

## State Diagram

### Building Lifecycle

[Initial] → UnderConstruction

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UnderConstruction → [Guard: construction complete] → Operational

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Operational → [Guard: maintenance needed] → UnderMaintenance

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UnderMaintenance → [Guard: maintenance complete] → Operational

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Operational → [Guard: satisfaction < threshold] → Abandoned

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Abandoned → [Guard: renovation] → UnderConstruction