

ADVANTAGES FOR HOMEOWNERS, BUILDERS AND DEVELOPERS

Lower Capital Cost

The installed cost of the LEGALETT System is lower than other construction methods for foundation and heating systems.

Lower Operating Cost

The superior insulation of the LEGALETT System greatly reduces the energy loss to the ground. Room temperature can be lowered on average by up to 2°C (4°F) with a retained level of comfort. The foundation can be used for heat storage eliminating energy demand during peak periods. The LEGALETT slab can absorb large amounts of solar energy to release later at night, also reducing energy costs. With LEGALETT, the requirement for air-conditioning is reduced and the operation of make-up air system is eliminated except during occupancy. LEGALETT provides simple controls that can take advantage of time of use energy rates.



Comfort

The LEGALETT foundation heat-storage ability gives way to a stable indoor climate, even when there is a quick change in the weather. LEGALETT ensures warm and comfortable floors while meeting heating needs.

Elimination of Footings and Frost Walls - Efficient Installation

The LEGALETT System provides for a faster and more efficient site preparation due to the use of a flat gravel bed. LEGALETT supplies all components as a kit, with easy to follow instructions. The supplied edge elements provide stay-in-place formwork and allow a short construction time.

Ability to Make Use of Land with Poor Soils

The LEGALETT System can be built on soil types that are simply not practical with traditional foundation designs, allowing the builder to make profitable use of areas that would otherwise have to be abandoned.

Prolongs Construction Season

After concrete pouring is complete, a temporary heater is connected to the heating system for concrete curing, effectively drying out the slab, a process which can continue throughout the construction period. This has advantages for the entire building process. Painting and floor laying can be carried out at an earlier stage than with conventional construction methods. (Traditional building heaters need not be used.)

Low Maintenance Cost

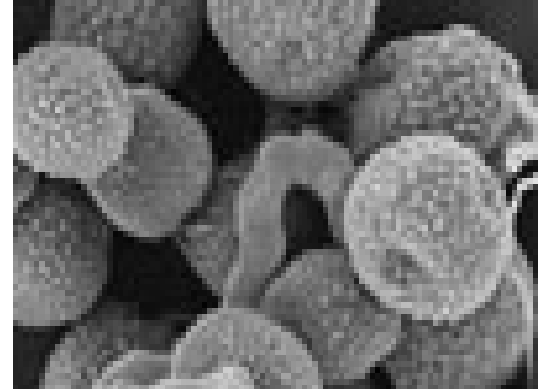
The closed loop pipe system does not require cleaning or maintenance. The air pipes do not have the leakage risks of a water system. There is no limit to the lifetime of the pipe system. The fan and the heating unit are easily accessible.

Heat During Power Outages

The heat storage system is advantageous in the event of a power outage. Due to the slab's ability to store energy, it can release its' large store of heat over along period of time.

Elimination of Mold and Mildew

LEGALETT eliminates the physical conditions necessary for the occurrence of dampness and thus the growth of mould in the foundation. Heating the slab drives the moisture away, eliminating dampness. The insulation under the slab also provides an effective capillary break against moisture migrating upwards from the soil in the summer, when the ground may be warmer than the slab. Without this insulation, the slab might become moist and damp during the summer. The insulation provides this barrier while allowing the slab to breathe.



Elimination of Radon Gas

The reinforced concrete slab provides for very good protection against radon. Additional measures in the case of radon can be taken, such as the sealing of inlets for plumbing fixtures, electrical conduits and gas lines that penetrate the slab. The LEGALETT System, as is, becomes a continuous radon barrier under the dwelling since there is no separation of footing / foundation and floor - the slab is continuous throughout.

Convenient for Physically Challenged and for Toddlers

The low entry height of a slab on grade heated floor make the LEGALETT System very convenient for the physically challenged as well as for small children.



Green Features

The LEGALETT System is environmentally friendly:

- Use of recyclable materials (the main bulk of the System is EPS insulation, piping and reinforcing, all of which can be recycled).
- Use of people friendly materials (warm concrete is one of the most friendly materials for the environmentally sensitive).
- Reduction in energy requirements due to reduced energy consumption, reducing fossil fuel consumption and greenhouse gas production.
- Ability to passively collect and distribute solar energy for heating, reducing heating energy consumption.
- Ability to modulate summer temperature spikes, reducing the need for cooling energy consumption.
- Ability to reduce ventilation and resultant make-up air heating / cooling to the minimum required for ventilation only (saving energy) during occupancy, while maintaining comfort (for assembly buildings).
- Minimum impact on the environment due to elimination of frost walls and deep foundation drainage, leaving natural water tables unaffected (and the vegetation and trees that draw from it).

Maintenance

Legalett also offers extremely low maintenance costs due to the closed nature of the piping system and the simplicity of the equipment. In comparison, a forced air heating system has much higher maintenance and cleaning costs, since the air used for heating is the same dust-laden air used for breathing.

**ADDITIONAL ADVANTAGES
 (FOR RETIREMENT HOMES / COMMUNITIES & NURSING HOMES)**



Lower Capital Cost

Retirement communities often consist of small, detached units. Since LEGALETT is less costly, these cost savings can be passed on to the owner.

Warm Comfortable Floors and No Drafts

Elderly people are especially sensitive to temperature. With LEGALETT, since the floor is warm, the feet are warm, and thus the whole body is warm. This increases occupant comfort, and decreases the effects of joint ailments from arthritis.

Easy To Provide A Heated Garage

When building with LEGALETT, it is easy to extend Legalett to include the garage as a heated area. The cost of frost walls used in typical garage construction is eliminated. A heated garage allows access to vehicles in a warm area. A retiree may want an area to work on hobbies, and a warm garage is the perfect place!

**ADDITIONAL ADVANTAGES
 (FOR ASSEMBLY BUILDINGS, CHURCHES, SCHOOLS & DAYCARES)**

Lower Operating Cost

The LEGALETT System reduces the requirement for air conditioning and eliminates the need for make-up air system operation except during occupancy.



ADDITIONAL ADVANTAGES (FOR LARGE BUILDERS AND DEVELOPERS)

Foundation Cost Consistency

When building similar houses in areas of different soil types, the design and construction of the foundation is based on the soil conditions and digging hazards of the site. Conventionally constructed buildings provide risk to the builder since digging is always an unknown.

Cut and Fill Reduction

Since there is no buried foundation /basement, cut and fill requirements are eliminated with the LEGALETT System. If the existing grade is suitable, then the roads are installed to suit that grade, and only simple landscaping is required to make the grade uniform, instead of a costly subdivision-wide program of cut and fill.



Elimination of Footings and Frost Walls

LEGALETT eliminates footings and frost walls. The slab provides more than adequate support for interior partition or bearing walls and posts, eliminating the complex and costly network of interior strip footings and foundation walls that are common with multi-unit structures.

No Effect on Water Table, Doesn't Kill Mature Trees

A traditional subdivision, with its multiple basements, all with foundation drainage, will typically lower the existing water table. This lowering of the water table will adversely affect existing mature trees. Since the LEGALETT foundation is built on rather than in the ground, it does not lower the water table. Houses with LEGALETT foundations can be built in areas with mature vegetation, with no negative environmental impact. LEGALETT is thus an environmentally friendly way to build, avoiding root damage and preserving existing water tables and mature vegetation and landscape.