

Tactile Shape Slate

Instruction Booklet



Tactile Shape Slate Instruction Booklet

Karen J. Poppe

Catalog No. 1-00131-00



**American Printing House for the Blind
Louisville, Kentucky 40206**

Tactile Shape Slate

In keeping with our philosophy to provide access to information for people who are blind or low vision, the American Printing House for the Blind (APH) provides accessible versions of this instruction booklet.

Catalog Number: 1-00131-00

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Overview

The **Tactile Shape Slate** can be used by braille transcribers, graphic artists, teachers of students with visual impairments, and students to tool raised point symbols and shapes onto a variety of media (e.g., braille paper, vinyl/plastic, tactile drawing film, heavy-gauge aluminum foil) during the preparation of raised-line graphs, maps, worksheets, artwork, and more. The user-friendly design of the slate mimics that of traditional hinged-style braille slates. The **Tactile Shape Slate** can be used in combination with other tactile graphic tools and materials, including APH's Tactile Graphic Line Slate (Catalog No. 1-00100-00).



Accompanied by a two-ended drawing stylus, the **Tactile Shape Slate** generates a variety of tactually discernible raised point symbols and shapes. With the slate oriented with the hinge on the left-hand side, there are 12 point symbol options on the right-hand side of the slate. From top-to-bottom, left-to-right, point symbols include the following:



- Outline circle (with center dot)
- Outline triangle
- Arrow
- Bold bump
- Outline diamond
- Semicircle
- X-shape
- Three-dot triangular arrangement
- T-shape
- Outline square
- V-shape
- Stair-step (short broad line above a short narrow line)

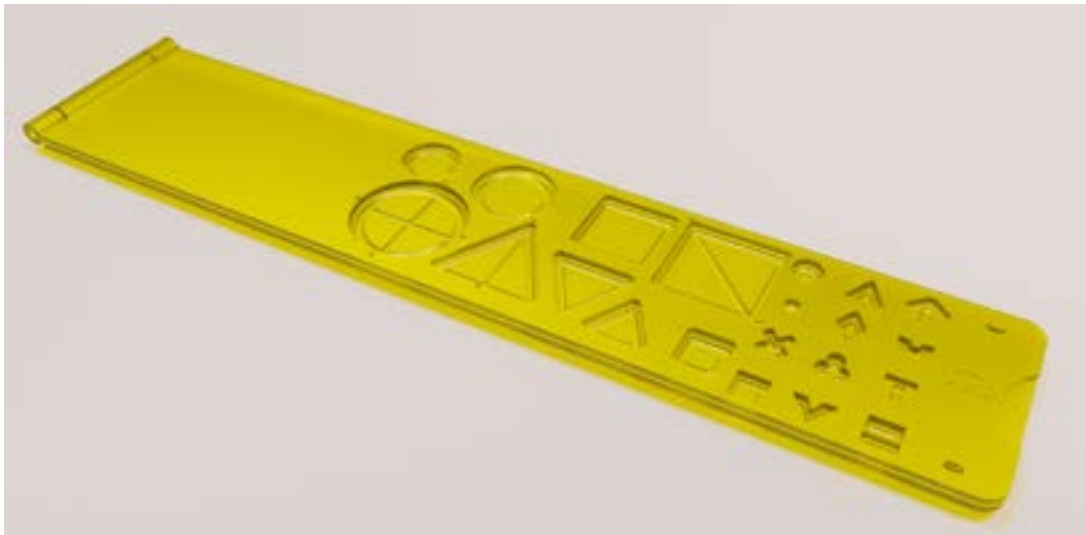
A broader point symbol selection, beyond the 12 symbols presented on the slate, is afforded by the artist's ability to tool a portion of a symbol to create an entirely unique embossed symbol. Below are some possibilities:

- tool only the vertical line of the T-shape
- tool only the open circle without the dot in the center
- tool only the upper portion of the arrow without the shaft
- tool only the broad OR narrow horizontal line of the stair-step symbol

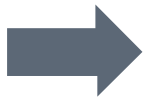
If needed, rotate a symbol to adjust for meaning related to directionality (e.g., downward arrow vs. upward arrow).

Tactile point symbols are intended to fit comfortably under the fingertip for quick identification of a landmark (e.g., state capital) within a tactile map, data points on a graph, or any identifying label. Point symbols are typically more pronounced and sit at a higher elevation than other features within a tactile graphic display.

The **Tactile Shape Slate** also provides large shape stencils for tooling three different sizes of circles, squares, and triangles. These shape stencils are positioned to the immediate left of the point-symbol arrangement. The largest stencil shapes of the circle, square, and triangle have incised grooves to accommodate tooling of right triangles, isosceles triangles, and half circles. The small, raised dots on the outer sides of the stencil shapes will help identify the beginning and ending locations of each interior groove when tooling.



**Shape
Stencils**



Basic Use

The **Tactile Symbol Slate** is 12 inches long by 2.5 inches wide and accommodates standard sheet sizes up to 11.5 x 11 inches. The yellow, transparent slate visually contrasts against the white background of most drawing material and allows the positioning of point symbols in relation to other surrounding graphic elements. The **Tactile Shape Slate** is used like a traditional braille slate by sandwiching the selected material (e.g., braille paper, vinyl, foil, drawing film) between the slate's bottom and top plates. Two pins are located on the end opposite the hinge; these pins secure the material to the slate while drawing. It is advisable, however, to apply gentle pressure with one hand to hold the slate in place to prevent unwanted movement of the slate during the tooling of each symbol or shape.

The two-ended drawing stylus has a pointed end and a rounded end. The type of tactile symbol desired will dictate which end of the stylus to use for drawing. Most of the point symbols are best tooled with the pointed end of the stylus. The rounded end of the stylus, however, should be used to emboss the wider line of the stair-step symbol, the bold bump symbol, and the dots within the three-dot triangular symbol.

The rounded end of the stylus works best for tooling the larger stencil shapes of the circles, triangles, and squares.



How the stylus is held and gripped will be influenced by the user's preference and the force required to tool each symbol or shape. More pressure is needed to tool vinyl material as opposed to braille paper, thin drawing film, or heavy-gauge aluminum foil. The stencil shapes are drawn with a fluid, gliding motion as the sides of each

shape are traced and tooled. Some point symbols (e.g., bold bump) will demand a strong downward push with the stylus. Keep the stylus in an upright position (rather than holding it at an angle) and apply even pressure while tooling a symbol. It may help to retrace a symbol several times when tooling to make sure the entire shape raises to a consistent height.

As with many tactile drawing tools (e.g., serrated tracing wheels), the tactile symbol or shape that is drawn with the **Tactile Shape Slate** will appear embossed or raised on the reverse side of the sheet. It is important to remember that a mirrored image of the symbol will be embossed. Furthermore, careful planning is needed to determine and plot the ideal position of the symbol or shape in relation to other tactile elements (e.g., braille labels, line paths, areal/fill patterns) within a graphic display.

Drawing Media Options

The **Tactile Shape Slate** is intended for the creation of various embossed tactile point symbols onto a variety of drawing media (e.g., braille paper, vinyl, foil). The drawing medium selected will determine the quality and tactile feel of the shapes and symbols that are tooled. The following are tips to keep in mind when working with various drawing media in combination with the slate.

Braille Paper



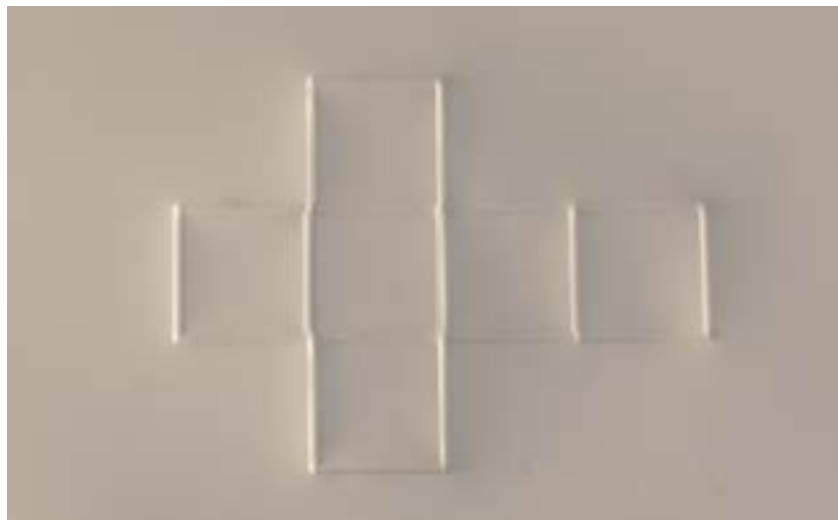
Braille paper might show evidence of breakage if a symbol or shape is tooled with the **Tactile Shape Slate**. Sometimes this breakage is merely visual and cannot be tactually detected. The degree of breakage can be minimized by reducing the applied drawing pressure. To help prevent breakage, wipe the braille sheet with a *slightly* dampened paper towel or rub the braille sheet with waxed paper before tooling. This initial preparation will make the braille paper more pliable and resistant to fracturing.



Vinyl Sheets



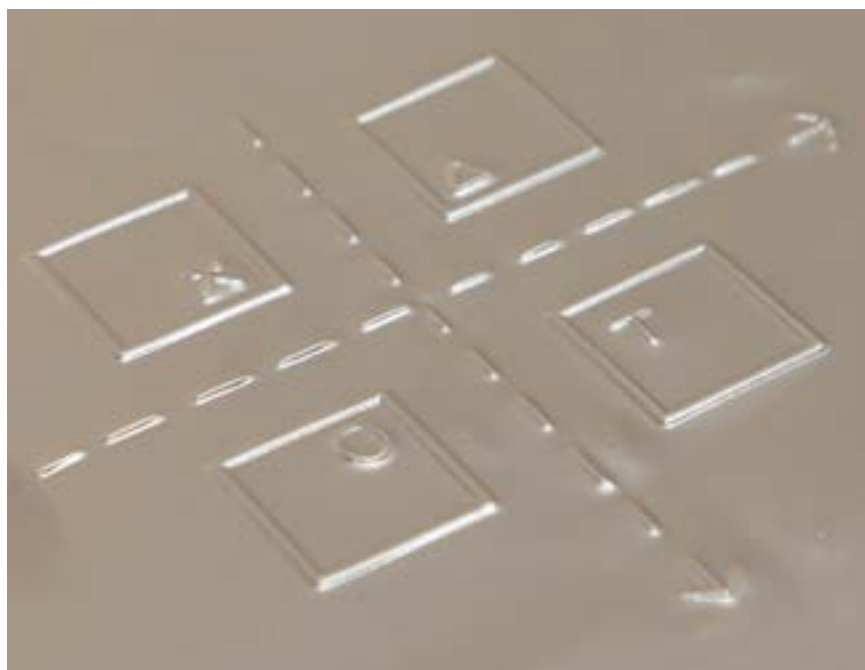
Vinyl sheets (approximately .005-in. thick) offer noticeable tooling benefits when used in combination with the **Tactile Shape Slate**. Vinyl, of course, affords long-term durability of the tactile display; the tear-resistant nature of this drawing medium accommodates the tooling of crisp tactile symbols and shapes. Very bold, elevated shapes and symbols can be tooled without concern of vinyl fracturing; there is no need to prepare vinyl before tooling.



Heavy-Gauge Aluminum Diagramming Foil



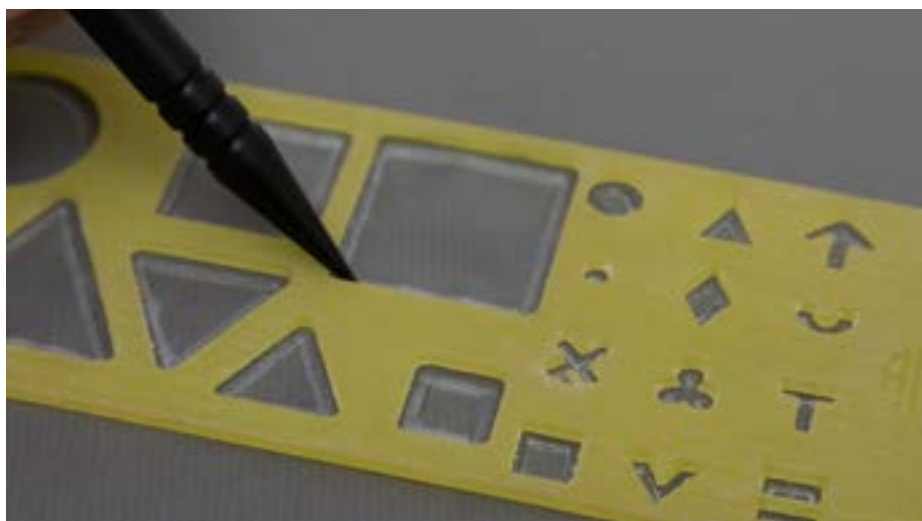
Heavy-gauge aluminum diagramming foil, included with APH's Tactile Graphics Kit (Catalog No. 1-08851-00), is useful for preparing tactile masters for eventual table-top thermoforming. Although not a commonly used method today, foil masters can be tooled and embellished using the **Tactile Shape Slate**. The slate mirrors and broadens the type of tactile symbols afforded by the point symbol tongs included in APH's Tactile Graphics Kit. The **Tactile Shape Slate** negates the need for a rubber-tipped hammer and the use of long metal tongs, each of which accommodates the tooling of only one point symbol.



Tactile Drawing Film



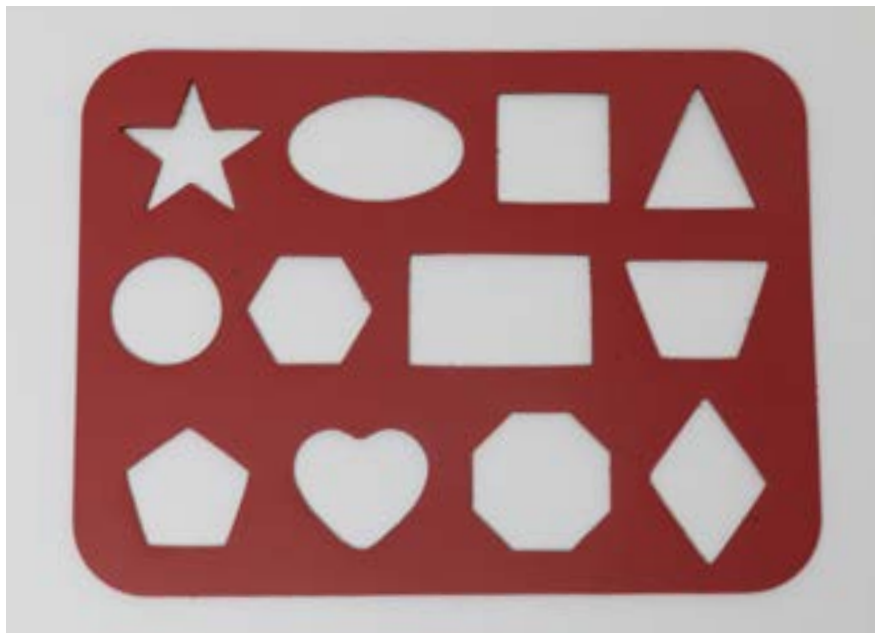
Tactile Drawing Film (Catalog No. 1-08858-00), typically used with a padded drawing surface as encountered on APH's TactileDoodle (Catalog No. 1-08824-00) or DRAFTSMAN Tactile Drawing Board (Catalog No. 1-08857-00), offers another medium for use with the **Tactile Shape Slate**. Although tactile drawing film can be a bit flimsy and awkward to tool when it is not clamped onto a padded drawing board, it can be carefully positioned between the two plates of the slate to accommodate tooling of point symbols and shapes. Remember that point symbols tooled via this process will emboss on the *opposite side* of the drawing film. As with other methods, some pre-planning is needed to position symbols and shapes in relation to other tactile features of a graphic display.



You might also choose to open the **Tactile Shape Slate** and place the upper plate against the tactile drawing film. Merely trace inside

the selected stencil shape (circle, square, or triangle) with a ballpoint pen or stylus to achieve an instant raised shape on the upper side of the graphic page.

The accompanying **Shape Stencil Plate** also provides additional shape options for tooling directly onto tactile drawing film. The shapes available include the following: star, oval, square, triangle, circle, hexagon, rectangle, trapezoid, pentagon, heart, octagon, and diamond.



Adhesive-Backed Brailleable Sheets



The thin quality of APH's Brailleable Labels and Sheets, Pin-Fed Sheets (Catalog No. 1-08875-00) allows convenient and easy tooling of the point symbols on adhesive-backed material. Simply clamp the adhesive-backed Brailleable sheet between the two plates of the **Tactile Shape Slate** with the removable liner side of the sheet facing upward toward the user so that the embossed shape appears on the reverse side of the sheet. Consider tooling symbols and trimming the adhesive-backed sheets to create individual tactile stickers to apply to graphs, appliances, board games, storybooks, etc.

Related APH Products

Visit APH's shopping site for additional information on the following products: aph.org/shop

- Aluminum Diagramming Foil Sheets (1-04090-00)
- Braille Labels and Sheets, Pin-Fed Sheets 8.5 x 11 in. (1-08875-00)
- DRAFTSMAN Tactile Drawing Board (1-08857-00)
- Feel 'n Peel Sheets: Carousel of Textures (1-08863-00)
- Feel 'n Peel Sheets: Carousel of Textures II (1-08897-00)
- Graphic Art Tape (1-08878-00)
- TactileDoodle (1-08824-00)
- Tactile Drawing Film (1-08858-00)
- Tactile Graphics Kit (1-08851-00)
- Tactile Graphics Kit Line-Drawing Tool Kit (1-08851-01)
- Tactile Graphic Line Slate (1-00100-00)



- Textured Paper Collection (1-03275-00)
- White Braille Paper
8.5 x 11 Sheets, unpunched (1-04151-01)
11.5 x 11 Sheets, unpunched (1-04221-00)

Additional Resources

Consult *Braille Authority of North America's (BANA) Guidelines and Standards for Tactile Graphics* (2010) for designing readable tactile graphics for braille/tactile learners:

brailleauthority.org/guidelines-and-standards-tactile-graphics

Note: Hardcopy print and braille editions are available for sale by the American Printing House for the Blind.

Occasional updates are made to the resources listed above. Be sure to access the most up-to-date editions of the guidelines.

Notes

Notes

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