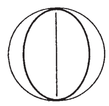
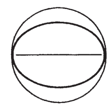
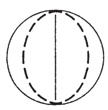
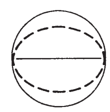
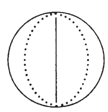
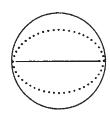
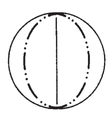
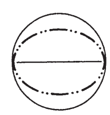
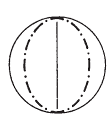
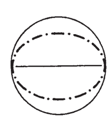
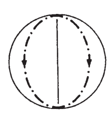
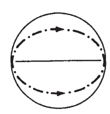
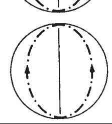
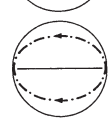
International Tables for Crystallography (2016). Vol. A, Table 2.1.2.4, p. 147.

Table 2.1.2.4
Graphical symbols of symmetry planes inclined to the plane of projection (in cubic space groups of classes $\bar{4}3m$ and $m\bar{3}m$ only)

Description	Graphical symbol† for planes normal to $[011]$ and $[01\bar{1}]$	Graphical symbol† for planes normal to $[101]$ and $[10\bar{1}]$	Glide vector(s) (in units of the shortest lattice translation vectors) of the defining operation(s) of the glide plane normal to $[011]$ and $[01\bar{1}]$	Glide vector(s) (in units of the shortest lattice translation vectors) of the defining operation(s) of the glide plane normal to $[101]$ and $[10\bar{1}]$	Symmetry element represented by the graphical symbol
Reflection plane, mirror plane			None	None	*m*
'Axial' glide plane			$\frac{1}{2}$ along $[100]$	$\frac{1}{2}$ along $[010]$	*a* or *b*
'Axial' glide plane			$\frac{1}{2}$ along $[01\bar{1}]$ or along $[011]$	$\frac{1}{2}$ along $[10\bar{1}]$ or along $[101]$	
'Double' glide plane [in space groups $I\bar{4}3m$ (217) and $Im\bar{3}m$ (229) only]			*Two* glide vectors: $\frac{1}{2}$ along $[100]$ *and* $\frac{1}{2}$ along $[01\bar{1}]$ or $\frac{1}{2}$ along $[011]$	*Two* glide vectors: $\frac{1}{2}$ along $[010]$ *and* $\frac{1}{2}$ along $[10\bar{1}]$ or $\frac{1}{2}$ along $[101]$	*e*
'Diagonal' glide plane			*One* glide vector: $\frac{1}{2}$ along $[11\bar{1}]$ or along $[111]$‡	*One* glide vector: $\frac{1}{2}$ along $[11\bar{1}]$ or along $[111]$‡	*n*
'Diamond' glide plane§ (pair of planes)			$\frac{1}{2}$ along $[1\bar{1}1]$ or along $[111]$¶	$\frac{1}{2}$ along $[\bar{1}11]$ or along $[111]$ ¶	*d*
			$\frac{1}{2}$ along $[\bar{1}\bar{1}1]$ or along $[\bar{1}11]$¶	$\frac{1}{2}$ along $[\bar{1}\bar{1}1]$ or along $[1\bar{1}1]$ ¶	

† The symbols represent orthographic projections. In the cubic space-group diagrams, complete orthographic projections of the symmetry elements around high-symmetry points, such as 0, 0, 0; $\frac{1}{2}$, 0, 0; $\frac{1}{4}$, $\frac{1}{4}$, 0, are given as 'inserts'.
‡ In the space groups $F\bar{4}3m$ (216), $Fm\bar{3}m$ (225) and $Fd\bar{3}m$ (227), the shortest lattice translation vectors in the glide directions are $\mathbf{t}(1, \frac{1}{2}, \bar{\frac{1}{2}})$ or $\mathbf{t}(1, \frac{1}{2}, \frac{1}{2})$ and $\mathbf{t}(\frac{1}{2}, 1, \bar{\frac{1}{2}})$ or $\mathbf{t}(\frac{1}{2}, 1, \frac{1}{2})$, respectively.
§ Glide planes *d* occur only in orthorhombic *F* space groups, in tetragonal *I* space groups, and in cubic *I* and *F* space groups. They always occur in pairs with alternating glide vectors, for instance $\frac{1}{4}(\mathbf{a}+\mathbf{b})$ and $\frac{1}{4}(\mathbf{a}-\mathbf{b})$. The second power of a glide reflection *d* is a centring vector.
¶ The glide vector is half of a centring vector, *i.e.* one quarter of the diagonal of the conventional body-centred cell in space groups $I\bar{4}3d$ (220) and $Ia\bar{3}d$ (230).

in 1992 (de Wolff *et al.*, 1992), while the 'double-arrowed' graphical symbol for *e*-glide planes oriented 'parallel' to the projection plane had already been used in *IT* (1935) and *IT* (1952).

The graphical symbols of symmetry axes and their descriptions are shown in Tables 2.1.2.5–2.1.2.7. The screw vectors of the defining operations of screw axes are given in units of the shortest lattice translation vectors parallel to the axes. The symbols in the last column of the tables indicate the symmetry elements that are represented by the graphical symbols in the symmetry-element diagrams of the space groups. Two main cases may be distinguished:

(i) graphical symbols of symmetry elements that in the space-group diagrams represent just one symmetry element. Thus, the graphical symbol of a fourfold rotation axis or an inversion centre represent the symmetry element 4 or $\bar{1}$. Similarly, the graphical symbols of symmetry planes (Tables 2.1.2.2–2.1.2.4) represent just one symmetry element (namely, mirror or glide plane) in the space-group diagrams;

(ii) graphical symbols of symmetry elements that in the space-group diagrams represent more than one symmetry element. For example, the graphical symbol described in Table 2.1.2.5 as 'Inversion axis: 3 bar' ($\bar{3}$),

represents in the diagrams the three different symmetry elements $\bar{3}$, 3, $\bar{1}$.

The last six entries of Table 2.1.2.5 are combinations of symbols of symmetry axes with that of a centre of inversion. When displayed on the space-group diagrams, the combined graphical symbols represent more than one symmetry element. For example, the symbol for a fourfold rotation axis with a centre of inversion (4/*m*),

 or 

represents the symmetry elements $\bar{4}$, 4 and $\bar{1}$.

  references