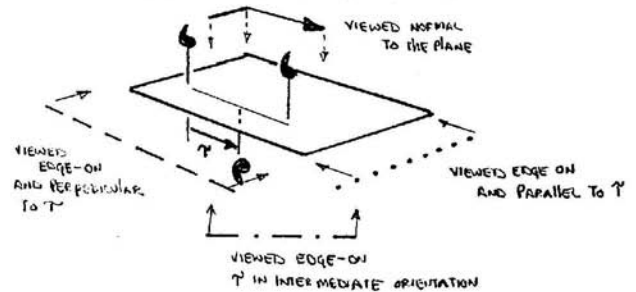


3.60 Symmetry, Structure and Tensor Properties of Materials

SYMBOLS FOR THE LOCUS OF A GLIDE PLANE :



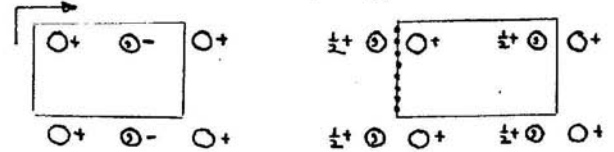
ANALYTICAL SYMBOLS FOR A GLIDE PLANE

AXIAL GLIDES $\left\{ \begin{array}{l} \tau = \frac{1}{2} a \quad \text{a-GLIDE} \\ \tau = \frac{1}{2} b \quad \text{b-GLIDE} \\ \tau = \frac{1}{2} c \quad \text{c-GLIDE} \end{array} \right.$

DIAGONAL GLIDES $\left\{ \begin{array}{l} \tau = \frac{1}{2} (a \pm b) \\ \tau = \frac{1}{2} (b \pm c) \\ \tau = \frac{1}{2} (c \pm a) \end{array} \right. \quad \left. \begin{array}{l} \\ \\ \end{array} \right\} \text{ n-GLIDE}$

DIAMOND GLIDES $\left\{ \begin{array}{l} \tau = \frac{1}{4} (a \pm b) \\ \tau = \frac{1}{4} (b \pm c) \\ \tau = \frac{1}{4} (c \pm a) \\ \tau = \frac{1}{4} (a \pm b \pm c) \end{array} \right. \quad \left. \begin{array}{l} \\ \\ \\ \end{array} \right\} \text{ d-GLIDE (POSSIBLE ONLY FOR NON-PRIMITIVE CELLS)}$

(THESE SYMBOLS REPLACE THE SYMBOL FOR m IN THE POINT-GROUP PORTION OF THE SPACE GROUP SYMBOL IF THE SYMMETRY ELEMENT IS PRESENT — $cg, P2/a$)



ABOVE ARE TWO EXAMPLES OF HOW GLIDE-PLANES MIGHT APPEAR IN SPACE-GROUP DIAGRAMS.

Figure removed for copyright reasons.

Source: Buerger, Martin J. Elementary Crystallography: An Introduction to the Fundamental Geometrical Features of Crystals. Cambridge, MA: MIT Press, 1978. ISBN: 0262520486.