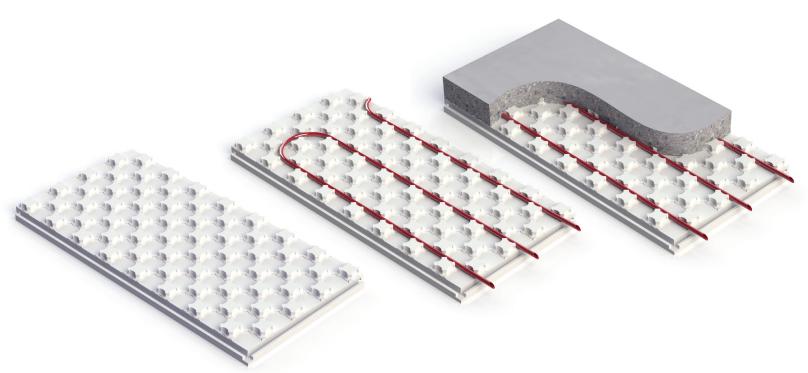


## HYDRONIC SYSTEM INSULATION TECHNOLOGY



New innovative product from Beaver Plastics Ltd.

- Multi-directional grid design
- Interlocking panels
- Flat bottom design
- Compact 2' x 4' panels
- Positive friction fit
- Faster installation saves time & money

## **Product Description:**

Heat-Sheet is a unique insulation panel designed especially for hydronic heating applications. Its primary functions are to conserve energy and reduce cost and labour. Heat-Sheet provides an efficient thermal barrier between the heated slab and the underlying ground. Heat-Sheet permits fast and accurate room temperature response to temperature controllers. The use of Heat-Sheet may also reduce the size and cost of system hardware.

Heat-Sheet will reduce project costs and speed installation because the usual method for positioning tube by tying it down to wire mesh has been replaced. The tube is simply 'stepped' into the Heat-Sheet panels, saving a great deal of back-breaking labour. The cost to purchase and install wire mesh may also be eliminated.

Heat-Sheet is manufactured in a 2' x 4' panel in several thicknesses that will accommodate  $\frac{1}{2}$ " and  $\frac{1}{2}$ " I.D. tubing, R-Values ranging from R4 to R16.1.

**'NEW' Heat-Sheet Heavy** is designed to accommodate 3/4" I.D. tubing for commercial applications.

## **Specifications and Compliances**

Beaver Plastics is committed to a Quality Management System that focusses not only on product and service quality but also on *all interrelated processes with our company* as a means to achieve the highest level of quality and performance standards. Heat-Sheet is manufactured to meet or exceed CAN/ULC S701 Type III. CCMC Evaluation listing 14007-L.



Heat-Sheet Performance Chart							
Physical Property	Units Imperial R Value	Units SI (Metrics)	ASTM Test Procedure	Values			
				Imperial	Metric		
Thermal Resistance (min) (R-Value) at 75° F / 24° C	hr.ft² °F BTU / 1 in.	hm² °C W / 25mm	C-177-76 or C-518-76	4.20	0.74		
Coefficient of Thermal expansion (max)	in / in / ℉	m/m/°C	D-696-79	3.5 x 10 <sup>-5</sup>	6 x 10 <sup>-5</sup>		
Compressive strength (min) at 10% deformation	psi	KPA	D-1621-73	25	172		
Water vapor permanence (max)	perm - in	ng / Pa.s.m.²	E-96-80	2.3	130		
Water absorption % (max)	%	%	D-2842-69	2.0	2.0		

Heat-Sheet Sizes and Packaging Chart (1/2" and 5%" Tubing)							
Product Description	Product Code	TTL Panel Thickness	Nominal Panel Thickness	Average R-Value	Panels/ Bundle	Sq. Ft./ Bundle	
HS-R4*	77703	1 3/8"	.5"	4	16	128	
HS-R6*	77706	1 %"	1.0"	6	14	112	
HS-R8	77708	2 3/8"	1.5"	8	10	80	
HS-R10	77710	2 %"	2.0"	10	8	64	
HS-R12	77712	3 3/8"	2.5"	12	6	48	
HS-R14	77714	3 %"	3.0"	14	6	48	
HS-R16.1	77716	3 %"	3.0"	16.1	6	48	

<sup>\*</sup> R4 & R6 panels do not interlock

Heat-Sheet Heavy Sizes and Packaging Chart (¾" Tubing)								
Product Description	Product Code	Panel Thickness	Panel Thickness	Average R-Value	Panels/ Bundle	Sq. Ft./ Bundle		
HSH-R8	77808	2.69"	1.44"	8	10	80		
HSH-R10	77810	3.20"	1.95"	10	8	64		
HSH-R12	77812	3.62"	2.37"	12	6	48		
HSH-R14	77814	4.08"	2.83"	14	6	48		
HSH-R16.1	77816	4.08"	2.83"	16.1	6	48		

## **Beaver Plastics**

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