

Rectangular

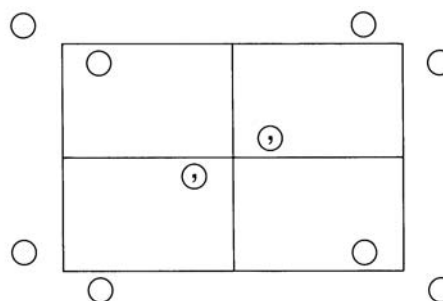
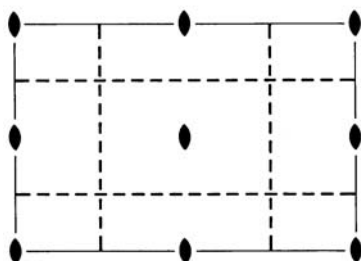
$2mm$

$p2gg$

Patterson symmetry $p2mm$

$p2gg$

No. 8



Origin at 2

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

Symmetry operations

(1) 1 (2) 2 0,0 (3) $b \frac{1}{4}, y$ (4) $a x, \frac{1}{4}$

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

Positions

Multiplicity,
Wyckoff letter,
Site symmetry

Coordinates

Reflection conditions

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

General:

$h0: h = 2n$
 $0k: k = 2n$

Special: as above, plus

2 b 2.. $\frac{1}{2}, 0$ $0, \frac{1}{2}$

$hk: h + k = 2n$

2 a 2.. $0, 0$ $\frac{1}{2}, \frac{1}{2}$

$hk: h + k = 2n$

Maximal non-isomorphic subgroups

I [2] $p1g1$ ($pg, 4$) 1; 3
[2] $p11g$ ($pg, 4$) 1; 4
[2] $p211$ ($p2, 2$) 1; 2

IIa none

IIb none

Maximal isomorphic subgroups of lowest index

IIc [3] $p2gg$ ($a' = 3a$ or $b' = 3b$) (8)

Minimal non-isomorphic supergroups

I [2] $p4gm$ (12)

II [2] $c2mm$ (9); [2] $p2mg$ ($a' = \frac{1}{2}a$) (7); [2] $p2gm$ ($b' = \frac{1}{2}b$) ($p2mg, 7$)