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Facsimile: (703) 522-5503

September 26, 2001

Gregory H. Griffis
Chair, Board of Zoning Adjustment
Room 210
441 4th Street, N.W.
Washington, DC 20001

Re: 5516-26 Hunt Place, N.E. BZA Case No. 16682
Supplementary materials relevant to Motion for Reconsideration and Rehearing

Dear Mr. Griffis:

Enclosed for your information are supplementary exhibits relevant to our Motion for Reconsideration and Rehearing in the subject case:

1. Revised plans for the construction of 6 townhouses at 5516-26 Hunt Place.
2. Selection of articles on modular housing.
3. Information on third party inspection.
4. Letter from a marketing specialist stating that the houses proposed are the minimum size that would sell in the Hunt Place neighborhood.

In addition, if we are granted a new hearing, we would like to show that the requested exceptions from zoning requirements may be handled under the special exception authority granted the Board under Section 353.1 of the DC Zoning Regulations (11 DCMR §353.1), thus obviating the need for variances.

Yours very truly,

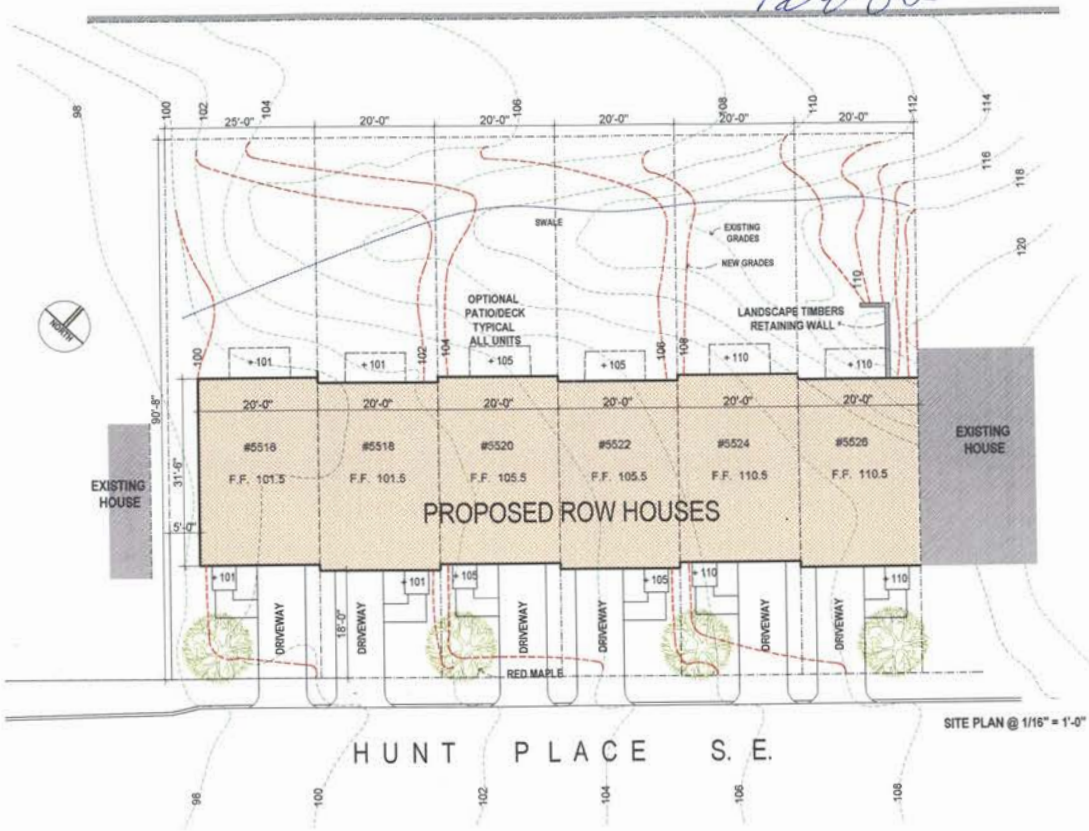
Stephen N. Gell

BZA
Case No. 16682
Exhibit No. 47

Board of Zoning Adjustment
District of Columbia
CASE NO.16682
EXHIBIT NO.47

Exhibit 1

16682



SITE PLAN @ 1/16" = 1'-0"

BZA
Case No. _____
Exhibit No. _____



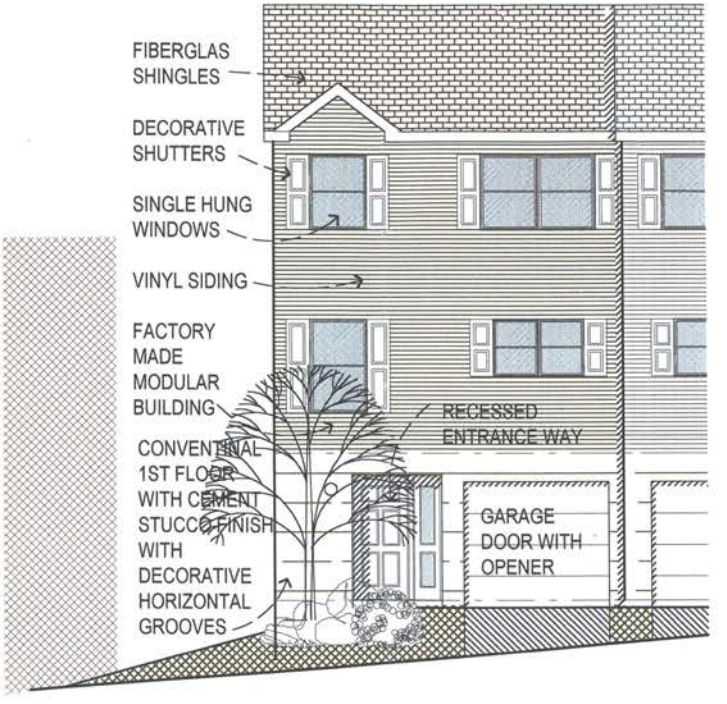
REAR YARD ELEVATION

1" = 10'-0"



HUNT PLACE ELEVATION

1" = 10'-0"



HUNT PLACE
ELEVATION DETAIL

3/16" = 1'-0"

Exhibit 2

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Professional Builder (1993)
Jan, 2000

Affordable Solutions To Inner-City Housing Woes.(Brief Article)

Author/s: Ann Matesi

Advancements in Affordable Housing: Manufacturing Housing Institute

Engaging examples of manufactured homes have "popped up" on previously abandoned sites in five urban communities thanks to a forward-thinking program called The Urban Design Demonstration Project, sponsored by the Manufactured Housing Institute (MHI), the industry's Arlington, Va.-based trade association. The overwhelming acceptance of these homes by the community at large has led to spin-off projects in other U.S. cities.

These new kids on the block are prompting city officials, community groups and developers alike, to take a closer look at this type of housing as a practical means of providing desirable much needed, single-family housing for inner city residents--at a reasonable price.

Professional Builder magazine awards the Manufactured Housing Institute its Professional Achievement Award for leadership in demonstrating that manufactured housing is a practical source of affordable housing for today's inner city residents-giving home ownership a boost where it's needed most.

Launched in 1998, MHI's Urban Design Demonstration Project selected five U.S. cities to feature manufactured homes designed and built with the purpose of introducing the concept to local residents, as well as developers, lenders, regulators and funding agencies who typically build and finance city housing. They were Wilkinsburg, Pa.; Washington, D.C.; Louisville, Ky.; Birmingham, Ala.; and Milwaukee. In each case, little or no government subsidy was used to demonstrate the affordability of this type of housing.

Today's manufactured home is a high-quality, strictly regulated product that must adhere to a HUD-administered federal building code that sets standards for design and construction, strength and durability, transportability, fire resistance, energy efficiency, quality and performance.

MHI contracted with Susan Maxman Architects, Philadelphia to develop a portfolio of home designs to be used in the demonstration cities. A wish list of desirable features, obtained from focus groups held in each target community provided the

designers with a clear idea of what each community wanted in style and amenities.

The one- and two-story homes spotlighted by Urban Design Demonstration Project feature large front porches, dramatic roof pitches, volume ceilings and in one case, a full basement. A variety of exterior finish materials allow each home to blend in well with its existing neighborhood.

"There are thousands upon thousands of vacant lots in urban areas today," says MHI President Chris Stinebert. "Historically, it has been difficult to get site-builders interested in them. Our goal with the Urban Design Demonstration Project was to show that this type of housing offers a viable option for inner city residential development."

Built entirely in a factory under controlled conditions, manufactured homes arrive on site in nearly move-in condition with doors and windows in place. They can be locked almost immediately, thereby eliminating theft of materials.

The key objective for the Urban Design Project, according to Stinebert, was to present the public with examples of manufactured homes that were not only architecturally compatible with their surroundings, but were also priced at or below prevailing market prices for their neighborhood.

The Urban Design Demonstration Project also addressed the necessity of reevaluating outdated, discriminatory zoning policies that restrict the use of manufactured housing in urban areas. And, most important, according to Stinebert, are the lessons to be learned from the Urban Design Demonstration Project MHI has joined together with HUD to develop a set of informational guidelines to assist future developers.

"We hope to offer a road map that others can benefit from," says Stinebert.

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UNDERSTANDING

HOME
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FACTORY-BUILT HOUSING

Many types of structures are built in the factory and designed for long-term residential use. In the case of manufactured and modular homes, units are built in a factory, transported to the site and installed. In panelized and pre-cut homes, essentially flat subassemblies (factory-built panels or factory-cut building materials) are transported to the site and assembled. The different types of factory-built housing can be summarized as follows:

Manufactured Homes: These are homes built entirely in the factory under a federal building code administered by the U.S. Department of Housing and Urban Development (HUD). The Federal Manufactured Home Construction and Safety Standards (commonly known as the HUD Code) went into effect June 15, 1976. Manufactured homes may be single- or multi-section and are transported to the site and installed. The federal standards regulate manufactured housing design and construction, strength and durability, transportability, fire resistance, energy efficiency and quality. The HUD Code also sets performance standards for the heating, plumbing, air conditioning, thermal and electrical systems. It is the only federally-regulated national building code. On-site additions, such as garages, decks and porches, often add to the attractiveness of manufactured homes and must be built to local, state or regional building codes.

Modular Homes: These factory-built homes are built to the state, local or regional code where the home will be located. Modules are transported to the site and installed.

Panelized Homes: These are factory-built homes in which panels - a whole wall with windows, doors, wiring and outside siding - are transported to the site and assembled. The homes must meet state or local building codes where they are sited.

Pre-Cut Homes: This is the name for factory-built housing in which building materials are factory-cut to design specifications, transported to the site and assembled. Pre-cut homes include kit, log and dome homes. These homes must meet local, state or regional building codes.

Mobile Homes: This is the term used for factory-built homes produced prior to June 15, 1976, when the HUD Code went into effect. By 1970, these homes were built to voluntary industry standards that were eventually enforced by 45 of the 48 contiguous states.

UNDERSTANDING

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THE HUD CODE

Just as site built homes are constructed according to a specific building code to ensure proper design and safety, today's manufactured homes are constructed in accordance with the HUD Code. The United States Congress laid the foundation for the HUD Code in the *National Manufactured Housing Construction and Safety* Standards Act of 1974, which was enacted because of three inter-related reasons:

1. **The interstate shipment of homes from the plant to the retailer to the home site meant that the manufacturer - prior to the advent of the HUD Code - ordinarily did not know in advance which code would apply;**
2. **States were not able to effectively and uniformly regulate manufactured home construction and safety issues; and**
3. **Congress wished to preserve access to affordable housing for middle and lower income families.**

In its legislation, Congress directed the Secretary of the U.S. Department of Housing and Urban Development (HUD) to establish appropriate manufactured home construction and safety standards that "...meet the highest standards of protection, taking into account existing state and local laws relating to manufactured home safety and construction."

Every HUD Code manufactured home is built in a factory, under controlled conditions, and has a special label affixed on the exterior of the home indicating that the home has been designed, constructed, tested and inspected to comply with the stringent federal standards set forth in the code. No manufactured home may be shipped from the factory unless it complies with the HUD Code and is released for shipment by an independent third party inspector certified by HUD.

The HUD Code is unique since it is specifically designed for compatibility with the factory production process. Performance standards for heating, plumbing, air conditioning, thermal and electrical systems are set in the code. In addition, performance requirements are established for structural design, construction, fire safety, energy efficiency, and transportation from the factory to the customer's home site. Manufactured homes are constructed with virtually the same materials used in site-built homes. However, in contrast to traditional site-building techniques, manufactured homes have the advantage of using engineered design applications and the most cost-efficient assembly-line techniques to produce a quality home at a much lower cost per square foot. To ensure quality, the design and construction of the home is monitored by both HUD and its monitoring contractor. The familiar red seal (the certification label) attached to the exterior of a manufactured home indicates that it has undergone and passed perhaps the most thorough inspection process in the home building industry.

Is the HUD Code less stringent than state or local building codes?

Although the HUD Code is more performance-based while model codes, such as the CABO One-and-Two Family Dwelling Code, used by many state and local jurisdictions to regulate site-built housing tend to be more prescriptive, independent analyses and comparisons of the HUD and CABO Codes generally come to the conclusion that they are comparable in nature. A 1997 comparison study of the HUD and CABO Codes by the University of Illinois Architecture-Building Research Council stated:

> *There are many similarities in these codes, along with minor differences of slight consequence and some differences of notable consequence. On balance, the codes are comparable.* 1

While some areas of the CABO code are deemed "more restrictive" than the HUD Code in the University of Illinois study, there are also areas where the HUD Code is deemed more restrictive than the CABO Code, such as in ventilation, flame spread, structural loads, window construction, vapor retarders and service wiring.

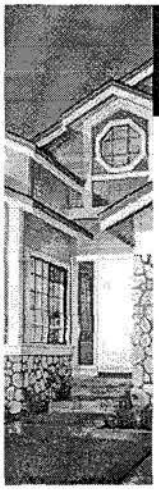
While some believe the HUD Code is solely responsible for the affordable nature of manufactured housing, the National Association of Home Builders Research Center, in a report prepared for HUD, concluded that:

> *...the net cumulative effect of the differences between the two codes is more likely on the order of hundreds of dollars, rather than thousands of dollars per unit.* 2

---

1 *Jeffrey Gordon and William B. Rose, Code Comparison Summary, University of Illinois at Urbana‹Champaign School of Architecture, published by the Manufactured Housing Institute, December 1997*

2 *NAHB Research Center, Factory and Site-Built Housing: A Comparative Analysis, U.S. Department of Housing & Urban Development, Office of Policy Development and Research, October 1998*



The affordability of manufactured housing is mainly attributable to the efficiencies of the factory process.

HOME
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THE "AFFORDABILITY" FACTOR

The affordability of manufactured housing is mainly attributable to the efficiencies of the factory process. The controlled environment and assembly-line techniques remove many of the problems of the site-built sector, such as poor weather, theft, vandalism and damage to building products and materials stored on site. Also, factory employees are trained, scheduled and managed by one employer, as opposed to the system of contracted labor in the site-built sector.

Manufactured home producers also benefit from the economies of scale which result from being able to purchase large quantities of building materials and products. As a result they are able to negotiate the lowest possible price for items that are invariably more expensive in a site-built house.

The factory process builds the home from the "inside out," which results in ease of installation for interior walls and plumbing and electrical systems. The house and materials on an assembly line travel to the workers, with scaffolds, tools and materials within easy reach. Computer-assisted design (CAD) programs also offer speed and flexibility for manufacturers.

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FAQs About Modular Homes

What is a modular home?
Modular homes are built in sections indoors, where they are never subjected to adverse weather conditions. The sections move through the factory, with quality control checking them after every step. Finished modules are covered, and transported to your home site. They are placed on a pre-made foundation, joined, and completed by your local builder.

Related Resources
• How Mobiles & Modulars Differ
• Modular Homes Links
• Manufactured Housing Links

Elsewhere on the Web
• Modular Home Building Process
• The HUD Code

Advertising



How long does it take to build a modular home?
That depends on your design, but some homes can be built in the factory in as little as 1-2 weeks. And there's never a weather delay, since homes are built indoors. It usually takes another 2-4 weeks for your local builder to connect the utilities and finish-up.

They sound like mobile homes.
Mobile homes, now called manufactured homes, are built to conform to the same federal code, no matter where they will be delivered. A modular home conforms to all building codes for your specific location, and in many cases construction exceeds the required codes. Read 'Site Built, Modular, and Manufactured Homes' to learn more about the differences in these structures.



Don't all modular homes look alike?
No, and unless you were there to see a home delivered and assembled, you would probably never guess it's a modular. Manufacturers use computer aided design programs to draw plans to your specifications, or to modify one of their standard plans to suit your needs, so nearly any plan can be turned into a modular. Each company is different, so be sure to ask questions about flexibility if you would like to design your own home.

Click here



Will banks finance a modular home?
Yes. Banks, appraisers, and insurance companies treat modular homes the same way they do site-built homes.

Can I save money by building a modular home?
It varies, but construction costs for a modular home are usually less per square foot than for a similar site-built home. Most modulars are very energy efficient, which helps reduce your

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Building Systems: Modular, Panelized and Log Homes

Fast Facts On Building Systems

- Building Systems are modular, panelized and log building components that are produced in a quality controlled environment. They adhere to the same state and local building codes as do traditional housing.
- According to *Automated Builder* magazine, more than 50 percent of all homes are constructed in whole or in part by using building systems.
- Using building systems can reduce expenses and construction time.
- The average time it takes to complete a systems built home is 4 to 8 weeks.
- Most building systems manufacturers use computers to create customized plans to meet the design and budget needs for both affordable and high-end luxury home buyers. Manufacturers can usually construct a systems built home from standard blueprints.
- In 1996, approximately 37,000 modular homes and 110,000 panelized units were produced. The log home industry estimates that the equivalent of 25,000 1,500-square-foot log homes were produced. All types have seen a steady increase in recent years, and continued growth is predicted.
- Systems built homes are often referred to as "prefabricated" or "factory built." They are not "manufactured." That term, synonymous with "mobile," refers to houses built to the less stringent HUD building code standard.
- Modules are 90-95 percent complete when they are shipped from the factory to the building site to be affixed to a conventional foundation. Two or more sections, 12 to 16 feet wide and up to 60 feet long are combined to create the finished building. Modules may also be stacked to make two- or three-story single-family homes, apartments or office buildings.
- Open wall panels are wall sections containing exterior sheathing only. Plumbing, wiring, insulation, and interior sheathing are installed at the building site. Most panelized homes are open wall systems. Closed wall panels have exterior walls finished with insulation, electrical, and plumbing systems installed.
- Geodesic dome homes are constructed of triangular panels, creating an energy

efficient home that maximizes living space using a minimal amount of materials. Buckminster Fuller was the first to formulate geodesic principles for dome construction.

- Log home companies produce factory-made or hand-crafted log homes with solid log walls ranging from 6 to 15 inches in thickness. Thermal mass characteristics of log walls make log homes as energy efficient as conventionally insulated walls. Solid wood homes are one of the most environmentally-compatible housing choices because of their thermal mass characteristics and the renewability of the building materials.

To receive a free directory of modular, panelized, log and/or geodesic dome homes, and a brochure featuring each type of housing, call the Building Systems Councils' Hotline at: 800/368-5242, ext. 162, or write 1201 15th Street, NW, Washington, DC 20005.

Fast Facts on Modular Homes

- Modular homes are built with components constructed in a controlled factory environment to the same stringent building codes as are traditionally built homes.
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- Modular homes are generally shipped within a 300 mile radius of the manufacturing facility.
- The average time for completing a modular home is 2 to 4 weeks.
- Home buyers can realize considerable savings by choosing a home constructed of modular components over a traditional site-built house.
- Modular housing meets the design and budget needs for both affordable housing and high-end luxury housing.
- In 1996, approximately 37,000 housing units were constructed using the modular system.

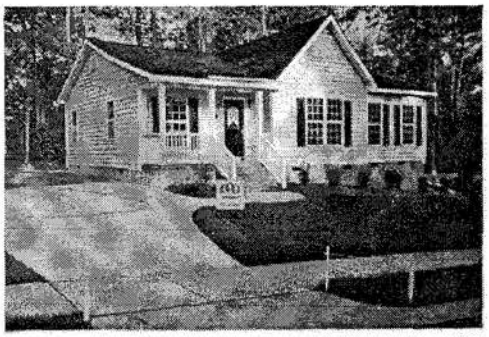
- Forecasters see the modular housing industry continuing to increase its market share.
- There are approximately 50 modular manufacturer members of the Building Systems Councils of the National Association of Home Builders.

You can obtain a free directory of modular manufacturers and a color brochure, "The Most Frequently Asked Questions and Answers ...Modular Homes," call the Building Systems Councils' Hotline at 800-368-5242, ext. 182, or write Modular Building Systems Council, National Association of Home Builders, 1201 15th Street, NW, Washington, DC 20005.

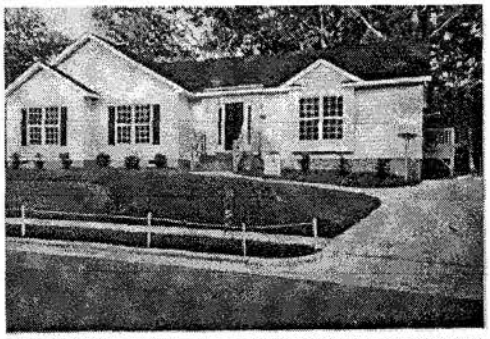
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CUSTOM MODULAR HOME GALLERY

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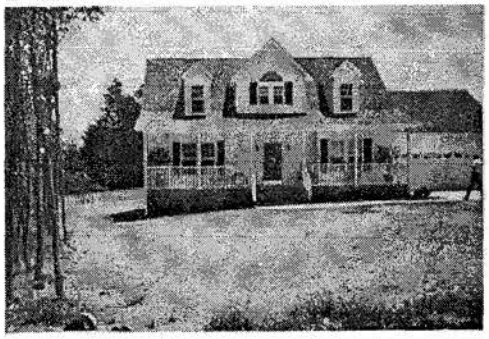


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Total Living 1265 Square Feet
3 - 4 Bed Cozy Living Room
Site Work - Porch
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The Carolanne

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2nd Floor 620 sq.ft. plus Bonus Room
Large Palladium Dormer
Site Work - Front Porch and Garage
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The Andrews

Total Living 1800 Square Feet
3 Bed - Large Family Room
Site Work - Porch and Garage
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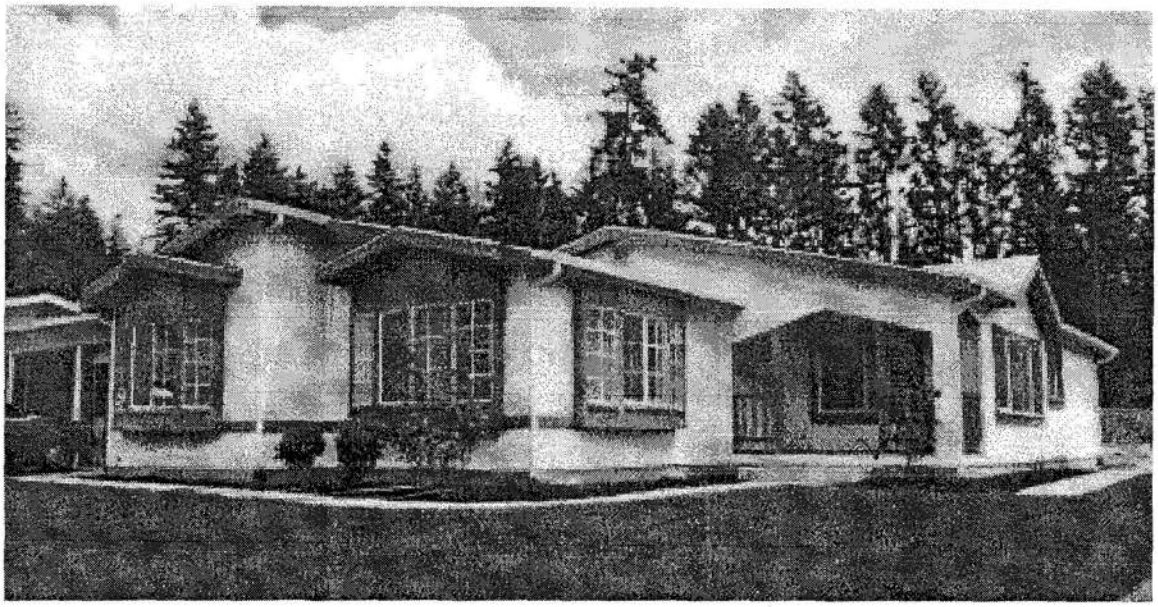
The Maryanne

Total Living 2000 Square Feet
3 Bed Family and Living Room
Site Work - Front Porch
ORDER PLAN BOOK
Custom Modulars - Two Story #23305 | $9.95

GALLERY PAGES | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

Affordable Housing:

MANUFACTURED HOMES



- Finding Your American Dream
- A Better Way to Build
- Choosing Your Home
- A Price You Can Afford
- Tiedown Law
- Fire Safety
- Terms You May Hear
- Who Chooses Manufactured Homes?
- Checklist

University of Illinois at Urbana–Champaign
College of Agricultural, Consumer and Environmental Sciences
Cooperative Extension Service
Circular 1336

Today's manufactured-housing industry has deep roots in answering the American public's call for affordable housing. In June 1974, the U.S. Congress passed the National Manufactured Home Construction and Safety Standards Act.

Since then, the creators of the "mobile home" grew into the manufactured-housing industry. Congress even adopted the name "manufactured housing" to show clearly that yesterday's "mobile home" can't compare to today's modern manufactured home.

Today's manufactured homes are well designed, spacious, and affordable. They are inspected to see that they meet the construction standards set by the U.S. Department of Housing and Urban Development (HUD). In every way, they're comparable to site-constructed homes.

Finding Your American Dream

Home costs continue to rise. Many families wonder if the American dream of owning their own home ever will come true. The good news is that manufactured homes offer whatever you want in a home. The price is affordable—because they arrive at the building lot as complete units, rather than being built from scratch on site.

If you're looking for a first home, a larger house for your growing family, or the perfect retirement home, a manufactured home could be the answer.

A Better Way to Build

Instead of three to six months to build a house on site, a manufactured home is constructed from start to finish in five days. By having supplies and materials close at hand and using assembly-line methods, the manufacturer can avoid many of the problems that plague the builder of site-built homes. The builder of manufactured homes has less concern for bad weather, scheduling of subcontractors, unavailability of materials, and loss due to vandalism and theft.

All manufactured homes, regardless of size or location, must meet one of the most rigid standards in the housing industry, the HUD code. The code covers design, construction, and structural provision. It includes the installation and performance of the heating, plumbing, air-conditioning, and electrical systems. Third-party inspections ensure that the HUD standards are met.

Because manufactured homes are built to this strict code, you are assured of energy efficiency. The code limits allowable heat loss in winter and heat gain in summer.

Choosing Your Home

You may pick from a wide range of exterior designs, depending on your taste and your budget. Siding options come in a variety of colors and materials, including metal, vinyl, and wood. You also may select design features such as a bay window, a gable front, or a pitched roof with shingles. Awnings, patio covers, and decks are available.

Many floor plans are available that include spacious living rooms, dining rooms, fully equipped kitchens, one to four (or more) bedrooms, family rooms, and utility rooms.

You can choose the color and quality of carpets and wall coverings. You can choose other features such as custom cabinets, window styles, and wood-burning fireplaces. Ask your retailer about options offered on the homes he or she sells.

Most manufactured homes are sold with a refrigerator and range. But some may include a microwave oven, trash compactor, garbage disposal, washer/dryer, and more.

You may wish to increase your home's energy efficiency—with options like increased insulation, double- and triple-glazed windows, and energy-efficient appliances. Ask your retailer about these features and their costs.

A Price You Can Afford

A wide range of financing options gives would-be owners flexibility in choosing a loan to meet their budget.

Many manufactured homes are financed through a retail installment contract, which can be arranged through the retailer or by the home buyer directly with a financial institution. Also, manufactured homes qualify for Veteran's Administration (VA) and Federal Home Administration (FHA) loans, as well as for Farmer's Home Administration (FmHA) loans.

When the construction cost of a manufactured home is compared with site-built construction cost, the manufactured home's cost is one-third to one-half as much. This difference comes because builders of manufactured homes can work year-round inside, buy materials in volume, and efficiently use construction materials.

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Professional Builder (1993)
Jan, 2000

Affordable Solutions To Inner-City Housing Woes.(Brief Article)

Author/s: Ann Matesi

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CONSUMER SATISFACTION

According to a study by the Foremost Insurance Company, 88 percent of manufactured homeowners report satisfaction with their housing choice. Likewise, a most recent Owens Corning study, conducted by National Family Opinion, found that 93 percent of manufactured home owners are satisfied with their housing choice. 3

SITING AND PLACEMENT OF MANUFACTURED HOMES

According to the U.S. Census, over 65 percent of manufactured homes were placed on private property, while the remaining 35 percent were sited in residential land-lease communities. The percentage of manufactured homes placed on private property has been growing over the last decade, and this trend is expected to continue as more and more residential land is zoned appropriately to allow for manufactured housing.

Rural and suburban markets have traditionally been the stronghold of the industry. While this remains true even today, manufactured homes are increasingly being used in urban areas. Two converging factors virtually ensure manufactured housing will play an ever-growing role in providing housing in urban neighborhoods - the escalating cost of new housing, and the rising use of technological and design innovations in homes.

Are manufactured homes more vulnerable to fire than site-built homes?

Manufactured homes are no more prone to fire than homes built on-site. As a matter of fact, a national fire safety study by the Foremost Insurance Company showed that site-built homes are more than twice as likely to experience a fire than manufactured homes. The study showed that the number of home fires is 17 per 1,000 for site-built homes, while only eight per 1,000 for manufactured homes. 4

What is responsible for the improved safety of manufactured homes? Strict construction standards. *Foremost Insurance Company's marketing research* department took an in-depth look into the fire frequencies of manufactured homes built before the advent of the HUD Code construction and safety standards, as well as homes built after the standards went into effect in 1976. Foremost's researchers found that post-HUD manufactured homes experience less fire incidences and have lower fire losses than pre-HUD manufactured homes.

Some fire resistance features of the HUD Code include strict standards for flame spread and smoke generation in materials, egress windows in all bedrooms, smoke detectors, and at least two exterior doors, which must be remote from each other and reachable without passage through other doors that are lockable. Site-built homes are required to have only one exterior door, and no "reachability" requirement.

Another report entitled, "Fire Experience in Manufactured Homes," by Dr. John R. Hall, Jr., which appeared in the May/June 1992 National Fire Protection Association Journal, concluded that manufactured homes built to HUD standards present a much lower risk of death and a significantly reduced risk of injury in fires than units that were not built to HUD Code requirements. The study showed that in fires occurring between 1980 and 1989, the fire death toll per 100 fires in post-HUD homes is two-thirds to three-fourths lower than pre-HUD homes. The fire injury rate is approximately one-third lower than pre-HUD homes for the same period of time.

Historically, a key factor in the severity of fires in manufactured homes is that there are a significantly higher percentage of manufactured homes in rural areas than in urban areas, while the percentage of site-built homes is much higher in urban/suburban areas. A fire in a home located in a rural area has a greater chance of becoming a "total fire" because of the increased amount of time needed for fire equipment to reach the home, since it may be outside a fire protected zone. Studies indicate that almost all fires in manufactured homes are related to human carelessness, disproving the assumption that the structure is at fault. The second leading cause of structural fires in manufactured homes involves mechanical failures, which occur in site-built homes as well. The simple reality is that the manufactured housing industry has been successful in its efforts to produce a safe and fire-resistant home.

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3 *Foremost Insurance Group of Companies, The Market Facts, 1996 Owens Corning, Beautiful, Affordable, Quality Housing: What Manufactured Homes Owners Really Want, 1998*

4 *Foremost Insurance Group of Companies, Fire Loss Study, 1986*



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Adopted by the Chapter Delegate Assembly on September 20, 1997

Ratified by the Board of Directors on September 21, 1997

STATEMENT OF THE ISSUES

An important element of APA's housing policy is the promotion of decent housing affordable to low and moderate income households in suitable living environments. Specifically, the policy urges all levels of government to recognize manufactured homes as an acceptable form of housing and a viable alternative to more costly site-built housing. This is particularly important as housing subsidies at the federal level are reduced. This policy is not intended to address siting issues with respect to mobile home parks, but is a guide for the standards to be employed in the siting and design of manufactured homes on individual lots.

FINDINGS

Since 1976, the U.S. Department of Housing and Urban Development (HUD) has regulated manufactured homes under the Manufactured Home Construction and Safety Standards, which are commonly referred to as the HUD Code. At that time these housing units were called "mobile homes," but in 1980 this designation was changed to "manufactured home" in recognition of the more durable and less mobile nature of these homes. Once sited, these homes are rarely moved.

About one-third of all residential units built in this country in 1995 were factory-built. Manufactured homes (HUD Code) that consist of one or more finished modules constructed on a permanent chassis used to transport the unit to its site, accounted for 68% of those factory-built homes. Panelized homes, constructed of factory-made panels assembled on site, accounted for 26%. The remaining 6% of factory-built homes were modular units, built with one or more three-dimensional components and transported to the site on a flatbed truck.

A 1985 nationwide survey by APA revealed that manufactured homes have not only become safer and more durable since enactment of the HUD Code in 1976, but their appearance has improved significantly. At the same time, public acceptance of manufactured homes has increased and some communities have revised their zoning and subdivision standards that govern manufactured homes and now permit such homes by right, even in their most restrictive single-family districts.

It also is important that there is a balance between housing needs and the need for stability of existing neighborhoods. Manufactured housing, if not properly placed and sited, can conflict with established neighborhood development patterns. Owners will pay some price for setting a home in an urban environment.

This may include additional costs for underpinning, roof material, siding, and other components. These are factors that can be, and are, applied equally to site-built homes. The inherent resistance to manufactured housing, however, may require more diligence in the design and administration of regulations.

A growing number of communities are allowing manufactured homes on vacant infill lots in built-up neighborhoods. At the same time, many developers who have never worked with manufactured homes before are taking advantage of greater public acceptance of this type of housing and are using it in new subdivision development. This may create interesting opportunities for manufactured housing as well as existing neighborhoods. Well-conceived pilot and demonstration projects may be used as a means for erasing stereotypes and encouraging more widespread use of manufactured homes in urban settings. Local public housing authorities and private not-for-profit organizations are exploring the use of manufactured homes to provide affordable housing to low-and moderate-income families. In recent years, there has been increasing interest in locating manufactured home production plants in inner city areas where both jobs and affordable housing are badly needed.

Many communities, however, continue to carry over outmoded stereotypes and exclude all types of manufactured homes from residential neighborhoods, even though the designs may be very similar in appearance and size to site-built housing.

POLICY POSITIONS

General Policy Position - APA National and Chapters support the use of manufactured homes on individual lots in compliance with the HUD Code as an acceptable form of affordable housing. Reasons to Support General Policy Position:

a. The manufactured home is a major source of housing for young families, first time home buyers, older adults, and others with limited income. In 1995 one-third of all new single-family homes sold were manufactured homes. Support for this Motion would be in keeping with APA's social equity policies.

b. HUD has made expanded use of manufactured housing for affordable homeownership a key element of its National Homeownership Strategy. APA is one of a number of national associations that make up HUD's National Partners in Homeownership and, along with other members of the Partnership, is helping to formulate and carry-out this strategy.

c. Support for manufactured homes and other forms of lower cost housing is consistent with APA's existing housing and social equity policies, which promote decent housing affordable to low and moderate income households in suitable living environments.

SPECIFIC POLICY POSITIONS

Specific Policy Position 1. APA National and Chapters support reasonable, cost effective standards, including design standards, and administrative procedures for manufactured homes in local zoning ordinances and regulations.

Reasons to Support Specific Policy Position 1:

a. Affordability is the single most important attribute of

manufactured homes. Land use regulations should not diminish the cost-savings this form of housing offers. Local zoning and subdivision standards can be crafted so that they encourage good siting and design without unnecessarily limiting the use of manufactured housing. These standards and the process for applying them should be no more restrictive for manufactured housing units than for conventionally constructed housing units. At the same time, it must be recognized that there may be some costs incurred to make manufactured housing compatible with existing neighborhoods in an infill environment, thereby resulting in development that may be more costly than typical subdivisions.

b. The HUD Code is a preemptive, uniform construction code that ensures that a manufactured home, regardless of where it is built in the U.S., will meet certain publicly adopted standards related to health, safety and welfare.

c. A growing number of states have enacted laws that prohibit the exclusion and unfair regulatory treatment of manufactured homes. Some states, moreover, call for parity in the regulation of manufactured homes and site-built housing.

d. Manufactured homes should be allowed as a permitted use in residential zoning districts at the permitted density for the district.

Specific Policy Position 2. APA National and Chapters should develop model definitions and siting standards.

Reasons to Support Specific Policy Position 2:

APA can play a leadership role in standardizing regulations to be implemented by communities that want to ensure more equitable treatment of manufactured housing and to create affordable housing opportunities for their citizens.

Specific Policy Position 3. APA National and Chapters encourage states to take steps to ensure that installation and anchoring requirements for manufactured homes are adequate. Where unique environmental conditions exist, specific life safety standards should be coordinated with those required by HUD. These standards should be consistent with those set forth in the American National Standards Institute's publication, Manufactured Home Installation (published in 1994).

Reasons to Support Specific Policy Position 3:

About half of the states have adopted installation standards for manufactured homes that require these homes to be installed on properly engineered foundation systems. When properly anchored, manufactured homes perform on an equal basis with site-built dwellings in unique environmental conditions.

Specific Policy Position 4. APA National and Chapters support periodic review and revision of the HUD Code to ensure that these standards adequately protect the public health, safety and welfare. Reasons to Support Specific Policy Position 4:

Typically, model codes such as BOCA (Basic Building Code) and ICBO (Uniform Building Code) are revised on a three-year cycle. It makes sense for the HUD Code to undergo a similar revision schedule.

EXCEPTIONS

Exceptions from the General Policy Position or Specific Policy Positions supported by specific findings and reasoning.

None to Date

AMENDMENTS

This Policy is subject to amendment for the purposes of the following:

1. adding findings or supplementing previous findings with new data or interpretations; and

2. adding Specific Policy Positions based on new findings or reasoning that tend to add to or qualify, but not reject entirely, the General Policy Position, one or more Specific Policy Positions, or one or more Exceptions from Policy Positions.

None to Date

The American Planning Association is a non-profit public interest and research organization representing 30,000 practicing planners, officials, and citizens involved with urban and rural planning issues. Sixty-five percent of APA's members are employed by state and local government agencies. These members are involved, on a day-to-day basis, in formulating planning policies and preparing land use regulations. APA's objective is to encourage planning that will contribute to public well-being by developing communities and environments that meet the needs of people and society more effectively.



DESIGN INNOVATIONS IN MANUFACTURED HOUSING

In the last several years, the manufactured housing industry has seen rapid growth in the aesthetic variety of manufactured housing, helping the homes appeal to a broader market than ever before. The addition of new plants and the introduction of new transportation technologies have enabled factories to increase interior ceiling height up to nine feet on many homes. Also, new "hinged roof" systems have allowed designers to produce homes with roof pitches of up to 9:12, so that manufactured homes can blend seamlessly into existing neighborhoods.

The single most important advancement in the industry over the last five years has been the development of two-story models. Until recently, engineering and materials technology, the physical constraints of many factories, and transportation issues made the possibility of multi-story manufactured homes seem like a pipe dream. However, the development of innovative chassis and transportation systems have enabled manufacturers and developers to work together to produce attractive and affordable two-story units. While multi-story models are still a small percentage of the overall manufactured housing market, the tremendous consumer interest in the concept will translate into more and more manufacturers adding them to their housing lineup in the near future.

Why are builder-developers using manufactured homes?

Exhibit 3



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THE INSPECTION SYSTEM FOR MANUFACTURED HOMES

It can generally be acknowledged that a building code is only as good as the enforcement system that accompanies it. The manufactured home enforcement program required by the U.S. Department of Housing and Urban Development (HUD) is a thorough and efficient system designed specifically for the factory production environment. Because the factory pace differs from that of the construction site, the manufactured home enforcement system is necessarily different, too. However, the goal in both cases is the *same - to ensure the highest degree of safety in the* design and construction of the home. The HUD enforcement system relies on a cooperative federal/state program to ensure compliance with the Federal Manufactured Home Construction and Safety *Standards (the HUD Code). The Department of Housing* and Urban Development enforces the HUD Code through its monitoring contractor. Uniformity and consistency can be maintained better in the HUD enforcement system because of two key factors. First, the inspections take place in the factory and follow behind the manufacturer's own in-plant inspection and quality assurance teams. This allows for more thoroughness, since time is spent inspecting homes rather than traveling to inspection sites. Efficiency is increased because travel time is limited and necessary paperwork is minimized. Second, consistency is maintained because fewer people inspect more homes. The enforcement procedure is much less susceptible to individual interpretations, as would be the case with on-site inspections in every jurisdiction across the country.

Inspection Starts Before Production Starts

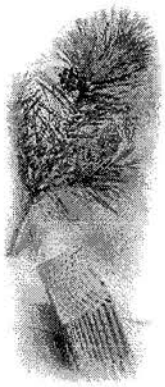
The HUD enforcement system begins with oversight by the Design Approval Primary Inspection Agency (DAPIA). The DAPIA (a third party inspection agency) must: approve the engineering design of the home; approve the manufacturer's quality assurance manual for its plant; and coordinate with the other third-party inspection agency, known as the IPIA. The Production Inspection Primary Inspection Agency (IPIA) has the responsibility to make sure the production facility programs and procedures are in accordance with the DAPIA approved quality assurance manual; and, it conducts inspections of homes produced in the factory to assure conformance with the approved design. Three interesting notes: 1) every home is inspected during at least one stage of production; 2) in the course of each plant visit, the IPIA makes a complete inspection of every phase of production and every visible part of each home in production; and 3) when a new plant is opened by the manufacturer, the first home built according to approved plans is inspected 100 percent - every step in the building process undergoes close scrutiny by the inspection agency. Along with this, the audit inspection teams of HUD's monitoring contractors conduct representative inspections as a check on the *performance of the third party inspection agents and the* manufacturer.

Keep in mind that all this is in addition to the inspections carried out by the manufacturer's own foremen and its quality assurance inspectors.

Certification Assures the Homebuyer

Before leaving the factory, each home must have a numbered certification label affixed to the exterior of each section of the home. This label certifies to the homebuyer that the home has been inspected in accordance with the HUD enforcement procedures and that it complies with the HUD building code. Only when all inspection parties are satisfied that the home complies with the code will the certification label be affixed to the home. A consumer seeing the home for the first time will have the assurance that the home has been thoroughly tested and inspected from the design stage through final construction and found to be built according to the approved design.

Info graphic: Who lives in manufactured housing?



PFS Mission

For almost 40 years, PFS has played a leading role in helping the wood-related construction industry achieve greater quality and safety. PFS evaluates and certifies a broad range of products and structures, including all types of Engineered Wood products, wood components, and industrialized building systems.

Your success as a manufacturer is our primary goal at PFS. Our commitment to you is reflected in our mission:

- To expand and enhance recognition of the PFS trademark as the premiere certification mark for wood-based building products. This will benefit manufacturers by strengthening the marketability of their products.
- To help manufacturers use state-of-the-art quality control techniques to produce the most consistent quality products.
- To provide training for manufacturers' quality control staff in these techniques, and in product and international quality standards.
- To encourage protection and preservation of the environment. Natural resources and natural beauty belong to everyone, including future generations. Engineered Wood products do not pose threats to endangered species or old growth trees. They minimize waste by using as many parts of the tree as possible, including what is otherwise seen as "waste" growth. They also require less energy to manufacture than other construction materials, and use one of the world's most managed and renewable resources. We applaud and encourage all industry efforts to seek even greater efficiency.

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Corporate History to Present

PFS Corporation of Madison, Wisconsin, is an internationally-recognized, independent quality assurance agency, unaffiliated with any manufacturer or specific tradename. It is headed by a building industry veteran with more than 40 years of leadership experience in quality control of building materials, and staffed by unique and competent quality control engineers.

PFS was chartered in 1959 as Plywood Fabricator Service, a non-profit plywood quality control agency affiliated with the American Plywood Association (APA). As factory production of structural components and entire buildings became widespread, more complete quality control services were needed by the building industry. PFS answered that need by expanding its scope to include plan review and inspection services for the housing industry. The name was changed to Product Fabrication Service, and Ed Starostovic, then executive vice president, moved the office from Tacoma, WA to Madison, WI in December 1972.

In 1978, the Internal Revenue Service determined that PFS was an independent agency no longer eligible for non-profit status; hence, the present PFS Corporation was formed.

PFS has come full circle since its 1959 beginnings, diversifying from serving manufacturers of plywood to factory-built structures, heating appliances, and wood component systems. Today, PFS provides certification services to most of the major engineered wood producers in the United States.

Today, PFS has over 100 employees including eleven licensed engineers and two wood scientists. It also operates a 10,000 sq. ft. testing and research facility in Madison, WI, certifying wood products for nearly 500 manufacturing facilities as far away as the jungles of Indonesia. PFS continues to grow and expand its services to the wood construction industry.

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Services Offered

- **Engineered Wood** -- PFS is the undisputed leader in Engineered Wood evaluation and certification. A major portion of all Engineered Wood products and components manufactured in the U.S. bear our certification mark.
- **Industrialized Building Systems** -- Serving as the leading third-party agency for modular building system evaluation and a key agency for HUD Code homes, we are audited, certified and recognized by the federal government and over 40 states to provide in-plant inspection and design approval. In addition, we provide on-site inspection for residential and commercial structures.
- **Structural Insulated Panels** -- As the agency of choice for most manufacturers requiring building code approval, we perform a large number of different tests needed to certify that structural insulated panels meet the model codes that apply to them. We also provide required third party manufacturing quality assurance inspection and listing services.
- **Fire Testing** -- PFS is one of the few providers of fire testing to the wood products industry. We test interior finish products for flame spread and test walls, floors, ceiling assemblies and fire doors for fire resistance. Our staff includes experienced fire protection engineers who are familiar with wood construction and its unique fire code requirements.
- **Adhesives and Sealants** -- We test adhesives and sealants for conformance to applicable national and federal standards. We also test adhesives for use on treated lumber and can assist in qualifying adhesives to meet FHA/HUD criteria.
- **Wood Panels** -- PFS evaluates and certifies hardwood plywood panels and composite assemblies.
- **Treated Wood/Wood Foundations** -- We provide quality control inspections of lumber and plywood which has been treated by pressure impregnation, and provide testing for fabricators of panels used for Permanent Wood Foundations, both with and without certified installers. PFS is accepted and audited by ALSC to provide these services.

Additional Services:

- **Quality Assurance/Training** -- Besides the quality assurance services already listed, PFS participates in ISO 9000 auditing to help manufacturers conduct business in the European market. Our training services include at least two national seminars per year, as well as on-site custom training.
- **Consulting/Forensics** -- We often provide consulting in the establishment of quality assurance programs and plant start-ups, as well as analysis of design-specific fire protection and building code compliance, and review of architectural designs and plans. Our capabilities also include legal consultation and expert witness services in fire cause and origin, fire protection analysis of buildings that have suffered fire events, and building code compliance for a broad range of post-construction building use problems.
- **Information Systems/Technology Transfer** -- Part of our commitment to the industries we serve is to help them stay informed, with publications such as our Insight bulletin, listing directory, PFS/RF Tips reference sheets, and a variety of educational materials on

emerging products and markets.

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Exhibit 4

COLDWELL BANKER
STEVENS, REALTORS®

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FAX (301) 630-4084
WEBSITE www.cbstevens.com

September 17, 2001

Ms. Ann McGee/W.F. Equipment Corporation
2009 Trappe Church Road
Darlington, MD 21034

Subject: Hunt Place

Dear Ms. McGee:

A recent review of the Hunt Place site for the development of new homes featuring 3 bedrooms and 2.5 baths with an integral one car garage indicates that any home less than 1850 sq. ft. of space would not be compatible with new homes in the immediate area. In addition, a smaller house would pose a marketing problem because it would not be comparable or compatible with other new homes in the area.

Yours truly,

Bill Jones
Marketing Specialist

Each Office Is Independently Owned And Operated.