solid skirting panel or TBR (cut off the edges) for each corner. Each piece should be long enough to fit against the cut edges of the corner molding and extend down past the edge of the siding; so make them longer than six inches if necessary.

For each corner, fold one piece in half lengthwise, place it on the corner (right side out!) against the cut edge of the corner molding, and use a fastener in each side to hold it in place. This makes for better protection for the corners, and vastly improves the way the corners will look when the installation's finished.

Vinyl-sided homes need a little different solution. The easiest way to protect a corner where the molding has been cut away, is to save the piece of cut off corner molding, cut off the "wings" where the siding fits into it, and slide it up behind the remaining "wing" pieces still attached to the corner. Stop sliding it up into place when the bottom edge of it is just a little bit below the bottom edge of the substrate behind the siding. Put a screw into each side of it, into the substrate, to hold it in place. It should now extend far enough up into the remaining corner molding to offer adequate protection against the weather.

Vinyl-sided homes also require additional special treatment. Fasteners should **NEVER** be driven through the vinyl siding and into the substrate. There are three industry-accepted methods for installing TBR's on a vinyl-sided home:

1. 2" x 2" treated furring strips can be nailed to the bottom of the floor joists, and the TBR's attached to these strips.
2. Expansion slots identical to those in the TBR's, or 1" holes, can be cut or drilled in the vinyl siding, and the fasteners centered in these.
3. The bottom ridge of the vinyl siding can be removed, and the TBR's installed to overlap the remaining edge on the siding.

Failure to use one of these industry-accepted methods of attaching the TBR's to your vinyl-sided mobile home, could result in your home's manufacturer voiding your home's warranty, or their refusal to repair damages resulting from an improper skirting installation.

Installations on wood or fiberboard-sided homes may require a thin bead of latex-based, 25 year caulking behind the TBR's, just above the fasteners, to prevent water damage where the fasteners go into the siding. Eventually, the TBR's will break loose from the caulking (as they are supposed to); but the caulking should still serve as a water-resistant seal to protect your home.

Bottom Rail (BR).

A plumb bob or level should be used to install the BR's at the corners of your home after the top back rails are installed. Care should be taken to cut the 90° angles needed to fold the BR's around each of the corners, unless the manufacturer provided BR's with pre-cut corners. The BR's should be installed with a 1/2 inch gap between them to allow for expansion.

A string should be run from the corner BR's, down the long sides of your home, to give the installer a straight reference for installing the remainder of the BR's. Failure to use a straight reference for installing the remainder of the BR's may result in the BR's following the naturally occurring curves of your home's siding, and a create a less than satisfactory appearance.

This is an important step in ensuring that your skirting is straight and level. I have a picture of one home that I did that had 13 corners at just one end! The multiple angles at the hitch end of the home required a lot of work, but the extra effort produced a very nice-looking result for the home owner.

The ground spikes (really big nails) used to anchor the BR's to the ground should be made of steel, not aluminum. Georgia and South Carolina clay (with or without rocks and gravel) can be very hard.

Know where your underground utility lines are **BEFORE** the installer starts driving ground spikes in!

Just before the BR's are installed you could have a 12" strip of asphalt-impregnated felt roof flashing laid down, centered on the line that the BR's will be installed to. This will help to retard the growth of grass and weeds around the bottom of your skirting. Personally, I prefer several other methods of accomplishing this and mention them further on in this publication under "Hazards".

The ground spikes should be placed in at least every other hole in the BR's, except when going around the hitch area, where using every hole provides greater support. BR's should be installed to follow the contours of your yard. If there's a dip or rise, the BR should be modified to fit it. BR's should cut straight across fresh utility ditches or dips that you plan to fill in. Fresh ditches have a tendency to settle.

For better security in dry sandy soil conditions (similar to beach sand at the seashore), 2" x 2" x 8" stakes and a fastener can be used in place of the ground spikes. The stakes must be cut from treated lumber. Each stake is placed under the hole in the BR where you would normally insert a ground spike. Then a 1 1/2" to 3" screw or fastener is used to secure the BR to the stake (the fastener's head must be larger than the holes in the BR). It is very important that the fasteners should be screwed or driven in until they just barely touch the BR. They need to be loose to allow the rail to expand and contract. Twenty four stakes can be obtained from one eight foot treated 2 x 4. Roughly one hundred and forty stakes are needed for a 16' x 80' home; six eight foot 2 x 4's, split in half, will provide one hundred and forty four stakes. If you cut these yourself, **BE CAREFUL!!!** Cutting 2 x 4's in this manner is dangerous work and should only be attempted by someone intimately familiar with the use of power or hand tools.

Large tree roots or other obstacles require a bit of ingenuity on the part of the installer, but the installation should still look good when they are crossed. Crossing the BR's over a cement patio is better accomplished by the use of pre-drilled holes and small "pin-grip" cement anchors.

Some installers use a caulking gun and liquid adhesive. This may only last for a year or two before the expanding and contracting of the BR, and normal wear and tear, breaks it free from the adhesive. The "pin-grip" cement anchor system is a better method. Screws or nails can be used to anchor the BR's when crossing over a ground-level wooden patio or deck that extends underneath the home. It is very important that the fasteners should be screwed or driven in until they just barely touch the BR. They need to be loose to allow the rail to expand and contract.

Panels.

Solid and vent (or perforated) panels should be accurately measured and cut to fit your installation.

The best method to assure accurate panel measurements, is to mark off the top back rails (on the portion of the rails that will be covered by the panels and the top front rails) in increments that match the width of your panels. Everlock's panels are 16" wide, as are most of the other manufacturer's panels. Some panels, however, are not 16" wide. Panel width can vary from 12" to 24".

The tops of all of the panels should be cut square and each panel should be level both vertically and front to back; the bottom edges of the panels trimmed to match the angle(s) of the bottom rails. It is especially important for the first panel installed to be properly leveled; if the first panel is off even a little bit, **ALL** of the other panels will be off, too. Also, if the panels are not leveled properly, you will end up with crooked corner panels and panels that are tilted instead of straight.

IMPORTANT NOTE: Not all panels come from the manufacturer with square-cut ends. The panels should be checked before they are measured and cut, to avoid cutting inaccurate panels.

Each panel should have locking tabs punched along the bottom edge of the panel with a Vinyl Skirting Tab Punching Tool, at the points where the bottom edge of the panel touches the front lip of the BR. Due to it's design, some skirting will only allow for one or two locking tabs. In my opinion, this is not enough. Choose skirting that allows for at least three to four evenly-spaced locking tabs per panel.

Do not allow an installer to talk you out of this feature, locking tabs prevent the wind from lifting the panels out of the bottom rails. An average 16' x 80' mobile home's skirting will have around 552 locking tabs. That's a lot of effort for an installer, and some installers will not punch the locking tabs, thinking to save themselves time and labor (for example, here at Teleho Enterprises, we punched over 100,000 locking tabs in three years!).

Depending on the temperature and season, the panels should overlap the TBR's by one to two inches. 1" in the summer when it's hot. 2" in the winter when it's cold. Here in the CSRA, 2" is all right year round, as it provides better wind protection, and we do not have as serious a problem with ground heave as areas further to the north do.

Ground heave, is a condition produced when the ground freezes hard, and rises from expansion. Your home doesn't move, but the skirting will, and it needs clearance to allow for this. This is a rare ground condition for the CSRA, so the 2" should be satisfactory. Should there be a hard freeze for several weeks, the panels may bow out a bit, but will straighten out when the ground thaws.

Panels should never be installed with more than a two inch overlap, or normal expansion of the skirting, and the settling of your home will deform the panels. Two inches also gives the installer a bit of a "buffer" that will allow a little extra panel for trimming when fitting the panel into place.

NOTE: Quick way to check if the installer is doing the installation properly. All of the panel tops should be straight across, and all should be level. There should be no more than a ½ " difference in panel height.

Panels should NEVER be fastened to the home or to the bottom rail with a screw or nail! Running a fastener through a panel and into the home locks both the panel and the top back rail in place, and prevents both from expanding and contracting with temperature change like they were designed to do. This will also cause the panels to deform if your home settles.

Installing skirting in this manner is a positive indication that your installer is not doing the job properly. Homes skirted in this manner end up with installations that look terrible in just a year or two.

The only exception to this rule, that I personally allowed, was when installing a wind-protecting feature on panels over three (3) feet in height. Any time a wind-protecting feature fastener is used to secure a panel to the home, an vertical expansion slot (just like the expansion slots in the top back rails, only up and down, not horizontal) should be cut in the panel, and a matching horizontal expansion slot cut in the top back rail. A matching horizontal expansion slot must also be cut in the siding on vinyl-sided homes.

Fastening a panel to the top back, top front or bottom rail with a fastener, *without making expansion slots*, means that something about the installation is wrong.

The only time a panel should be directly fastened to the rail system, **BUT NOT TO THE HOME**, is when the skirting has been installed around the hitch. Two to four screws are needed to secure the "point" panel to the top back rail (TBR) and bottom rail (BR) to lock the panel, TBR and BR in place. One fastener should also be used at the two points where the TBR folds to go around the hitch area. These two fasteners should **NOT** be placed in an expansion slot in the TBR, as their purpose is to secure the hitch area rail system in place (vinyl-sided homes will still need an expansion slot cut in the siding for these fasteners). If the remaining fasteners in the hitch area TBR are properly installed, the rail will still be able to expand with temperature changes. All of these fasteners should be concealed by the top front rail and the face of the bottom rail. None of the fasteners should be exposed to view.

I used a light framework of PVC pipe to reinforce the TBR. Two pieces of 1/2" PVC pipe, cut to fit the length of the TBR's around the hitch, were used as anchors for the TBR screws. The pipes were not attached to anything else other than the TBR's.

When the panel height is greater than three (3) feet, some type of system must be used to secure the panels against "blowout". The highest quality vinyl skirting products will already have a system designed to take care of this problem. For example, at the time that I installed skirting, Everlock Systems Deluxe Vinyl Skirting could be ordered with their optional **Windguard System®** of steel inserts. They are inserted into the panel joints, and locked into the top back rail.

When the panel height exceeds four (4) feet and is less than six (6) feet, it takes a bit more to protect against "blowout". Most skirting manufacturers will recommend building a 2' x 4' treated lumber framework behind installations at this height. Teleho Enterprises had it's own **Windrod System** that used a combination of full length steel rods inserted into each panel joint, and anchor screw assemblies inserted in every third panel at the top and next to the joint edge (and, yes, we did cut those vertical and horizontal expansion slots mentioned earlier in this section for each Windrod anchor assembly).

Installation of vinyl skirting is not recommended at panel heights greater than six (6) feet. **The home owner should expect to assume all responsibility for this type of installation, and anything that may occur because of the extreme height of the panels.** If your home is set higher than six (6) feet at any one point, do not be surprised if the installer asks you to sign a release or offers a shorter warranty length before the installer will take or start the installation.

When the last panel in the installation overlaps the first, instead of meeting it evenly (so that they just slide together); pop rivets, or screws should be used to secure the two panels together. The last panel may need to be trimmed to fit behind or in front of the first panel. Painting, or covering the exposed fasteners with a color-coordinated plastic screw cover, will make for a better looking installation.

Due to it's design, almost all solid vinyl skirting eliminates the need to install an access opening. Any of the panels in a proper installation can be easily removed without the use of a tool, as required in some local ordinances.

Vents.

Vent panels (or perforated panels) are for venting moisture and gases from beneath your home. Moisture buildup can destroy your home from the bottom up, and create moisture problems inside your home, too. Gases like radon, gases venting from your sewer hookup, or even fumes from a natural or LP gas leak need to be vented out from under your home. You will need to check on your community's regulations for venting mobile home skirting.

In general, there should be a minimum of four (4) vent panels, one at each corner of your home, on the front and back sides. Each vent panel should provide a minimum of 30 square inches of ventilation. Several vent panels should be used together at low corners when one vent panel would provide less than 30 square inches of ventilation.

Vent panels can vary in ventilation capacity from manufacturer to manufacturer, and even due to style or color. You'll need to check the manufacturer's specifications for your brand, style and color of skirting to make sure that you will be in compliance with your local ordinances. For example, one 24" Everlock Systems Deluxe Skirting vent panel provides 32.5 square inches of ventilation capacity, so six 24" vent panels, one at each corner and one in the middle of each side, will provide 195 square inches of ventilation. Each Everlock Systems Deluxe solid panel also has 2.5 square inches of self-ventilation due to Everlock's unique design. On a 16' x 80' home, this would provide an additional 330 square inches of ventilation. That would give your home a total of 525 square inches of ventilation capacity, the equivalent of 42 dryer vent-sized (4") holes spaced equally around your home every 4 1/2 feet!

Homes greater than 60' in length should have an additional vent panel centered in each long side (A minimum of 6, 30 square inch vent panels for the whole home).

Double-wide, triple-wide and quad-wide homes should have an additional vent panel centered on each end of the home (A minimum of 6 to 8, 30 square inch vent panels for the whole home, depending on the length of the home).

IMPORTANT NOTE: Too many vent panels will lower the insulating value of the skirting installation. Using all 24" vent panels (Everlock Systems Deluxe Skirting) on a 16' x 80' mobile home would give you nearly 4500 square inches of ventilation capacity; that's over 31 square feet! That's the equivalent of two mobile home-sized front doors, or four average-sized mobile home windows, or 358 dryer vent-sized (4") holes, or a hole, just over 6" in diameter, in every panel!

A note about dryer vents: They should *never* be vented directly under the home. The installer should provide a dryer vent kit and duct to run the dryer vent to the outside of the skirting. There should be enough dryer duct to easily reach from your dryer to the skirting. The duct should be flexible "soft" aluminum (NOT vinyl), and should not be stretched tight, as this can cause the duct to come apart, pull loose from your dryer, and/or deform your skirting.

Utility Cutouts.

Cutouts for utility hookups should be neat and well placed. All cutouts should be a uniform shape, usually a circle or oval, be sized to fit around the utility fixture or line with at least 1/2" minimum clearance around fixtures (1/8" minimum clearance around movable objects like an air conditioner drain line), and have smooth edges.

If a cutout requires an access cut from the edge of a panel to the cutout to allow installation around a utility fixture or line, the corners of the cut should be rounded off and, if the cut is longer than 6", it should be held closed after installation by a piece of contractor-grade duct tape placed on the back of the panel. Waterlines should have cutouts large enough to accommodate insulation. Special care should be taken to allow proper clearance around electrical lines, air conditioning lines and duct work.

If the hitch area is not to be skirted, the cutouts around the hitch should be neat and conform to the shape of the hitch frame-work. An often overlooked cutout is the one for the air conditioner (AC) drain line.

Top Front Rail (TFR).

The TFR's should overlap, but not be pushed tightly together (at least ½" clearance), to allow room for expansion and contraction due to temperature changes. Care should be taken to ensure that the corner TFR's are properly installed so that they are not warped or improperly folded where they go around the corners. As with the bottom rails, care should be taken when cutting the corner TFR's. Follow the pattern exactly as shown in the installation instructions, unless the manufacturer has already provided TFR's with pre-cut corners.

Custom Touches.

All custom work should be properly planned, and done carefully and look professional. This is especially important when the skirting is run around the hitch or a deck. Very few installers have perfected this practice. It takes planning and skill to make the hitch area or a deck look sharp and blend into the rest of the installation. The skirting should be run around the hitch or deck as a continuation of the rest of the skirting installation, ***NOT*** as an "add-on" after the rest of the installation is finished. An improperly covered hitch or deck area can ruin the look of an otherwise professional installation.

Installing the skirting behind, rather than around, a permanent deck may require going under the deck or home in order to install the rails and panels. This is especially true when there is zero clearance between the deck and the home. In some cases, it may not be possible to install the top rails at all. In these cases, it's up to the installer's ingenuity to find a way to secure the top of the panels behind the deck, without putting fasteners through the panels.

All exposed fasteners, with the possible exception of the screws holding the dryer vent in place, should be painted, or covered with a color-coordinated plastic screw cover. **All fasteners exposed on the back side of the skirting should be covered with a safety cap in order to protect you and your family from harm should you access the space beneath your home.**

Cleanup.

There should be skirting materials left over after the installation for future repairs. There should be at least one whole piece of each rail type (2 to 3 pieces), and at least one whole solid panel and one whole vent panel. Any cut pieces of rail, and any cut pieces of panel large enough to fit your home as a replacement panel, are **your's**; make sure that the installer leaves them behind. The estimate cost is based on the number of whole pieces of rail and panel that it should take to complete your home's installation, so there should be no argument over the installer leaving the cut pieces behind.

The installer should leave your home and property in the same condition as when he arrived. Most sanitation collectors will pick up the boxes and left over scraps of skirting with your regular trash pickup, if the boxes are reduced by folding or cutting them up. The installer should fold or cut up the boxes and neatly stack all of the scraps where your trash is usually picked up. If necessary, the installer should take the boxes and unusable scraps with him when he leaves.

Taking Care of Your Home's Skirting.

Once properly installed, there's not much to do for your home's vinyl skirting except to keep it clean. There should be instructions for the care of your home's skirting in either the installation instructions, or with the warranty. Usually, whatever you can safely use to clean your home's siding will work on your home's skirting.

Hazards.

Any fasteners that are exposed on the inside of the skirting where you may come in contact with them, should be covered with soft "rubber" screw protectors for your protection.

The #1 hazard to vinyl skirting is the "weed eater", the string grass trimmer! Especially the gas-powered ones. Plant the first 6" around the home with some sort of decorative plant, or use a grass killer (chemical, not fire!) and/or bedding to set up a 6" barrier around your home.

Another hazard, and a much more dangerous one, is the gas or charcoal grill. **ALWAYS** keep your gas or charcoal grill at least four to six feet from the side of your home.

DO NOT store flammable liquids under your home!

Rocks or debris thrown out by a lawn mower can also damage your home's skirting.

Do not throw hot cooking grease or oil onto the ground next to your home's skirting. The splashing grease or oil can create permanent melt spots on your home's skirting.

NEVER remove a panel and fail to put it back when you are finished with it! The wind can act just like a child blowing up a balloon, and even a properly installed system could suffer "blowout".

Moving Your Mobile Home.

If you should relocate your home, you can take your skirting with you! Just start at one corner by removing the top front rail, marking the start spot on the top front and top back rails with a permanent marker where it will not show. Then carefully remove the rest of the top front rails as you go around your home, numbering the pieces in the order that you remove them. The next step is to remove the panels, discarding the corner panels, any panels with cutouts, or any damaged panels. Stack all of the good panels with the largest ones on the bottom, and bundle them together (use several bundles, too many panels in a bundle will make the bundle hard to handle).

Then, starting at the same spot where you began to remove the top front rails, carefully pull up the bottom rails. Depending on your soil conditions and how long the ground spikes were in the ground, you may need to get new ones for your re-installation (you can figure 6 to 7 spikes per bottom rail). At your new site, the bottom rails are re-installed in the proper order, the old panels cut to match the new installation (a few new whole panels will probably be needed to finish out the re-installation), and the top back rails re-installed in the order that they were removed.

Important Note To Consumers With Wood or Fiberboard-sided Homes:

It is very important to consider having your home painted every two to three years, if it is sided with wood or fiberboard siding. While the wood siding weathers better than the fiberboard, both should be regularly inspected for damage and wear.

Fiberboard siding is especially prone to water damage if the surface of it is damaged in any way. Damage should be sealed with paint or a clear all-weather sealant. All work done by Teleho Enterprises on a wood or fiberboard-sided home, where the work involves cutting or trimming the siding or molding, was sealed with an all-weather exterior grade lacquer. We also sealed any extra screw holes we may have made during the installation process. A latex-based 25 year caulking was also used to provide a water-resistant barrier behind the top back rail system.

I have seen first hand what a little water can do to a beautiful home in just a few short years. Please consider this advice, and plan on painting your wood or fiberboard-sided home every two to three years.

Teleho Enterprises' Estimate, and 5 Year Installation Warranty.

[SAMPLE ESTIMATE COVER SHEET]

Teleho Enterprises is the CSRA's only company that *professionally* installs solid vinyl mobile home skirting. While we do have competitors, none of them install your home's skirting like we do!

Teleho Enterprises will install **Everlock Systems, Inc. Deluxe Solid Vinyl Mobile Home Skirting** on your home *to the manufacturer's specifications*. We will use only the best in materials and accessories to skirt your home. Everlock's **Triple-Lock Design** provides added security in severe weather conditions. For additional security, we use Everlock's **Windguard Steel Rod Inserts** on panels from 36" to 48" in height, and on panels from 48" to 72" in height we use Teleho Enterprises' own **Windrod System** of full length steel rods and anchor screws. Everlock Systems, Inc. provides a written **LIFETIME Warranty** on their skirting and accessories, and Teleho Enterprises provides up to a five year written warranty on the installation (installation warranty length dependent on home style and exterior sheathing).

Here's some really great news: Teleho Enterprises provides the **materials at wholesale cost!** No kidding! Whatever we pay Everlock or our other suppliers for the materials, is what you pay. There is absolutely NO markup on the material's cost to you. To our knowledge, we are the only skirting company in the CSRA that does this for our customers.

Teleho Enterprises provides all the materials and labor, and you don't even need to be home when we do your installation. We take our time with each customer's home, providing the highest quality installation possible. Everything about our installations is professional, from the proper cutting and placement of each panel, to the neat uniformly shaped cutouts for your home's air conditioning and utility hookups, to the smoothing of each corner to prevent injury to you, your loved ones and guests.

Teleho Enterprises has the endorsement of Everlock Systems, Inc. You are welcome to call them at 1-800-843-3336 and ask them about us. We can also provide other references at your request, even photographs of some of our work!

We have two residential payment plans, and three commercial plans. Commercial customers and senior citizens also receive a 15% discount on the labor costs. Residential installations may be (1) prepaid, or (2) the materials prepaid and the balance paid prior to the installation. Commercial installations also have a third option, (3) the materials prepaid and the balance paid no later than ten business days after completion (this option available only to commercial customers with accounts in good standing). There is a \$25.00 fee for returned checks, a 20% cancellation charge on installations canceled before the start of the installation, no refunds on materials and a \$20.00 per hour charge for installations canceled after the start of the installation, and no refunds on completed installations (except where provided for in the Teleho Enterprises Installation Warranty).

[TELEHO ENTERPRISES' SAMPLE ESTIMATE]

ESTIMATE FOR MOBILE HOME SKIRTING AND INSTALLATION

DATE: 10-10-00

INV#:10000

PURCHASER:

John & Mary Doe
1234 Anyplace Court
Anytown, GA 12345
PH#: 555-1234//

SITE:

John & Mary Doe
(SAME)

PH#: //

First and Second Color Choices: White and Gray

(All installations include Dryer Vent kits, and Windguard/Windrod technology when required.)

Table with 4 columns: Item, Price, Payment Status, Total Price. Rows include MATERIALS, SHIPPING, SALES TAX, SUBTOTAL, LABOR, DISCOUNT, and TOTAL DUE.

ESTIMATE GOOD FOR 30 DAYS

Estimate void if current state of the home, as of the date printed above, is modified or changed in any way.

All materials and labor provided by Teleho Enterprises. Skirting will be Everlock Systems Deluxe Vinyl Skirting with a Lifetime Warranty, unless otherwise noted. Maximum installation warranty is 5 years.

CUSTOMER WILL NEED TO TAKE CARE OF THE FOLLOWING:

- 1> Move objects and personal property six (6) feet away from home.
2> Cut grass before installation, under-cutting home a few inches.
3> Dogs and livestock MUST be restrained, & all droppings removed.
4>
5>
6>

[SAMPLE FIVE YEAR INSTALLATION WARRANTY]

Five-Year Warranty

Limited Non-Prorated & Transferable

Teleho Enterprises, subject to the conditions and limitations listed herein, warrants its installation of your vinyl skirting and accessories to be free from installation defects, and that the vinyl skirting and accessories have been installed to the manufacturer's specifications. Should any installation defects occur during the five year period following the initial installation, when the vinyl skirting and accessories have been subjected to normal and proper use, Teleho Enterprises will, at its option, either repair or replace the portion of the installation determined to be defective, at no cost to the owner, provided, however, in lieu of repair or replacement, Teleho Enterprises reserves the right to refund that amount paid by the original owner for the vinyl skirting and accessories plus the cost to the original owner of its initial installation.

Limitations

Teleho Enterprises shall not be liable for, and this warranty does not apply to, any failure, defects or damage resulting from or connected with: Misuse, neglect or improper storage, modifications to the initial installation by unauthorized personnel, use of accessories which do not properly receive and/or secure the vinyl skirting or installed accessories; impact of foreign objects (including, but not limited to, impact of string type grass trimmer, power mower), fire, hurricane, tornado, flood, lightning, windstorm, earthquake or other violent storm or casualty, or Acts of God; defects failure of or damage of the substrata wall on which the skirting is attached caused by movement, distortion, cracking or settling of such wall or the foundation of the building; any other cause not involving inherent defects in the initial installation of the vinyl skirting and accessories by Teleho Enterprises.

This warranty covers the initial installation only. Teleho Enterprises reserves the right to discontinue or modify any of its products or installation procedures, including the color or type of vinyl skirting and/or accessories, without notice to the homeowner/consumer and shall not be liable to the homeowner/consumer as a result of such discontinuance or modification.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, LIABILITIES OR OBLIGATIONS OF TELEHO ENTERPRISES, ORAL OR WRITTEN, EXPRESSED OR IMPLIED, EXCEPT THAT THE DURATION OF ANY IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE THAT THE HOMEOWNER/CONSUMER MAY HAVE ARE LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY. IN NO EVENT SHALL TELEHO ENTERPRISES BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES OF ANY KIND, INCLUDING ANY DAMAGE TO THE BUILDING, ITS CONTENTS OR ANY PERSONS THEREIN. NO REPRESENTATIVE OF TELEHO ENTERPRISES OR ITS INSTALLERS IS AUTHORIZED TO MAKE ANY CHANGE IN OR MODIFICATIONS TO THIS WARRANTY. SOME STATES DO NOT ALLOW LIMITATIONS ON INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE MAY NOT APPLY TO YOU.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

This warranty is transferable to a new owner provided Teleho Enterprises is notified in writing by the new owner within 45 days of the real estate transfer.

To obtain performance under this warranty, the homeowner/consumer shall notify Teleho Enterprises of such defect promptly following its discovery, and shall submit with such notification, in order to provide Teleho Enterprises an opportunity to investigate the claim and examine the installation claimed to be defective. Notification shall be provided to Teleho Enterprises; [contact info no longer applicable]. Teleho Enterprises shall then promptly inspect the claimed defects before any replacement or repair is begun, and Teleho Enterprises shall, within a reasonable time after inspection, make the necessary repairs or replace the vinyl skirting or and/or accessories, or, in lieu of repair or replacement, refund that amount paid by the original owner for the vinyl skirting and accessories plus the cost to the original owner of its initial installation.

PLACE YOUR INSTALLATION INSTRUCTIONS, AND YOUR WARRANTIES IN
THE BACK OF THIS BUYER'S GUIDE.

USE THE BLANK PAGES FOR YOUR OWN ESTIMATE FIGURES OR ANY
NOTES THAT YOU MIGHT WANT TO MAKE ABOUT YOUR INSTALLATION.
