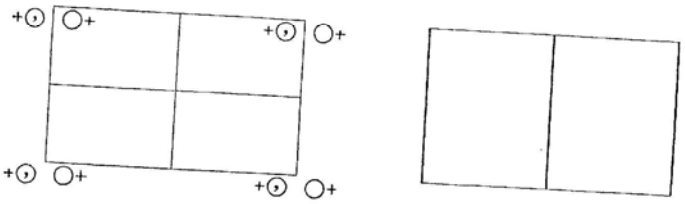
Monoclinic m

$P\,1\,m\,1$

No. 6

Pm
C_s^1



Origin on plane m; unique axis b

2ND SETTING

Number of positions, Wyckoff notation, and point symmetry			Co-ordinates of equivalent positions	Conditions limiting possible reflections
2	c	1	x,y,z; $x,\bar{y},z$.	General:
				hkl: } No conditions $h0l$: } $0k0$: }
1	b	m	$x,\frac{1}{2},z$.	Special:
1	a	m	$x,0,z$.	No conditions

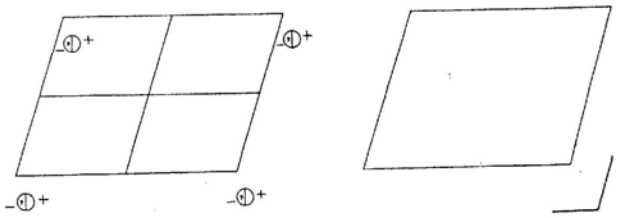
Symmetry of special projections

(001) $p1m$; $a'=a$, $b'=b$

(100) $pm1$; $b'=b$, $c'=c$

(010) $p1$; $c'=c$, $a'=a$

Pm C_s^1 — No. 6 — $P\,1\,1\,m$ — m Monoclinic

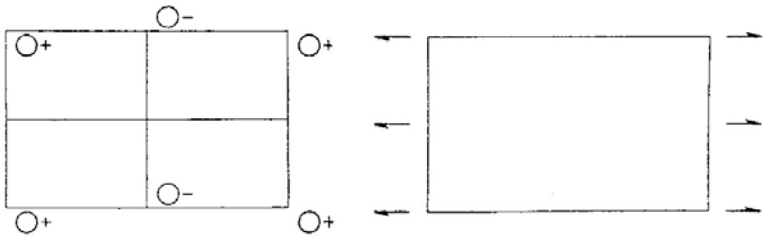


1ST SETTING — Origin on plane m; unique axis c

Number of positions, Wyckoff notation, and point symmetry			Co-ordinates of equivalent positions	Conditions limiting possible reflections
				General:
2	c	1	x,y,z; $x,y,\bar{z}$.	hkl: No conditions $hk0$: No conditions $00l$: No conditions
				Special:
1	b	m	$x,y,\frac{1}{2}$.	No conditions
1	a	m	$x,y,0$.	

Symmetry of special projections

(001) $p1$; $a'=a$, $b'=b$ — (100) $p1m$; $b'=b$, $c'=c$ — (010) $pm1$; $c'=c$, $a'=a$

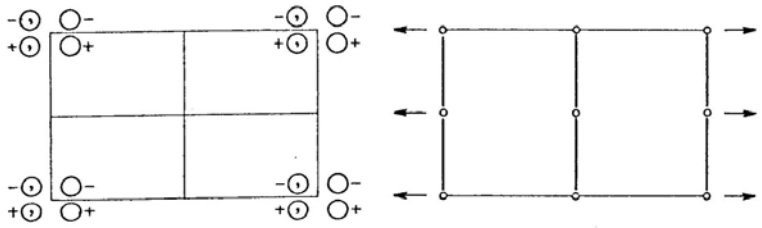


Origin on 2_1; unique axis b 2ND SETTING

Number of positions, Wyckoff notation, and point symmetry			Co-ordinates of equivalent positions	Conditions limiting possible reflections
2	a	1	x,y,z; $\bar{x},\frac{1}{2}+y,\bar{z}$.	hkl: No conditions $h0l$: No conditions $0k0$: $k=2n$

Symmetry of special projections

(001) $pg1$; $a'=a$, $b'=b$ (100) $p1g$; $b'=b$, $c'=c$ (010) $p2$; $c'=c$, $a'=a$

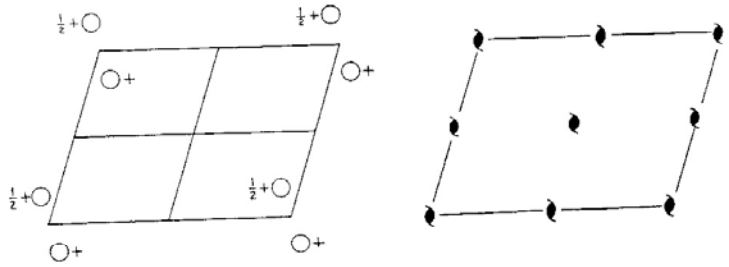


Origin at centre ($2/m$); unique axis b 2ND SETTING

Number of positions, Wyckoff notation, and point symmetry			Co-ordinates of equivalent positions	Conditions limiting possible reflections
				General:
4	o	1	x,y,z; $x,\bar{y},z$; $\bar{x},y,\bar{z}$; $\bar{x},\bar{y},\bar{z}$.	No conditions
				Special:
2	n	m	$x,\frac{1}{2},z$; $\bar{x},\frac{1}{2},\bar{z}$.	No conditions
2	m	m	$x,0,z$; $\bar{x},0,\bar{z}$.	
2	l	2	$\frac{1}{2},y,\frac{1}{2}$; $\frac{1}{2},\bar{y},\frac{1}{2}$.	
2	k	2	$0,y,\frac{1}{2}$; $0,\bar{y},\frac{1}{2}$.	
2	j	2	$\frac{1}{2},y,0$; $\frac{1}{2},\bar{y},0$.	
2	i	2	$0,y,0$; $0,\bar{y},0$.	
1	h	$2/m$	$\frac{1}{2},\frac{1}{2},\frac{1}{2}$.	
1	g	$2/m$	$\frac{1}{2},0,\frac{1}{2}$.	
1	f	$2/m$	$0,\frac{1}{2},\frac{1}{2}$.	
1	e	$2/m$	$\frac{1}{2},\frac{1}{2},0$.	
1	d	$2/m$	$\frac{1}{2},0,0$.	
1	c	$2/m$	$0,0,\frac{1}{2}$.	
1	b	$2/m$	$0,\frac{1}{2},0$.	
1	a	$2/m$	$0,0,0$.	

Symmetry of special projections

(001) pmm; $a'=a$, $b'=b$ (100) pmm; $b'=b$, $c'=c$ (010) $p2$; $c'=c$, $a'=a$



1ST SETTING

Origin on 2_1; unique axis c

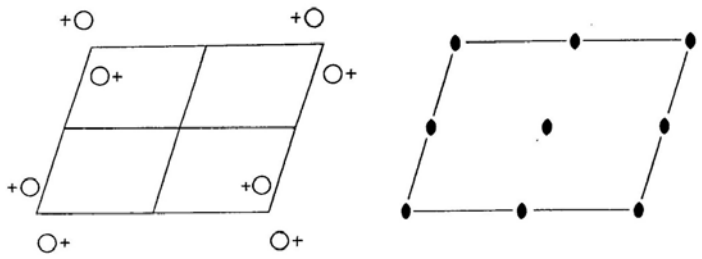
Number of positions, Wyckoff notation and point symmetry			Co-ordinates of equivalent positions	Conditions limiting possible reflections
2	a	1	x,y,z; $\bar{x},\bar{y},\frac{1}{2}+z$.	hkl: No conditions $hk0$: No conditions $00l$: $l=2n$

Symmetry of special projections

(001) $p2$; $a'=a$, $b'=b$

(100) $pg1$; $b'=b$, $c'=c$

(010) $p1g$; $c'=c$, $a'=a$



1ST SETTING Origin on 2; unique axis c

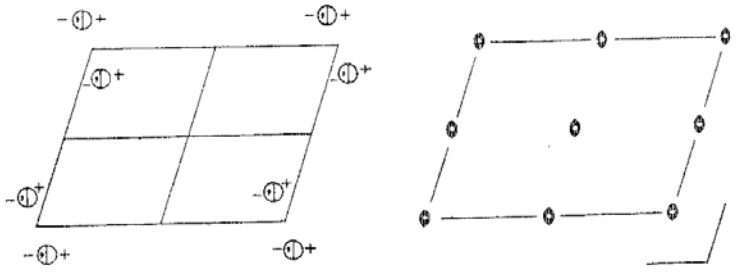
Number of positions, Wyckoff notation, and point symmetry			Co-ordinates of equivalent positions	Conditions limiting possible reflections
				General:
2	e	1	x,y,z; $\bar{x},\bar{y},z$.	hkl: } No conditions $hk0$: } $00l$: }
				Special:
1	d	2	$\frac{1}{2},\frac{1}{2},z$.	No conditions
1	c	2	$\frac{1}{2},0,z$.	
1	b	2	$0,\frac{1}{2},z$.	
1	a	2	$0,0,z$.	

Symmetry of special projections

(001) $p2$; $a'=a, b'=b$ (100) $pm1$; $b'=b, c'=c$ (010) $p1m$; $c'=c, a'=a$

$P\,2/m$ C_{2h}^{1}

No. 10 $P\,1\,1\,2/m$ $2/m$ Monoclinic

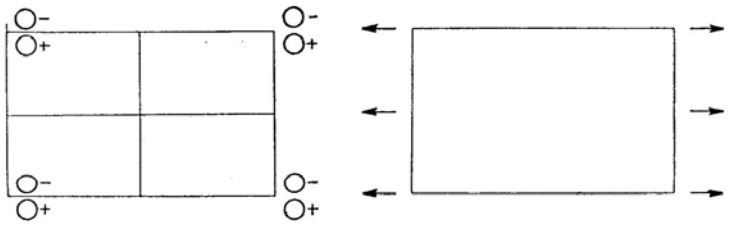


1ST SETTING Origin at centre ($2/m$); unique axis c

Number of positions, Wyckoff notation, and point symmetry			Co-ordinates of equivalent positions	Conditions limiting possible reflections
				General:
4	o	1	x,y,z; $x,y,\bar{z}$; $\bar{x},\bar{y},z$; $\bar{x},\bar{y},\bar{z}$.	No conditions
				Special:
2	n	m	$x,y,\frac{1}{2}$; $\bar{x},\bar{y},\frac{1}{2}$.	No conditions
2	m	m	$x,y,0$; $\bar{x},\bar{y},0$.	
2	l	2	$\frac{1}{2},\frac{1}{2},z$; $\frac{1}{2},\frac{1}{2},\bar{z}$.	
2	k	2	$0,\frac{1}{2},z$; $0,\frac{1}{2},\bar{z}$.	
2	j	2	$\frac{1}{2},0,z$; $\frac{1}{2},0,\bar{z}$.	
2	i	2	$0,0,z$; $0,0,\bar{z}$.	
1	h	$2/m$	$\frac{1}{2},\frac{1}{2},\frac{1}{2}$.	
1	g	$2/m$	$\frac{1}{2},\frac{1}{2},0$.	
1	f	$2/m$	$0,\frac{1}{2},\frac{1}{2}$.	
1	e	$2/m$	$\frac{1}{2},0,\frac{1}{2}$.	
1	d	$2/m$	$\frac{1}{2},0,0$.	
1	c	$2/m$	$0,\frac{1}{2},0$.	
1	b	$2/m$	$0,0,\frac{1}{2}$.	
1	a	$2/m$	$0,0,0$.	

Symmetry of special projections

(001) $p2$; $a'=a$, $b'=b$ (100) pmm; $b'=b$, $c'=c$ (010) pmm; $c'=c$, $a'=a$

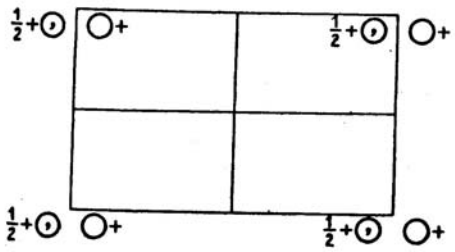


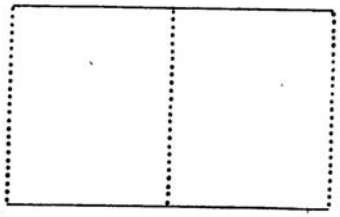
Origin on 2; unique axis b 2ND SETTING

Number of positions, Wyckoff notation, and point symmetry			Co-ordinates of equivalent positions	Conditions limiting possible reflections
				General:
2	e	1	x,y,z; $\bar{x},y,\bar{z}$.	hkl: } No conditions $h0l$: } $0k0$: }
				Special:
1	d	2	$\frac{1}{2},y,\frac{1}{2}$.	No conditions
1	c	2	$\frac{1}{2},y,0$.	
1	b	2	$0,y,\frac{1}{2}$.	
1	a	2	$0,y,0$.	

Symmetry of special projections

(001) $pm1$; $a'=a$, $b'=b$ (100) $p1m$; $b'=b$, $c'=c$ (010) $p2$; $c'=c$, $a'=a$





Origin on glide-plane *c*; unique axis *b*

2ND SETTING

ositions, tation, ymmetry

Co-ordinates of equivalent positions

Conditions limiting possible reflections

1 x,y,z; $x,\bar{y},\frac{1}{2}+z$.

hkl: No conditions
*h*0*l*: $l=2n$
0*k*0: No conditions

Symmetry of special projections

m; $a'=a$, $b'=b$

(100) *pg*1; $b'=b$, $c'=c$

(010) *p*1; $c'=c/2$, $a'=a$