

# Let the sun heat your water

Water heating accounts for a significant portion of a typical Canadian home's annual energy budget. A solar water heating system can reduce significantly your purchased energy needs.

More and more Canadians are realizing that the purchase and installation costs of a solar water heating system can be recovered over time through lower energy bills. Solar heaters offer a hedge against inflation; after initial start-up costs, energy from the sun is virtually free, while the costs of fuels and electricity rise regularly.

Solar water heaters work on a very simple concept: collection, transfer and storage of sunlight as heat. This process provides home-

owners with hot water, day and night, for laundry, dish washing and bathing. Solar water heaters are most suitable for households that use large amounts of hot water.

## Solar collection

The collection of solar heat is based on the greenhouse effect. Sunlight beams through a clear glass or plastic cover and strikes a dark-coloured, light-absorbing material that converts the light into heat. Temperatures in solar collectors can easily reach 95°C.

Several types of solar collectors are available. Flat plate collectors consist of a shallow rectangular box with a transparent glass or plastic cover. Inside, a dark coloured metal

surface containing imbedded pipes absorbs incoming sunlight and transfers its heat to a fluid circulating in the pipes.

An evacuated tube solar collector uses about twelve glass tubes, each containing a single absorber and tube. Solar heat boils a special fluid in the tube that in turn heats water circulating through a header pipe at the top of the collector.

An integrated collector storage (ICS) system uses a long tank in an insulated trough with a glass cover to both heat water and store it until it is needed.

Depending on the design of the system, insulated pipes transfer the heated water from the collector to an insulated storage tank, to the

back-up water heater or directly to the point of use. Solar system storage tanks are generally larger than conventional tanks, since sufficient hot water must be collected during the day to meet evening and early morning needs.

## Installation

With careful planning, a solar hot water system can be installed easily with little inconvenience for the household. The most visible components of the system, the outdoor collectors, are attractively finished and occupy a space of only 5 to 10 m<sup>2</sup>. Collectors should face in a southern direction to get maximum exposure to the sun's rays. They are usually installed on an unshaded roof but can also be mounted on a wall or on a special ground frame near the house.

Indoors, connecting pipes run-

ning from the roof to the basement can usually be hidden from view in closets, walls and floors. Newer systems include a flexible insulated pipe which can be routed through walls and floors the same way as electric wires.

## Selecting a system

When purchasing a solar hot water system, your first important decision will be whether to install a seasonal or year-round system.

Seasonal solar water heaters can be used only when the outside temperature is above freezing. They tend to be less expensive than systems designed for year-round use because they do not require a freeze protection mechanism. Seasonal systems are ideal for cottages or for families that spend a considerable amount of time away from home during the winter.

## WHAT'S YOUR MOST VALUABLE ASSET WORTH RIGHT NOW?



**ANNE BAHR**  
Sales Representative  
Res: 877-1875

Redeem this certificate and find out! The bearer is entitled to a **FREE MARKET EVALUATION** of his or her property, at no obligation, by Anne or Kathleen, representing Royal City Realty Limited, Realtor.

Please call us personally for an appointment.

**877-5296**

**TOR. LINE**  
846-0800



**KATHLEEN DOBBIE**  
Sales Representative  
Res: 877-7393

This is not intended to solicit property already listed for sale and is not valid while listed.

**ROYAL CITY REALTY**

**NRS** NATIONAL REAL ESTATE SERVICE  
**BRAND REALTY INC.**

**DOUG MEAL**  
SALES REPRESENTATIVE

Business: (416) 873-0300  
Residence: (416) 877-6279

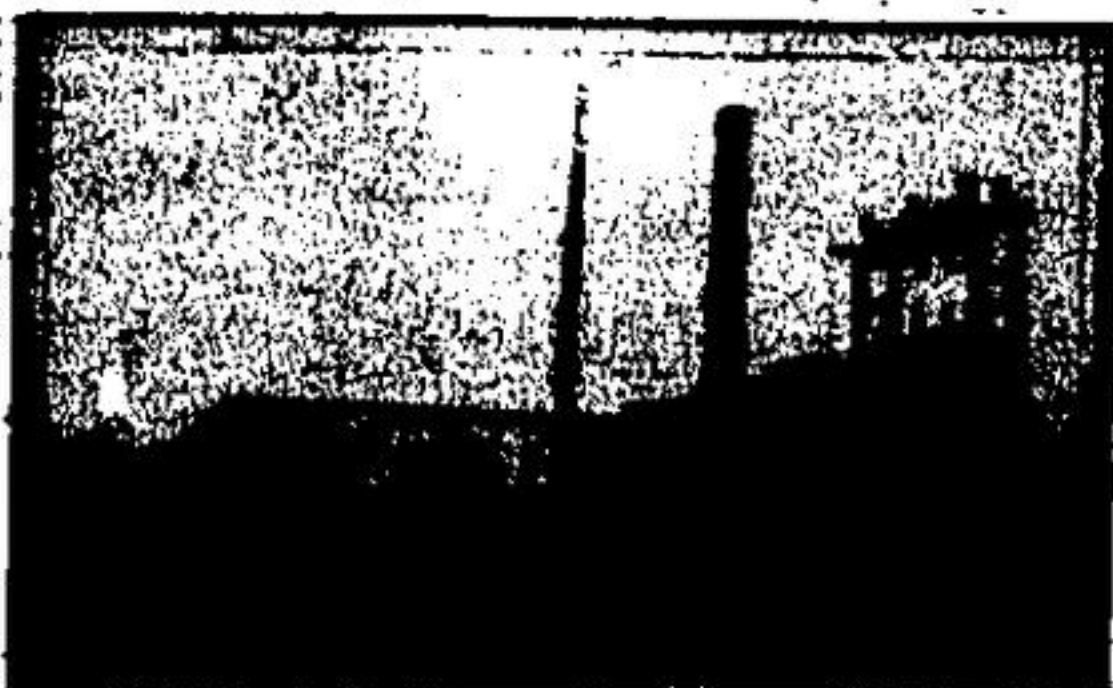


## HOME EVALUATION CERTIFICATE

Present this certificate to Doug Meal for a **FREE APPRAISAL** of Your Home's Market Value with no cost or obligation.

**CALL DOUG MEAL FOR DETAILS**  
**877-0300**

(Not Intended To Solicit Homes Already Listed For Sale)



## FOR SALE

M1 Industrial. 18,000 square foot combination shop and office space. **\$599,000.** Call Doug Meal at 873-0300.

