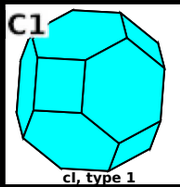
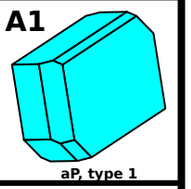
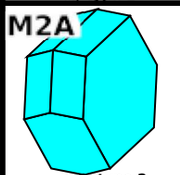
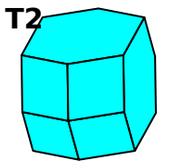
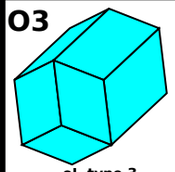
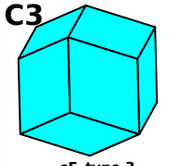
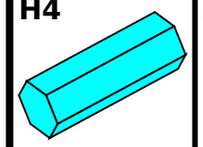
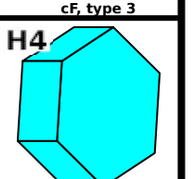
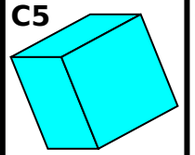
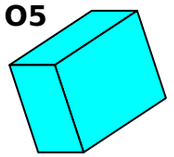
The Bravais Lattice Types

Lattice System

Federov Type

	C cubic	T tetragonal	R rhombohedral	O_A orthorhombic	O_B orthorhombic	M_A monoclinic	M_B monoclinic	A anorthic	H hexagonal	Dirichlet cells also known as Dirichlet domains Voronoi domains Federov parallelohedra Wigner-Seitz cell
1 truncated octahedron	C1 cI (rrr rrr)	T1 tI (rrr rrs)	R1 hR (rrr sss)	O1A oF (rrs rrt)	O1B oI (rst rst)	M1A mC(rrs ttu)	M1B mC(rst rsu)	A1 aP (rst uvw)		C1 cI, type 1  A1 aP, type 1 
2 elongated dodecahedron		T2 tI (rr0 rrs)		O2 oI (rs0 srt)		M2A mC(rs0 stu)	M2B * mC(rs0 rst)	A2 * aP (rs0 tuv)		M2A mC, type 2  T2 tI, type 2 
3 truncated octahedron	C3 cF (rr0 rr0)		R3 hR (rr0 sr0)	O3 * oI (rs0 rs0)		M3 * mC(rs0 ts0)		A3 * aP (rs0 tu0)		O3 oI, type 3  C3 cF, type 3 
4 hexagonal prism				O4 oS (00r sst)		M4 mP(00r stu)			H4 hP (00r rrs)	H4 hP, type 4  H4 hP, type 4 
5 cuboid	C5 cP (000 rrr)	T5 tP (000 rrs)		O5 oP (000 rst)						C5 cP, type 5  O5 oP, type 5 

***Not a full-dimensional Bravais type**

O3 is a 2-D manifold between O2 and O1B
M3 is a 3-D manifold between M2A and M1B
M2B is a 3-D manifold between M1A and M1B

[modified after Delone, Galiulin, and Shtogrin, 1975]