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VOLUME 16, NUMBER 7, OTTAWA 1979

Canadian industry skilfully accommodates housing needs

Canadians are very accommodating — especially when it comes to houses which they manufacture for both domestic and international markets!

Noted for their flexibility, durability, comfort, economy and energy efficiency, these homes meet or exceed most international building codes and are adaptable to virtually any climate or environment.

In fact, Canadian manufactured homes, building components and technical expertise are being exported to an increasing number of countries, such as Britain, Belgium, France, Japan, Bolivia, Venezuela, Algeria, The Netherlands and Saudi Arabia.

This export market is currently bringing in some \$300,000,000 per year to Canadian companies and businessmen see an even brighter picture for the future.

Such success is due in large measure to the Canadian method of building homes — timber frame construction — and to the housing situation in Canada itself.

In Canada, hundreds of thousands of families are living very comfortably in manufactured wood houses. In fact between 80 and 90 per cent of all low rise Canadian housing (homes three storeys or less, single detached, semi-detached, row and garden court type) are of wood frame construction.

This means that the same structural system, erection skills and building materials in standard compatible sizes are used throughout the country whether by site builders or by manufacturers.

It also means flexibility, with house products being completely adaptable to the widest range of environmental conditions — temperature, wind, humidity, earthquake; cultural preferences inherent in a cosmopolitan population; varying

economic levels in rural or urban areas; and architectural and engineering requirements.

But wood frame construction does not mean houses are made completely of wood, as are log cabins, for example. Rather, wood frame houses are ones where the structural components are wood. All kinds of other materials are attached to this

special. By no means are they one-of-a-kind boxes.

Additionally, with timber frame construction, houses can be built on site or manufactured in factories. They can be economically transported by land, sea and air. And production skills are easily learned, requiring a minimum amount of skilled labour.



structural frame, or inserted into the cavities within it, to give desired performance at full price ranges.

The flexible system can be used unchanged to build one-room hunting lodges or multi-room luxury mansions. The exterior finish may be wood, brick, stucco, concrete, steel, aluminum or even plastic. And it can be architecturally styled to give the appearance of the traditional housing of a culture — Spanish, Colonial, Tudor or French Provin-

Beyond housing, the wood frame construction is used for light commercial, industrial and agricultural buildings.

While there are many advantages to the wood frame construction method, wood itself offers numerous benefits.

Around the world wood is the most universally naturally occurring construction resource material. Its high strength and utility — combined with its light weight — make it

ideal for economic transportation.

Wood, in component residential construction, is also highly resistant to earthquake — as Japan has recently officially recognized. The multitude of nearly rigid joints in the total assembly provide it with just enough flexibility to absorb this particular kind of stress. Wood is not subject to the brittle fracturing or

interior decoration, wood also offers the extremely attractive comfort factors of dryness and resiliency.

In fact, wood — and the wood frame system — has particularly good application where interior temperature and humidity must be controlled relative to wide variations in external atmospheric conditions. Wood is a low thermal conductor and does not create condensing surfaces within walls or ceilings.

If a small amount of moisture forms on a wood surface it is absorbed and does not collect into drops and run along low points where it could cause problems. As well, wood does not expand and contract with temperature changes. This eliminates the use of expansion joints and flexible connections in wooden structural assemblies: wood components are the same size on a hot day as on a cold day.

Wood tends to absorb rather than reflect sound so that, acoustically, wood component construction performs well — in both residential and non-residential construction. The addition of various panels and cladding further reduces sound transmission.

The Canadian house manufacturing industry is composed of approximately 250 companies, producing whole houses or the majority of parts for houses. Most of the firms produce less than 300 houses a year though a few companies produce between 1,000 and 2,000 houses. Because the equipment and methods are flexible, the products can be widely varied and the plants can adjust their production according to market demand.

The Canadian house manufacturing industry can be divided into several categories.

A small group called "Pre-Cutters" simply cut lumber to fit a
(Continued on page 2)

Stepping out in fine selling style



Canadian footwear is fashionable and infinitely saleable — as manufacturers, buyers and representatives from some 30 countries will see between March 24-26, 1979.

That's when nine Canadian footwear manufacturers will participate at the 47th GDS, International Footwear Fair, in Dusseldorf, West Germany — a highly successful fair that, for more than two decades, has been attracting worldwide interest.

The Canadians will be there with an arresting display of products that are not only stylish, but durable — confident that they will make additional inroads into the international marketplace.

Such confidence is based on the knowledge that fine craftsmanship, high quality and the custom-made look are trademarks of the Canadian footwear collection.

Some representative Canadian footwear manufacturers and their products are described on page 2 of this edition of Canada Courier. Other leading Canadian footwear manufacturers participating in the 47th GDS, International Footwear Fair in Dusseldorf include: Blondo Inc.; J.D. Carrier Shoe Co. Limited; Christina Shoe Co. Ltd.; Kaufman Footwear Inc.; Olympia Shoe (1975) Ltd.; and Savage Shoes (1970) Limited.

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Whatever the scale of the building operation, ATCO International can handle it! Here Atco units are on-loaded at Montreal. Story, page 4.



canada courier

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bill of material and ship it to a site builder who erects the house framework without further cutting. The products of this group are precision-end-trimmed joints, rafters, studs and lintels.

The largest group, both in number of companies and plant size, is the "Component or Panel Manufacturers." A few of these companies only produce components or sub-assemblies such as roof trusses, wall panels and stairways, and sell to site builders.

Most companies produce whole-house packages including structural components, wall and roof sheathing, flooring, shingles, insulation, windows, doors, cabinets and the paint and nails — all the material necessary to erect and finish a home except for the plumbing, heating and electrical equipment. These service systems are supplied and installed by local sub-contractors while the house is being erected.

Flexibility again is an important ingredient of component house

manufacturing. Although the larger plants offer a line of standard models and may seek to sell standard houses, they usually find that home-buyers want some changes to customize their houses so that each house becomes an individual product.

All major Canadian manufacturers offer options such as fireplaces, finished basements, garages, bow windows and different qualities of cabinetry, hardware, electrical fixtures and finished floor materials.

The result is that Canadian component manufacturers offer the same wide variety of homes as the site builders — and it is impossible to identify one or the other from their appearance.

This, incidentally, is the kind of component construction that was used to build the 114-house project at Igny, outside Paris, in 1971. Here the timber frame houses were of various designs, including split-levels, bungalows and two-storey houses with full basements.

Many of these were innovations on the French housing scene. Innovative, too, were some of the construction methods: roof trusses covered with plywood sheathing before roofing material was applied; asphalt roof shingles; forced warm air from a central furnace; plumbing and wiring easily installed in timber frame housing.

Most revolutionary of all was the factory assembly of components — a simple assembly plant produced plywood-sheathed exterior wall panels and gable ends, interior partitions framed for doors and corner connections, roof trusses, stairways and other pre-cut pieces. The factory was run by 10 men and produced all components required for the 114-house project — and it was ac-



complished within two months!

In addition to speed, factory production also reduces the effects of bad weather on construction; systemizes material procurement and handling; greatly improves — and guarantees — quality control; reduces the amount and cost of labour; and, equally important, it reduces the wastage of materials.

To maximize these benefits, as much production as possible now takes place in the factory. This has led to the production of modular or sectional housing where completed three-dimensional units leave the plant and only need to be connected together and to services on site.

Modular houses may have two sections to make a bungalow, three for a split-level and four for a two-storey house. Multiple units are attached together to build motels and dormitories. As well, modular houses have all the electrical, plumbing and heating equipment installed at the factory.

The most completely finished manufactured residential unit is the mobile home. Such homes are built on steel chassis with wheels so they can be towed through the plant assembly line and right on to the building site.

When a complete house consists of two units, they are called "Double Wides" and are very similar to modular houses. Mobile homes are often used as the first housing on major construction and resource development projects in Canada and other parts of the world.

A close relative to the mobile home is the industrial camp unit. These are more utilitarian and rugged. In Canada, a few companies have specialized in industrial camp production and have developed international businesses mainly in support of oil, hydro-electric and mineral resource development complexes. Several thousand units have been used as emergency housing for flood and earthquake victims around the world.

In such emergencies, speed of delivery is the key factor in export sales. And speed, combined with high quality, is a definite characteristic of Canada's capability in the housing field.

A case in point was Atco International Limited's successful bid to supply emergency housing in Friuli in Northern Italy in the wake of the disastrous earthquake of 1976.

The requirement was for 1,000 units to be installed in 24 days. Atco was able to meet that deadline at an acceptable price and the company got the job. Other emergency situations of this kind have also been handled by Canadian industry.

As a further guarantee of high quality and safety standards, potential buyers should know that all

wood framed houses, whether built on site or in factories, are built to the same minimum standards — as described in the Canadian National Building Code and the Residential Standards of the Central Mortgage and Housing Corporation. More than that, the majority of Canadian house builders exceed this mandatory minimum quality level.

The Canadian National Building Code has been recognized as an international model to cover wood frame construction. Appropriate parts of it have been incorporated into the building codes of Britain, France, Belgium, The Netherlands and Japan. The Code co-relates extensively with the four model codes used in the United States. It is also being studied as an example document by a number of countries which either do not have building codes or do not have coverage of wood frame construction in their present building regulations, such as Mexico, Venezuela, Argentina, Nigeria, Ivory Coast, Algeria, Lybia, Saudi Arabia and Iran.

Being erected in virtually all parts of the world, the products of Canada's diversified housing industry are attractive to international markets for the same reasons they are popular in Canada — they are economical, efficiently transportable, adaptable to the widest variety of environmental and cultural conditions, energy affordable and eminently liveable!

Elsewhere in this edition, Canada Courier features the products and capabilities of several representative Canadian housing manufacturers. These stories are individually coded. More information on Canada's housing industry in general, however, can be obtained by filling in the trade inquiry form on page 7 with the following code number. Code 2-164

Leap to it!

Contour puts wings on feet



Casually chic, high quality comfort shoes, sandals and boots with leather uppers and rubber bottoms — that's the world famous "Roots" recessed heel footwear created, designed and manufactured by Natural Footwear Ltd. of Toronto, Ontario. Gently recessed at the back and curved like a rocker at the front of the sole, the clever contour distributes weight evenly, making forward movement effortless. Roots are sold only in company-owned stores with the complete Roots program, franchised stores or miniature Roots stores within retail shoes stores or large department stores. This marketing program is already a success in Britain, France, The Netherlands, West Germany and Belgium. The Roots authorized dealer program was specifically designed for cities with a population of 25,000 up to 250,000. Natural Footwear Ltd. is interested in further developing both its franchise and dealer programs in international markets. Code 2-262

Maple Leaf borrows the mukluk design



Inspired by the mukluk of the Eskimo, snow boots from Maple Leaf Shoe Co. Ltd. come in three heights and are ideal for trekking through deep snow. The leather muklucks have handwrapped crepe soles and imitation shearing lining. Maple Leaf boots are also made from imitation fur that looks like the real thing and is just as functional, full grain leather, leather-like vinyl and nylon. The company also manufactures hiking and hunting boots in waterproof leathers. And, Estrie Footwear Ltd., a division of Maple Leaf, is one of Canada's largest manufacturers of athletic footwear, producing such items as cross-country ski boots and golf shoes. Maple Leaf Shoe Co. Ltd. would like to further penetrate the general footwear market and seeks sales agents to cover department stores and chain retail outlets. Code 2-362

Casual comfort sells the Greb Kodiak boot

The ultimate comfort for casual winter wear, the Greb Kodiak — in leather uppers with crepe soles — is the recognized pace-setter in Canada. The Greb Kodiak boot is made by Greb Industries Ltd. and distributed by Bauer International, the marketing arm of all products manufactured under the Greb & Bauer trademarks. Greb products include men's and boys' sport, work and industrial boots, standard and insulated in Hi-cut and Lo-cut; ladies' and boys' casual shoes, cement construction; and men's and ladies' safety shoes, cement construction. Formed in 1912, Greb Industries has become one of the largest quality footwear manufacturers. It is also the exclusive manufacturing licensee for Hush Puppies, the footwear with the comfort of an old slipper. The company recently formed the Bauer International Division to broaden its international markets and is seeking established footwear distributors responsive to planned programs supported by technical and merchandising expertise. Code 2-462



Traditional pottery products popular with international buyers

Blue Mountain — the name alone is a guarantee of fine quality pottery that is uniquely Canadian and internationally famous.

Using locally dug native clay that is aged for two years and purified, Blue Mountain's traditional pottery is characterized by long, graceful lines in a distinctive dark green or harvest gold colour. Also distinctive is the high-gloss, reflowing glaze that was specially developed by Blue Mountain craftsmen.

Blue Mountain's glaze formula is unique in that it provides an ideal marriage between the chemistry of the glaze and the chemistry of the clay body. The result is that it resists crazing and ensures a uniform coverage of all pores and openings.

In addition to its traditional products, both functional (ash trays, vases) and decorative (animal figures) Blue Mountain has, in recent years, greatly expanded its product line.

The Canadian Decorator Collection, for example, comprises a limited number of items in classic designer shapes and features matte glazes in a choice of slate blue or mocha brown colour.

This collection, which has enjoyed an immediate and sustained demand, includes vases, wine carafes, cookie jars, wine goblets, teapots, serving bowls and candleholders.

Also introduced and doing well in the home furnishings retail sector is the collection of lamps, available in all glaze colours. Available, too, are attractive hanging planters complete with macramé hanging rope in colours contrasting with those of the glaze.



One of the most recent and innovative series by Blue Mountain is the Native Artists' Collection, the result of combining the skills of the Blue Mountain artisans with the work of three of Canada's leading native Indian and Eskimo artists.

The classic pottery shapes in vases, plates and canisters, carry reproductions of nine drawings — by Chief William Jeffrey, one of the most important interpreters of the Haida culture; by Abraham Apakark Anghik, one of Canada's finest young Eskimo artists; and Daphne Odjig, the internationally acclaimed Woodland Indian painter.

Representing the artists' work and their ways of life, the drawings are permanently glazed to the specially developed "native earth colour" pottery in a way which both protects and preserves their integrity.

This new Blue Mountain collection not only represents a first through the marriage of great and original native Canadian art with fine pottery, it is also unique in that it is a joint venture with the artists who hold royalty interests in all pottery sold.

Because of the the great flexibility of clay, Blue Mountain is able to craft many specialty items such as corporate gifts, logos and souvenirs. These can be custom-made on a contract basis.

Most of Blue Mountain's product line is made by slip casting or pressing methods and, since the catalogues list more than 300 different items — requiring a range of production and handling methods — extensive automation is neither practical nor desirable.

Blue Mountain has continued a program of research and development since 1972. Improvements in slip setting time, mold life, mechanical drying, glaze preparation and materials handling have created a modern production procedure, mechanized only where necessary.

As well, the strength of the clay body has been increased, while its thickness has been reduced. This permits much finer detail in the configurations than was possible in the past.

Attracting some 450,000 visitors per year, Blue Mountain Pottery of Collingwood, Ontario, is a division of Heritage Craftsmen Inc. The capable and enterprising firm has been crafting decorative and functional pottery for almost 30 years and seeks to further expand its worldwide markets. Code 3-162



Distinctively finished in high quality, reflowing glazes, Blue Mountain Pottery products are characterized by long, graceful lines and colours that range from green and harvest gold to slate blue and mocha brown. The pieces — there are more than 300 items listed in the catalogues — are both decorative and functional, ranging from vases, ash trays and carafes to fish, owls and cats. The Collingwood, Ontario, company exports its pottery worldwide.

Happy Lindal homeowners enjoy comfort and cost-savings



Whether it be a ski chalet, a cottage or a residential home, structures from Lindal Cedar Homes Ltd. are noted for their warmth, durability, beauty and flexibility. And they are more than just packaged homes, as the one at left demonstrates. Originally a Franklin model from Lindal's Heritage Series, this house was easily and inexpensively transformed to suit its owner's tastes. The standard floor plan was completely reversed; a fireplace added to the living room; and another built upstairs in the master bedroom. In addition to other changes, two rooms were made into one large area with skylights and the kitchen was redesigned to include a pass-through to the dining room.

A British Columbia company which has shipped homes to a number of countries throughout the world, is noted for quality service, rapid and economical delivery. And Lindal Cedar Homes, New Westminster, uses a wood which is not only warm and appealing to the eye, but also brings energy and cost savings to both owner and builder.

Because cedar consists of millions of air-filled cells, it acts as a natural insulator, many times more effective than brick, concrete, steel or aluminum.

In fact, a piece of cedar only 3.8 cm (1½ inches) thick, has five times the insulating value of a common brick. In this way, keeping the heat in keeps costs down — a valuable feature in these energy-conscious days.

Another economic advantage is that cedar is imbued with a natural preservative oil that resists the ravages of time, weather, mildew and decay. The result is that a cedar home will last for decades in cold, warm or moist climates — and with a minimal amount of maintenance.

To these natural, all-climate assets, Lindal adds the important advantage of kiln drying or "pre-shrinking" to ensure tight, even walls. This process virtually eliminates the moisture that can cause green or air-dried lumber to twist and warp.

But that's not all! In removing moisture, kiln drying also significantly

reduces the weight of the building material. This in turn reduces freight costs — one of the factors that makes Lindal cedar homes competitive in distant markets.

The world's largest manufacturer of pre-cut cedar homes, Lindal stresses high quality and imposes extremely rigid standards.

And the company enforces these standards right from the time the raw material is harvested — Lindal cuts, sorts (or discards) to its own specifications in its own sawmill rather than starting with someone else's rough-cut lumber and standards — to the time the house is completed and ready for occupancy.

Combining the best of pre-cutting and pre-fabrication, Lindal's building system is based on the age-old post and beam method. Unlike conventional buildings in which the walls support the roof load, in the Lindal system the roof load is supported by the posts and beams.

Since the walls are not structural, they can be moved easily, allowing for increased flexibility. And in this building system any of the roof styles can be married to any of the floor plans.

What's more, the floor plan can be modified any way the customer wishes: the floor plan can be reversed; walls or windows moved; and rooms added or enlarged. In fact, a customer can start from

scratch and create a totally original design.

When a Lindal building package arrives at a home erection site, it is delivered pre-cut — not prefabricated. And what may look like a load of lumber is really a ready-to-assemble home.

All components are part numbered for quick, easy identification. The same numbering system helps the builder understand and use the plans set, materials list and construction manual.

Just about everything is already cut, generally to size, so that one can start nailing — instead of sawing — in a hurry. Equally important, the majority of primary components actually lock together: wall planks, floor and roof decking, are all tongue-and-grooved for easier assembly.

Although assembly time may be affected by many variables — size of home, builder proficiency, subcontractors' availability, location and season — it's entirely feasible to erect a Lindal to "shell" stage in less than three weeks.

Backed by more than 30 years' experience, Lindal Cedar Homes Ltd. has earned an enviable international reputation — not only for its pre-cut cedar homes and chalets but also for its churches and other commercial and community buildings. Code 3-264



Complimenting any residential neighbourhood is the Melbourne from the International Series by Lindal Cedar Homes Ltd. T-shaped, the top of the T is for bedrooms and the other wing for family living. To add a personal touch and to meet site requirements, the owners of this Melbourne simply and inexpensively built their house on a daylight basement and added a deck off the living room.

From small units to industrial housing... Good things come in consortium packages!

Housing units that can be delivered and erected in virtually any location in the world are provided by Homexpo Canada Exports Ltd.

A consortium of several leading Canadian home manufacturers, Homexpo is headquartered in Vancouver, British Columbia, a province recognized as Canada's foremost lumber producer.

With such long term resources of fine forest products and with a production capability of 5,000 buildings a year, Homexpo is able to offer its clients a continuing supply of high quality buildings that can successfully compete and compare with other housing units currently on the market.

Homexpo's structures are built according to an existing selection of proven and tested plans which can be modified, when required, to suit any specific on-site need. As well, the group's expertise in design, construction and on-site supervision, gives it a distinct advantage — especially in the areas of cost, speed, flexibility and quality control.

And the company is flexible. The

product range is from a small, self-contained unit to large townsites or industrial housing complexes. Within this spectrum are ultra modern single-family homes, multiplex homes and apartment complexes — all of which are constructed to codes and standards that are among the highest in the world.

In the construction process Homexpo manufacturers employ the "wet core" principle in which the service core of the structure — complete with all appliances, cupboards, fixtures and related wiring and plumbing, plus all wall and floor finishes — is manufactured as a finished unit.

Dimensioned lumber of various sizes is used in prefabricated wall and floor sections as well as in engineered roof truss systems. Then, with economy and efficiency in mind, the completely finished unit is used as a shipping container for additional finishing materials.

Homexpo, in February, 1978, completed a major overseas contract which saw the supply of 342 housing units to Bougainville Copper Li-

mitted, a subsidiary of Rio Tinto, in New Guinea.

Competing against other international groups, Homexpo was also awarded the contract to supply 251 housing units to the Arabian American Oil Company (ARAMCO).

The first part of the contract involved the manufacture and supply of the prefabricated housing units by the manufacturing companies and the purchase of related plumbing and electrical supplies. The second part of the contract, the site portion, will be completed at two different locations in Saudi Arabia.

Another indication of the company's good work is the arrangement whereby Homexpo is providing Kawasaki Heavy Industries with support facility buildings in three locations in Saudi Arabia.

Working closely with government agencies in the overseas trade field, with a permanent representative living in Saudi Arabia and an agent in Latin America, Homexpo Canada Exports Ltd. actively seeks additional markets in these and other countries. Code 4-164



No job is too big for Homexpo Canada Exports Ltd., a consortium of leading Canadian home manufacturers headquartered in Vancouver, British Columbia. The components being unpacked above are part of 251 cluster housing units being erected in Saudi Arabia for the Arabian American Oil Company, just one of the major overseas projects on which Homexpo has worked. Below, cluster housing ready for stuccoing.



Down to the tiniest detail...

ATCO expertly handles huge scale operations

Whatever the accommodation need, ATCO International Ltd. has the answer.

Headquartered in Calgary, Alberta, and with manufacturing plants and offices worldwide, ATCO is highly respected internationally for its wide range of rugged, durable and comfortable installations.

ATCO is also noted for its speed and efficiency in transporting and erecting its buildings, whether they be of wood or metal frame construction.

This capability — so important to potential importers — was dramatically demonstrated in 1976 in the wake of the earthquake in Friuli in Northern Italy. The emergency demand was for 1,000 housing units to be installed in 24 days. ATCO met the deadline.

Proving itself again, ATCO was

engaged in the approximately \$45,000,000 contract for the provision of housing in Jubail, Saudi Arabia.

This multi-million dollar seaport and industrial city is considered the largest project of its kind in the world. ATCO received the contract in mid-summer, 1977 and successfully completed the project in fall, 1978 — a solid indication of ATCO's expertise in managing, on a massive scale, the logistics of manufacturing, transportation, installation and site work. This efficiency has enabled ATCO to obtain contracts for additional housing and a hospital complex.

Becoming increasingly active in this area of the world — there is now an ATCO Saudi Arabia Ltd. — the company is meeting the growing demand for housing and related

facilities.

For example, within the grounds of the Jeddah Royal Palace, ATCO completed a 600 - man training complex which includes two-storey housing and office facilities.

As well, the company has supplied family housing for the technicians of the French contractor, Thinet. And a Korean based international contractor, You-One, purchased a 1,000-man camp including unitized sewage, water and electrical systems for its construction site in Tubak, Saudi Arabia.

And one of the world's largest oil companies, Aramco, has purchased ATCO dormitories for 8,000 men and three 1,000-man kitchen/dining complexes.

Accommodation produced by ATCO ranges from housing for entire communities, mobile homes and

Computer control for Precision components

When it comes to exporting prefabricated homes, vacation homes, commercial and institutional buildings, a company with know-how is Precision Homes Corporation Inc.

The 38-year-old Toronto, Ontario, company — one of the first Canadian home manufacturers to build homes for export — has been involved in several overseas projects ranging from single model structures to the building, shipping, erecting and furnishing of 150 homes for a townsite development in the Middle East.

Noted for its precise, economical production methods, Precision, with its system of component manufacturing, uses controlled conditions, modern machinery and expertly trained personnel.

The company's system of home manufacturing is computerized for speed, accuracy and economy. When a building is scheduled for production, it is first programmed for computer control. The computer tape directs the pre-cutting of materials for wall sections, roof trusses and other components.

This computer control ensures uniformity of measurement and precise assembly of manufactured sections. As well, the completed building is better and stronger and more easily and economically assembled on the foundation than is possible with the traditional method of cutting and framing on site.

While Precision uses the most modern computerized machinery, it does not ignore individual tastes. Custom designs built to a customer's

own specifications are programmed, with the tapes being retained in Precision's computer program file.

In addition, Precision designs, manufactures, erects and finishes a building or home to any stage the customer wishes, from shell house to turnkey project, complete with broadloom and appliances, if required.

And this is all accomplished with quality being the most important consideration. The lumber, windows, doors, soffits, hardware and other accessories — all are carefully chosen for style, durability and value. In fact, the customer has the option of specifying certain materials.

To developers in other countries Precision offers a wide choice of working arrangements including the manufacture of components for shell homes which are finished by the developer; turnkey projects with the final assembly of the homes supervised by Precision personnel on behalf of the developer; and turnkey projects in which Precision manufactures, erects, furnishes and equips the buildings completely.

Regardless of the project — which could be a small summer cottage, a church, a town and country home or a motel — excellent design and quality craftsmanship are evident throughout.

Active in Iran, the Caspian Sea area, Bahrain, Saudi Arabia and other locations, Precision Homes Corporation Inc. is ready and able to increase its exports to these and other international markets. Code 4-264



A home like this, a motel unit, or a complete townsite — all are easily and economically provided by Precision Homes Corporation Inc., one of Canada's foremost exporters of prefabricated homes, commercial and institutional buildings. Active in the Middle East where many of its structures are erected, Precision participated in the November, 1978 Arab Built Fair in Bahrain where it erected and displayed its motel units.

patented metal buildings to universities, fully equipped laboratories, camp sites, institutional residences and family homes — all built to ATCO's high standards.

Buildings for entire communities are transported from the factories to remote sites throughout the world. While these structures are rugged and often placed in inhospitable environments, they are far from shoddy — workers' dormitories feature private or semi-private rooms, comfortable heating or air conditioning and up-to-date plumbing.

In every ATCO camp, kitchens are furnished with all the equipment necessary to efficiently feed large numbers of workers. And, by assembly-line production, ATCO also builds all auxiliary structures — medical clinics, post offices, stores, administrative facilities, sewage treatment plants, recreation and other specialized requirements of remote settlements.

Through one of its many subsidiaries ATCO has also become one

of Canada's largest contractors for interior finishing of hotels, restaurants and homes. In addition to providing metal siding and roofing for its own housing products, the company also markets these materials to other manufacturers.

ATCO also manufactures a patented Fold-A-Way relocatable metal building that serves a variety of roles from warehousing and equipment sheds to barns and pipeline pumping stations. Another line of steel building, the Supertruss, is produced for permanent industrial/commercial applications such as warehouses, manufacturing plants, wharf complexes and aircraft hangars.

With 17 factories strategically located throughout the world and with large inventories of knock-down units always on hand for rapid shipment, ATCO International Ltd. is ready and able to further increase its international markets.

Traditional log style method — with an updated difference!

Individually designed homes, beautifully styled and attractively priced, are what customers get when the manufacturer is Pan-Abode Building Ltd. of Richmond, British Columbia.

Pan-Abode has been manufacturing homes, vacation homes, commercial and industrial structures for more than 30 years. For a variety of both practical and aesthetic reasons the company has always used western red cedar, one of the finest natural building materials.

For example, western red cedar has unusual air-filled cellular structures that are particularly effective in slowing down the flow of sound and heat.

In fact, tests have shown that 2.54 cm (1 inch) of cedar has the same insulating efficiency as 30.5 cm (12 inches) of concrete or 17.8 cm (7 inches) of brickwork — an important economic consideration as the cedar home stays warmer in winter and cooler in summer.

Other than its rich, luxurious appearance, the most unusual characteristic of western red cedar is its high resistance to decay. Natural preservatives in the wood, while completely safe to humans, are toxic to wood-attacking fungi. The result is a decay-free home with an extremely long life.

Offering a wide variety of professionally designed floor plans that have been tested and proved by thousands of satisfied homeowners, Pan-Abode primarily builds single-storey structures — all of which can be individually modified to customer requirements.

The company will also evaluate split-level and two-storey designs to determine their adaptability to the Pan-Abode construction system.

A "building block" system, it is based on the traditional log style method of construction, but one that has been updated to accommodate today's contemporary design tastes. It is also much easier, more econom-

ical and much more solid than the older method.

So simple is construction that many Pan-Abode homes have been built by their owners. No special skills are required and a structure can be erected quickly and easily. A crew of three can assemble a home at the floor area rate of 6 m² (65 square feet) per man day.

Speed is facilitated because, in the Pan-Abode system, every cedar log is cut to the exact length required, and notched to form a specially patented lock joint at all intersecting points (the lock joint is completely hidden so that no gaps show and no nailing is necessary) and then stamped with an easy-to-read code number that identifies its location.

The coded, pre-cut logs are stacked, one on top of the other, to form the walls. Doors and windows are pre-assembled and need only be inserted in the pre-cut opening. Next, the purlins are laid on top of the load-bearing wall, followed by 5.1 cm by 15.2 cm (2 inch by 6 inch) tongue and groove cedar roof boards, insulation and, finally, shingles or shakes.

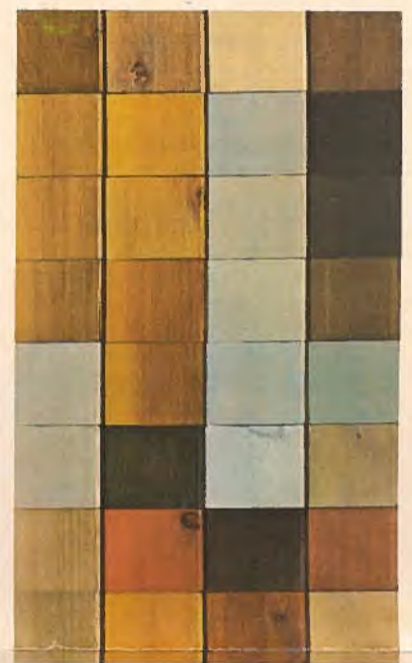
Pan-Abode homes can be erected on any conventional type of foundation such as concrete walls, concrete block footings and sills, or concrete slabs. Except in cases where a concrete slab is used, the standard floor system is foundation beams, floor joints and plywood subfloor. And, with the exception of the logs secured to the floor, no nails, spikes, pins, or pegs are used in the construction of the walls and partitions.

Attractive, durable, with a high insulation value and a low co-efficient of shrinking and swelling, individually designed Pan-Abode homes enhance any environment and withstand virtually any climate.

And they are proving themselves not only in Canada, but the United States, the South Pacific, various European countries, South America and the Caribbean! Code 5-164



One of nature's best building materials — western red cedar — is used in all homes manufactured by Pan-Abode Building Ltd. of Richmond, British Columbia. And Pan-Abode's homes are manufactured, not pre-fabricated: every piece of wood is individually cut to precise specifications. With virtually limitless layout possibilities, Pan-Abode homes are noted for their natural acoustical and thermal insulation, durability and beauty.



Pan-Abode's various finishes.

Total flexibility is Domfab's first secret of success

Buildings to suit any need anywhere are supplied by Domfab Ltd., Montreal, Quebec.

Custom-designed, site-assembled and fire-resistant, the wide range of structures includes hotel-motel units, single family bungalows, fourplexes, apartment buildings,

mobile camps, water purification plants, fire stations, hospitals and vehicle maintenance buildings.

Such diversity is possible because of the construction method used — the Domfab Thermobuilt System — in which configurations, floor plans, structural, architectural and mechan-

ical and design features are all totally flexible and can be tailored to individual job requirements.

The Thermobuilt System is the result of adapting a time-tested and proven building method that is used throughout North America for the majority of residential and light

commercial structures. What Domfab did was replace traditionally used timbers with steel, a move the company has found to be more suitable to a variety of environmental conditions.

Basis of the system is a series of pre-cut structural members manufactured from cold rolled steel. These are assembled to form a skeletal wall which will accept any variety of exterior skin or cladding materials including reinforced stucco-cement, marble, masonry brick and stone, or simulated brick and stone. A colourful and attractive metal cladding is also available.

The versatility of the finishes also applies to the interior skin, with Domfab most often choosing gypsum board. Gypsum has versatile, decorative qualities, is easy to maintain and creates a fine interior. It is also fire resistant.

The Thermobuilt System creates comfortable, effective and permanent quality accommodation. And, because of a number of factors, it provides a most effective climate barrier.

The interior and exterior wall skins are separated, preventing the conductivity of heat, cold, humidity, dryness and noise. The trapped air molecules within the sandwich wall enhance insulation, and the special vapour barrier material reduces humidity and condensation.

In addition to being fire resistant, the Thermobuilt structure is also resistant to termites and can withstand earth tremors better than many other building systems. This is particularly true in the case of conventional masonry or poured-in-place or pre-cast concrete.

All factors considered, the Domfab Thermobuilt System is most effective in dealing with the extremes of all climatic and environmental conditions. It is also noted for its durability, and the speed and simplicity of erection. And the system can comply with most building codes worldwide.

Having erected several thousand motel units and single family bungalows in Canada and the United States, Domfab Ltd. is engaged in or has completed projects in other parts of the world, most notably in Saudi Arabia.

In Riyadh, for instance, projects include the supply and erection of 100 single family bungalows and recreational facilities for U.S. Corps of Engineers personnel; fourplexes and dormitories for Western Electric personnel; and two-storey apartment buildings for officers of the U.S. Corps of Engineers.

Villas for the sole use of King Khaled were provided by Domfab for the King Khaled Military City as were advance support facilities and 11,000 square metres of fully furnished and equipped camps.

And for the Jubail Industrial Complex, considered the largest such project in the world, Domfab is supplying approximately 1,200 buildings, 60 per cent of which are residential structures and the remainder commercial and support facilities.

Domfab Ltd. has the experience and expertise to satisfy virtually any client need. The company actively seeks to further increase the export of its easy-to-erect buildings and structures.

Code 5-264



Using the Domfab Thermobuilt System of construction, Domfab Ltd. of Montreal, Quebec, supplies a wide range of custom-designed buildings — up to five storeys high — to international clients. The simple and easy-to-erect system uses steel wall structures that are separated by exterior and interior skins that are fire resistant, improve insulation and prevent humidity and condensation. Domfab Ltd. is extremely active in Saudi Arabia where it is working on several major projects including King Khaled Military City and the Jubail Industrial Complex.

Phentex spins a very good yarn

It pays to stick to your knitting. Phentex knows this — and so does the company's increasing number of international customers!

Noted for its versatility and dependability, Phentex Inc. yarn — the only such yarn on the market — is made of 100 per cent polypropylene and is used for knitting, macramé, weaving and other creative crafts.

The first yarn introduced under the name was a polypropylene synthetic made from olefin and 100 per cent phenspun. This exclusive process combines the dyes in the very first step of production, ensuring an intergration of colour that makes the yarn truly colour-fast, fade and run-free.

Colours are clear and vibrant and, because of the initial integration, consistent. There is no variation in different dye lots. In addition, the phenspun process makes Phentex yarn extremely long-wearing, stain resistant and washable.

Shrink and stretch resistant as well, Phentex yarn is ideal for use in a variety of practical and decorative applications.

About three years ago the firm introduced "Elite," a yarn that is soft in texture yet maintains all the advantages of the original yarn. The latest addition to the family is a ma-

cramé yarn which is available in a wide range of clear vivid colours.

Having captured a large share of the Canadian market, Phentex is also making major breakthroughs on the international scene — where customers appreciate the consistent high quality of product, excellent service and rapid delivery.

To ensure this consistently high quality, Phentex Inc. has installed the most up-to-date electronic control system available. Tension, flow, moisture content, speed, weight... all are controlled electronically.

Additionally, specially trained operatives supervise each stage of production to ensure that Phentex yarns will always have the uniform colouring and soft, even texture that have made them popular with users all over the world.

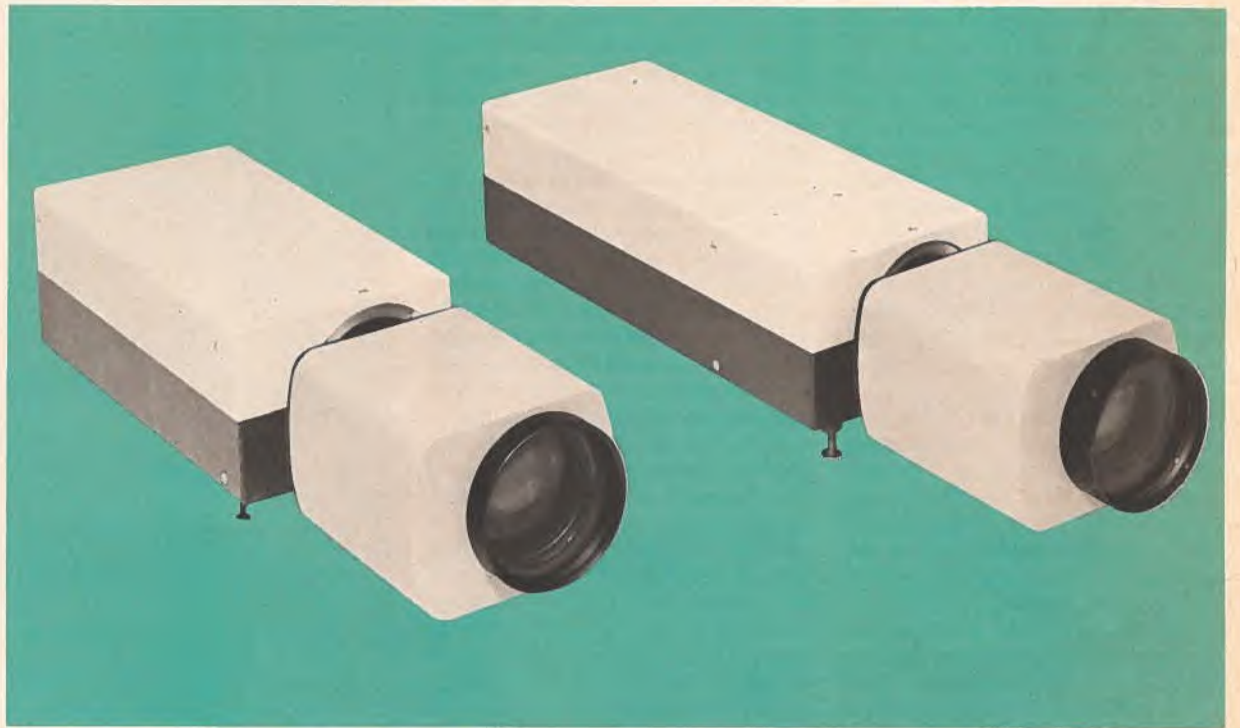
A young and dynamic company with an aggressive marketing strategy, Phentex Inc. is headquartered in St. Hyacinthe, Quebec. The original plant has been complemented by three more in Canada and a fifth one has been opened in Plattsburgh, New York.

Active in the export field, Phentex Inc. seeks to further expand its North American markets as well as those in Europe, South America and Africa. Code 6-162



Appearances can be deceptive — but not when it comes to products by Phentex Inc., a St. Hyacinthe, Quebec, company whose yarns are noted internationally for their versatility and dependability. Demonstrating the excellence of the product are the various finished articles worn by these mannequins. The only deception? The "mannequin" in the centre is a live model!

Low-light-level TV cameras demonstrate high sensitivity



A major advance in the field of Low Light Level TV (LLLTV) cameras, the Picker Mini-isocon (PMI) series is specifically designed for use in security surveillance, pollution monitoring, scientific instrumentation and other applications that demand exacting standards. Featuring vertical and horizontal sweep loss protection, simple set-up procedures and automatic light level compensation, the PMI series cameras are also noted for their high sensitivity, wide dynamic range and excellent resolution. Able to withstand overload exposures of 10^4 fc for one second and completely immune to "wipe out" on local overloads, the PMI cameras are normally available in non-intensified or intensified one input stage versions in 16 mm format. One of the significant advantages offered by the PMI series is the ability of the cameras to simultaneously differentiate large light level difference — within the same scene — with negligible degradation of performance. This feature of wide intra-scene dynamic range permits retention of a scene information in the presence of localized bright light overloads. Available options are an auto-iris lens control and a surveillance package that includes: man-pack camera; 10.2 cm (4-inch) diagonal view finder; VTR for 12 Vdc operation — available in both non-intensified and intensified models. With built-in provisions for uninterrupted operation, the rugged, field-proven cameras are, except for the isocon tube, fully solid-state silicon circuitry. Considered the only production series of Canadian manufactured LLLTV cameras presently available, the cameras are made by Picker Canada Ltd/Liée, Montreal, Quebec. Seeking worldwide markets for its cameras, the company is also noted internationally for the manufacture and supply of security x-ray systems for airports, postal facilities and other institutions. Code 6-239

Library covers 7,000 jobs

Helpful career counselling by video cassette

From Reed Vocational Resource Library Ltd. comes an excellent series of video cassettes that present real-life job information to anyone wishing career counselling.

The Edmonton, Alberta, company produces and distributes a total of 137 10-minute programs on careers and vocations with more than 7,000 occupations presented in the package.

Each colour program details in a documentary style the responsibilities, working conditions, demands and rewards of the occupations covered. The vocations are not rated or evaluated — they are shown as they actually are on a day-to-day basis. The programs are produced in a stimulating first-person format that is designed to allow the viewer to extract the relevant information needed to form his or her own conclusions.

Each is a fast paced program produced to exact technical standards that ensures the viewer an informative and entertaining experience. If the viewer is interested in a particular career, a counsellor can then be approached for more detailed information.

Any occupation can be investigated by simply choosing the appropriate video cassette and viewing it. Each program is composed of material filmed at the job location showing the work environment with descriptions and explanations provided by people actually engaged in the respective occupations.

Reed developed its Library because the company felt that both adults and students had little idea of the day-to-day nature of many occupations and a lack of insight into the vast range of jobs available today.

To stock the Library, a com-



More than 7,000 occupations can be studied using this video cassette library produced and distributed by Reed Vocational Resource Library Ltd. of Edmonton, Alberta. The Library consists of 137 10-minute programs that take a frank look at different occupations to give the viewer a realistic impression of a particular job.

prehensive program of research, development and testing was conducted in conjunction with schools, community colleges, universities and manpower agencies to make sure the Library most effectively fulfills the requirements of the company's clients.

In addition, Reed's Library has been carefully designed so that it is compatible with existing career selection systems. Recognizing the continually changing nature of the job world, Reed maintains an ongo-

ing research program so that cassettes can be changed and updated as conditions dictate.

The Libraries are highly applicable in all areas of job career counselling including secondary schools, post secondary institutions and universities, public and private manpower agencies, libraries and personnel departments.

Currently distributed within Canada, Reed wishes to market its vocational libraries internationally.

Code 6-380

The decision to go digital

An acknowledged expert in the manufacture of telecommunications equipment, Northern Telecom Limited is also an internationally recognized leader in the field of digital technology.

In fact, in 1976, Northern Telecom became the first telecommunications manufacturer in the world to publicly commit itself to producing a full range of digital telecommunications equipment by 1980. All introductions are on or ahead of schedule.

The decision to go digital — the definite mode of the future — means savings for all concerned, the manufacturer as well as the end user of telecommunications equipment.

Digital technology is already providing faster, simpler to operate, less expensive modes of telecommunications than conventional analog technology. As digital equipment is smaller than analog equipment, it requires less space and lower construction costs to house the various pieces of equipment. Smaller components also mean that less manufacturing and warehousing space is required by the manufacturer.

Another significant factor is that digital technology is virtually immune to inflation. For example, the number of elements that can be put on a single silicon chip has doubled each year for the past 10 years while the cost of the chip has remained the same. Use of solid state components has made telecommunications systems more reliable.

Digital's most important feature perhaps is that it is technologically indifferent to the type of message it carries. It can accommodate voice, data or video signals with equal ease and clarity. It is also more free from error than the analog method.

Northern Telecom Limited entered the digital world in late 1975 with the introduction of its SL-1 digital business communications system. Today, more than 650 systems have been sold or ordered in Europe, Asia, the Middle East and North America.

Ideal for use in hospitals, schools, government departments and businesses, the SL-1 is an advanced private telecommunications switching system that employs stored-

program control, digital switching techniques and a new family of electronic telephone sets.

A total system design which is more compact and modular than analog, the SL-1 provides private branch exchange (PBX) key telephone and centrex-type services plus a wide variety of custom calling services. The system is designed to provide business services for several thousand stations, depending on traffic requirements.

The basic electronic telephone set is equipped with a pushbutton dial, speaker, and 13 feature keys and is connected to the equipment via two-pair distribution wiring. The operation of station features is greatly simplified by direct operation of the feature keys — which may be assigned with any one of a large number of conventional or custom calling features.

Key/lamp expansion modules and attendant consoles are included in the new family of telephone sets. The modules can be added to expand the facilities on the basic set and console without additional cabling to the switching equipment.

With savings up to 20 per cent or more when compared to analog systems the SL-1 offers significant advantages to both the business user and the operating company.

For the business customer, SL-1 offers: reduced installation intervals and fewer interruptions by the operating company; reduced building space to accommodate the equipment, cabling and associated distribution apparatus; a wider range of service offerings; and opportunities to customize services to individual user requirements.

For the operating company SL-1 offers: simplified ordering procedures; reduced administration and maintenance costs; administration from a remote location; new service features and revenue opportunities; economical multi-customer operation; stored-program control flexibility to satisfy future business customer's requirements, and toll quality digital transmission.

Northern Telecom's digital technology offers significant benefits in that all its digital equipment — subscriber, switching and trans-

mission — is compatible with analog equipment, so that the technological evolution from analog to digital can be easily accommodated — and at a speed desired by the user!

In the switching field Northern offers a full range of Digital Multiplex Systems (DMS), including the DMS-1, DMS-10, DMS-100, DMS-200 and TOPS (Traffic Operator Position System).

Ideal for servicing rural areas or remote communities, DMS-1 can act as a remote digital switch or line connector; the DMS-10 is capable of handling the switching needs of a community dial office where requirements range from a few hundred to 6,000 lines; and for larger offices, the DMS-100 local switch has a capacity of up to 100,000 lines.

The DMS-200, for toll or transit office, has a capacity of up to 60,000 trunks while the DMS-300, equipped with 4,000 trunks, will be the world's first gateway international switch when it is cut in 1980. Northern's first customer for the DMS-300 is Teleglobe Canada, the Canadian overseas telecommunications authority.

An example of Northern Telecom's expertise in digital transmission equipment and systems is the LD-4, a high capacity coaxial cable that is currently operating between Montreal, Ottawa and Toronto.

The world's longest commercial high capacity digital transmission system, the LD-4 has the capacity to carry 20,000 simultaneous two-way telephone conversations or a mix of TV, data or voice traffic over a cable no thicker than a man's arm.

Northern Telecom Limited is the second largest telecommunications equipment manufacturer in North America and among the six largest in the world. Established in 1882 and with the largest industrial research organization in Canada, Northern Telecom is able to keep one step ahead in telecommunications developments.

Northern Telecom, whose equipment is used in 90 countries throughout the world, is anxious and willing to develop new international markets for its digital products.

Code 7-164



Leading the world in the manufacture and supply of digital telecommunications equipment and systems, Northern Telecom Limited of Montreal, Quebec, was the first telecommunications manufacturer in the world to go completely digital. Shown here is the company's SL-1 digital business communications system which, like all Northern Telecom digital systems, is faster, simpler to operate and a less expensive means of communication than conventional analog systems. They are also more flexible and technologically indifferent to the type of messages (voice, image, data, TV,) carried.

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Fine restaurants need fresh herbs! Hydroponics supplies them, year-round

Gourmet chefs consider it essential. Gastronomists enjoy its results. And it enhances the culinary reputation of fine restaurants!

Object of such accolades is the hydroponic "Herb Market" manufactured by Applied Hydroponics of Canada Inc., Montreal Quebec.

An innovative new concept in food service equipment, the Herb Market allows cooks to have home-grown, garden-fresh herbs at their fingertips year-round.

The Herb Market also means that chefs can now prepare dishes — especially of the "nouvelle cuisine" variety — that previously were impossible because of the limited commercial fresh herb supply.

Designed to occupy a minimum of space — a 0.6 metre by 1.5 metre (two-foot by five-foot) floor area is sufficient — the system can yield 567 to 1,701 grams (20 to 60 ounces) of fresh herbs of any kind every week. That's 28,350 to 85,050 grams (1,000 to 3,000 ounces) a year!

Among the first in North America to employ Applied Hydroponics Herb Markets in their kitchens, award-winning chefs Albert Schnell of the Queen Elizabeth Hotel in Montreal and Jurgen Mehlhorn of the Montreal Airport Hilton, testify to the success of the hydroponic concept.

Says Chef Schnell: "There is no substitute for fresh herbs. You feel the difference. Once a chef has tried a hydroponic herb growing system, he'd never give it up."

Executive Chef Mehlhorn is also enthusiastic: "Definitely, it's upgrading our cuisine; there are no two ways about it. And it's saving us a tremendous amount of money.

The results are devastatingly obvious. We're committed to it."

These chefs are now able to grow a wide variety of herbs, including sorrel, chives, basil, rosemary, chervil, thyme, marjoram, oregano, sage, parsley and savoury. And they are grown, says Chef Schnell, "with far less work than my outside garden takes in summertime."

In fact, maintenance of a hydroponic Herb Market takes only a few minutes a day. That's because hydroponic gardening requires no soil. This makes it an extremely clean system and one in which there is no tilling, no weeding and no pests to contend with.

Instead of soil, plants grow in a gravel-like material that is kept wet with a constantly recirculated nutrient solution of water and minerals which is pumped through special hoses from the bottom half of each tub. Overhead adjustable fluorescent lamps provide the exact light spectrum for optimum growth and to permit continuous harvest year-round.

Additionally, in hydroponic gardening — the principles of which have been known since the days of the Hanging Gardens of Babylon — less energy is directed to root development. This allows plants to grow to maturity more quickly and to remain productive; each day, just snip off what is needed and the same plant continues growing!

The herb growing installations from Applied Hydroponics of Canada Inc. are modular — a chef can start with one Herb Market garden and add additional growing facilities at any time.

Applied Hydroponics' basic Herb Market unit is a free-standing four-tub system which provides 1.1 square metres (12 square feet) of growing area.

Included in the system are: four

growing tubs; a circulation pump and all necessary tubing for each tub; two high-output fluorescent fixtures with eight lamps; an electrical control panel; a six-month supply of nutrient; a six-month supply of the special gravel-like growing material; and all necessary assembly, planting, growing and harvesting instructions.

The remainder of the system consists of a crop yield and maintenance log book; enough seeds to get started; and a steel rigid frame which houses all the components.

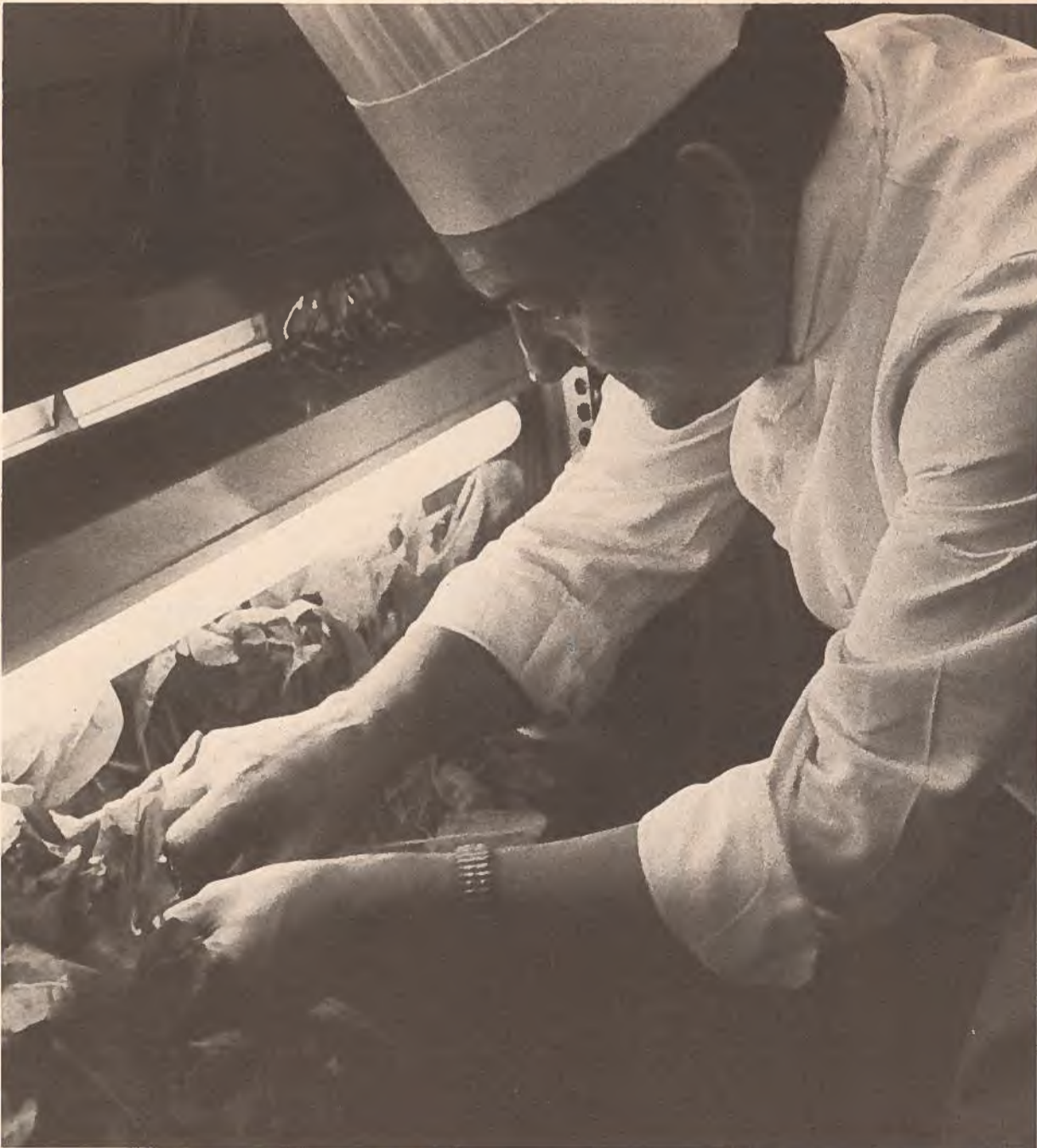
The compact system can be placed in any draft-free location where conditions are relatively consistent, with each Herb Market module requiring an area 0.6 metres by 1.5 metres (two feet by five feet) by 2.1 metres (seven feet) high. Space is also reduced because the system need only be accessible from one side.

As well, a supply of tap water (not softened) should be available nearby for weekly watering. Water demand is approximately 57 litres (15 gallons) per week. Electricity to power the four pumps and two fluorescent fixtures takes a 120 volt supply, 500 watt demand, or about 18 hours a day.

Economical to operate, the Herb Market system pays for itself in approximately six months. From then on, the herb budget can be slashed to just pennies a day — and everyone, chefs, customers and restaurant owners, are more than happy!

The "Herb Market" is currently marketed in Canada and the United States by Applied Hydroponics of Canada Inc. This naturally enterprising company, whose Hydroponics idea is growing, actively seeks to establish markets worldwide.

Code 8-188



Fine-quality restaurants can now produce fresh herbs year-round with the "Herb Market" developed by Applied Hydroponics of Canada Inc., Montreal, Quebec. Here Albert Schnell, award-winning Executive Chef at Montreal's Queen Elizabeth Hotel, snips some fresh sorrel from his garden. Schnell uses sorrel in a new salmon with sorrel sauce dish which, he says, "was impossible before because I couldn't get fresh sorrel."

Cooking with Enterprise

Quality products that are unique and innovative have earned The Enterprise Foundry Co. Ltd. a reputation second to none in the cooking and heating appliances fields.

The 106-year-old firm is the world's only full line manufacturer of cooking stoves, producing units that use every available energy source — wood, coal, oil, gas and electricity.

Latest product from this Sackville, New Brunswick, company — and one that is sure to gain international markets — is the Enterprise Microwave Oven.

This oven's uniquely designed stirrer fan and deflector ensure that the 645 watts of cooking power are well distributed for consistent, even cooking. As well, the food temperature control not only cooks by measuring internal temperatures of foods (where it counts), it will automatically maintain food at the same temperature for as long as desired.

In addition to a 99-minute digital timer are the power variable controls which give the user 20, 50 and 100 per cent of power at the touch of a button. Power levels can be selected at any time during the cooking process. Controls allow the operator

to roast, simmer, reheat and defrost.

With an easy-care vinyl-on-aluminum cabinet in harvest wheat colour, the Enterprise microwave oven complements any kitchen decor. As well, the oven is designed and sized to fit easily between kitchen cabinets and countertops (no top-of-oven vents to worry about).

The oven has three rubber "feet" which hold it steady even when the counter surface may not be perfectly level. This tripod suspension also eliminates distortion of the door and oven due to cooking vibrations.

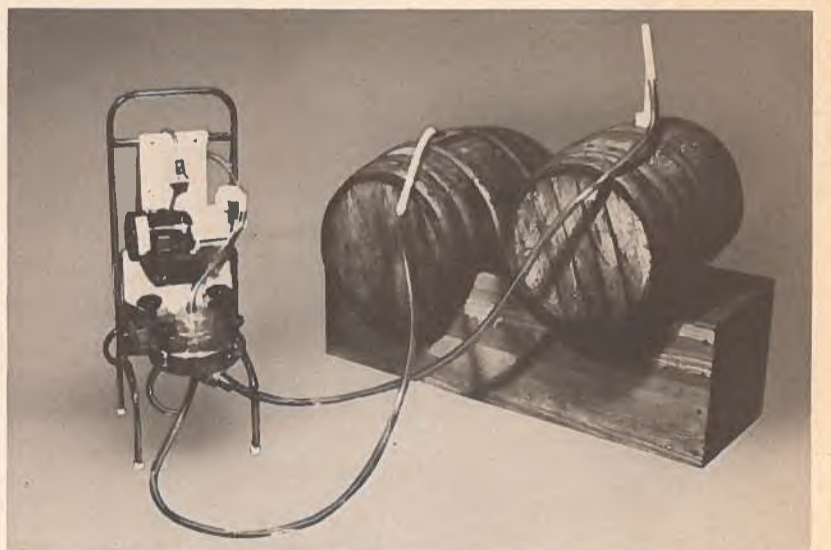
The oven itself is of a magnetic stainless steel, making it rust and corrosion proof and easy to clean. The magnetic quality ensures that, should the oven be inadvertently left on, the elements will not burn out. And the easy-to-clean ceramic shelf eliminates any possibility of shelf breakage.

The latest in a long line of cooking and heating appliances, the Enterprise Microwave Ovens are selling extremely well in Canada and, with microwave cooking using 50 to 75 per cent less electricity than conventional electric cooking, The Enterprise Foundry Co. Ltd. is certain its ovens will sell equally well in worldwide markets. Code 8-262



Designed with the cook in mind, this Enterprise Microwave Oven is noted for its evenness of cooking, quality of construction and whisper quiet operation. One of three models, this microwave oven is manufactured and exported by The Enterprise Foundry Co. Ltd., a company with more than 106 years' experience in the cooking and heating appliances fields.

Wine that maketh glad . . .



Spirits are high these days among those professional and amateur wine makers who are using the new wine filtration/clarification unit developed by Vinoclear Manufacturing Inc. of Cambridge, Ontario. Consisting of a pump and filter, Vinoclear's easy-to-operate unit is unique in that it removes bacteria and yeast from homemade wine without disturbing the wine's body. The non-asbestos filter further enhances and guarantees the clarity of the wine. Another advantage is that the system is much less expensive than similar filtration/clarification units currently on the market. A big help in filtering, decanting and bottling wine, Vinoclear's system does away with long and tiresome operations while yielding a wine that is always crystal clear, clean and wholesome. The units are available in two models, the standard and the deluxe. The only difference is that the deluxe model has a hand pump attached so that it is semi-automatically primed. Developed after two-and-one-half years of research, the system weighs 6 kgs (13.2 lbs) and is 74 cms (29 ins) high. Experiencing high sales in Canada, Vinoclear Manufacturing Inc. is actively seeking worldwide markets, especially in such wine-producing areas as France, Italy, Germany, Spain, Portugal and the United States. Code 8-362