headed by a pair of diagrams, as illustrated in Fig. 1.2.6.3. Each diagram is a projection of four neighbouring unit cells. The headline of each cell choice contains a small drawing indicating the origin and basis vectors of the cell that apply to that description.

For the monoclinic/rectangular and orthorhombic/rectangular layer groups, two diagrams are given, as illustrated in Figs. 1.2.6.4 and 1.2.6.5, respectively. For these groups, the Hermann–Mauguin symbol for the layer group is given for two settings, *i.e.* for two ways of assigning the labels **a**, **b**, **c** to the basis vectors of the conventional coordinate system.

The symbol for each setting is referred to as a *setting symbol*. The setting symbol for the standard setting is (*abc*). The Hermann–Mauguin symbol of the layer group in the conventional coordinate system, in the standard setting, is the same as the Hermann–Mauguin symbol in the first line of the headline. The setting symbol for all other settings is a shorthand notation for the relabelling of the basis vectors. For example, the setting symbol (*cab*) means that the basis vectors relabelled in this setting as **a**, **b** and **c** were in the standard setting labelled **c**, **a** and **b**, respectively [*cf.* Section 2.6 of *IT* A (1983)].

For these groups, the two settings considered are the standard (*abc*) setting and a second ($b\bar{a}c$) setting. In Fig. 1.2.6.6, the (*abc*) setting symbol is written horizontally across the top of the diagram and the second ($b\bar{a}c$) setting symbol is written vertically on the left-hand side of the diagram. When viewing the diagram with the (*abc*) setting symbol written horizontally across the top of the diagram, the origin of the coordinate system is at the upper left-hand corner of the diagram, the basis vector labelled **a** is downward towards the bottom of the page, the basis vector labelled **b** is to the right and the basis vector labelled **c** is upward out of the page (see also Figs. 1.2.6.4 and 1.2.6.5). When viewing

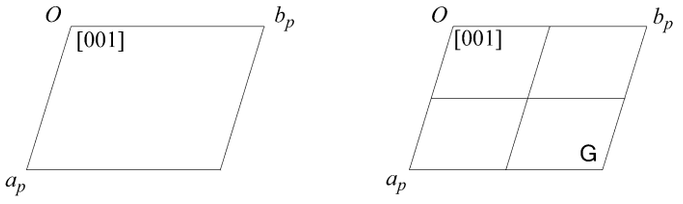

Fig. 1.2.6.1. Diagrams for triclinic/oblique layer groups.

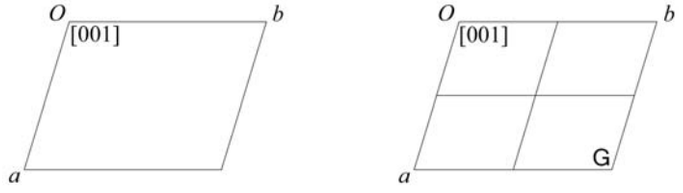

Fig. 1.2.6.2. Diagrams for monoclinic/oblique layer groups.

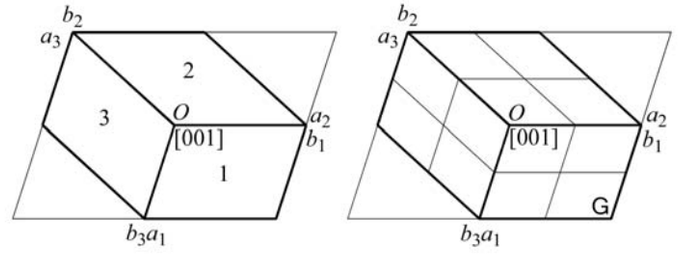

Fig. 1.2.6.3. Monoclinic/oblique layer groups Nos. 5 and 7, cell choices 1, 2, 3. The numbers 1, 2, 3 within the cells and the subscripts of the basis vectors indicate the cell choice.

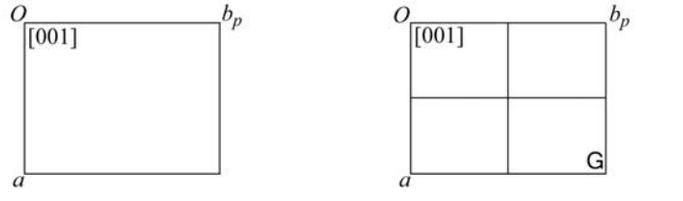

Fig. 1.2.6.4. Diagrams for monoclinic/rectangular layer groups.

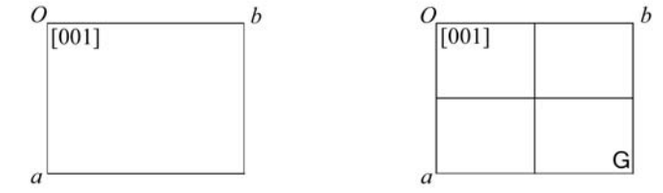

Fig. 1.2.6.5. Diagrams for orthorhombic/rectangular layer groups.

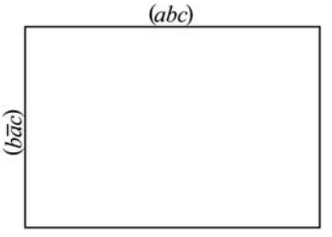

Fig. 1.2.6.6. Monoclinic/rectangular and orthorhombic/rectangular layer groups with two settings. For the second-setting symbol printed vertically, the page must be turned clockwise by 90° or viewed from the right-hand side.

Table 1.2.6.1. *Distinct Hermann–Mauguin symbols for monoclinic/rectangular and orthorhombic/rectangular layer groups in different settings*

	Setting symbol	
	(*abc*)	($b\bar{a}c$)
Layer group	Hermann–Mauguin symbol	
L8	*p*211	*p*121
L9	$p2_111$	$p12_11$
L10	*c*211	*c*121
L11	*pm*11	*p*1*m*1
L12	*pb*11	*p*1*a*1
L13	*cm*11	*c*1*m*1
L14	*p*2/*m*11	*p*12/*m*1
L15	$p2_1/m11$	$p12_1/m1$
L16	*p*2/*b*11	*p*12/*a*1
L17	$p2_1/b11$	$p12_1/a1$
L18	*c*2/*m*11	*c*12/*m*1
L20	$p2_122$	$p22_12$
L24	*pma*2	*pbm*2
L27	*pm*2*m*	*p*2*mm*
L28	$pm2_1b$	$p2_1ma$
L29	$pb2_1m$	$p2_1am$
L30	*pb*2*b*	*p*2*aa*
L31	*pm*2*a*	*p*2*mb*
L32	$pm2_1n$	$p2_1mn$
L33	$pb2_1a$	$p2_1ab$
L34	*pb*2*n*	*p*2*an*
L35	*cm*2*m*	*c*2*mm*
L36	*cm*2*a*	*c*2*mb*
L38	*pmaa*	*pbmb*
L40	*pmam*	*pbmm*
L41	*pmma*	*pmmb*
L42	*pman*	*pbmn*
L43	*pbaa*	*pbab*
L45	*pbma*	*pmab*