

SG No. 175 C_{6h}^1 $P6/m$ [hexagonal]

* plus set: $+ [0, 0, 0]$

* Wyckoff site: **1a**, site symmetry: $6/m..$

Table 1: Wyckoff bond: **1a@1a**

No.	vector	center	mapping
1	$[0, 0, Z]$	$[0, 0, 0]$	$[1, 2, 3, 4, 5, 6, -7, -8, -9, -10, -11, -12]$

Table 2: Wyckoff bond: **3b@1a**

No.	vector	center	mapping
1	$[X, Y, 0]$	$[0, 0, 0]$	$[1, -4, -7, 10]$
2	$[-Y, X - Y, 0]$	$[0, 0, 0]$	$[2, -5, -8, 11]$
3	$[-X + Y, -X, 0]$	$[0, 0, 0]$	$[3, -6, -9, 12]$

Table 3: Wyckoff bond: **6c@1a**

No.	vector	center	mapping
1	$[X, Y, Z]$	$[0, 0, 0]$	$[1, -7]$
2	$[-Y, X - Y, Z]$	$[0, 0, 0]$	$[2, -8]$
3	$[-X + Y, -X, Z]$	$[0, 0, 0]$	$[3, -9]$
4	$[-X, -Y, Z]$	$[0, 0, 0]$	$[4, -10]$
5	$[Y, -X + Y, Z]$	$[0, 0, 0]$	$[5, -11]$
6	$[X - Y, X, Z]$	$[0, 0, 0]$	$[6, -12]$

* Wyckoff site: **1b**, site symmetry: $6/m..$

Table 4: Wyckoff bond: **1a@1b**

No.	vector	center	mapping
1	$[0, 0, Z]$	$[0, 0, \frac{1}{2}]$	$[1, 2, 3, 4, 5, 6, -7, -8, -9, -10, -11, -12]$

Table 5: Wyckoff bond: **3b@1b**

No.	vector	center	mapping
1	$[X, Y, 0]$	$[0, 0, \frac{1}{2}]$	$[1, -4, -7, 10]$
2	$[-Y, X - Y, 0]$	$[0, 0, \frac{1}{2}]$	$[2, -5, -8, 11]$
3	$[-X + Y, -X, 0]$	$[0, 0, \frac{1}{2}]$	$[3, -6, -9, 12]$

Table 6: Wyckoff bond: **6c@1b**

No.	vector	center	mapping
1	$[X, Y, Z]$	$[0, 0, \frac{1}{2}]$	$[1, -7]$
2	$[-Y, X - Y, Z]$	$[0, 0, \frac{1}{2}]$	$[2, -8]$
3	$[-X + Y, -X, Z]$	$[0, 0, \frac{1}{2}]$	$[3, -9]$
4	$[-X, -Y, Z]$	$[0, 0, \frac{1}{2}]$	$[4, -10]$
5	$[Y, -X + Y, Z]$	$[0, 0, \frac{1}{2}]$	$[5, -11]$
6	$[X - Y, X, Z]$	$[0, 0, \frac{1}{2}]$	$[6, -12]$

* Wyckoff site: **2c**, site symmetry: $-6..$

Table 7: Wyckoff bond: **2a@2c**

No.	vector	center	mapping
1	$[0, 0, Z]$	$[\frac{1}{3}, \frac{2}{3}, 0]$	$[1, 2, 3, -10, -11, -12]$
2	$[0, 0, Z]$	$[\frac{2}{3}, \frac{1}{3}, 0]$	$[4, 5, 6, -7, -8, -9]$

Table 8: Wyckoff bond: **6b@2c**

No.	vector	center	mapping
1	$[X, Y, 0]$	$[\frac{1}{3}, \frac{2}{3}, 0]$	$[1, 10]$
2	$[-Y, X - Y, 0]$	$[\frac{1}{3}, \frac{2}{3}, 0]$	$[2, 11]$
3	$[-X + Y, -X, 0]$	$[\frac{1}{3}, \frac{2}{3}, 0]$	$[3, 12]$
4	$[-X, -Y, 0]$	$[\frac{2}{3}, \frac{1}{3}, 0]$	$[4, 7]$
5	$[Y, -X + Y, 0]$	$[\frac{2}{3}, \frac{1}{3}, 0]$	$[5, 8]$
6	$[X - Y, X, 0]$	$[\frac{2}{3}, \frac{1}{3}, 0]$	$[6, 9]$

Table 9: Wyckoff bond: **12c@2c**

No.	vector	center	mapping
1	$[X, Y, Z]$	$[\frac{1}{3}, \frac{2}{3}, 0]$	$[1]$
2	$[-Y, X - Y, Z]$	$[\frac{1}{3}, \frac{2}{3}, 0]$	$[2]$
3	$[-X + Y, -X, Z]$	$[\frac{1}{3}, \frac{2}{3}, 0]$	$[3]$
4	$[-X, -Y, Z]$	$[\frac{2}{3}, \frac{1}{3}, 0]$	$[4]$
5	$[Y, -X + Y, Z]$	$[\frac{2}{3}, \frac{1}{3}, 0]$	$[5]$
6	$[X - Y, X, Z]$	$[\frac{2}{3}, \frac{1}{3}, 0]$	$[6]$
7	$[-X, -Y, -Z]$	$[\frac{2}{3}, \frac{1}{3}, 0]$	$[7]$
8	$[Y, -X + Y, -Z]$	$[\frac{2}{3}, \frac{1}{3}, 0]$	$[8]$
9	$[X - Y, X, -Z]$	$[\frac{2}{3}, \frac{1}{3}, 0]$	$[9]$
10	$[X, Y, -Z]$	$[\frac{1}{3}, \frac{2}{3}, 0]$	$[10]$
11	$[-Y, X - Y, -Z]$	$[\frac{1}{3}, \frac{2}{3}, 0]$	$[11]$

continued ...

Table 9

No.	vector	center	mapping
12	$[-X + Y, -X, -Z]$	$[\frac{1}{3}, \frac{2}{3}, 0]$	[12]

* Wyckoff site: 2d, site symmetry: $-6..$

Table 10: Wyckoff bond: 2a@2d

No.	vector	center	mapping
1	$[0, 0, Z]$	$[\frac{1}{3}, \frac{2}{3}, \frac{1}{2}]$	[1, 2, 3, -10, -11, -12]
2	$[0, 0, Z]$	$[\frac{2}{3}, \frac{1}{3}, \frac{1}{2}]$	[4, 5, 6, -7, -8, -9]

Table 11: Wyckoff bond: 6b@2d

No.	vector	center	mapping
1	$[X, Y, 0]$	$[\frac{1}{3}, \frac{2}{3}, \frac{1}{2}]$	[1, 10]
2	$[-Y, X - Y, 0]$	$[\frac{1}{3}, \frac{2}{3}, \frac{1}{2}]$	[2, 11]
3	$[-X + Y, -X, 0]$	$[\frac{1}{3}, \frac{2}{3}, \frac{1}{2}]$	[3, 12]
4	$[-X, -Y, 0]$	$[\frac{2}{3}, \frac{1}{3}, \frac{1}{2}]$	[4, 7]
5	$[Y, -X + Y, 0]$	$[\frac{2}{3}, \frac{1}{3}, \frac{1}{2}]$	[5, 8]
6	$[X - Y, X, 0]$	$[\frac{2}{3}, \frac{1}{3}, \frac{1}{2}]$	[6, 9]

Table 12: Wyckoff bond: 12c@2d

No.	vector	center	mapping
1	$[X, Y, Z]$	$[\frac{1}{3}, \frac{2}{3}, \frac{1}{2}]$	[1]
2	$[-Y, X - Y, Z]$	$[\frac{1}{3}, \frac{2}{3}, \frac{1}{2}]$	[2]
3	$[-X + Y, -X, Z]$	$[\frac{1}{3}, \frac{2}{3}, \frac{1}{2}]$	[3]
4	$[-X, -Y, Z]$	$[\frac{2}{3}, \frac{1}{3}, \frac{1}{2}]$	[4]
5	$[Y, -X + Y, Z]$	$[\frac{2}{3}, \frac{1}{3}, \frac{1}{2}]$	[5]
6	$[X - Y, X, Z]$	$[\frac{2}{3}, \frac{1}{3}, \frac{1}{2}]$	[6]
7	$[-X, -Y, -Z]$	$[\frac{2}{3}, \frac{1}{3}, \frac{1}{2}]$	[7]
8	$[Y, -X + Y, -Z]$	$[\frac{2}{3}, \frac{1}{3}, \frac{1}{2}]$	[8]
9	$[X - Y, X, -Z]$	$[\frac{2}{3}, \frac{1}{3}, \frac{1}{2}]$	[9]
10	$[X, Y, -Z]$	$[\frac{1}{3}, \frac{2}{3}, \frac{1}{2}]$	[10]
11	$[-Y, X - Y, -Z]$	$[\frac{1}{3}, \frac{2}{3}, \frac{1}{2}]$	[11]
12	$[-X + Y, -X, -Z]$	$[\frac{1}{3}, \frac{2}{3}, \frac{1}{2}]$	[12]

* Wyckoff site: 2e, site symmetry: $6..$

Table 13: Wyckoff bond: 2a@2e

No.	vector	center	mapping
1	$[0, 0, Z]$	$[0, 0, z]$	$[1, 2, 3, 4, 5, 6]$
2	$[0, 0, -Z]$	$[0, 0, -z]$	$[7, 8, 9, 10, 11, 12]$

Table 14: Wyckoff bond: 6b@2e

No.	vector	center	mapping
1	$[X, Y, 0]$	$[0, 0, z]$	$[1, -4]$
2	$[-Y, X - Y, 0]$	$[0, 0, z]$	$[2, -5]$
3	$[-X + Y, -X, 0]$	$[0, 0, z]$	$[3, -6]$
4	$[-X, -Y, 0]$	$[0, 0, -z]$	$[7, -10]$
5	$[Y, -X + Y, 0]$	$[0, 0, -z]$	$[8, -11]$
6	$[X - Y, X, 0]$	$[0, 0, -z]$	$[9, -12]$

Table 15: Wyckoff bond: 12c@2e

No.	vector	center	mapping
1	$[X, Y, Z]$	$[0, 0, z]$	$[1]$
2	$[-Y, X - Y, Z]$	$[0, 0, z]$	$[2]$
3	$[-X + Y, -X, Z]$	$[0, 0, z]$	$[3]$
4	$[-X, -Y, Z]$	$[0, 0, z]$	$[4]$
5	$[Y, -X + Y, Z]$	$[0, 0, z]$	$[5]$
6	$[X - Y, X, Z]$	$[0, 0, z]$	$[6]$
7	$[-X, -Y, -Z]$	$[0, 0, -z]$	$[7]$
8	$[Y, -X + Y, -Z]$	$[0, 0, -z]$	$[8]$
9	$[X - Y, X, -Z]$	$[0, 0, -z]$	$[9]$
10	$[X, Y, -Z]$	$[0, 0, -z]$	$[10]$
11	$[-Y, X - Y, -Z]$	$[0, 0, -z]$	$[11]$
12	$[-X + Y, -X, -Z]$	$[0, 0, -z]$	$[12]$

* Wyckoff site: 3f, site symmetry: $2/m$.

Table 16: Wyckoff bond: 3a@3f

No.	vector	center	mapping
1	$[X, Y, 0]$	$[\frac{1}{2}, 0, 0]$	$[1, -4, -7, 10]$
2	$[-Y, X - Y, 0]$	$[0, \frac{1}{2}, 0]$	$[2, -5, -8, 11]$
3	$[-X + Y, -X, 0]$	$[\frac{1}{2}, \frac{1}{2}, 0]$	$[3, -6, -9, 12]$

Table 17: Wyckoff bond: **3b@3f**

No.	vector	center	mapping
1	$[0, 0, Z]$	$[\frac{1}{2}, 0, 0]$	$[1, 4, -7, -10]$
2	$[0, 0, Z]$	$[0, \frac{1}{2}, 0]$	$[2, 5, -8, -11]$
3	$[0, 0, Z]$	$[\frac{1}{2}, \frac{1}{2}, 0]$	$[3, 6, -9, -12]$

Table 18: Wyckoff bond: **6c@3f**

No.	vector	center	mapping
1	$[X, Y, Z]$	$[\frac{1}{2}, 0, 0]$	$[1, -7]$
2	$[-Y, X - Y, Z]$	$[0, \frac{1}{2}, 0]$	$[2, -8]$
3	$[-X + Y, -X, Z]$	$[\frac{1}{2}, \frac{1}{2}, 0]$	$[3, -9]$
4	$[-X, -Y, Z]$	$[\frac{1}{2}, 0, 0]$	$[4, -10]$
5	$[Y, -X + Y, Z]$	$[0, \frac{1}{2}, 0]$	$[5, -11]$
6	$[X - Y, X, Z]$	$[\frac{1}{2}, \frac{1}{2}, 0]$	$[6, -12]$

* Wyckoff site: **3g**, site symmetry: $2/m$.

Table 19: Wyckoff bond: **3a@3g**

No.	vector	center	mapping
1	$[X, Y, 0]$	$[\frac{1}{2}, 0, \frac{1}{2}]$	$[1, -4, -7, 10]$
2	$[-Y, X - Y, 0]$	$[0, \frac{1}{2}, \frac{1}{2}]$	$[2, -5, -8, 11]$
3	$[-X + Y, -X, 0]$	$[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}]$	$[3, -6, -9, 12]$

Table 20: Wyckoff bond: **3b@3g**

No.	vector	center	mapping
1	$[0, 0, Z]$	$[\frac{1}{2}, 0, \frac{1}{2}]$	$[1, 4, -7, -10]$
2	$[0, 0, Z]$	$[0, \frac{1}{2}, \frac{1}{2}]$	$[2, 5, -8, -11]$
3	$[0, 0, Z]$	$[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}]$	$[3, 6, -9, -12]$

Table 21: Wyckoff bond: **6c@3g**

No.	vector	center	mapping
1	$[X, Y, Z]$	$[\frac{1}{2}, 0, \frac{1}{2}]$	$[1, -7]$
2	$[-Y, X - Y, Z]$	$[0, \frac{1}{2}, \frac{1}{2}]$	$[2, -8]$
3	$[-X + Y, -X, Z]$	$[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}]$	$[3, -9]$
4	$[-X, -Y, Z]$	$[\frac{1}{2}, 0, \frac{1}{2}]$	$[4, -10]$

continued ...

Table 21

No.	vector	center	mapping
5	$[Y, -X + Y, Z]$	$[0, \frac{1}{2}, \frac{1}{2}]$	$[5, -11]$
6	$[X - Y, X, Z]$	$[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}]$	$[6, -12]$

* Wyckoff site: **4h**, site symmetry: **3..**

Table 22: Wyckoff bond: **4a@4h**

No.	vector	center	mapping
1	$[0, 0, Z]$	$[\frac{1}{3}, \frac{2}{3}, z]$	$[1, 2, 3]$
2	$[0, 0, Z]$	$[\frac{2}{3}, \frac{1}{3}, z]$	$[4, 5, 6]$
3	$[0, 0, -Z]$	$[\frac{2}{3}, \frac{1}{3}, -z]$	$[7, 8, 9]$
4	$[0, 0, -Z]$	$[\frac{1}{3}, \frac{2}{3}, -z]$	$[10, 11, 12]$

Table 23: Wyckoff bond: **12b@4h**

No.	vector	center	mapping
1	$[X, Y, Z]$	$[\frac{1}{3}, \frac{2}{3}, z]$	$[1]$
2	$[-Y, X - Y, Z]$	$[\frac{1}{3}, \frac{2}{3}, z]$	$[2]$
3	$[-X + Y, -X, Z]$	$[\frac{1}{3}, \frac{2}{3}, z]$	$[3]$
4	$[-X, -Y, Z]$	$[\frac{2}{3}, \frac{1}{3}, z]$	$[4]$
5	$[Y, -X + Y, Z]$	$[\frac{2}{3}, \frac{1}{3}, z]$	$[5]$
6	$[X - Y, X, Z]$	$[\frac{2}{3}, \frac{1}{3}, z]$	$[6]$
7	$[-X, -Y, -Z]$	$[\frac{2}{3}, \frac{1}{3}, -z]$	$[7]$
8	$[Y, -X + Y, -Z]$	$[\frac{2}{3}, \frac{1}{3}, -z]$	$[8]$
9	$[X - Y, X, -Z]$	$[\frac{2}{3}, \frac{1}{3}, -z]$	$[9]$
10	$[X, Y, -Z]$	$[\frac{1}{3}, \frac{2}{3}, -z]$	$[10]$
11	$[-Y, X - Y, -Z]$	$[\frac{1}{3}, \frac{2}{3}, -z]$	$[11]$
12	$[-X + Y, -X, -Z]$	$[\frac{1}{3}, \frac{2}{3}, -z]$	$[12]$

* Wyckoff site: **6i**, site symmetry: **2..**

Table 24: Wyckoff bond: **6a@6i**

No.	vector	center	mapping
1	$[X, Y, 0]$	$[\frac{1}{2}, 0, z]$	$[1, -4]$
2	$[-Y, X - Y, 0]$	$[0, \frac{1}{2}, z]$	$[2, -5]$
3	$[-X + Y, -X, 0]$	$[\frac{1}{2}, \frac{1}{2}, z]$	$[3, -6]$
4	$[-X, -Y, 0]$	$[\frac{1}{2}, 0, -z]$	$[7, -10]$
5	$[Y, -X + Y, 0]$	$[0, \frac{1}{2}, -z]$	$[8, -11]$
6	$[X - Y, X, 0]$	$[\frac{1}{2}, \frac{1}{2}, -z]$	$[9, -12]$

Table 25: Wyckoff bond: **6b@6i**

No.	vector	center	mapping
1	$[0, 0, Z]$	$[\frac{1}{2}, 0, z]$	$[1, 4]$
2	$[0, 0, Z]$	$[0, \frac{1}{2}, z]$	$[2, 5]$
3	$[0, 0, Z]$	$[\frac{1}{2}, \frac{1}{2}, z]$	$[3, 6]$
4	$[0, 0, -Z]$	$[\frac{1}{2}, 0, -z]$	$[7, 10]$
5	$[0, 0, -Z]$	$[0, \frac{1}{2}, -z]$	$[8, 11]$
6	$[0, 0, -Z]$	$[\frac{1}{2}, \frac{1}{2}, -z]$	$[9, 12]$

Table 26: Wyckoff bond: **12c@6i**

No.	vector	center	mapping
1	$[X, Y, Z]$	$[\frac{1}{2}, 0, z]$	$[1]$
2	$[-Y, X - Y, Z]$	$[0, \frac{1}{2}, z]$	$[2]$
3	$[-X + Y, -X, Z]$	$[\frac{1}{2}, \frac{1}{2}, z]$	$[3]$
4	$[-X, -Y, Z]$	$[\frac{1}{2}, 0, z]$	$[4]$
5	$[Y, -X + Y, Z]$	$[0, \frac{1}{2}, z]$	$[5]$
6	$[X - Y, X, Z]$	$[\frac{1}{2}, \frac{1}{2}, z]$	$[6]$
7	$[-X, -Y, -Z]$	$[\frac{1}{2}, 0, -z]$	$[7]$
8	$[Y, -X + Y, -Z]$	$[0, \frac{1}{2}, -z]$	$[8]$
9	$[X - Y, X, -Z]$	$[\frac{1}{2}, \frac{1}{2}, -z]$	$[9]$
10	$[X, Y, -Z]$	$[\frac{1}{2}, 0, -z]$	$[10]$
11	$[-Y, X - Y, -Z]$	$[0, \frac{1}{2}, -z]$	$[11]$
12	$[-X + Y, -X, -Z]$	$[\frac{1}{2}, \frac{1}{2}, -z]$	$[12]$

* Wyckoff site: **6j**, site symmetry: **m**.

Table 27: Wyckoff bond: **6a@6j**

No.	vector	center	mapping
1	$[X, Y, 0]$	$[x, y, 0]$	$[1, 10]$
2	$[-Y, X - Y, 0]$	$[-y, x - y, 0]$	$[2, 11]$
3	$[-X + Y, -X, 0]$	$[-x + y, -x, 0]$	$[3, 12]$
4	$[-X, -Y, 0]$	$[-x, -y, 0]$	$[4, 7]$
5	$[Y, -X + Y, 0]$	$[y, -x + y, 0]$	$[5, 8]$
6	$[X - Y, X, 0]$	$[x - y, x, 0]$	$[6, 9]$

Table 28: Wyckoff bond: **6b@6j**

No.	vector	center	mapping
1	$[0, 0, Z]$	$[x, y, 0]$	$[1, -10]$

continued ...

Table 28

No.	vector	center	mapping
2	$[0, 0, Z]$	$[-y, x - y, 0]$	$[2, -11]$
3	$[0, 0, Z]$	$[-x + y, -x, 0]$	$[3, -12]$
4	$[0, 0, Z]$	$[-x, -y, 0]$	$[4, -7]$
5	$[0, 0, Z]$	$[y, -x + y, 0]$	$[5, -8]$
6	$[0, 0, Z]$	$[x - y, x, 0]$	$[6, -9]$

Table 29: Wyckoff bond: **12c@6j**

No.	vector	center	mapping
1	$[X, Y, Z]$	$[x, y, 0]$	$[1]$
2	$[-Y, X - Y, Z]$	$[-y, x - y, 0]$	$[2]$
3	$[-X + Y, -X, Z]$	$[-x + y, -x, 0]$	$[3]$
4	$[-X, -Y, Z]$	$[-x, -y, 0]$	$[4]$
5	$[Y, -X + Y, Z]$	$[y, -x + y, 0]$	$[5]$
6	$[X - Y, X, Z]$	$[x - y, x, 0]$	$[6]$
7	$[-X, -Y, -Z]$	$[-x, -y, 0]$	$[7]$
8	$[Y, -X + Y, -Z]$	$[y, -x + y, 0]$	$[8]$
9	$[X - Y, X, -Z]$	$[x - y, x, 0]$	$[9]$
10	$[X, Y, -Z]$	$[x, y, 0]$	$[10]$
11	$[-Y, X - Y, -Z]$	$[-y, x - y, 0]$	$[11]$
12	$[-X + Y, -X, -Z]$	$[-x + y, -x, 0]$	$[12]$

* Wyckoff site: **6k**, site symmetry: **m**.

Table 30: Wyckoff bond: **6a@6k**

No.	vector	center	mapping
1	$[X, Y, 0]$	$[x, y, \frac{1}{2}]$	$[1, 10]$
2	$[-Y, X - Y, 0]$	$[-y, x - y, \frac{1}{2}]$	$[2, 11]$
3	$[-X + Y, -X, 0]$	$[-x + y, -x, \frac{1}{2}]$	$[3, 12]$
4	$[-X, -Y, 0]$	$[-x, -y, \frac{1}{2}]$	$[4, 7]$
5	$[Y, -X + Y, 0]$	$[y, -x + y, \frac{1}{2}]$	$[5, 8]$
6	$[X - Y, X, 0]$	$[x - y, x, \frac{1}{2}]$	$[6, 9]$

Table 31: Wyckoff bond: **6b@6k**

No.	vector	center	mapping
1	$[0, 0, Z]$	$[x, y, \frac{1}{2}]$	$[1, -10]$
2	$[0, 0, Z]$	$[-y, x - y, \frac{1}{2}]$	$[2, -11]$
3	$[0, 0, Z]$	$[-x + y, -x, \frac{1}{2}]$	$[3, -12]$

continued ...

Table 31

No.	vector	center	mapping
4	$[0, 0, Z]$	$[-x, -y, \frac{1}{2}]$	$[4, -7]$
5	$[0, 0, Z]$	$[y, -x + y, \frac{1}{2}]$	$[5, -8]$
6	$[0, 0, Z]$	$[x - y, x, \frac{1}{2}]$	$[6, -9]$

Table 32: Wyckoff bond: 12c@6k

No.	vector	center	mapping
1	$[X, Y, Z]$	$[x, y, \frac{1}{2}]$	[1]
2	$[-Y, X - Y, Z]$	$[-y, x - y, \frac{1}{2}]$	[2]
3	$[-X + Y, -X, Z]$	$[-x + y, -x, \frac{1}{2}]$	[3]
4	$[-X, -Y, Z]$	$[-x, -y, \frac{1}{2}]$	[4]
5	$[Y, -X + Y, Z]$	$[y, -x + y, \frac{1}{2}]$	[5]
6	$[X - Y, X, Z]$	$[x - y, x, \frac{1}{2}]$	[6]
7	$[-X, -Y, -Z]$	$[-x, -y, \frac{1}{2}]$	[7]
8	$[Y, -X + Y, -Z]$	$[y, -x + y, \frac{1}{2}]$	[8]
9	$[X - Y, X, -Z]$	$[x - y, x, \frac{1}{2}]$	[9]
10	$[X, Y, -Z]$	$[x, y, \frac{1}{2}]$	[10]
11	$[-Y, X - Y, -Z]$	$[-y, x - y, \frac{1}{2}]$	[11]
12	$[-X + Y, -X, -Z]$	$[-x + y, -x, \frac{1}{2}]$	[12]

* Wyckoff site: 12l, site symmetry: 1

Table 33: Wyckoff bond: 12a@12l

No.	vector	center	mapping
1	$[X, Y, Z]$	$[x, y, z]$	[1]
2	$[-Y, X - Y, Z]$	$[-y, x - y, z]$	[2]
3	$[-X + Y, -X, Z]$	$[-x + y, -x, z]$	[3]
4	$[-X, -Y, Z]$	$[-x, -y, z]$	[4]
5	$[Y, -X + Y, Z]$	$[y, -x + y, z]$	[5]
6	$[X - Y, X, Z]$	$[x - y, x, z]$	[6]
7	$[-X, -Y, -Z]$	$[-x, -y, -z]$	[7]
8	$[Y, -X + Y, -Z]$	$[y, -x + y, -z]$	[8]
9	$[X - Y, X, -Z]$	$[x - y, x, -z]$	[9]
10	$[X, Y, -Z]$	$[x, y, -z]$	[10]
11	$[-Y, X - Y, -Z]$	$[-y, x - y, -z]$	[11]
12	$[-X + Y, -X, -Z]$	$[-x + y, -x, -z]$	[12]