## Group: P4M



Orbifold Signature
*442
IUC Notation
p4m
Coxeter Notation
$[4,4]$
Lattice Types
Square

Sample Cell


Reflections
Four directions
Glide Reflections
Two directions, perpendicular

## $\square$ Four Fold Rotations

Two centers of $90^{\circ}$ rotation, located at intersection of reflection axes

## $\checkmark$ Two Fold Rotations

One center of $180^{\circ}$ rotation, located at intersection of reflection and glide reflection axes

Lattice Structure


## Reflections

## Notes

A tiling of squares with four fold symmetry, or a checkerboard pattern of two distinct squares with four reflection axes. Gingham and plaid are examples, as is a chessboard. Characterized by "quarter turns and mirrors."

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Fundamental Cell




