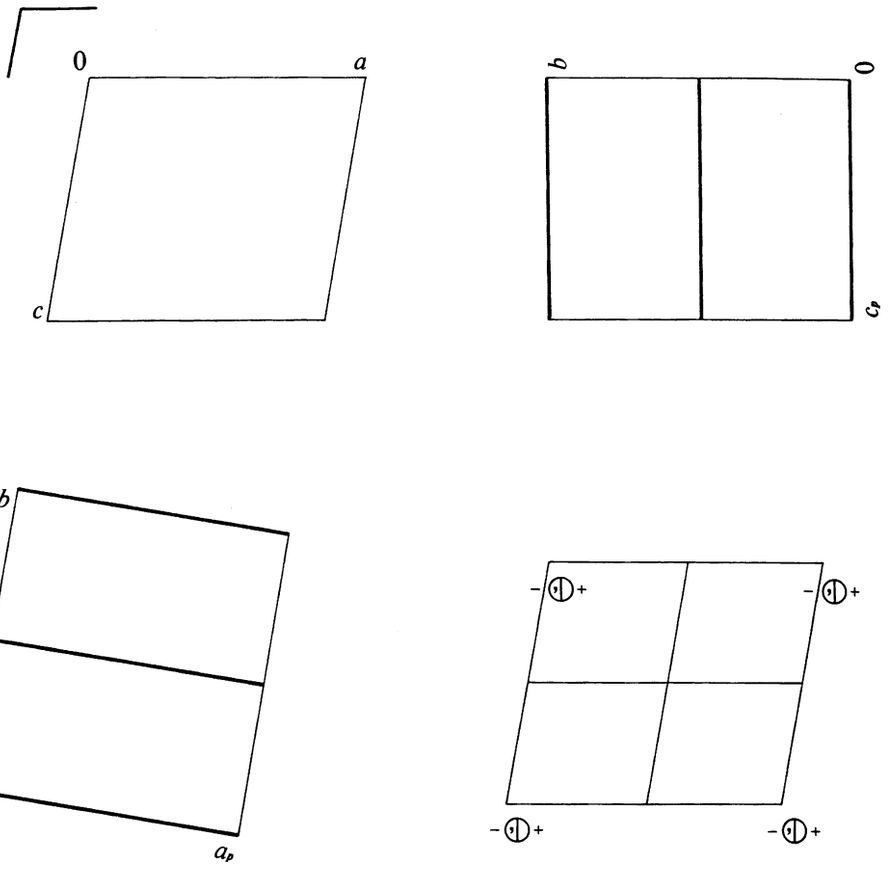
Pm C_s^1 m Monoclinic

No. 6 $P\,1\,m\,1$ Patterson symmetry $P\,1\,2/m\,1$

UNIQUE AXIS b



Origin on mirror plane m

Asymmetric unit $0 \le x \le 1; \quad 0 \le y \le \frac{1}{2}; \quad 0 \le z \le 1$

Symmetry operations

(1) 1 (2) m $x,0,z$

Generators selected (1); $t(1,0,0)$; $t(0,1,0)$; $t(0,0,1)$; (2)

Positions

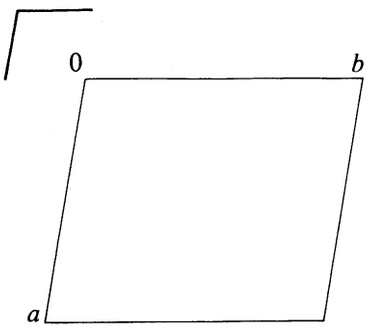
Multiplicity, Wyckoff letter, Site symmetry			Coordinates		Reflection conditions
					General:
2	c	1	(1) x,y,z	(2) $x,\bar{y},z$	no conditions
					Special: no extra conditions
1	b	m	$x,\frac{1}{2},z$		
1	a	m	$x,0,z$		

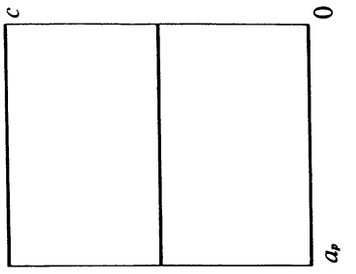
Symmetry of special projections

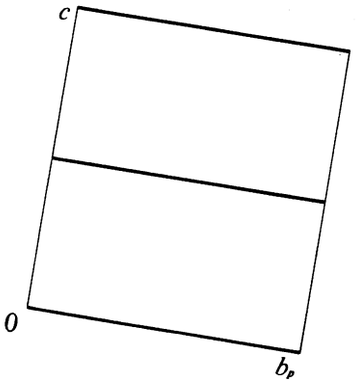
Along [001] $p\,1\,1\,m$
$\mathbf{a}' = \mathbf{a}_p$ $\mathbf{b}' = \mathbf{b}$
Origin at $0,0,z$

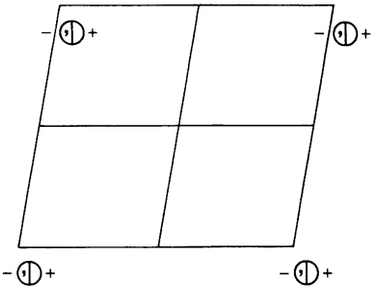
Along [100] $p\,1\,m\,1$
$\mathbf{a}' = \mathbf{b}$ $\mathbf{b}' = \mathbf{c}_p$
Origin at $x,0,0$

Along [010] $p\,1$
$\mathbf{a}' = \mathbf{c}$ $\mathbf{b}' = \mathbf{a}$
Origin at $0,y,0$









Origin on mirror plane m

Asymmetric unit $0 \le x \le 1; \quad 0 \le y \le 1; \quad 0 \le z \le \frac{1}{2}$

Symmetry operations

(1) 1 (2) m $x,y,0$

Generators selected (1); $t(1,0,0)$; $t(0,1,0)$; $t(0,0,1)$; (2)

Positions

Multiplicity, Wyckoff letter, Site symmetry			Coordinates		Reflection conditions
					General:
2	c	1	(1) x,y,z	(2) $x,y,\bar{z}$	no conditions
					Special: no extra conditions
1	b	m	$x,y,\frac{1}{2}$		
1	a	m	$x,y,0$		

Symmetry of special projections

Along [001] $p\,1$
$\mathbf{a}' = \mathbf{a}$ $\mathbf{b}' = \mathbf{b}$
Origin at $0,0,z$

Along [100] $p\,1\,1\,m$
$\mathbf{a}' = \mathbf{b}_p$ $\mathbf{b}' = \mathbf{c}$
Origin at $x,0,0$

Along [010] $p\,1\,m\,1$
$\mathbf{a}' = \mathbf{c}$ $\mathbf{b}' = \mathbf{a}_p$
Origin at $0,y,0$