MASONRY SOLUTIONS FOR BIM

MODEL DRIVEN DESIGN AND CONSTRUCTION

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MasonryIQ
Cad Blox
CLASH DETECTION
An Ounce of Prevention is Worth a Pound of Cure
- Benjamin Franklin -
CONSTRUCTION EFFICIENCY

- ACCURATE ORDERS
- VIRTUAL COORDINATION
- FASTER DELIVERY, FEWER SURPRISES
- REDUCED AIRBORNE SILICA
- REDUCED LABOR
- BETTER AESTHETICS
MODELING EFFICIENCIES

- Programming
- Schematic Design
- Design Development
- Construction Documents
- Construction

LOD 400

Automated Modeling

Power of BIM & Coordination

COST OF CHANGES
MODELS FOR ARCHITECTS

PRODUCING DRAWINGS NOT BUILDINGS

- DETAILS: SECTION, PLAN, ELEVATION
- LAYOUT AND PLANNING
- CODE COMPLIANCE
- MATERIAL SELECTION
- RENDERING
- BUDGETING
## LOD 300 DESIGN MODELS

<table>
<thead>
<tr>
<th>300</th>
<th>Element modeling to include:</th>
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<tbody>
<tr>
<td></td>
<td>• floor element with design-specified locations and geometries</td>
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*43 B1010.10-LOD-300 Floor Structural Frame (Masonry Framing)*
VIRTUAL CONSTRUCTION

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<table>
<thead>
<tr>
<th>Lod 400</th>
<th>Element modeling to include:</th>
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<tbody>
<tr>
<td></td>
<td>- Reinforcing</td>
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<tr>
<td></td>
<td>- Connections</td>
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<td>- Grouting Material</td>
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<td></td>
<td>- Jams</td>
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<tr>
<td></td>
<td>- Bond Beams</td>
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<td>- Lintels</td>
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<td></td>
<td>- Member fabrication part number</td>
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<tr>
<td></td>
<td>- Any part required for complete installation</td>
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2D DOCUMENTS: SCATTERED AND DISCONNECTED DATA

TRADITIONAL DESIGN PROCESS
- PLAN VIEW DATA
- ELEVATION DATA
- SECTION VIEW DATA

BIM DESIGN PROCESS
- SECTION VIEW
- ELEVATION
- PLAN VIEW
LIVE REVIT DEMO OF MASONRY IQ...
SOLUTIONS IN DEVELOPMENT

MUD INTEGRATION
SOLDIER COURSING

REBAR
UNIT SELECTION FOR RENDER

U FACTORS
1/3 AND 1/4 BOND

ESTIMATING
MUD INTEGRATION
REBAR MODELING
U FACTORS
Masonry iQ enhances masonry in Revit models.