Table 1.2.6.2. *Distinct Hermann–Mauguin symbols for monoclinic and orthorhombic rod groups in different settings*

	Setting symbol					
	(*abc*)	(*bāc*)	(*c̄ba*)	(*bca*)	(*ac̄b*)	(*c̄āb*)
Rod group	Hermann–Mauguin symbol					
R3	$\not{p}_c211$	$\not{p}_c121$	$\not{p}_a112$	$\not{p}_b112$	$\not{p}_b211$	$\not{p}_a121$
R4	$\not{p}_cm11$	$\not{p}_c1m1$	$\not{p}_a11m$	$\not{p}_b11m$	$\not{p}_bm11$	$\not{p}_a1m1$
R5	$\not{p}_cc11$	$\not{p}_c1c1$	$\not{p}_a11a$	$\not{p}_b11b$	$\not{p}_bb11$	$\not{p}_a1a1$
R6	$\not{p}_c2/m11$	$\not{p}_c12/m1$	$\not{p}_a112/m$	$\not{p}_b112/m$	$\not{p}_b2/m11$	$\not{p}_a12/m1$
R7	$\not{p}_c2/c11$	$\not{p}_c12/c1$	$\not{p}_a112/a$	$\not{p}_b112/b$	$\not{p}_b2/b11$	$\not{p}_a12/a1$
R8	$\not{p}_c112$	$\not{p}_c112$	$\not{p}_a211$	$\not{p}_b121$	$\not{p}_b121$	$\not{p}_a211$
R9	$\not{p}_c112_1$	$\not{p}_c112_1$	$\not{p}_a2_111$	$\not{p}_b12_11$	$\not{p}_b12_11$	$\not{p}_a2_111$
R10	$\not{p}_c11m$	$\not{p}_c11m$	$\not{p}_am11$	$\not{p}_b1m1$	$\not{p}_b1m1$	$\not{p}_am11$
R11	$\not{p}_c112/m$	$\not{p}_c112/m$	$\not{p}_a2/m11$	$\not{p}_b12/m1$	$\not{p}_b12/m1$	$\not{p}_a2/m11$
R12	$\not{p}_c112_1/m$	$\not{p}_c112_1/m$	$\not{p}_a2_1/m11$	$\not{p}_b12_1/m1$	$\not{p}_b12_1/m1$	$\not{p}_a2_1/m11$
R13	$\not{p}_c222$	$\not{p}_c222$	$\not{p}_a222$	$\not{p}_b222$	$\not{p}_b222$	$\not{p}_a222$
R14	$\not{p}_c222_1$	$\not{p}_c222_1$	$\not{p}_a2_122$	$\not{p}_b22_12$	$\not{p}_b22_12$	$\not{p}_a2_122$
R15	$\not{p}_cmm2$	$\not{p}_cmm2$	$\not{p}_a2mm$	$\not{p}_bm2m$	$\not{p}_bm2m$	$\not{p}_a2mm$
R16	$\not{p}_ccc2$	$\not{p}_ccc2$	$\not{p}_a2aa$	$\not{p}_bb2b$	$\not{p}_bb2b$	$\not{p}_a2aa$
R17	$\not{p}_cmc2_1$	$\not{p}_ccm2_1$	$\not{p}_a2_1am$	$\not{p}_bb2_1m$	$\not{p}_bm2_1b$	$\not{p}_a2_1ma$
R18	$\not{p}_c2mm$	$\not{p}_cm2m$	$\not{p}_amm2$	$\not{p}_bmm2$	$\not{p}_b2mm$	$\not{p}_am2m$
R19	$\not{p}_c2cm$	$\not{p}_cc2m$	$\not{p}_ama2$	$\not{p}_bbm2$	$\not{p}_b2mb$	$\not{p}_am2a$
R20	$\not{p}_cmmm$	$\not{p}_cmmm$	$\not{p}_ammm$	$\not{p}_bmmm$	$\not{p}_bmmm$	$\not{p}_ammm$
R21	$\not{p}_cccm$	$\not{p}_cccm$	$\not{p}_amaa$	$\not{p}_bbmb$	$\not{p}_bbmb$	$\not{p}_amaa$
R22	$\not{p}_cmcm$	$\not{p}_ccmm$	$\not{p}_amam$	$\not{p}_bbmm$	$\not{p}_bmmb$	$\not{p}_amma$

Table 1.2.6.3. *Distinct Hermann–Mauguin symbols for tetragonal, trigonal and hexagonal rod groups in different settings*

	Setting symbol	
	(*abc*)	$(a \pm b \quad b \mp a \quad c)$
Rod group	Hermann–Mauguin symbol	
R35	$\not{p}4_2cm$	$\not{p}4_2mc$
R37	$\not{p}\bar{4}2m$	$\not{p}\bar{4}m2$
R38	$\not{p}\bar{4}2c$	$\not{p}\bar{4}c2$
R41	$\not{p}4_2/mmc$	$\not{p}4_2/mcm$

	Setting symbol	
	(*abc*)	$(\pm 2a \pm b \quad \mp a \pm b \quad c)$ $(\pm a \pm 2b \quad \mp 2a \mp b \quad c)$ $(\mp a \pm b \quad \mp a \mp 2b \quad c)$
Rod group	Hermann–Mauguin symbol	
R46	$\not{p}312$	$\not{p}321$
R47	$\not{p}3_112$	$\not{p}3_121$
R48	$\not{p}3_212$	$\not{p}3_221$
R49	$\not{p}3m1$	$\not{p}31m$
R50	$\not{p}3c1$	$\not{p}31c$
R51	$\not{p}\bar{3}1m$	$\not{p}\bar{3}m1$
R52	$\not{p}\bar{3}1c$	$\not{p}\bar{3}c1$
R70	$\not{p}6_3mc$	$\not{p}6_3cm$
R71	$\not{p}\bar{6}m2$	$\not{p}\bar{6}2m$
R72	$\not{p}\bar{6}c2$	$\not{p}\bar{6}2c$
R75	$\not{p}6_3/mmc$	$\not{p}6_3/mcm$

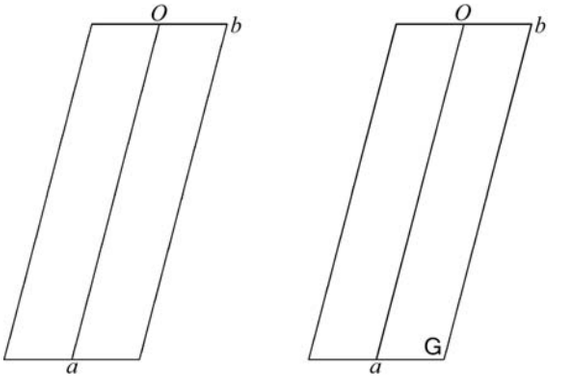

Fig. 1.2.6.16. Diagrams for oblique frieze groups.

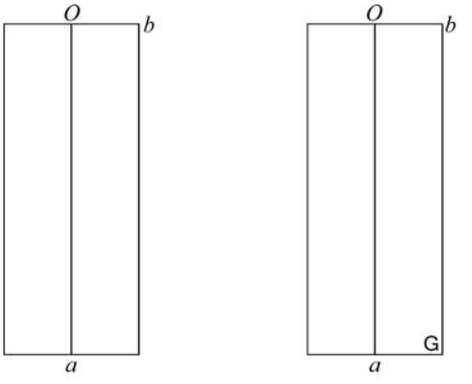

Fig. 1.2.6.17. Diagrams for rectangular frieze groups.

1.2.7. Origin

The origin has been chosen according to the following conventions:

(i) If the subperiodic group is centrosymmetric, then the inversion centre is chosen as the origin. For the three layer groups *p*4/*n* (L52), *p*4/*nbm* (L62) and *p*4/*nmm* (L64), we give descriptions for two origins, at the inversion centre and at $(-\frac{1}{4}, -\frac{1}{4}, 0)$ from the inversion centre. This latter origin is at a position of high site symmetry and is consistent with having the origin on the fourfold axis, as is the case for all other tetragonal layer groups. The group symbols for the description with the origin at the inversion centre, *e.g.* $p4/n\,(\frac{1}{4}, \frac{1}{4}, 0)$, are followed by the shift $(\frac{1}{4}, \frac{1}{4}, 0)$ of the position of the origin used in the description having the origin on the fourfold axis.

(ii) For noncentrosymmetric subperiodic groups, the origin is at a point of highest site symmetry. If no symmetry is higher than 1, the origin is placed on a screw axis, a glide plane or at the intersection of several such symmetry elements.