

THE



# INTERFACE

*We Manage Heat®*

September, 2002

## News From ETI

This issue of the Interface provides advanced notice of our new pricing system and announces a very important new product, the SIT-6E In-Pavement Sensor. The SIT-6E is particularly important in view of the new technology that it pioneers. During 2003, watch for the introduction of a number of new products based upon this innovative technology.

With this issue of the Interface, we begin two new continuing features. The first is SNO-TALK which presents topics dealing with all aspects of snow melting. The second, CODE CORNER examines NEC (National Electrical Code) issues relating to freeze protection and snow melting applications. These short features provide useful information for an investment of just a minute or two of your valuable time.

## New SIT-6E In-pavement Sensor to Replace the SIT-5E

Within the next sixty days, we will start shipping the new SIT-6E In-Pavement Sensor as an enhanced performance replacement for the SIT-5E. The next issue of the Interface will include a data sheet. The SIT-6E,



**PREVIEW OF  
THINGS TO COME**

although similar in physical appearance and size to the earlier SIT-5E, it is a "clean sheet" design. It represents ETI's biggest technological leap in the more than thirty-four years of manufacturing in-pavement sensors.

In addition to retaining performance features of the SIT-5E, some of the many enhancements include: a more flexible mounting, reduced power consumption, improved moisture and temperature sensing, superior resistance to lightning and other electric surges along with greater application flexibility.

Now for the best news, the SIT-6E offers many more features at the same price as the earlier product. That is, increased value.

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## New Pricing System



Effective December 1, 2002, we will base prices on a mark down from the List Price. In effect, we are adopting the industry's most popular pricing strategy. As part of the change, we will publish only List Prices. Your discount multiplier depends upon channel position and quantity. If this change was implemented today, your prices would not be altered.

Between now and the change date, we will work out the details. This topic will continue with the next issue of the Interface.

# SNO-TALK

## Why a Heater Hold-on Timer?

When the snow stops, it may be too soon to stop heating since melting may not be complete. When snow falls faster than it can be immediately melted, this situation is unavoidable.

Melting and clearing a snow event takes energy which is expressed in kilowatt-hours. Assuming no thermal losses, the number of watts per square foot determines the *rate* at which the snow event is cleared. If the snow falls too rapidly, melting will lag behind and snow will accumulate. In essence, the snow melting system ends up with a deficit in the kilowatt hours. Holding the heaters on after snow stops for a period of time makes up for this deficit thus ensuring complete melting.

All ETI snow melting controls provide either a fixed or adjustable hold-on timer that operates heaters after snow stops. That is, the hold-on timer makes up for any energy deficit that may have occurred during the snow event.

# CODE CORNER

Article 110.3(B). Installation and Use. Listed or labeled equipment shall be installed and used in accordance with any instructions included in the listing or labeling.

Did you know the instructions packaged with your equipment are the law? Where the NEC uses the verb “shall,” the statement is an absolute. Any deviation from the guiding statement is a violation of the NEC. Further, not installing per the instructions could render warranties void and endanger building occupants.

Listed or labeled is interpreted as any listing agency and includes all literature packaged with the equipment. First, the listing agency UL, CSA, Factory Mutual or any other NRTL indicates the equipment has been reviewed and meets its listing agent’s criteria. Secondly, the listing agency recognizes the installation literature as an integral part of the product. As such, the instructions shall be obeyed when installing and or commissioning the product.

Finally, listing and or labeling recognizes that a manufacturer may utilize electrical materials regulated by the NEC in a manner not specified. The use of wire, raceways and sub components that have been reviewed and deemed conforming by a listing agency is permitted.

## Canadian and USA Service Voltages Compared

Electrical design for new construction begins with the selection of service voltage. Service voltages differ between Canada and the United States. Further, they vary by the market served. Principle markets served are Industrial, Commercial and Residential. The service voltages are listed in a descending order of popularity for each country:

### Canada

Industrial	Commercial	Residential
600/347 volt 3P4W Wye*	600/347 volt 3P4W Wye	240/120 volt 1P3W
208/120 volt 3P4W Wye	208/120 volt 3P4W Wye	
600 volt 3P3W Delta	240/120 volt 1P3W	

### United States

Industrial	Commercial	Residential
480/277 volt 3P4W Wye	208/120 volt 3P4W Wye	240/120 volt 1P3W
208/120 volt 3P4W Wye	480/277 volt 3P4W Wye	
480 volt 3P3W Delta		
240 volt 3P3W Delta		

\*Note: P=Phase, W=Wire. A Wye connected transformer secondary contains (3) Ungrounded (Line or Phase) Conductors and (1) Grounded (Neutral) Conductor.

The trend is a move to the Wye connected service transformer. The primary reason is the fully rated and solidly grounded neutral. The phase voltages 120, 277 and 347 are in demand for office equipment, convenience receptacles and lighting.



We Provide Managed Heat™

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