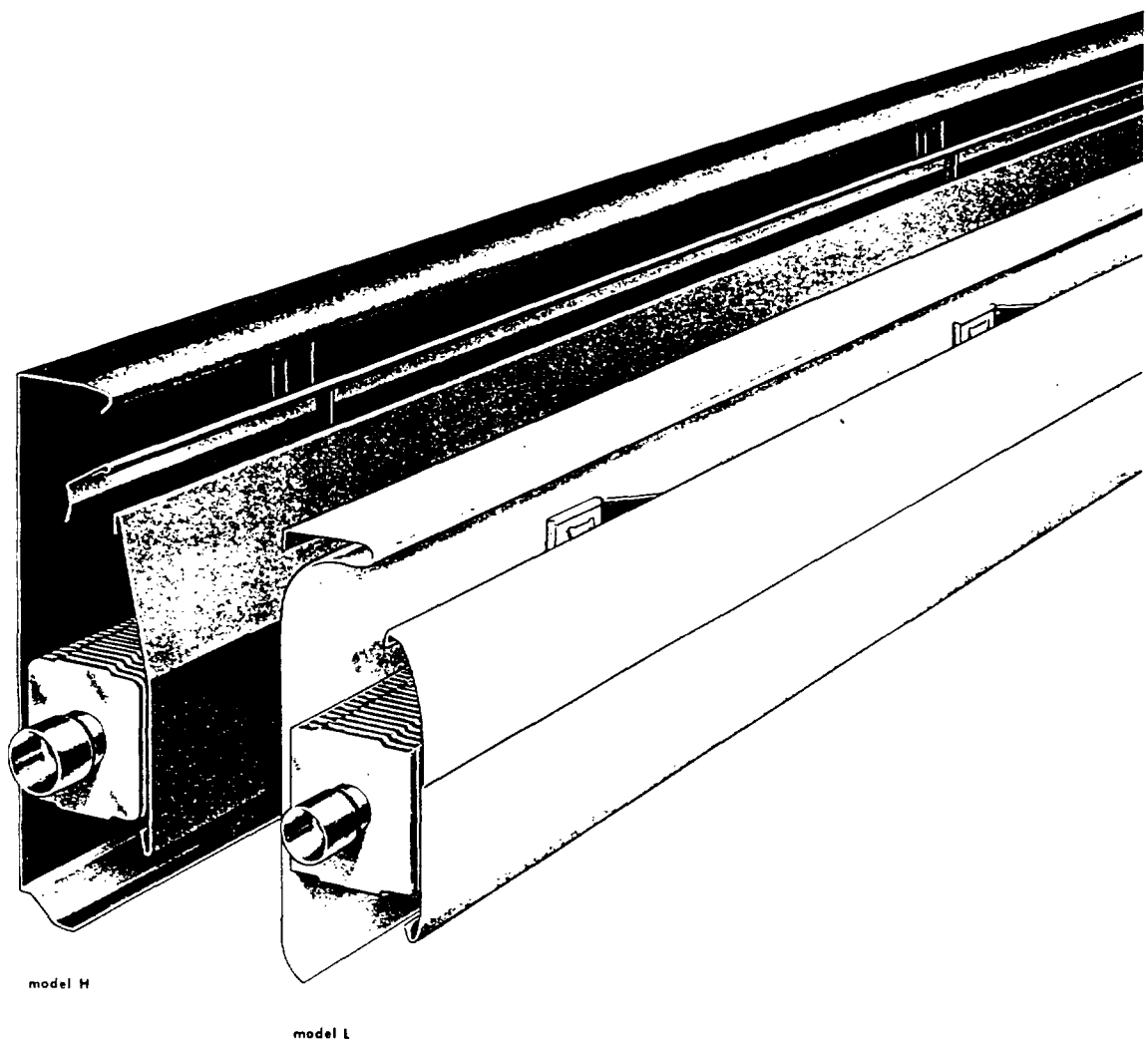




model H

model L

model L
model H

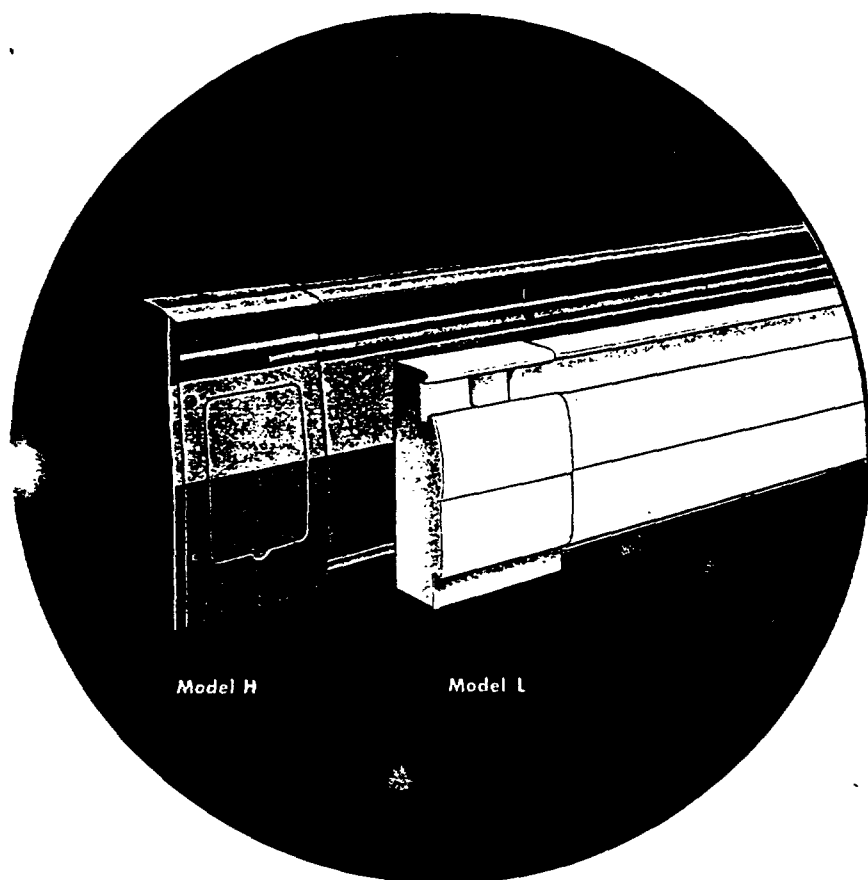
Heatrim non-ferrous
baseboard heating

AMERICAN-Standard

PLAINTIFF'S
EXHIBIT

AST-302

00450



► **Heatrim — new
non-ferrous
baseboard panels
by American-Standard**

■ **New Model L Heatrim Baseboard Panels** by American-Standard are especially designed for quick, easy, low-cost installation while assuring the best in quality hydronic[■] heating comfort.

The smart, low-styled, 8-inch steel enclosure is ideal for installation under low windows, along glass walls and other height-restricted areas, as well as for long runs. Extending only 3 inches from the wall, Model L Heatrim takes up a minimum of space and may be recessed to depth of plaster.

Everything about the new Model L is designed to satisfy the homeowner, installer and builder. For the homeowner, Model L Heatrim offers beauty of design, decorating freedom and quiet, efficient operation.

For the installer, special features such as the multi-purpose, snap-in type support bracket, newly designed element slide cradle and handsome accessories that simply snap into place, as well as a practical variety of lengths — 4, 5, 6 and 8-foot — speed up installation and reduce costs. And the newly designed fins provide ease and safety in handling.

In addition to the smart new design and versatility of Model L Heatrim, the builder will appreciate the attractive, white, satin-like prime coat, which may be easily painted for added decorating harmony, or left as is for economy in time and expense usually required for finishing.

When you select Model L Heatrim, you may choose either the Model 85 (¾-inch) or Model 110 (1-inch) element. Either combination gives you two effectively different Heatrim models for a variety of uses. (See special element design features on next page.)

■ Hydronics is the science of heating and cooling with water.

■ **New Model H Heatrim Baseboard Panels** by American-Standard, as with the Model L, provide easy, low-cost installation and all the comfort advantages of modern hydronic heating.

Model H Heatrim has a 10¼-inch high steel enclosure which provides high-heat capacity, making it particularly well suited to jobs where more than average heat is required and/or where installation area is limited. Model H Heatrim may be installed against the wall, or recessed to depth of plaster.

Homeowners will find the trim, modern lines and compact design of Model H Heatrim panels pleasant to live with and completely compatible for any decorating scheme. They especially will enjoy the quiet, clean, draft-free warmth these panels provide.

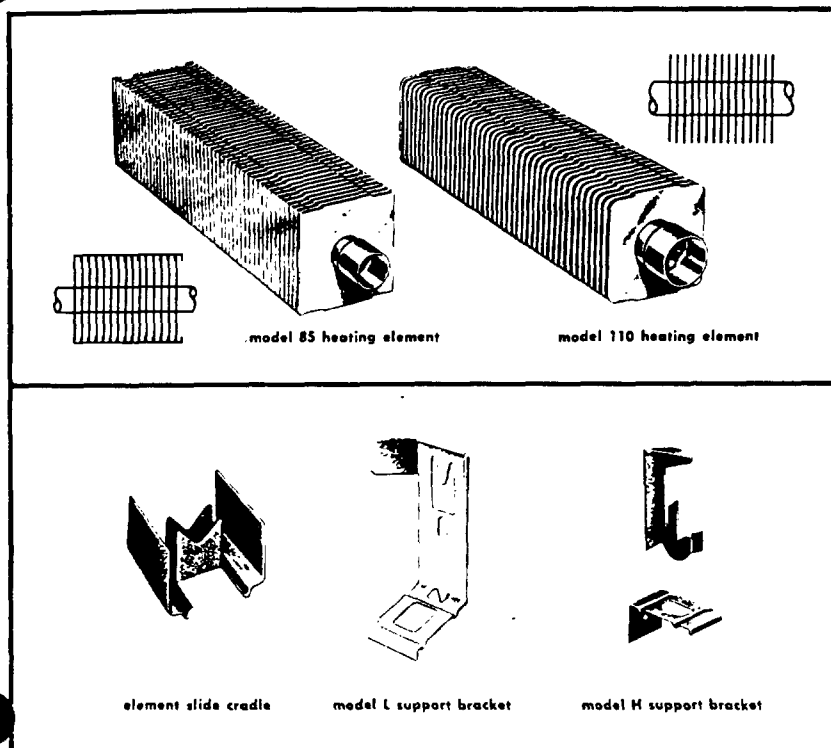
Installers will find Model H Heatrim easy and economical to install. It's available in a variety of convenient 4, 5, 6 and 8-foot panel lengths. The newly designed elements, with no sharp edges, facilitate handling on the job. Other features that provide for more efficient operation and installation are a newly designed support bracket and a special element slide cradle. Model H Heatrim is finished in a gray prime coat for easy painting or finishing.

As with Model L Heatrim panels, a choice of two heating elements is available. The new Model 85 (¾ inch) or Model 110 (1 inch) can be installed with equal ease and with the same basic accessory items.

With two enclosures—the Model L and Model H—and a choice of two heating elements, American-Standard gives you four completely new Heatrim models for every type installation.

▶ two heating elements of evolutionary design

▶ two attractive



■ **Model 85 heating element** features a nominal $\frac{3}{4}$ -inch copper tube on which 0.011-inch thick by $2\frac{1}{2}$ -inch square aluminum fins are collar bonded, 52 per lineal foot. These heat-reflecting fins are of a channel-edge design with one fin edge tightly butted against another. This special butt-edge design eliminates expansion and contraction noises. This design also results in a stronger finned-tube element with no sharp edges, making it easier and safer to handle. Output is increased because of the improved flue effect created by the channel edge design on both sides of the element. Model 85 element may be used either in the Model H or Model L enclosure and is shipped in 4, 5, 6 and 8-foot lengths.

■ **Model 110 heating element** features a nominal 1-inch copper tube with 0.032-inch thick by $2\frac{1}{2}$ -inch square aluminum fins, 48 per lineal foot. Fins are edge-bonded to tubing for permanency. All fin corners are rounded for convenience and safety in handling, plus increased rigidity. Both Models 85 and 110 heating elements are furnished with one end expanded to receive the unexpanded end of another. This permits sweating the elements without the use of couplings, which saves time and material. Model 110 heating element may be used either in Model H or Model L enclosure and is shipped in 4, 5 and 6-foot lengths.

■ **Element slide cradle**, formed of terne plate for lubricant slickness, fits into a duo-grooved bracket track, providing noiseless lineal expansion of heating element and installation ease.

■ **Model L snap-in support bracket** slips into slots provided on back plate. Formed of sturdy, one-piece steel construction, it's installed in minimum time with no tools. Bracket provides both support for front panel and track for heating element.

■ **Model H hanger bracket** is spot welded on back plate, which eliminates one step in installation. Bracket is of sturdy, two-piece steel construction. Additional brackets may be ordered if required; they are attached to back plate with screws.

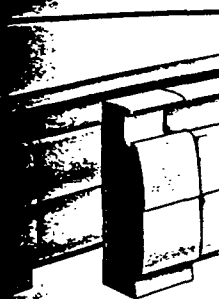
■ **Model L valve enclosure** is designed for easy access to piping, fittings and floor. Front cover, which attaches to enclosure and adjacent front panel, can be removed without the aid of tools, providing access to valve, air vent or

■ **Model L end box** is designed so valve enclosure is not required. Snap-locks into place, and adjacent front panel is provided to clear either copper tubing.

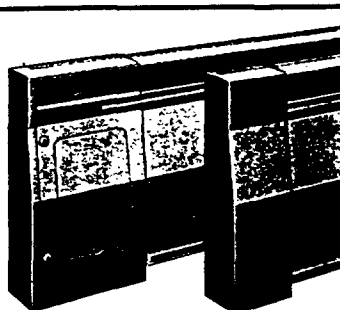
■ **Model L corner connection** functions to Model H corner connections. Require no tools to install. Pieces can be easily removed for corner connections. Outer pieces consist of two pieces—slides over top of back plate and front piece that connects to front panel. Inside corner consists of two pieces—an inverted L-shaped piece that attaches to the wall and plate, and a front piece that connects to enclosure front panel. Enclosure components are designed for utmost ease and safety in installation.

■ **Model L telescopic pipe**—A 14-inch telescopic pipe with breaches openings up to 14 inches between Model L Heating Element and the need for costly cutting. Model L telescopic pipe consists of two parts—back plate and front piece. Made of steel, it's a one-piece enclosure part, it's on the job. Joining (not shown), provides over joints and are 4, 5, 6 and 8-foot long.

heights—model L, 8"; model H, 10"



model L valve enclosure and end box



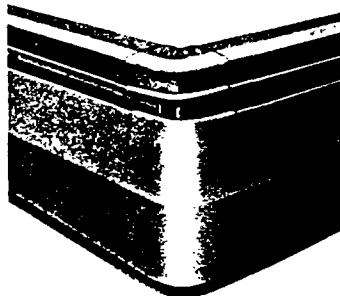
model H valve enclosure and end box

■ **Model H valve enclosure** hides piping, fittings and floor holes. The entire front plate is removed by loosening two screws, permitting full clearance for making sweat connections. A smartly designed, hinged door provides easy access to valve, air vent or balancing fitting.

■ **Model H end box** is used whenever a valve enclosure is not required. A knockout to clear either a ¾-inch or 1-inch copper tube is provided.



model L projecting corner cover

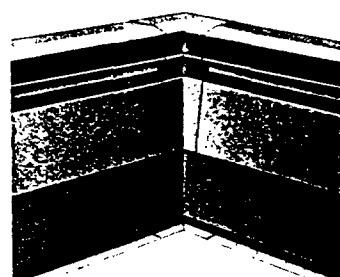


model H projecting corner cover

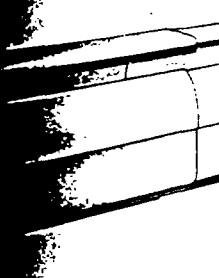
■ **Model H corner covers** are designed to provide an attractive, uninterrupted appearance around inside and outside corners. Outside corner covers consist of three pieces—a top piece that slides over top of back plate, a telescopic piece connecting air vanes and a front piece that connects the enclosure front panels. The inside corner cover, also consisting of three similar pieces, attaches in the same way. Model H corner covers are fabricated from sturdy sheet steel and are finished in a prime gray coat. Corner covers and enclosure components are perfectly matched for utmost ease and accuracy in assembly and installation.



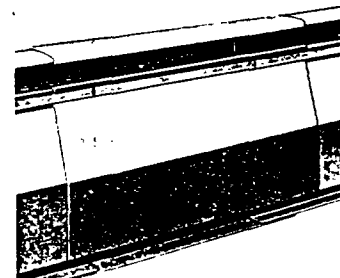
model L inverted corner cover



model H inverted corner cover



model L telescopic joining piece



model H telescopic joining piece

■ **Model H telescopic and joining pieces**—14-inch long telescopic piece fills in gaps up to 12½ inches between Model H Heatrim panels—eliminates the need for costly, on-the-job cutting of enclosure. Telescopic piece consists of three parts—back plate, air vane and front connecting piece. Made of steel and formed to match enclosure parts, it is a time and work-saver on the job. Joining pieces, 1½ inches wide (not shown), provide a neat, attractive cover over joints. They are furnished with every 4, 5, 6 and 8-foot length of Heatrim.

1—Newly designed support bracket—die-formed of heavy-gauge sheet steel, provides support for front panel and heating element. Snap-in type bracket on Model L; welded-on type bracket (two pieces) on Model H.

2—Air vane—eliminates turbulence and improves chimney effect, which increases heat flow from Model H Heatrim panels.

3—Damper—regulates flow of heat when full panel output is not needed or desired. Model L damper is of new spring-actuated design for positive, finger-trip operation—requires no knob or chain for opening or closing. Model H damper has knobbed slider assembly. Both dampers are located above heating element.

4—Enclosure top and back panel—is formed of sturdy, one-piece sheet steel construction. Designed for most efficient flow of air, surfaces are smooth with no cracks or ridges to collect dust and lint.

5—Enclosure front—fashioned of dent-resisting sheet steel, firmly snaps to support brackets without tools. It is easily removable for cleaning or installing damper.

6—Air intake space—provides unrestricted air circulation for maximum heating efficiency. Enclosure front is located high enough above floor to permit easy cleaning underneath element.

7—Element slide cradle—formed of terne plate for lubricant slickness, rides in duo-grooved support bracket track and provides for noiseless lineal movement of heating element. Two brackets and support clips are furnished with each 4-foot length of panel; 3 with each 5 and 6-foot length; and 4 with each 8-foot length.

8—Model 85 heating element—consists of a nominal $\frac{3}{4}$ -inch copper tube to which $2\frac{3}{4}$ -inch square by 0.011-inch thick aluminum fins of channel-edge design are collar bonded. Model 85 element may be used in either Model H or Model L enclosure.

9—Model 110 heating element—consists of a nominal 1-inch copper tube to which $2\frac{3}{4}$ -inch square, die-stamped fins (0.032-inch thick) are edge bonded. Model 110 element may be used in either Model H or Model L enclosure.

10—Joining pieces— $1\frac{1}{2}$ inches wide for Model H and 3 inches wide for Model L, provide neat, attractive covering for joints and are furnished with every 4, 5, 6 and 8-foot length of Heatrim.

Model L Heatrim enclosures and accessories are finished in a white, satin-like prime coat. Model H Heatrim enclosures and accessories are painted a prime gray coat.

