

Orthorhombic

$mm2$

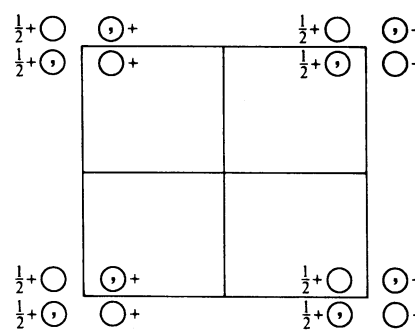
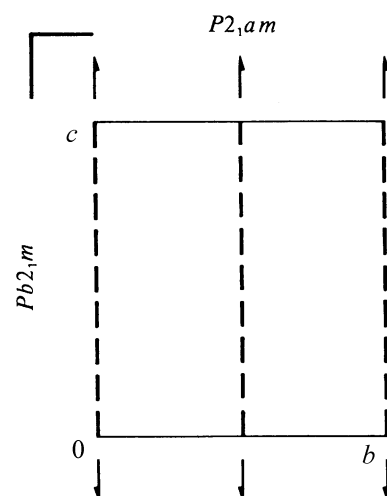
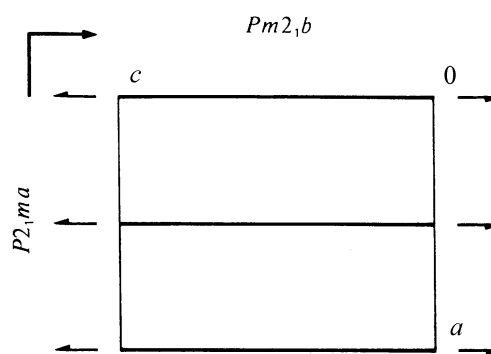
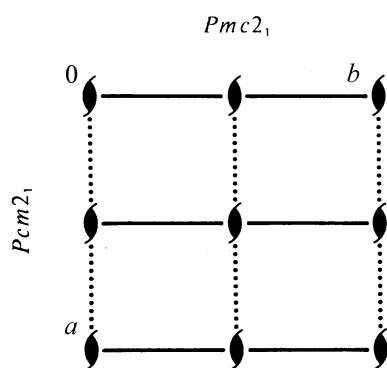
C_{2v}^2

$Pmc2_1$

Patterson symmetry $Pmmm$

$Pmc2_1$

No. 26



Origin on $mc2_1$

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

Symmetry operations

(1) 1 (2) $2(0,0,\frac{1}{2})$ $0,0,z$ (3) c $x,0,z$ (4) m $0,y,z$

Generators selected (1); $t(1,0,0)$; $t(0,1,0)$; $t(0,0,1)$; (2); (3)

Positions

Multiplicity,
Wyckoff letter,
Site symmetry

Coordinates

Reflection conditions

4 c 1 (1) x,y,z (2) $\bar{x},\bar{y},z+\frac{1}{2}$ (3) $x,\bar{y},z+\frac{1}{2}$ (4) \bar{x},y,z

General:

$h0l: l = 2n$

$00l: l = 2n$

Special: no extra conditions

2 b $m..$ $\frac{1}{2},y,z$ $\frac{1}{2},\bar{y},z+\frac{1}{2}$

2 a $m..$ $0,y,z$ $0,\bar{y},z+\frac{1}{2}$

Symmetry of special projections

Along $[001]$ $p2mm$

$\mathbf{a}' = \mathbf{a}$ $\mathbf{b}' = \mathbf{b}$

Origin at $0,0,z$

Along $[100]$ $p1g1$

$\mathbf{a}' = \mathbf{b}$ $\mathbf{b}' = \mathbf{c}$

Origin at $x,0,0$

Along $[010]$ $p11m$

$\mathbf{a}' = \frac{1}{2}\mathbf{c}$ $\mathbf{b}' = \mathbf{a}$

Origin at $0,y,0$