

# THERMADRY®

## Insulating Drainage Panels

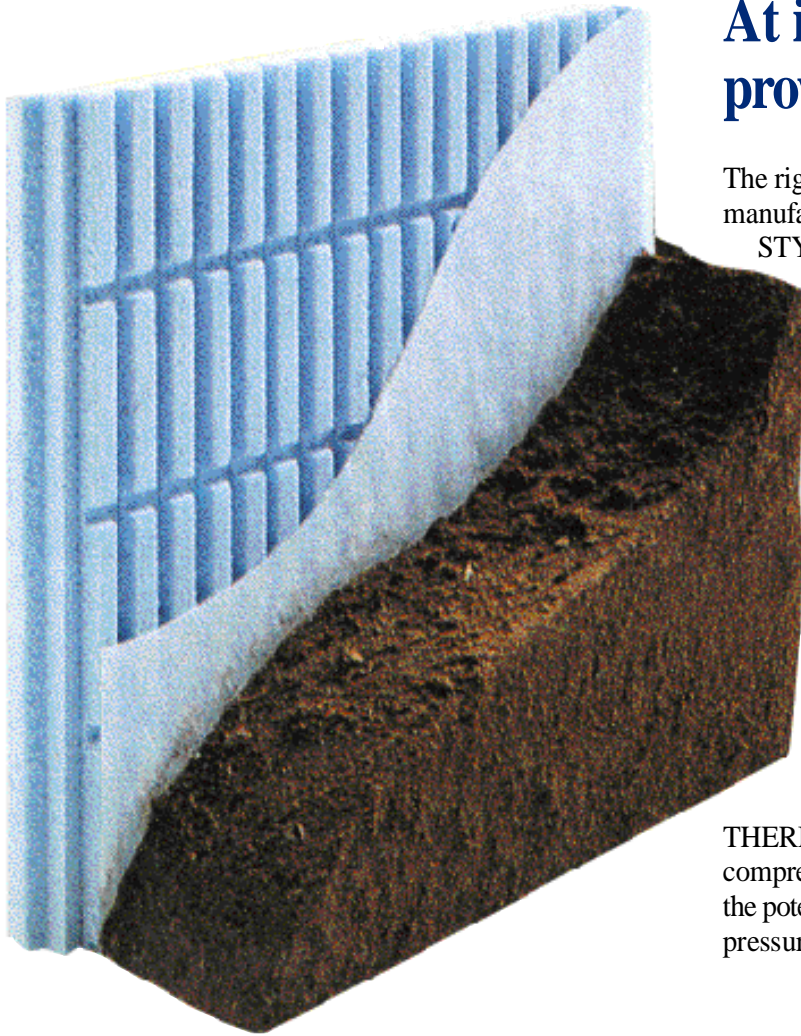
THERMADRY is manufactured using



**The one complete system for below-grade commercial and residential applications that drains, insulates and protects.**



**CLEAR**  
CORPORATION



## At its core, over 40 years of proven insulating performance.

The rigid THERMADRY drainage panels are manufactured by T. Clear Corporation. Its core is STYROFOAM® brand

insulation, a moisture-resistant, rigid foam product developed and manufactured exclusively by The Dow Chemical Company. The thermal performance of this extruded polystyrene foam insulation has been proven worldwide.

The reason is the tight closed-cell structure and the absence of voids between the cells enable STYROFOAM brand insulation to repel all forms of moisture. In addition, its rigid structure assures high compressive strength that withstands installation abuse and earth pressures.

In sum, this unique time- and labor-saving product provides drainage, reduces long-term energy consumption and protects a building's foundation.

THERMADRY's high drainage rates and high compressive strength protect below-grade structures against the potentially damaging effects of soil water, hydrostatic pressures and freeze-thaw cycling.

## Designed and manufactured to help assure unimpeded flow.

On one side of each 2' X 8' panel is a series of closely spaced vertical and horizontal channels. These channels help direct ground water flow to the drain.

Adhered to the channeled surface is a spunbonded geotextile filtration fabric. It helps prevent soil from entering and clogging the channels. The fabric also overlaps the sides and ends of the panels. This prevents the edge channels from being clogged at the panel joints. And the tongue and groove edges of each panel help assure a tight fit.

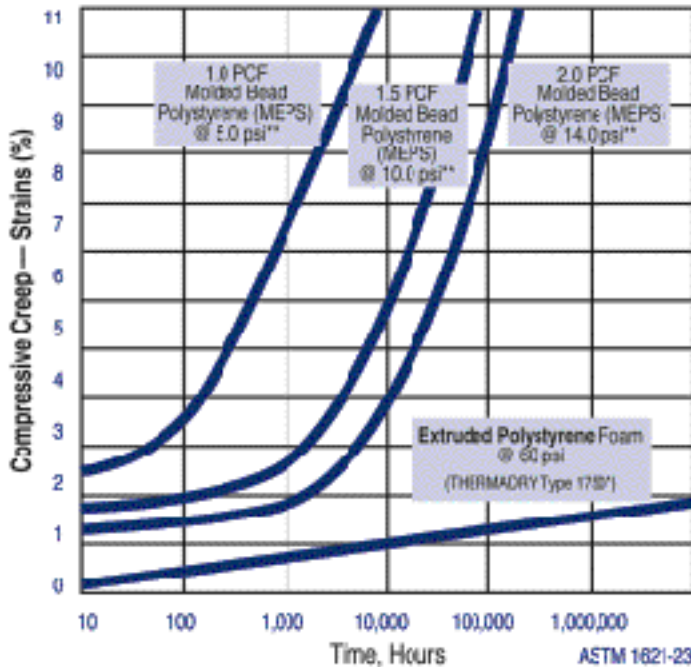
## Takes high compressive loads. Maintains high flow rates.

The performance of THERMADRY Insulating Drainage Panels is not jeopardized by compressive creep — a continuous decrease in the thickness of a material subjected to compressive loads.

Most materials will experience some creep and its rate is influenced by the strength of the material and amount of compressive force. Mineral wool and glass fiber drainage products deform as soon as a compressive load is applied, such as backfill. Other materials may deform over time, which would ultimately lower drainage rates.

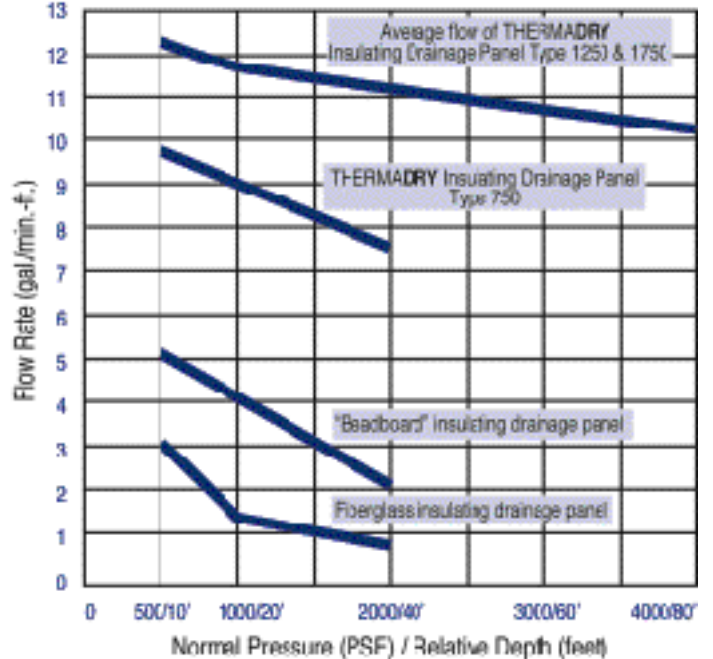
In the case of THERMADRY Insulating Drainage Panels, their excellent ability to withstand compressive loads limits deformation to less than 1.5% over a 20 year time frame. As a result, high drainage rates are maintained.

**Compressive Creep @ Different Loads vs. Time for Polystyrene Insulation Foams, 70°F**



\*THERMADRY TYPE 1750 is made from STYROFOAM 80 psi extruded polystyrene foam.  
 \*\*BASF Polyamide Corp. technical bulletin E-3 "Strength Characteristics of EPS Thermal Insulation."  
 †Typical properties, not to be construed as specifications.

**Flow Rate vs. Normal Pressure\*\*\***



\*\*\*Testing performed by ST3 Consultants, Ltd.

## Built for effective performance for other applications.

There are three types of THERMADRY Insulating Drainage Panels — 750, 1250 and 1750. Each can be used to full advantage in varied structures other than basements or foundation walls. They will, for example, drain, insulate and protect bridge abutments, retaining walls, earth-sheltered structures, culverts, lagging or forms. And Types 1250 and 1750 can be used for horizontal installations such as plaza decks.

When installations are made in colder climates, the panels help reduce potential structural damage from frost heave by draining water from frost-prone soils and -- with retaining walls -- insulate the soil to retard freezing.

We welcome your inquiries about using THERMADRY Insulating Drainage Panels and encourage you to contact your local representative whenever you need information.

For product availability, technical information, or the name of your local sales representative, call T. Clear Corp. at **1-800-544-7398**.

### Typical Physical Properties of THERMADRY Insulating Drainage Panels

Panel Property	Type 750	Type 1250	Type 1750
Thickness, Inches	1, 1 1/2, 2 1/4	1 1/2, 2 1/4	1 1/2, 2 1/4
R-Value, F•sq. ft.•h/Btu	4.4, 6.9, 10.6	6.9, 10.6	6.9, 10.6
Compress. Strength <sup>†</sup> , psf.	2160	3460	5180
Flow Rate <sup>††</sup> , ggm/ft.	9.5, 9.5, 9.5	12, 12	12, 12

† An appropriate design factor, such as 3 to 1 for static loads, should be applied to minimize long-term compressive creep.

†† Flow rate at 500 lb./sq. ft. load. See Flow Rate vs. Normal Pressure chart on this page for other load ranges.



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NOTICE: Extruded polystyrene foam insulation will burn and should be stored, handled and installed properly. For proper use consult applicable building code requirements, for regulations, and specific instructions available from your supplier or the T. Clear Corp., 3255 Symmes Road, Hamilton, OH 45015 (1-800-544-7398).

SPECIFIC INSTRUCTIONS: Extruded polystyrene foam insulation should be protected from the living area of the building by code-acceptable finishes such as masonry, concrete, gypsum board or equivalent. For proper protection of plastic foam in storage, consult your insurer, local fire department or other authority having jurisdiction.

The components used in the manufacture of THERMADRY Insulating Drainage Panels have no food value to attract or support insects. However, due to the fact that the extruded polystyrene foam insulation sometimes covers the exterior surface area of below grade walls and slabs, it may be difficult to detect termites entering a building structure. Building codes prohibit the use of plastic foam insulation on exterior foundations and crawl spaces in certain southern and western states. In other areas where termites may be a concern, construction techniques and industry practices that can reduce the potential for termite infestation should be considered. Consult a local building official for specific requirements in your area.

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NOTICE: T. CLEAR CORP. believes the information and recommendations herein to be accurate and reliable as of August 1997. However, since any assistance furnished by T. CLEAR CORP. with reference to the proper use and disposal of its products is provided without charge, and since use conditions and disposal are not within its control, T. CLEAR CORP. assumes no obligation or liability for such assistance and does not guarantee results from use of such products or other information herein; no warranty, expressed or implied, is given nor is freedom from any patent owned by T. CLEAR CORP. or others to be inferred. Information herein concerning laws and regulations is based on U.S. federal laws and regulations except where specific reference is made to those of other jurisdictions. Since use conditions and governmental regulations may differ from one location to another and may change with time, it is the Buyer's responsibility to determine whether T. CLEAR CORP.'S products are appropriate for Buyer's use, and to assure Buyer's workplace and disposal practices are in compliance with laws, regulations, ordinances, and other governmental enactments applicable in the jurisdiction(s) having authority over Buyer's operations.

Styrofoam® is a trademark of the Dow Chemical Company  
THERMADRY® is a trademark of T. Clear Corporation

## **T. CLEAR CORPORATION**

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