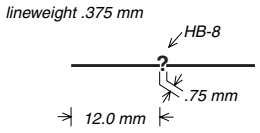
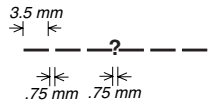
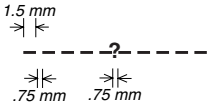
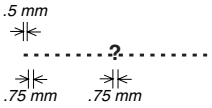
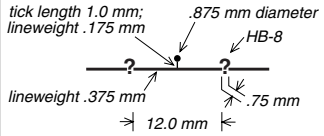
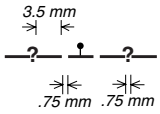
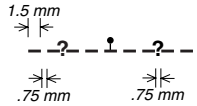
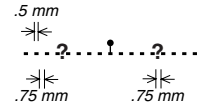
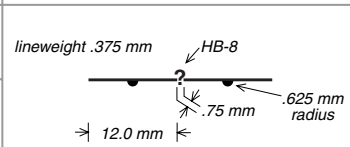
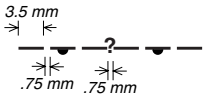
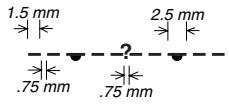
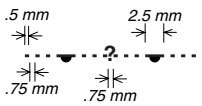
2—FAULTS

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
2.1—Faults (generic; vertical, subvertical, or high-angle; or unknown or unspecified orientation or sense of slip)				
2.1.1	Fault (generic; vertical, subvertical, or high-angle; or unknown or unspecified orientation or sense of slip) —Identity and existence certain, location accurate			Use generic, nonspecific (non-ornamented) fault symbols when orientation or sense of slip is not known or not specified; use also on small-scale maps to show regional fault patterns. If orientation or sense of slip is known and if scale allows, use more specific types of ornamented fault symbols to indicate fault geometry and (or) relative motion.
2.1.2	Fault (generic; vertical, subvertical, or high-angle; or unknown or unspecified orientation or sense of slip)—Identity or existence questionable, location accurate	——?——		
2.1.3	Fault (generic; vertical, subvertical, or high-angle; or unknown or unspecified orientation or sense of slip)—Identity and existence certain, location approximate	— — — — — —		
2.1.4	Fault (generic; vertical, subvertical, or high-angle; or unknown or unspecified orientation or sense of slip)—Identity or existence questionable, location approximate	— — —?— — —		
2.1.5	Fault (generic; vertical, subvertical, or high-angle; or unknown or unspecified orientation or sense of slip) —Identity and existence certain, location inferred	– – – – – – – – –		
2.1.6	Fault (generic; vertical, subvertical, or high-angle; or unknown or unspecified orientation or sense of slip)—Identity or existence questionable, location inferred	– – – –?– – – –		
2.1.7	Fault (generic; vertical, subvertical, or high-angle; or unknown or unspecified orientation or sense of slip) —Identity and existence certain, location concealed	. . . . .		
2.1.8	Fault (generic; vertical, subvertical, or high-angle; or unknown or unspecified orientation or sense of slip)—Identity or existence questionable, location concealed	. . . . . ?		

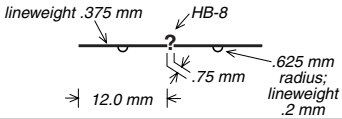
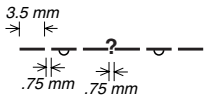
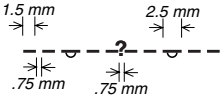
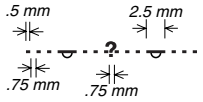
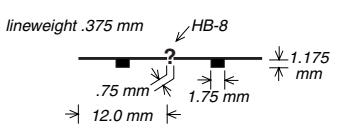
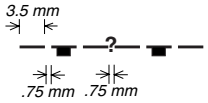
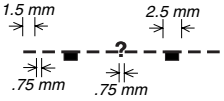
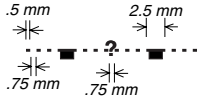
**For more information, see general guidelines on pages A-i to A-v.*

2—FAULTS (continued)

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
	2.2—Normal faults			
2.2.1	Normal fault—Identity and existence certain, location accurate. Ball and bar on downthrown block			Ball and bar symbols are placed along a fault to indicate its overall fault type (normal fault). Ball and bar symbols may also be placed along other types of faults at specific localities where observations of normal (or apparent normal) offset have been made (see Section 2.11). Ball and bar symbols may be combined with paired arrows to show oblique offset (see Sections 2.7, 2.11). In cross section, use paired arrows to show relative motion of normal faults (see Section 2.11).
2.2.2	Normal fault—Identity or existence questionable, location accurate. Ball and bar on downthrown block			
2.2.3	Normal fault—Identity and existence certain, location approximate. Ball and bar on downthrown block			
2.2.4	Normal fault—Identity or existence questionable, location approximate. Ball and bar on downthrown block			
2.2.5	Normal fault—Identity and existence certain, location inferred. Ball and bar on downthrown block			
2.2.6	Normal fault—Identity or existence questionable, location inferred. Ball and bar on downthrown block			
2.2.7	Normal fault—Identity and existence certain, location concealed. Ball and bar on downthrown block			
2.2.8	Normal fault—Identity or existence questionable, location concealed. Ball and bar on downthrown block			
2.2.9	Low-angle normal fault—Identity and existence certain, location accurate. Half-circles on downthrown block			Half-circles indicate overall fault type (low-angle normal fault); they are not placed at specific localities where observations have been made. In cross section, use paired arrows to show relative motion of low-angle normal faults (see Section 2.11).
2.2.10	Low-angle normal fault—Identity or existence questionable, location accurate. Half-circles on downthrown block			
2.2.11	Low-angle normal fault—Identity and existence certain, location approximate. Half-circles on downthrown block			
2.2.12	Low-angle normal fault—Identity or existence questionable, location approximate. Half-circles on downthrown block			
2.2.13	Low-angle normal fault—Identity and existence certain, location inferred. Half-circles on downthrown block			
2.2.14	Low-angle normal fault—Identity or existence questionable, location inferred. Half-circles on downthrown block			
2.2.15	Low-angle normal fault—Identity and existence certain, location concealed. Half-circles on downthrown block			
2.2.16	Low-angle normal fault—Identity or existence questionable, location concealed. Half-circles on downthrown block			

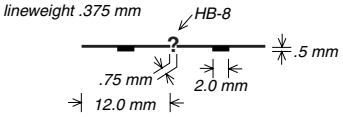
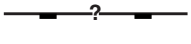
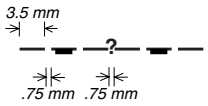
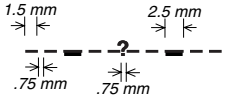
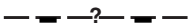
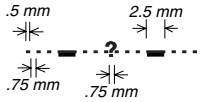
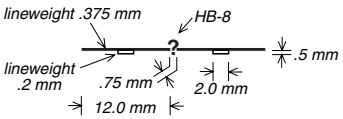
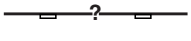
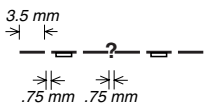
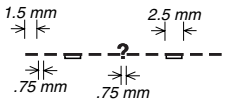
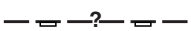
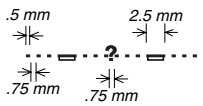
**For more information, see general guidelines on pages A-i to A-v.*

2—FAULTS (continued)

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
2.3—Low-angle faults (unknown or unspecified sense of slip)				
2.3.1	Low-angle fault (unknown or unspecified sense of slip)—Identity and existence certain, location accurate. Half-circles on upper plate			Use to show faults that exhibit low-angle geometry but for which relative motion cannot be (or has not been) specified. Half-circles indicate overall fault type (low-angle fault, unknown or unspecified sense of slip); they are not placed at specific localities where observations have been made.
2.3.2	Low-angle fault (unknown or unspecified sense of slip)—Identity or existence questionable, location accurate. Half-circles on upper plate			
2.3.3	Low-angle fault (unknown or unspecified sense of slip)—Identity and existence certain, location approximate. Half-circles on upper plate			
2.3.4	Low-angle fault (unknown or unspecified sense of slip)—Identity or existence questionable, location approximate. Half-circles on upper plate			
2.3.5	Low-angle fault (unknown or unspecified sense of slip)—Identity and existence certain, location inferred. Half-circles on upper plate			
2.3.6	Low-angle fault (unknown or unspecified sense of slip)—Identity or existence questionable, location inferred. Half-circles on upper plate			
2.3.7	Low-angle fault (unknown or unspecified sense of slip)—Identity and existence certain, location concealed. Half-circles on upper plate			
2.3.8	Low-angle fault (unknown or unspecified sense of slip)—Identity or existence questionable, location concealed. Half-circles on upper plate			
2.4—Reverse faults				
2.4.1	Reverse fault—Identity and existence certain, location accurate. Rectangles on upthrown block			Rectangles indicate overall fault type (reverse fault); they are not placed at specific localities where observations have been made. In cross section, use paired arrows to show relative motion of reverse faults (see Section 2.11).
2.4.2	Reverse fault—Identity or existence questionable, location accurate. Rectangles on upthrown block			
2.4.3	Reverse fault—Identity and existence certain, location approximate. Rectangles on upthrown block			
2.4.4	Reverse fault—Identity or existence questionable, location approximate. Rectangles on upthrown block			
2.4.5	Reverse fault—Identity and existence certain, location inferred. Rectangles on upthrown block			
2.4.6	Reverse fault—Identity or existence questionable, location inferred. Rectangles on upthrown block			
2.4.7	Reverse fault—Identity and existence certain, location concealed. Rectangles on upthrown block			
2.4.8	Reverse fault—Identity or existence questionable, location concealed. Rectangles on upthrown block			

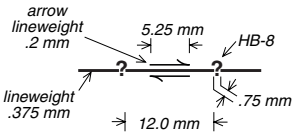
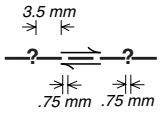
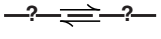
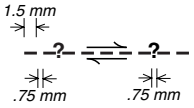
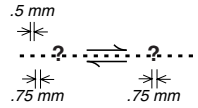
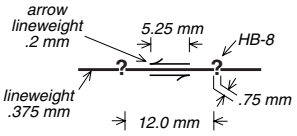
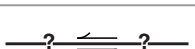
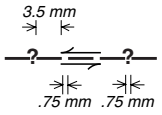
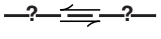
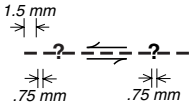
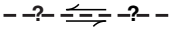
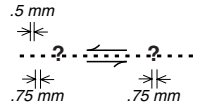
**For more information, see general guidelines on pages A-i to A-v.*

2—FAULTS (continued)

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
	2.5—Rotational or scissor faults			
2.5.1	Rotational or scissor fault, reverse-slip offset—Identity and existence certain, location accurate. Rectangles on upthrown block			Rectangles indicate overall fault type (rotational or scissor fault, reverse-slip offset); they are not placed at specific localities where observations have been made. In cross section, use paired arrows to show relative motion of rotational or scissor faults (see Section 2.11).
2.5.2	Rotational or scissor fault, reverse-slip offset—Identity or existence questionable, location accurate. Rectangles on upthrown block			
2.5.3	Rotational or scissor fault, reverse-slip offset—Identity and existence certain, location approximate. Rectangles on upthrown block			
2.5.4	Rotational or scissor fault, reverse-slip offset—Identity or existence questionable, location approximate. Rectangles on upthrown block			
2.5.5	Rotational or scissor fault, reverse-slip offset—Identity and existence certain, location inferred. Rectangles on upthrown block			
2.5.6	Rotational or scissor fault, reverse-slip offset—Identity or existence questionable, location inferred. Rectangles on upthrown block			
2.5.7	Rotational or scissor fault, reverse-slip offset—Identity and existence certain, location concealed. Rectangles on upthrown block			
2.5.8	Rotational or scissor fault, reverse-slip offset—Identity or existence questionable, location concealed. Rectangles on upthrown block			
2.5.9	Rotational or scissor fault, normal-slip offset—Identity and existence certain, location accurate. Rectangles on downthrown block			Rectangles indicate overall fault type (rotational or scissor fault, normal-slip offset); they are not placed at specific localities where observations have been made. In cross section, use paired arrows to show relative motion of rotational or scissor faults (see Section 2.11).
2.5.10	Rotational or scissor fault, normal-slip offset—Identity or existence questionable, location accurate. Rectangles on downthrown block			
2.5.11	Rotational or scissor fault, normal-slip offset—Identity and existence certain, location approximate. Rectangles on downthrown block			
2.5.12	Rotational or scissor fault, normal-slip offset—Identity or existence questionable, location approximate. Rectangles on downthrown block			
2.5.13	Rotational or scissor fault, normal-slip offset—Identity and existence certain, location inferred. Rectangles on downthrown block			
2.5.14	Rotational or scissor fault, normal-slip offset—Identity or existence questionable, location inferred. Rectangles on downthrown block			
2.5.15	Rotational or scissor fault, normal-slip offset—Identity and existence certain, location concealed. Rectangles on downthrown block			
2.5.16	Rotational or scissor fault, normal-slip offset—Identity or existence questionable, location concealed. Rectangles on downthrown block			

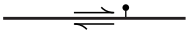
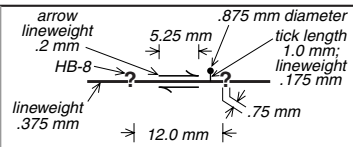
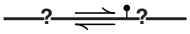
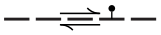
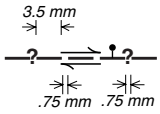
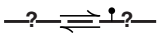
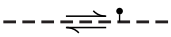
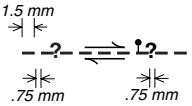
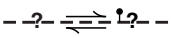
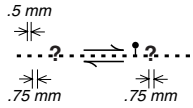
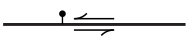
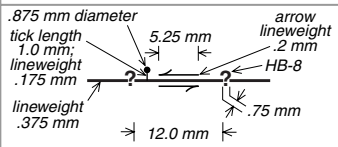
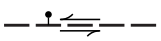
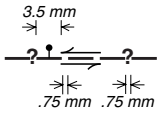
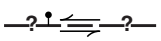
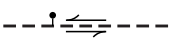
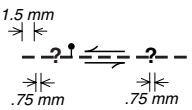
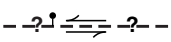
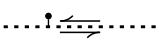
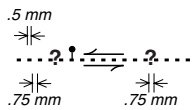
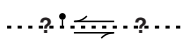
**For more information, see general guidelines on pages A-i to A-v.*

2—FAULTS (continued)

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
	2.6—Strike-slip faults			
2.6.1	Strike-slip fault, right-lateral offset—Identity and existence certain, location accurate. Arrows show relative motion			Paired arrows are placed along a fault to indicate its overall type (strike-slip fault) and its relative motion. Paired arrows may also be placed along other types of faults at specific localities where observations of strike-slip (or apparent strike-slip) offset have been made (see Section 2.11). Paired arrows may be combined with ball and bar symbols to show oblique offset (see Sections 2.7, 2.11). In cross section, use either A/T or +/– notation to show relative motion of strike-slip faults (see Section 2.11).
2.6.2	Strike-slip fault, right-lateral offset—Identity or existence questionable, location accurate. Arrows show relative motion			
2.6.3	Strike-slip fault, right-lateral offset—Identity and existence certain, location approximate. Arrows show relative motion			
2.6.4	Strike-slip fault, right-lateral offset—Identity or existence questionable, location approximate. Arrows show relative motion			
2.6.5	Strike-slip fault, right-lateral offset—Identity and existence certain, location inferred. Arrows show relative motion			
2.6.6	Strike-slip fault, right-lateral offset—Identity or existence questionable, location inferred. Arrows show relative motion			
2.6.7	Strike-slip fault, right-lateral offset—Identity and existence certain, location concealed. Arrows show relative motion			
2.6.8	Strike-slip fault, right-lateral offset—Identity or existence questionable, location concealed. Arrows show relative motion			
2.6.9	Strike-slip fault, left-lateral offset—Identity and existence certain, location accurate. Arrows show relative motion			
2.6.10	Strike-slip fault, left-lateral offset—Identity or existence questionable, location accurate. Arrows show relative motion			
2.6.11	Strike-slip fault, left-lateral offset—Identity and existence certain, location approximate. Arrows show relative motion			
2.6.12	Strike-slip fault, left-lateral offset—Identity or existence questionable, location approximate. Arrows show relative motion			
2.6.13	Strike-slip fault, left-lateral offset—Identity and existence certain, location inferred. Arrows show relative motion			
2.6.14	Strike-slip fault, left-lateral offset—Identity or existence questionable, location inferred. Arrows show relative motion			
2.6.15	Strike-slip fault, left-lateral offset—Identity and existence certain, location concealed. Arrows show relative motion			
2.6.16	Strike-slip fault, left-lateral offset—Identity or existence questionable, location concealed. Arrows show relative motion			

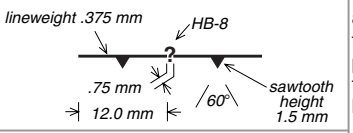
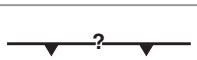
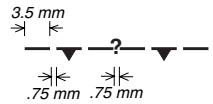
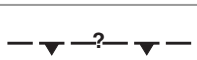
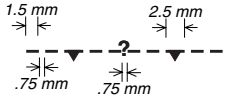
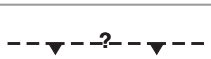
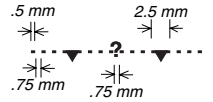
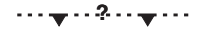
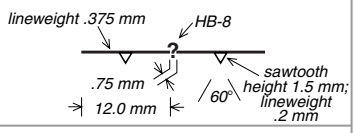
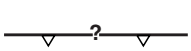
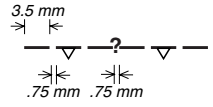
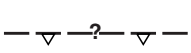
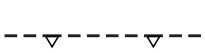
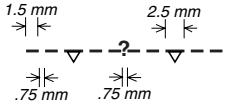
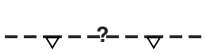
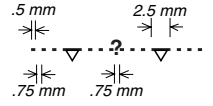
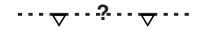
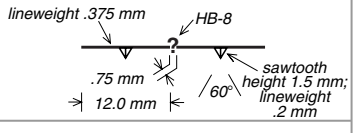
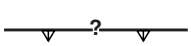
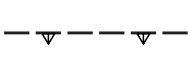
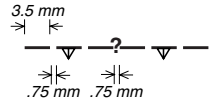
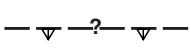
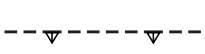
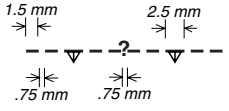
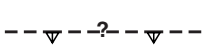
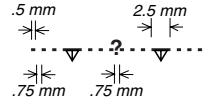
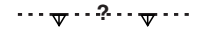
**For more information, see general guidelines on pages A-i to A-v.*

2—FAULTS (continued)

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
	2.7—Oblique-slip faults			
2.7.1	Oblique-slip fault, right-lateral offset—Identity and existence certain, location accurate. Arrows show relative motion; ball and bar on downthrown block			Sets of paired arrows and ball and bar symbols are placed along a fault to indicate its overall type (oblique-slip fault) and its relative motion. Sets of paired arrows and ball and bar symbols may also be placed along other types of faults at specific localities where observations of oblique-slip (or apparent oblique-slip) offset have been made (see Section 2.11). In cross section, use paired arrows with either A/T or +/– notation to show relative motion of oblique-slip faults (see Section 2.11).
2.7.2	Oblique-slip fault, right-lateral offset—Identity or existence questionable, location accurate. Arrows show relative motion; ball and bar on downthrown block			
2.7.3	Oblique-slip fault, right-lateral offset—Identity and existence certain, location approximate. Arrows show relative motion; ball and bar on downthrown block			
2.7.4	Oblique-slip fault, right-lateral offset—Identity or existence questionable, location approximate. Arrows show relative motion; ball and bar on downthrown block			
2.7.5	Oblique-slip fault, right-lateral offset—Identity and existence certain, location inferred. Arrows show relative motion; ball and bar on downthrown block			
2.7.6	Oblique-slip fault, right-lateral offset—Identity or existence questionable, location inferred. Arrows show relative motion; ball and bar on downthrown block			
2.7.7	Oblique-slip fault, right-lateral offset—Identity and existence certain, location concealed. Arrows show relative motion; ball and bar on downthrown block			
2.7.8	Oblique-slip fault, right-lateral offset—Identity or existence questionable, location concealed. Arrows show relative motion; ball and bar on downthrown block			
2.7.9	Oblique-slip fault, left-lateral offset—Identity and existence certain, location accurate. Arrows show relative motion; ball and bar on downthrown block			
2.7.10	Oblique-slip fault, left-lateral offset—Identity or existence questionable, location accurate. Arrows show relative motion; ball and bar on downthrown block			
2.7.11	Oblique-slip fault, left-lateral offset—Identity and existence certain, location approximate. Arrows show relative motion; ball and bar on downthrown block			
2.7.12	Oblique-slip fault, left-lateral offset—Identity or existence questionable, location approximate. Arrows show relative motion; ball and bar on downthrown block			
2.7.13	Oblique-slip fault, left-lateral offset—Identity and existence certain, location inferred. Arrows show relative motion; ball and bar on downthrown block			
2.7.14	Oblique-slip fault, left-lateral offset—Identity or existence questionable, location inferred. Arrows show relative motion; ball and bar on downthrown block			
2.7.15	Oblique-slip fault, left-lateral offset—Identity and existence certain, location concealed. Arrows show relative motion; ball and bar on downthrown block			
2.7.16	Oblique-slip fault, left-lateral offset—Identity or existence questionable, location concealed. Arrows show relative motion; ball and bar on downthrown block			

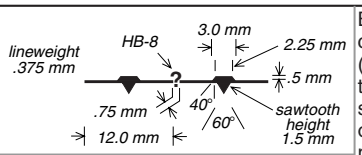
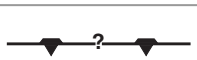
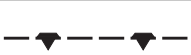
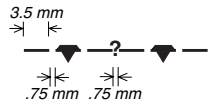
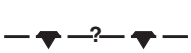
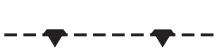
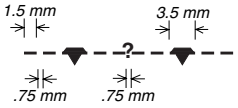
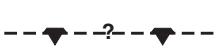
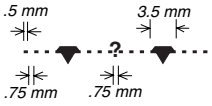
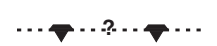
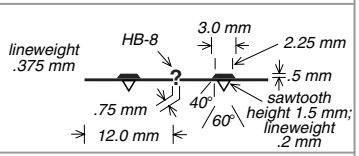
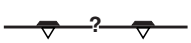
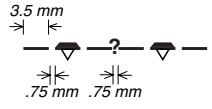
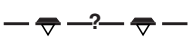
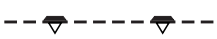
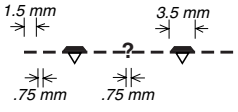
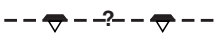
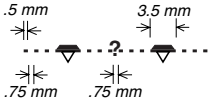
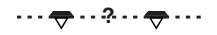
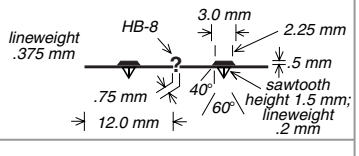
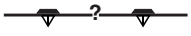
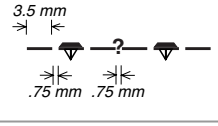
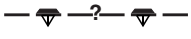
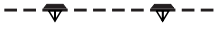
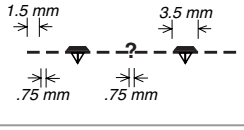
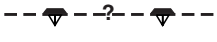
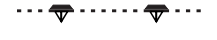
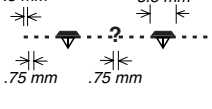
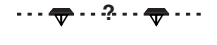
**For more information, see general guidelines on pages A-i to A-v.*

2—FAULTS (continued)

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
	2.8—Thrust faults			
2.8.1	Thrust fault (1st option)—Identity and existence certain, location accurate. Sawteeth on upper (tectonically higher) plate			Sawteeth indicate overall fault type (thrust fault); they are not placed at specific localities where observations have been made. In cross section, use paired arrows to show relative motion of thrust faults (see Section 2.11). If desired, "2nd option" and "3rd option" symbols may be used to show other types or generations of thrust faults.
2.8.2	Thrust fault (1st option)—Identity or existence questionable, location accurate. Sawteeth on upper (tectonically higher) plate			
2.8.3	Thrust fault (1st option)—Identity and existence certain, location approximate. Sawteeth on upper (tectonically higher) plate			
2.8.4	Thrust fault (1st option)—Identity or existence questionable, location approximate. Sawteeth on upper (tectonically higher) plate			
2.8.5	Thrust fault (1st option)—Identity and existence certain, location inferred. Sawteeth on upper (tectonically higher) plate			
2.8.6	Thrust fault (1st option)—Identity or existence questionable, location inferred. Sawteeth on upper (tectonically higher) plate			
2.8.7	Thrust fault (1st option)—Identity and existence certain, location concealed. Sawteeth on upper (tectonically higher) plate			
2.8.8	Thrust fault (1st option)—Identity or existence questionable, location concealed. Sawteeth on upper (tectonically higher) plate			
2.8.9	Thrust fault (2nd option)—Identity and existence certain, location accurate. Sawteeth on upper (tectonically higher) plate			
2.8.10	Thrust fault (2nd option)—Identity or existence questionable, location accurate. Sawteeth on upper (tectonically higher) plate			
2.8.11	Thrust fault (2nd option)—Identity and existence certain, location approximate. Sawteeth on upper (tectonically higher) plate			
2.8.12	Thrust fault (2nd option)—Identity or existence questionable, location approximate. Sawteeth on upper (tectonically higher) plate			
2.8.13	Thrust fault (2nd option)—Identity and existence certain, location inferred. Sawteeth on upper (tectonically higher) plate			
2.8.14	Thrust fault (2nd option)—Identity or existence questionable, location inferred. Sawteeth on upper (tectonically higher) plate			
2.8.15	Thrust fault (2nd option)—Identity and existence certain, location concealed. Sawteeth on upper (tectonically higher) plate			
2.8.16	Thrust fault (2nd option)—Identity or existence questionable, location concealed. Sawteeth on upper (tectonically higher) plate			
2.8.17	Thrust fault (3rd option)—Identity and existence certain, location accurate. Sawteeth on upper (tectonically higher) plate			
2.8.18	Thrust fault (3rd option)—Identity or existence questionable, location accurate. Sawteeth on upper (tectonically higher) plate			
2.8.19	Thrust fault (3rd option)—Identity and existence certain, location approximate. Sawteeth on upper (tectonically higher) plate			
2.8.20	Thrust fault (3rd option)—Identity or existence questionable, location approximate. Sawteeth on upper (tectonically higher) plate			
2.8.21	Thrust fault (3rd option)—Identity and existence certain, location inferred. Sawteeth on upper (tectonically higher) plate			
2.8.22	Thrust fault (3rd option)—Identity or existence questionable, location inferred. Sawteeth on upper (tectonically higher) plate			
2.8.23	Thrust fault (3rd option)—Identity and existence certain, location concealed. Sawteeth on upper (tectonically higher) plate			
2.8.24	Thrust fault (3rd option)—Identity or existence questionable, location concealed. Sawteeth on upper (tectonically higher) plate			

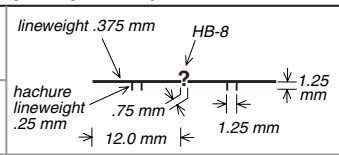
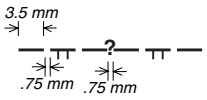
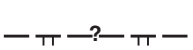
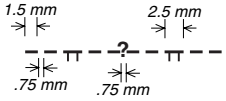
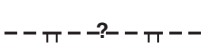
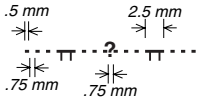
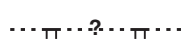
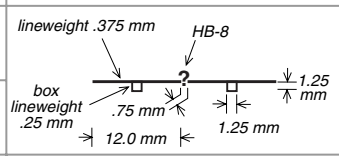
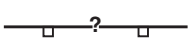
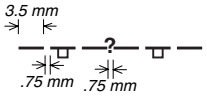
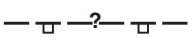
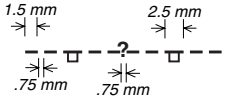
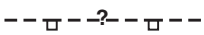
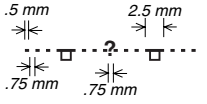
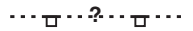
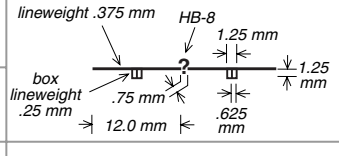
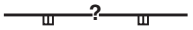
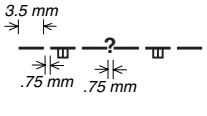
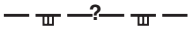
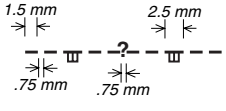
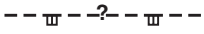
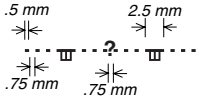
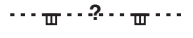
For more information, see general guidelines on pages A-i to A-v.

2—FAULTS (continued)

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
	2.9—Overturned thrust faults			
2.9.1	Overturned thrust fault (1st option)—Identity and existence certain, location accurate. Bars on tectonically higher plate (footwall); sawteeth in direction of dip			Bars and sawteeth indicate overall fault type (overturned thrust fault); they are not placed at specific localities where observations have been made. In cross section, use paired arrows to show relative motion of overturned thrust faults (see Section 2.11). If desired, "2nd option" and "3rd option" symbols may be used to show other types or generations of overturned thrust faults.
2.9.2	Overturned thrust fault (1st option)—Identity or existence questionable, location accurate. Bars on tectonically higher plate (footwall); sawteeth in direction of dip			
2.9.3	Overturned thrust fault (1st option)—Identity and existence certain, location approximate. Bars on tectonically higher plate (footwall); sawteeth in direction of dip			
2.9.4	Overturned thrust fault (1st option)—Identity or existence questionable, location approximate. Bars on tectonically higher plate (footwall); sawteeth in direction of dip			
2.9.5	Overturned thrust fault (1st option)—Identity and existence certain, location inferred. Bars on tectonically higher plate (footwall); sawteeth in direction of dip			
2.9.6	Overturned thrust fault (1st option)—Identity or existence questionable, location inferred. Bars on tectonically higher plate (footwall); sawteeth in direction of dip			
2.9.7	Overturned thrust fault (1st option)—Identity and existence certain, location concealed. Bars on tectonically higher plate (footwall); sawteeth in direction of dip			
2.9.8	Overturned thrust fault (1st option)—Identity or existence questionable, location concealed. Bars on tectonically higher plate (footwall); sawteeth in direction of dip			
2.9.9	Overturned thrust fault (2nd option)—Identity and existence certain, location accurate. Bars on tectonically higher plate (footwall); sawteeth in direction of dip			
2.9.10	Overturned thrust fault (2nd option)—Identity or existence questionable, location accurate. Bars on tectonically higher plate (footwall); sawteeth in direction of dip			
2.9.11	Overturned thrust fault (2nd option)—Identity and existence certain, location approximate. Bars on tectonically higher plate (footwall); sawteeth in direction of dip			
2.9.12	Overturned thrust fault (2nd option)—Identity or existence questionable, location approximate. Bars on tectonically higher plate (footwall); sawteeth in direction of dip			
2.9.13	Overturned thrust fault (2nd option)—Identity and existence certain, location inferred. Bars on tectonically higher plate (footwall); sawteeth in direction of dip			
2.9.14	Overturned thrust fault (2nd option)—Identity or existence questionable, location inferred. Bars on tectonically higher plate (footwall); sawteeth in direction of dip			
2.9.15	Overturned thrust fault (2nd option)—Identity and existence certain, location concealed. Bars on tectonically higher plate (footwall); sawteeth in direction of dip			
2.9.16	Overturned thrust fault (2nd option)—Identity or existence questionable, location concealed. Bars on tectonically higher plate (footwall); sawteeth in direction of dip			
2.9.17	Overturned thrust fault (3rd option)—Identity and existence certain, location accurate. Bars on tectonically higher plate (footwall); sawteeth in direction of dip			
2.9.18	Overturned thrust fault (3rd option)—Identity or existence questionable, location accurate. Bars on tectonically higher plate (footwall); sawteeth in direction of dip			
2.9.19	Overturned thrust fault (3rd option)—Identity and existence certain, location approximate. Bars on tectonically higher plate (footwall); sawteeth in direction of dip			
2.9.20	Overturned thrust fault (3rd option)—Identity or existence questionable, location approximate. Bars on tectonically higher plate (footwall); sawteeth in direction of dip			
2.9.21	Overturned thrust fault (3rd option)—Identity and existence certain, location inferred. Bars on tectonically higher plate (footwall); sawteeth in direction of dip			
2.9.22	Overturned thrust fault (3rd option)—Identity or existence questionable, location inferred. Bars on tectonically higher plate (footwall); sawteeth in direction of dip			
2.9.23	Overturned thrust fault (3rd option)—Identity and existence certain, location concealed. Bars on tectonically higher plate (footwall); sawteeth in direction of dip			
2.9.24	Overturned thrust fault (3rd option)—Identity or existence questionable, location concealed. Bars on tectonically higher plate (footwall); sawteeth in direction of dip			

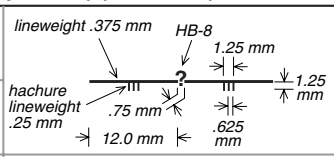
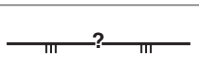
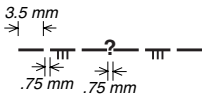
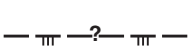
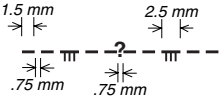
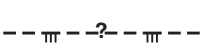
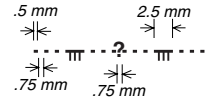
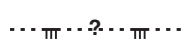
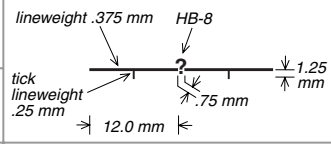
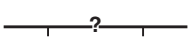
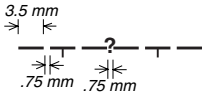
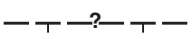
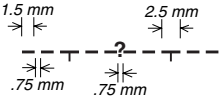
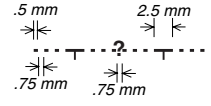
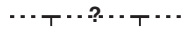
For more information, see general guidelines on pages A-i to A-v.

2—FAULTS (continued)

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
2.10—Detachment faults (sense of slip unspecified)				
2.10.1	Detachment fault (sense of slip unspecified) (1st option)—Identity and existence certain, location accurate. Hachures on upper plate			May be used to show either normal (extensional) or thrust (compressional) offset. Hachures indicate overall fault type (detachment fault); they are not placed at specific localities where observations have been made. In cross section, use paired arrows to show relative motion of detachment faults (see Section 2.11). If desired, "2nd option" and "3rd option" symbols may be used to show other types or generations of detachment faults.
2.10.2	Detachment fault (sense of slip unspecified) (1st option)—Identity or existence questionable, location accurate. Hachures on upper plate			
2.10.3	Detachment fault (sense of slip unspecified) (1st option)—Identity and existence certain, location approximate. Hachures on upper plate			
2.10.4	Detachment fault (sense of slip unspecified) (1st option)—Identity or existence questionable, location approximate. Hachures on upper plate			
2.10.5	Detachment fault (sense of slip unspecified) (1st option)—Identity and existence certain, location inferred. Hachures on upper plate			
2.10.6	Detachment fault (sense of slip unspecified) (1st option)—Identity or existence questionable, location inferred. Hachures on upper plate			
2.10.7	Detachment fault (sense of slip unspecified) (1st option)—Identity and existence certain, location concealed. Hachures on upper plate			
2.10.8	Detachment fault (sense of slip unspecified) (1st option)—Identity or existence questionable, location concealed. Hachures on upper plate			
2.10.9	Detachment fault (sense of slip unspecified) (2nd option)—Identity and existence certain, location accurate. Boxes on upper plate			May be used to show either normal (extensional) or thrust (compressional) offset. Boxes indicate overall fault type (detachment fault); they are not placed at specific localities where observations have been made. In cross section, use paired arrows to show relative motion of detachment faults (see Section 2.11). If desired, "2nd option" and "3rd option" symbols may be used to show other types or generations of detachment faults.
2.10.10	Detachment fault (sense of slip unspecified) (2nd option)—Identity or existence questionable, location accurate. Boxes on upper plate			
2.10.11	Detachment fault (sense of slip unspecified) (2nd option)—Identity and existence certain, location approximate. Boxes on upper plate			
2.10.12	Detachment fault (sense of slip unspecified) (2nd option)—Identity or existence questionable, location approximate. Boxes on upper plate			
2.10.13	Detachment fault (sense of slip unspecified) (2nd option)—Identity and existence certain, location inferred. Boxes on upper plate			
2.10.14	Detachment fault (sense of slip unspecified) (2nd option)—Identity or existence questionable, location inferred. Boxes on upper plate			
2.10.15	Detachment fault (sense of slip unspecified) (2nd option)—Identity and existence certain, location concealed. Boxes on upper plate			
2.10.16	Detachment fault (sense of slip unspecified) (2nd option)—Identity or existence questionable, location concealed. Boxes on upper plate			
2.10.17	Detachment fault (sense of slip unspecified) (3rd option)—Identity and existence certain, location accurate. Boxes on upper plate			
2.10.18	Detachment fault (sense of slip unspecified) (3rd option)—Identity or existence questionable, location accurate. Boxes on upper plate			
2.10.19	Detachment fault (sense of slip unspecified) (3rd option)—Identity and existence certain, location approximate. Boxes on upper plate			
2.10.20	Detachment fault (sense of slip unspecified) (3rd option)—Identity or existence questionable, location approximate. Boxes on upper plate			
2.10.21	Detachment fault (sense of slip unspecified) (3rd option)—Identity and existence certain, location inferred. Boxes on upper plate			
2.10.22	Detachment fault (sense of slip unspecified) (3rd option)—Identity or existence questionable, location inferred. Boxes on upper plate			
2.10.23	Detachment fault (sense of slip unspecified) (3rd option)—Identity and existence certain, location concealed. Boxes on upper plate			
2.10.24	Detachment fault (sense of slip unspecified) (3rd option)—Identity or existence questionable, location concealed. Boxes on upper plate			

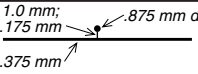
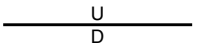
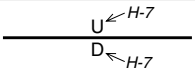
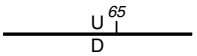
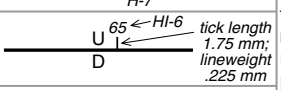
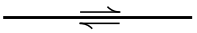
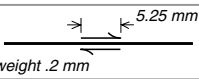
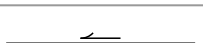
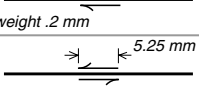
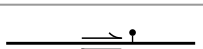
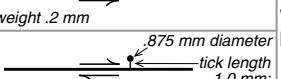
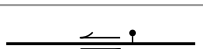
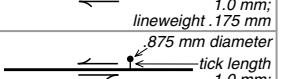
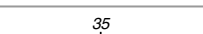
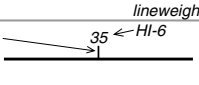
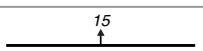
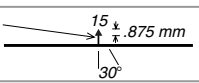
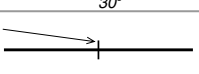
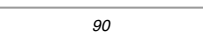
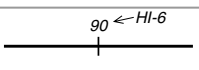
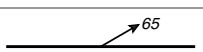
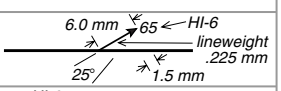
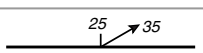
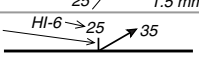
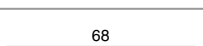
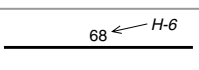
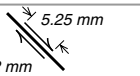
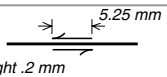
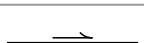
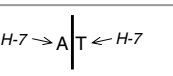
For more information, see general guidelines on pages A-i to A-v.

2—FAULTS (continued)

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
2.10—Detachment faults (sense of slip unspecified) (continued)				
2.10.25	Master detachment fault (sense of slip unspecified)—Identity and existence certain, location accurate. Hachures on upper plate			May be used to show either normal (extensional) or thrust (compressional) offset. Hachures indicate overall fault type (master detachment fault); they are not placed at specific localities where observations have been made. In cross section, use paired arrows to show relative motion of master detachment faults (see Section 2.11).
2.10.26	Master detachment fault (sense of slip unspecified)—Identity or existence questionable, location accurate. Hachures on upper plate			
2.10.27	Master detachment fault (sense of slip unspecified)—Identity and existence certain, location approximate. Hachures on upper plate			
2.10.28	Master detachment fault (sense of slip unspecified)—Identity or existence questionable, location approximate. Hachures on upper plate			
2.10.29	Master detachment fault (sense of slip unspecified)—Identity and existence certain, location inferred. Hachures on upper plate			
2.10.30	Master detachment fault (sense of slip unspecified)—Identity or existence questionable, location inferred. Hachures on upper plate			
2.10.31	Master detachment fault (sense of slip unspecified)—Identity and existence certain, location concealed. Hachures on upper plate			
2.10.32	Master detachment fault (sense of slip unspecified)—Identity or existence questionable, location concealed. Hachures on upper plate			
2.10.33	Listric fault at head of detachment fault (sense of slip unspecified)—Identity and existence certain, location accurate. Ticks on upper plate			May be used to show either normal (extensional) or thrust (compressional) offset. Ticks indicate overall fault type (listric fault at head of detachment fault); they are not placed at specific localities where observations have been made. In cross section, use paired arrows to show relative motion of listric faults at head of detachment faults (see Section 2.11).
2.10.34	Listric fault at head of detachment fault (sense of slip unspecified)—Identity or existence questionable, location accurate. Ticks on upper plate			
2.10.35	Listric fault at head of detachment fault (sense of slip unspecified)—Identity and existence certain, location approximate. Ticks on upper plate			
2.10.36	Listric fault at head of detachment fault (sense of slip unspecified)—Identity or existence questionable, location approximate. Ticks on upper plate			
2.10.37	Listric fault at head of detachment fault (sense of slip unspecified)—Identity and existence certain, location inferred. Ticks on upper plate			
2.10.38	Listric fault at head of detachment fault (sense of slip unspecified)—Identity or existence questionable, location inferred. Ticks on upper plate			
2.10.39	Listric fault at head of detachment fault (sense of slip unspecified)—Identity and existence certain, location concealed. Ticks on upper plate			
2.10.40	Listric fault at head of detachment fault (sense of slip unspecified)—Identity or existence questionable, location concealed. Ticks on upper plate			

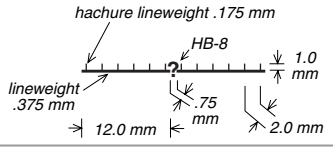
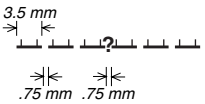
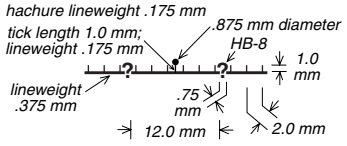
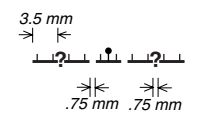
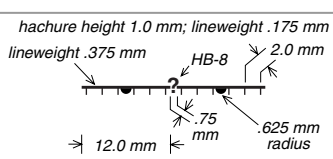
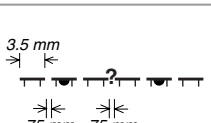
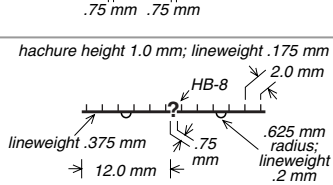
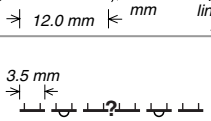
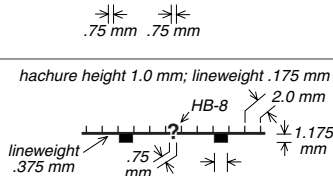
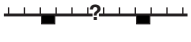
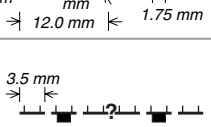
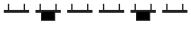
**For more information, see general guidelines on pages A-i to A-v.*

2—FAULTS (continued)

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
	2.11—Line-symbol decorations and notations for faults			
2.11.1	Fault showing local normal offset (1st option)—Ball and bar on downthrown block			Place line-symbol decorations where observations have been made. Line-symbol decorations may be added to any type or style of fault to show local relative motion or geomorphic relations. Line-symbol decorations may also be added to faults in places where local geomorphic features may indicate an apparent offset but where true sense of displacement is unknown.
2.11.2	Fault showing local normal offset (2nd option)—U, upthrown block; D, downthrown block			
2.11.3	Fault showing local reverse offset—Showing dip value and direction. U, upthrown block; D, downthrown block			
2.11.4	Fault showing local right-lateral strike-slip offset—Arrows show relative motion			
2.11.5	Fault showing local left-lateral strike-slip offset—Arrows show relative motion			
2.11.6	Fault showing local right-lateral oblique-slip offset—Arrows show relative motion; ball and bar on downthrown block			
2.11.7	Fault showing local left-lateral oblique-slip offset—Arrows show relative motion; ball and bar on downthrown block			
2.11.8	Inclined fault (1st option)—Showing dip value and direction			Place tick, arrow, or other line-symbol decoration where observation was made. Add arrowhead or '90' to ticks showing dip if necessary for clarity.
2.11.9	Inclined fault (2nd option)—Showing dip value and direction			
2.11.10	Vertical or near-vertical fault (1st option)			
2.11.11	Vertical or near-vertical fault (2nd option)			
2.11.12	Lineation on fault surface—Showing bearing and plunge			
2.11.13	Lineation on inclined fault surface—Tick shows fault dip value and direction; arrow shows bearing and plunge of lineation			
2.11.14	Fault—Showing amount of local displacement			Place displacement value where measurement was made.
2.11.15	Fault—Showing name			Letter size or spacing may be increased on longer fault segments.
2.11.16	Normal fault (in cross section)—Arrows show relative motion			
2.11.17	Thrust fault or reverse fault (in cross section)—Arrows show relative motion			
2.11.18	Detachment fault, movement of upper plate to left (in cross section)—Arrows show relative motion			
2.11.19	Detachment fault, movement of upper plate to right (in cross section)—Arrows show relative motion			
2.11.20	Strike-slip fault (in cross section) (1st option)—A, away from observer; T, toward observer			May be combined with paired arrows to show oblique-slip offset.
2.11.21	Strike-slip fault (in cross section) (2nd option)—minus, away from observer; plus, toward observer			
2.11.22	Normal fault (on small-scale maps or figures)—Tick on downthrown side			Usually reserved for use on page-size illustrations or on maps at scales of 1:1,000,000 or smaller.
2.11.23	Reverse fault (on small-scale maps or figures)—R on upthrown block			
2.11.24	Thrust fault (on small-scale maps or figures)—T on upper (tectonically higher) plate			

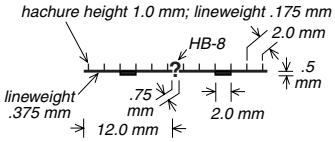
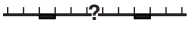
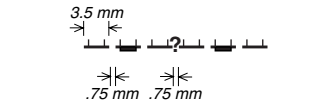
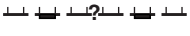
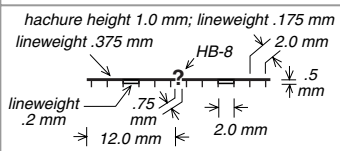
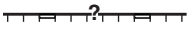
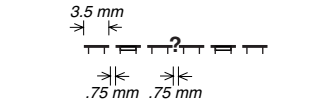
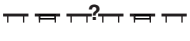
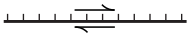
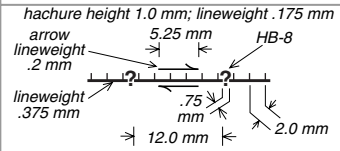
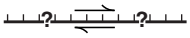
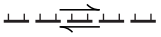
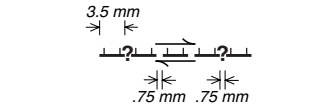
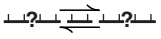
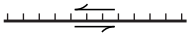
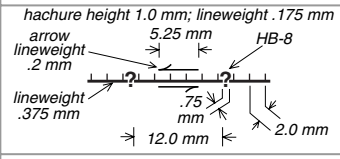
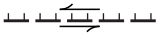
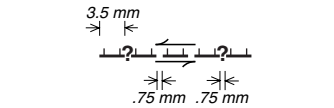
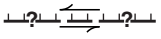
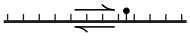
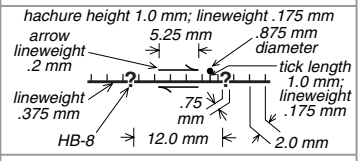
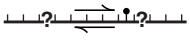
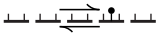
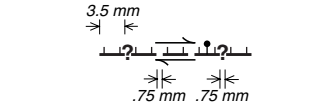
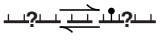
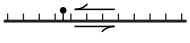
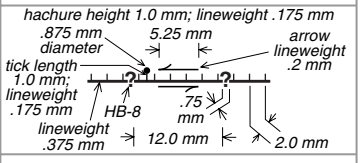
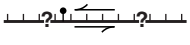
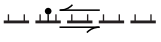
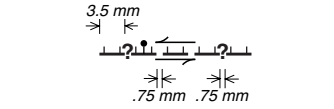
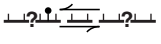
For more information, see general guidelines on pages A-i to A-v.

2—FAULTS (continued)

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
	2.12—Fault scarps			
2.12.1	Scarp on fault (generic; vertical, subvertical, or high-angle; or unknown or unspecified orientation or sense of slip)—Identity and existence certain, location accurate. Hachures point downscarp			
2.12.2	Scarp on fault (generic; vertical, subvertical, or high-angle; or unknown or unspecified orientation or sense of slip)—Identity or existence questionable, location accurate. Hachures point downscarp			
2.12.3	Scarp on fault (generic; vertical, subvertical, or high-angle; or unknown or unspecified orientation or sense of slip)—Identity and existence certain, location approximate. Hachures point downscarp			
2.12.4	Scarp on fault (generic; vertical, subvertical, or high-angle; or unknown or unspecified orientation or sense of slip)—Identity or existence questionable, location approximate. Hachures point downscarp			
2.12.5	Scarp on normal fault—Identity and existence certain, location accurate. Ball and bar on downthrown block. Hachures point downscarp			
2.12.6	Scarp on normal fault—Identity or existence questionable, location accurate. Ball and bar on downthrown block. Hachures point downscarp			
2.12.7	Scarp on normal fault—Identity and existence certain, location approximate. Ball and bar on downthrown block. Hachures point downscarp			
2.12.8	Scarp on normal fault—Identity or existence questionable, location approximate. Ball and bar on downthrown block. Hachures point downscarp			
2.12.9	Scarp on low-angle normal fault—Identity and existence certain, location accurate. Half-circles on downthrown block. Hachures point downscarp			
2.12.10	Scarp on low-angle normal fault—Identity or existence questionable, location accurate. Half-circles on downthrown block. Hachures point downscarp			
2.12.11	Scarp on low-angle normal fault—Identity and existence certain, location approximate. Half-circles on downthrown block. Hachures point downscarp			
2.12.12	Scarp on low-angle normal fault—Identity or existence questionable, location approximate. Half-circles on downthrown block. Hachures point downscarp			
2.12.13	Scarp on low-angle fault (unknown or unspecified sense of slip)—Identity and existence certain, location accurate. Half-circles on upper plate. Hachures point downscarp			
2.12.14	Scarp on low-angle fault (unknown or unspecified sense of slip)—Identity or existence questionable, location accurate. Half-circles on upper plate. Hachures point downscarp			
2.12.15	Scarp on low-angle fault (unknown or unspecified sense of slip)—Identity and existence certain, location approximate. Half-circles on upper plate. Hachures point downscarp			
2.12.16	Scarp on low-angle fault (unknown or unspecified sense of slip)—Identity or existence questionable, location approximate. Half-circles on upper plate. Hachures point downscarp			
2.12.17	Scarp on reverse fault—Identity and existence certain, location accurate. Rectangles on upthrown block. Hachures point downscarp			
2.12.18	Scarp on reverse fault—Identity or existence questionable, location accurate. Rectangles on upthrown block. Hachures point downscarp			
2.12.19	Scarp on reverse fault—Identity and existence certain, location approximate. Rectangles on upthrown block. Hachures point downscarp			
2.12.20	Scarp on reverse fault—Identity or existence questionable, location approximate. Rectangles on upthrown block. Hachures point downscarp			

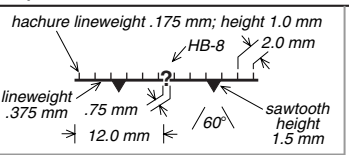
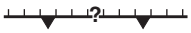
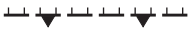
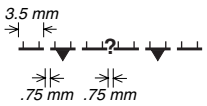
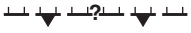
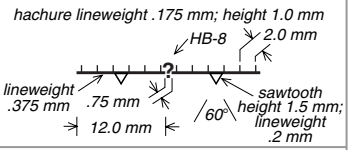
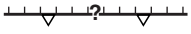
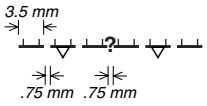
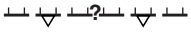
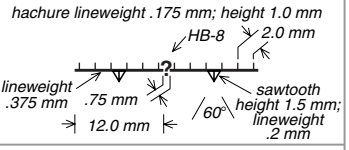
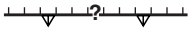
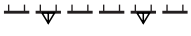
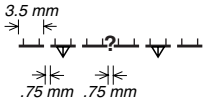
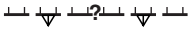
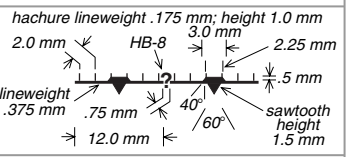
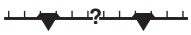
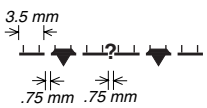
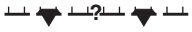
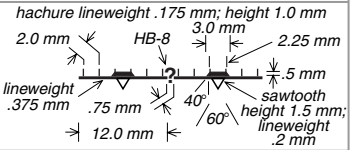
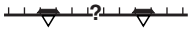
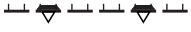
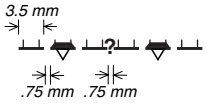
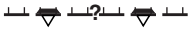
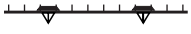
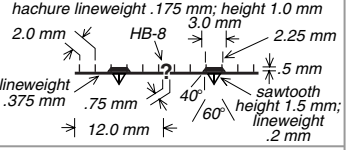
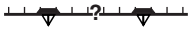
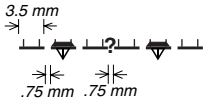
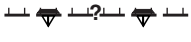
For more information, see general guidelines on pages A-i to A-v.

2—FAULTS (continued)

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
	2.12—Fault scarps (continued)			
2.12.21	Scarp on rotational or scissor fault, reverse-slip offset—Identity and existence certain, location accurate. Rectangles on upthrown block. Hachures point downscarp			
2.12.22	Scarp on rotational or scissor fault, reverse-slip offset—Identity or existence questionable, location accurate. Rectangles on upthrown block. Hachures point downscarp			
2.12.23	Scarp on rotational or scissor fault, reverse-slip offset—Identity and existence certain, location approximate. Rectangles on upthrown block. Hachures point downscarp			
2.12.24	Scarp on rotational or scissor fault, reverse-slip offset—Identity or existence questionable, location approximate. Rectangles on upthrown block. Hachures point downscarp			
2.12.25	Scarp on rotational or scissor fault, normal-slip offset—Identity and existence certain, location accurate. Rectangles on downthrown block. Hachures point downscarp			
2.12.26	Scarp on rotational or scissor fault, normal-slip offset—Identity or existence questionable, location accurate. Rectangles on downthrown block. Hachures point downscarp			
2.12.27	Scarp on rotational or scissor fault, normal-slip offset—Identity and existence certain, location approximate. Rectangles on downthrown block. Hachures point downscarp			
2.12.28	Scarp on rotational or scissor fault, normal-slip offset—Identity or existence questionable, location approximate. Rectangles on downthrown block. Hachures point downscarp			
2.12.29	Scarp on strike-slip fault, right-lateral offset—Identity and existence certain, location accurate. Arrows show relative motion. Hachures point downscarp			
2.12.30	Scarp on strike-slip fault, right-lateral offset—Identity or existence questionable, location accurate. Arrows show relative motion. Hachures point downscarp			
2.12.31	Scarp on strike-slip fault, right-lateral offset—Identity and existence certain, location approximate. Arrows show relative motion. Hachures point downscarp			
2.12.32	Scarp on strike-slip fault, right-lateral offset—Identity or existence questionable, location approximate. Arrows show relative motion. Hachures point downscarp			
2.12.33	Scarp on strike-slip fault, left-lateral offset—Identity and existence certain, location accurate. Arrows show relative motion. Hachures point downscarp			
2.12.34	Scarp on strike-slip fault, left-lateral offset—Identity or existence questionable, location accurate. Arrows show relative motion. Hachures point downscarp			
2.12.35	Scarp on strike-slip fault, left-lateral offset—Identity and existence certain, location approximate. Arrows show relative motion. Hachures point downscarp			
2.12.36	Scarp on strike-slip fault, left-lateral offset—Identity or existence questionable, location approximate. Arrows show relative motion. Hachures point downscarp			
2.12.37	Scarp on oblique-slip fault, right-lateral offset—Identity and existence certain, location accurate. Arrows show relative motion; ball and bar on downthrown block. Hachures point downscarp			
2.12.38	Scarp on oblique-slip fault, right-lateral offset—Identity or existence questionable, location accurate. Arrows show relative motion; ball and bar on downthrown block. Hachures point downscarp			
2.12.39	Scarp on oblique-slip fault, right-lateral offset—Identity and existence certain, location approximate. Arrows show relative motion; ball and bar on downthrown block. Hachures point downscarp			
2.12.40	Scarp on oblique-slip fault, right-lateral offset—Identity or existence questionable, location approximate. Arrows show relative motion; ball and bar on downthrown block. Hachures point downscarp			
2.12.41	Scarp on oblique-slip fault, left-lateral offset—Identity and existence certain, location accurate. Arrows show relative motion; ball and bar on downthrown block. Hachures point downscarp			
2.12.42	Scarp on oblique-slip fault, left-lateral offset—Identity or existence questionable, location accurate. Arrows show relative motion; ball and bar on downthrown block. Hachures point downscarp			
2.12.43	Scarp on oblique-slip fault, left-lateral offset—Identity and existence certain, location approximate. Arrows show relative motion; ball and bar on downthrown block. Hachures point downscarp			
2.12.44	Scarp on oblique-slip fault, left-lateral offset—Identity or existence questionable, location approximate. Arrows show relative motion; ball and bar on downthrown block. Hachures point downscarp			

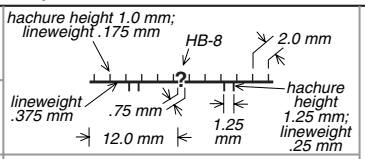
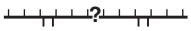
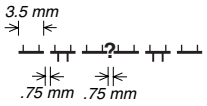
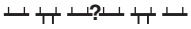
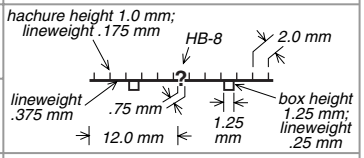
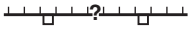
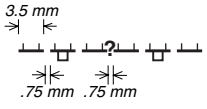
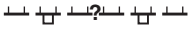
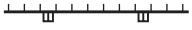
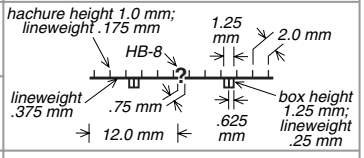
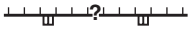
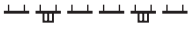
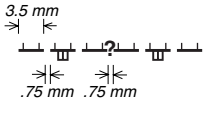
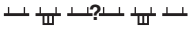
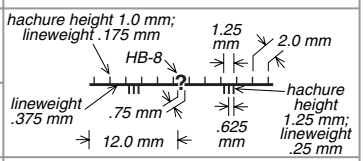
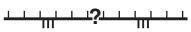
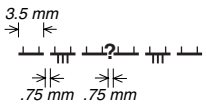
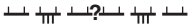
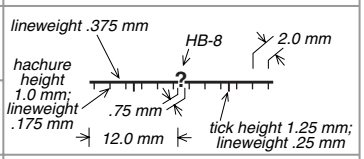
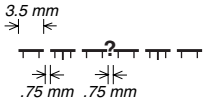
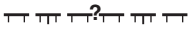
*For more information, see general guidelines on pages A-i to A-v.

2—FAULTS (continued)

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
	2.12—Fault scarps (continued)			
2.12.45	Scarp on thrust fault (1st option)—Identity and existence certain, location accurate. Sawteeth on upper (tectonically higher) plate. Hachures point downscarp			
2.12.46	Scarp on thrust fault (1st option)—Identity or existence questionable, location accurate. Sawteeth on upper (tectonically higher) plate. Hachures point downscarp			
2.12.47	Scarp on thrust fault (1st option)—Identity and existence certain, location approximate. Sawteeth on upper (tectonically higher) plate. Hachures point downscarp			
2.12.48	Scarp on thrust fault (1st option)—Identity or existence questionable, location approximate. Sawteeth on upper (tectonically higher) plate. Hachures point downscarp			
2.12.49	Scarp on thrust fault (2nd option)—Identity and existence certain, location accurate. Sawteeth on upper (tectonically higher) plate. Hachures point downscarp			
2.12.50	Scarp on thrust fault (2nd option)—Identity or existence questionable, location accurate. Sawteeth on upper (tectonically higher) plate. Hachures point downscarp			
2.12.51	Scarp on thrust fault (2nd option)—Identity and existence certain, location approximate. Sawteeth on upper (tectonically higher) plate. Hachures point downscarp			
2.12.52	Scarp on thrust fault (2nd option)—Identity or existence questionable, location approximate. Sawteeth on upper (tectonically higher) plate. Hachures point downscarp			
2.12.53	Scarp on thrust fault (3rd option)—Identity and existence certain, location accurate. Sawteeth on upper (tectonically higher) plate. Hachures point downscarp			
2.12.54	Scarp on thrust fault (3rd option)—Identity or existence questionable, location accurate. Sawteeth on upper (tectonically higher) plate. Hachures point downscarp			
2.12.55	Scarp on thrust fault (3rd option)—Identity and existence certain, location approximate. Sawteeth on upper (tectonically higher) plate. Hachures point downscarp			
2.12.56	Scarp on thrust fault (3rd option)—Identity or existence questionable, location approximate. Sawteeth on upper (tectonically higher) plate. Hachures point downscarp			
2.12.57	Scarp on overturned thrust fault (1st option)—Identity and existence certain, location accurate. Bars on tectonically higher plate (footwall); sawteeth in direction of dip. Hachures point downscarp			
2.12.58	Scarp on overturned thrust fault (1st option)—Identity or existence questionable, location accurate. Bars on tectonically higher plate (footwall); sawteeth in direction of dip. Hachures point downscarp			
2.12.59	Scarp on overturned thrust fault (1st option)—Identity and existence certain, location approximate. Bars on tectonically higher plate (footwall); sawteeth in direction of dip. Hachures point downscarp			
2.12.60	Scarp on overturned thrust fault (1st option)—Identity or existence questionable, location approximate. Bars on tectonically higher plate (footwall); sawteeth in direction of dip. Hachures point downscarp			
2.12.61	Scarp on overturned thrust fault (2nd option)—Identity and existence certain, location accurate. Bars on tectonically higher plate (footwall); sawteeth in direction of dip. Hachures point downscarp			
2.12.62	Scarp on overturned thrust fault (2nd option)—Identity or existence questionable, location accurate. Bars on tectonically higher plate (footwall); sawteeth in direction of dip. Hachures point downscarp			
2.12.63	Scarp on overturned thrust fault (2nd option)—Identity and existence certain, location approximate. Bars on tectonically higher plate (footwall); sawteeth in direction of dip. Hachures point downscarp			
2.12.64	Scarp on overturned thrust fault (2nd option)—Identity or existence questionable, location approximate. Bars on tectonically higher plate (footwall); sawteeth in direction of dip. Hachures point downscarp			
2.12.65	Scarp on overturned thrust fault (3rd option)—Identity and existence certain, location accurate. Bars on tectonically higher plate (footwall); sawteeth in direction of dip. Hachures point downscarp			
2.12.66	Scarp on overturned thrust fault (3rd option)—Identity or existence questionable, location accurate. Bars on tectonically higher plate (footwall); sawteeth in direction of dip. Hachures point downscarp			
2.12.67	Scarp on overturned thrust fault (3rd option)—Identity and existence certain, location approximate. Bars on tectonically higher plate (footwall); sawteeth in direction of dip. Hachures point downscarp			
2.12.68	Scarp on overturned thrust fault (3rd option)—Identity or existence questionable, location approximate. Bars on tectonically higher plate (footwall); sawteeth in direction of dip. Hachures point downscarp			

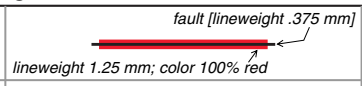
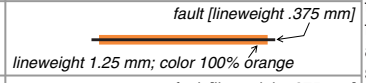
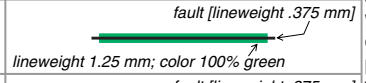
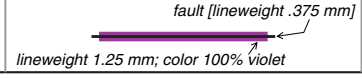
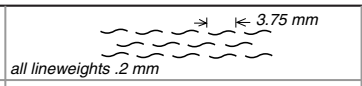
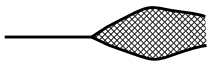
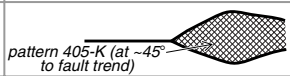
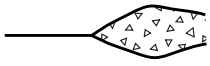
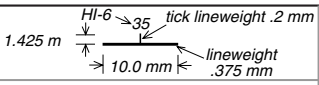
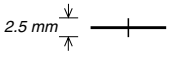
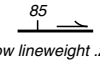
*For more information, see general guidelines on pages A-i to A-v.

2—FAULTS (continued)

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
2.12—Fault scarps (continued)				
2.12.69	Scarp on detachment fault (sense of slip unspecified) (1st option)—Identity and existence certain, location accurate. Long-hachure pairs on upper plate. Shorter, widely spaced hachures point downscarp			
2.12.70	Scarp on detachment fault (sense of slip unspecified) (1st option)—Identity or existence questionable, location accurate. Long-hachure pairs on upper plate. Shorter, widely spaced hachures point downscarp			
2.12.71	Scarp on detachment fault (sense of slip unspecified) (1st option)—Identity and existence certain, location approximate. Long-hachure pairs on upper plate. Shorter, widely spaced hachures point downscarp			
2.12.72	Scarp on detachment fault (sense of slip unspecified) (1st option)—Identity or existence questionable, location approximate. Long-hachure pairs on upper plate. Shorter, widely spaced hachures point downscarp			
2.12.73	Scarp on detachment fault (sense of slip unspecified) (2nd option)—Identity and existence certain, location accurate. Boxes on upper plate. Hachures point downscarp			
2.12.74	Scarp on detachment fault (sense of slip unspecified) (2nd option)—Identity or existence questionable, location accurate. Boxes on upper plate. Hachures point downscarp			
2.12.75	Scarp on detachment fault (sense of slip unspecified) (2nd option)—Identity and existence certain, location approximate. Boxes on upper plate. Hachures point downscarp			
2.12.76	Scarp on detachment fault (sense of slip unspecified) (2nd option)—Identity or existence questionable, location approximate. Boxes on upper plate. Hachures point downscarp			
2.12.77	Scarp on detachment fault (sense of slip unspecified) (3rd option)—Identity and existence certain, location accurate. Boxes on upper plate. Hachures point downscarp			
2.12.78	Scarp on detachment fault (sense of slip unspecified) (3rd option)—Identity or existence questionable, location accurate. Boxes on upper plate. Hachures point downscarp			
2.12.79	Scarp on detachment fault (sense of slip unspecified) (3rd option)—Identity and existence certain, location approximate. Boxes on upper plate. Hachures point downscarp			
2.12.80	Scarp on detachment fault (sense of slip unspecified) (3rd option)—Identity or existence questionable, location approximate. Boxes on upper plate. Hachures point downscarp			
2.12.81	Scarp on master detachment fault (sense of slip unspecified)—Identity and existence certain, location accurate. Long-hachure triplets on upper plate. Shorter, widely spaced hachures point downscarp			
2.12.82	Scarp on master detachment fault (sense of slip unspecified)—Identity or existence questionable, location accurate. Long-hachure triplets on upper plate. Shorter, widely spaced hachures point downscarp			
2.12.83	Scarp on master detachment fault (sense of slip unspecified)—Identity and existence certain, location approximate. Long-hachure triplets on upper plate. Shorter, widely spaced hachures point downscarp			
2.12.84	Scarp on master detachment fault (sense of slip unspecified)—Identity or existence questionable, location approximate. Long-hachure triplets on upper plate. Shorter, widely spaced hachures point downscarp			
2.12.85	Scarp on listric fault at head of detachment fault (sense of slip unspecified)—Identity and existence certain, location accurate. Single (longer) ticks on upper plate. Shorter, widely spaced hachures point downscarp			
2.12.86	Scarp on listric fault at head of detachment fault (sense of slip unspecified)—Identity or existence questionable, location accurate. Single (longer) ticks on upper plate. Shorter, widely spaced hachures point downscarp			
2.12.87	Scarp on listric fault at head of detachment fault (sense of slip unspecified)—Identity and existence certain, location approximate. Single (longer) ticks on upper plate. Shorter, widely spaced hachures point downscarp			
2.12.88	Scarp on listric fault at head of detachment fault (sense of slip unspecified)—Identity or existence questionable, location approximate. Single (longer) ticks on upper plate. Shorter, widely spaced hachures point downscarp			

**For more information, see general guidelines on pages A-i to A-v.*

2—FAULTS (continued)

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
	2.13—Quaternary faulting			
2.13.1	Fault showing displacement during historic time (includes areas of known fault creep)			Although only shown here on "identity and existence certain, location accurate," generic faults, color may be added to any type or style of fault to highlight where geomorphic evidence indicates displacement during Quaternary time.
2.13.2	Fault showing displacement during Holocene time			
2.13.3	Fault showing displacement during late Quaternary time			
2.13.4	Fault showing displacement during Quaternary time (undifferentiated)			
	2.14—Shear zones; mylonite zones; fault-breccia zones			
2.14.1	Ductile shear zone or mylonite zone—May or may not be associated with mappable faults			Orient S-shaped symbols to indicate linear trend of zone; spacing may be varied to show intensity of shear. Width of zones may vary. Patterns may either overprint other map units or be used as stand-alone map units (if zones have well-defined boundaries).
2.14.2	Zone of sheared rock within fault			
2.14.3	Fault-breccia zone or zone of broken rock within fault			
2.14.4	Fault-breccia zone or zone of broken rock around fault			
	2.15—Small, minor faults			
2.15.1	Small, minor inclined fault—Showing strike and dip			Use to show small, minor faults that are observed in outcrop but that cannot be traced away from that outcrop.
2.15.2	Small, minor vertical or near-vertical fault—Showing strike			
2.15.3	Small, minor shear fault—Showing dip. Arrow shows direction of relative horizontal displacement			

For more information, see general guidelines on pages A-i to A-v.