



SDI SERVICES CATALOG

CERTIFICATIONS

Member of AISC | AISC Certified | Member of AWS |
HUB - TxCPA | DBE/ACDBE - PANYNJ | MBE - PANYNJ |
SBE - PANYNJ | DBE/ACDBE - TxDOT | SBE - TxDOT |
DBE/ACDBE - Caltrans | MBE - NYC SBS | NJPW Contractor |
MBE - NYC SCA | Cage Code - SBA

SD
INDUSTRIES

www.sd-ind.com
212-348-8000
sales@sd-ind.com



CONTENTS

06 Shop & Fabrication Drawings

Fabrication Drawings, Steel Detailing and 3D Detailing

08 3D Rendering & Visualization

Architectural Renderings, Product Rendering, 3D Modelling, Virtual Walkthroughs and Flythroughs & Animation

10 Modular & Prefabricated Design Services

Design Optimization, Standardization, Cost-Effective Solutions, and Prefabrication & Off-Site Construction

12 3D Scanning & Surveying

LIDAR Precision Scanning, Point Cloud Generation, As-Built Surveying, Reverse Engineering, Topographic & structural Survey and Drone Survey & Aerial Mapping

14 Engineering Services

Structural Analysis & Calculations, Finite Element Analysis, Connection Design & Load Testing, Custom Metal Fabrication Engineering

16 Consultation

Material Selection & Specification Review, Feasibility & Cost Analysis, Compliance & Code Consultation, Construction Inspection & Audit

18 Project Management

Scheduling & Resource Allocation, Budget & Cost Control, Risk Management & Quality Assurance, Client Coordination & Reporting

20 Design Services

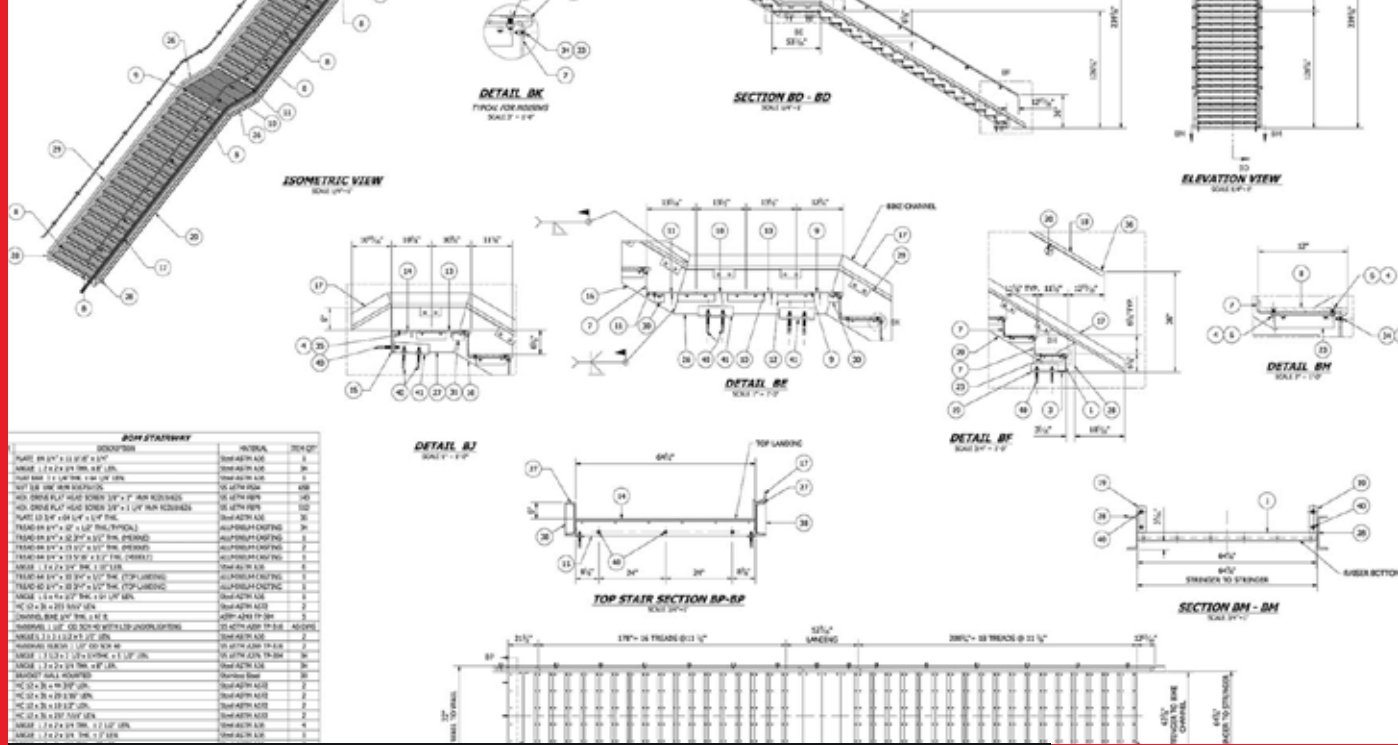
Prototyping & Mock-ups, Signage Design & Development, Conceptual Design, Product Development, Architectural Metal & Glass Design, Parametric & Computational Design

22 Construction Services

Architectural Metal & Glass Installation, Signage Fabrication & Installation, Metal Fabrication

24 BIM Services

BIM Architectural Development, BIM Management & Coordination, MEP Design & Integration, As-Built Drawings, Construction Documentation, Permit Drawings



SHOP & FABRICATION DRAWINGS

Our Shop & Fabrication Drawings help turn your project's design vision into buildable, error-free fabrication packages. This ensures smooth production and hassle-free installation.

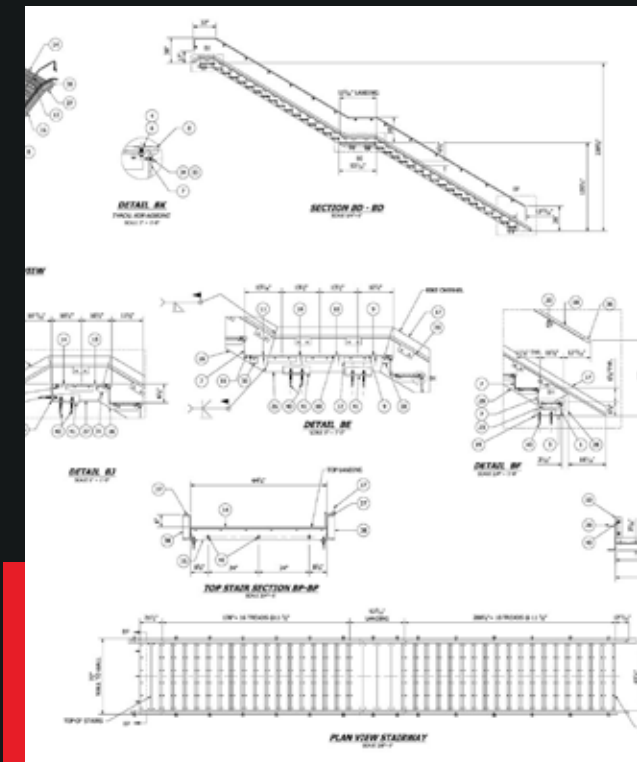
OVERVIEW

We provide precise, fabrication-ready drawings that bridge design intent with actual production. Our focus is on accuracy, coordination, and reducing field issues.

- **Accurate Detailing**
Minimize fabrication errors with dimensionally correct and specification-driven drawings.
- **Improved Field Installation**
Clear, coordinated layouts help crews install efficiently with fewer questions.
- **Faster Submittal Approvals**
Well-organized drawings reduce review cycles and speed up approvals.
- **Reduced Rework & RFIs**
Early clash detection and coordination help avoid costly field modifications.

HOW IT WORKS

- **Scope and Design Review**
We analyze architectural and structural plans along with your project scope.
- **Drafting & Detailing**
Our team creates shop drawings with material specs, dimensions, welds, and connections.
- **Quality Control & Coordination**
Drawings undergo internal QA and are checked for trade coordination and field fit.
- **Client Review & Final Issuance**
We incorporate redlines, finalize, and issue approved drawings for fabrication.



Fabrication Drawings



Steel Detailing



3D Detailing



3D RENDERING & VISUALIZATION

Our 3D Rendering & Visualization services help stakeholders visualize the end result, making design approvals faster and client presentations more impactful.

OVERVIEW

We bring your designs to life with high-quality 3D renderings, animations, and virtual walkthroughs. Our visuals help communicate project intent and design aesthetics before fabrication or construction begins.

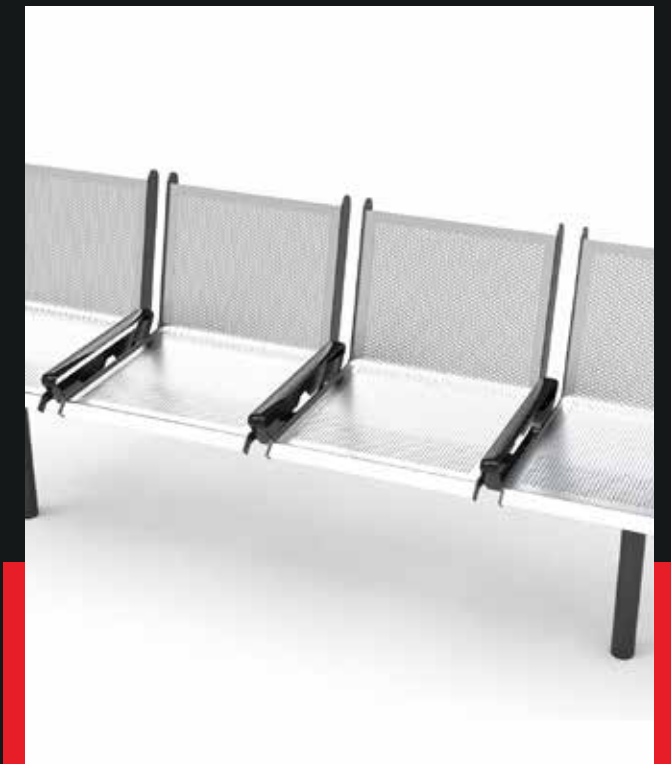
- **Visualize Design Before Build**
See material finishes, layouts, and design details in realistic 3D views.
- **Support Client Approvals**
Help clients make informed decisions early in the project.
- **Enhance Marketing & Presentations**
Use visuals in proposals, RFPs, and stakeholder presentations.
- **Reduce Late Design Changes**
Catch and resolve design issues before fabrication or construction starts.

HOW IT WORKS

- **Gather Design Inputs**
We review architectural drawings and material selections.
- **Build 3D Model**
Our team creates accurate models with textures and lighting.
- **Render & Animate**
We produce images, walkthroughs, or animations as needed.
- **Review & Final Delivery**
We incorporate feedback and submit final files in your preferred format.



Architectural Renderings



Product Rendering



3D Modelling



Virtual Walkthroughs, Flythroughs & Animation



MODULAR & PREFABRICATED DESIGN SERVICES

We provide modular and prefabricated design solutions that streamline production, improve installation speed, and reduce project costs.

OVERVIEW

Our design team focuses on optimizing components for off-site fabrication, helping clients achieve faster schedules, reduced waste, and higher quality control.

- **Optimized for Fabrication**
Designs tailored for efficient manufacturing and off-site production.
- **Standardization Across Projects**
Repeatable design modules reduce lead times and simplify coordination.
- **Cost Savings**
Lower material waste and labor costs through smart design and prefabrication.
- **Faster Installation**
Pre-assembled units speed up on-site installation and minimize disruption.

HOW IT WORKS

- **Review Scope and Project Needs**
We analyze project goals and identify modularization opportunities.
- **Develop Standardized Designs**
Our team creates repeatable, fabrication-friendly design modules.
- **Coordinate with Fabrication Teams**
We align design details with manufacturing and site logistics.
- **Issue Final Prefab Drawings**
We deliver fabrication-ready documents for off-site production and field installation.



Design Optimization



Standardization



Cost-Effective Solutions



Prefabrication & Off-Site Construction



3D SCANNING & SURVEYING

Our advanced scanning technologies deliver precise digital measurements, helping clients with as-built documentation, clash detection, and design validation.

OVERVIEW

We offer high-accuracy 3D scanning and surveying services to capture detailed site data for design, fabrication, and verification needs.

- **High-Accuracy Data Capture**
Use LIDAR and drone-based scans for detailed, real-world measurements.
- **Comprehensive As-Built Documentation**
Generate reliable point clouds and 3D models for existing site conditions.
- **Support for Reverse Engineering**
Capture complex geometries for modification, retrofits, or replication.
- **Faster Site Analysis**
Drone and aerial mapping reduce survey time and improve coverage of large areas.

HOW IT WORKS

- **Plan Scope & Access**
We review project requirements and site conditions to choose the right scanning method.
- **Conduct On-Site Scanning**
Our team performs LIDAR, drone, or other scans to capture all required data points.
- **Process & Generate Point Clouds**
We convert scan data into usable point clouds, 3D models, or survey reports.
- **Review & Deliver Results**
We provide final files in the required formats for design, engineering, or documentation use.



LIDAR Precision Scanning



Point Cloud Generation



As-Built Surveying



Reverse Engineering



Topographic & Structural Survey



Drone Survey & Aerial Mapping



ENGINEERING SERVICES

We provide specialized engineering solutions for structural analysis, connection design, and custom metal fabrication, ensuring strength, stability, and code compliance.

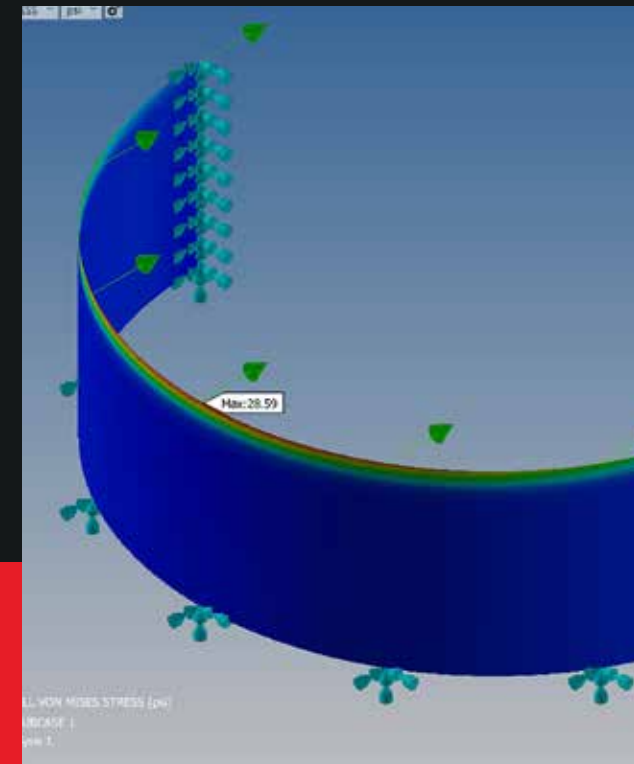
OVERVIEW

Our engineering team supports your projects with precise calculations, load testing, and detailed connection designs tailored to your fabrication and installation needs.

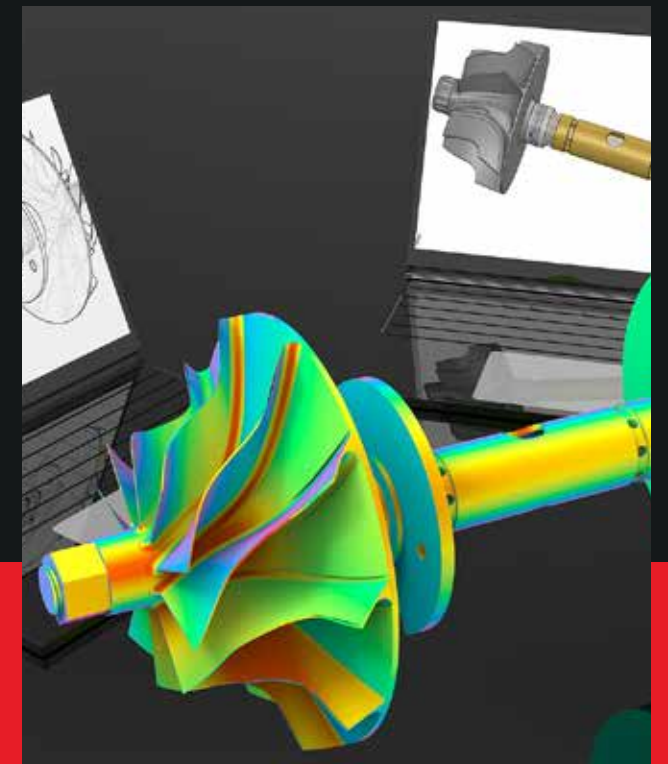
- **Structural Analysis**
Load-bearing calculations to meet design specs and codes.
- **Connection Design**
Safe, efficient welded and bolted connection details.
- **Simulation & Testing**
FEA for stress, load, and performance checks.
- **Fabrication-Ready Output**
Engineering optimized for shop and field execution.

HOW IT WORKS

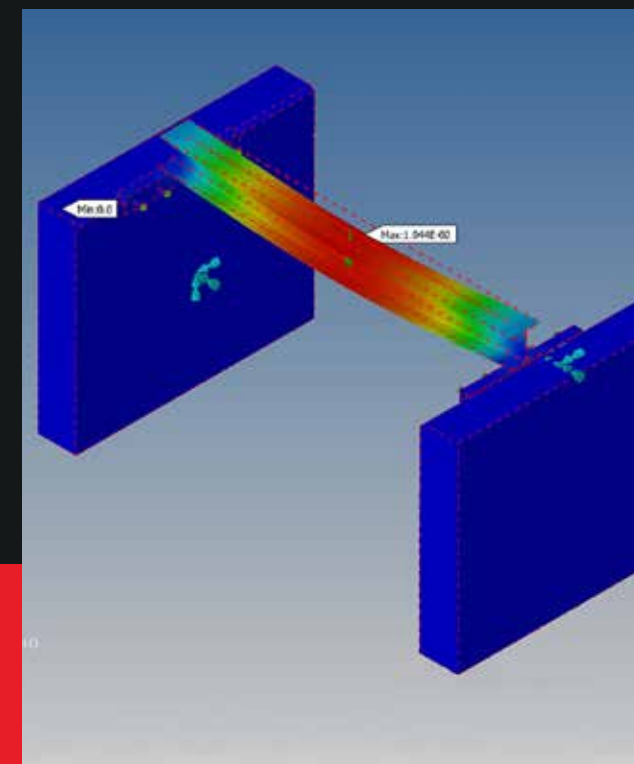
- **Review Scope & Specs**
We assess drawings, loads, and design needs.
- **Run Calculations & Analysis**
Our team performs structural checks and FEA.
- **Coordinate with Fabrication Team**
We align designs with shop drawings and site conditions.
- **Submit Final Reports**
Stamped calculations and engineering reports are issued.



Structural Analysis & Calculations



Finite Element Analysis



Connection Design & Load Testing



Custom Metal Fabrication Engineering



CONSULTATION

We offer expert consulting services to help you make informed decisions on materials, costs, codes, and constructability at any project stage.

OVERVIEW

Our team provides guidance on material selection, budget planning, code compliance, and site inspections to minimize risks and ensure project success.

- **Material Selection Support**
We help choose the right materials for performance and budget.
- **Feasibility & Cost Insights**
Evaluate design options for cost, constructability, and schedule impact.
- **Code & Compliance Review**
Ensure designs and materials meet local and national codes.
- **Construction Inspections**
On-site audits to verify quality, adherence, and specification compliance.

HOW IT WORKS

- **Understand Project Goals**
We discuss scope, budget, and technical requirements.
- **Review Drawings & Specs**
Our team evaluates material specs, codes, and design constraints.
- **Conduct Cost & Feasibility Analysis**
We provide insights on budget impact and buildability.
- **Deliver Reports or Site Inspections**
We issue written recommendations or conduct site audits as needed.



Material Selection & Specification Review



Feasibility & Cost Analysis



Compliance & Code Consultation



Construction Inspection & Audit



PROJECT MANAGEMENT

We manage project schedules, budgets, risks, and quality to ensure smooth execution from start to finish.

OVERVIEW

Our project management team oversees timelines, resources, costs, and communication—keeping your project on track and within budget.

- **Efficient Scheduling**
Plan and allocate resources for on-time project delivery.
- **Budget Control**
Monitor costs and manage project expenses proactively.
- **Risk & Quality Oversight**
Identify risks early and enforce quality standards.
- **Clear Client Communication**
Provide regular updates, reports, and coordination with stakeholders.

HOW IT WORKS

- **Define Project Scope & Timeline**
We set goals, deliverables, and scheduling milestones.
- **Plan Resources & Budget**
Allocate labor, materials, and control project spending.
- **Monitor Risks & Quality**
Track progress, identify issues, and enforce quality checks.
- **Report Progress to Clients**
Provide regular updates, schedules, and budget reports.



Scheduling & Resource Allocation



Budget & Cost Control



Risk Management & Quality Assurance



Client Coordination & Reporting



DESIGN SERVICES

Our design team helps bring your ideas to life with mock-ups, prototypes, and production-ready designs for fabrication and installation.

OVERVIEW

We provide creative and technical design solutions for architectural metal, glass, signage, and product development, from concept to prototype.

- **Concept to Prototype**
Develop ideas into functional designs and physical mock-ups.
- **Specialized Signage & Metal Design**
Custom solutions for signage, architectural metal, and glass.
- **Product Development Support**
We assist with design refinement and production detailing.
- **Parametric & Computational Design**
Advanced modeling for complex, performance-driven geometries.

HOW IT WORKS

- **Review Project Goals**
We discuss design intent, function, and aesthetic requirements.
- **Develop Design Concepts**
Our team creates initial models, layouts, or visualizations.
- **Produce Prototypes & Mock-Ups**
We fabricate samples or digital models for review.
- **Finalize for Fabrication**
We deliver production-ready drawings and specifications.



Prototyping & Mock-ups



Signage Design & Development



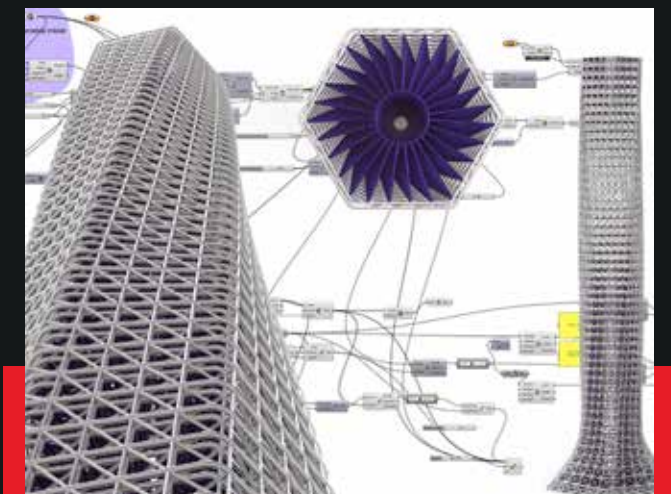
Conceptual Design



Product Development



Architectural Metal & Glass Design



Parametric & Computational Design



CONSTRUCTION SERVICES

We provide expert installation and field execution for architectural metal, glass, and signage packages—ensuring quality, safety, and schedule adherence.

OVERVIEW

Our construction team delivers turnkey fabrication and installation services for metals, glass, and signage, with a focus on precision and project coordination.

- **Expert Installation**
Precise field installation of architectural metal, glass, and signage.
- **Integrated Fabrication-to-Field Workflow**
We manage both in-house fabrication and on-site execution.
- **Schedule & Safety Focus**
We meet project deadlines while maintaining strict safety standards.
- **Adaptable Site Coordination**
Our crews coordinate with GCs, trades, and site conditions in real-time.

HOW IT WORKS

- **Review Scope & Site Conditions**
We assess drawings and field constraints for installation planning.
- **Fabricate Components In-House**
Our shop produces metal, glass, or signage elements per specs.
- **Coordinate Delivery & Site Access**
We schedule deliveries and mobilize field crews accordingly.
- **Perform Installation with QA Checks**
Our team installs per drawings with on-site supervision and quality checks.



Architectural Metal & Glass Installation



Signage Fabrication & Installation



Metal Fabrication



BIM SERVICES

We offer comprehensive BIM services to support project coordination, clash detection, and accurate documentation across architectural, structural, and MEP disciplines.

OVERVIEW

Our BIM team delivers fully coordinated models, as-built drawings, and permit-ready documentation—helping streamline communication and reduce field issues.

- Improved Project Coordination
Detect clashes early and resolve design conflicts across trades.
- Accurate As-Built Documentation
We provide detailed, post-construction models reflecting field conditions.
- Streamlined MEP Integration
Seamlessly coordinate MEP systems within architectural and structural models.
- Permit-Ready Documentation
Deliver fully detailed drawings for permit submittals and construction.

HOW IT WORKS

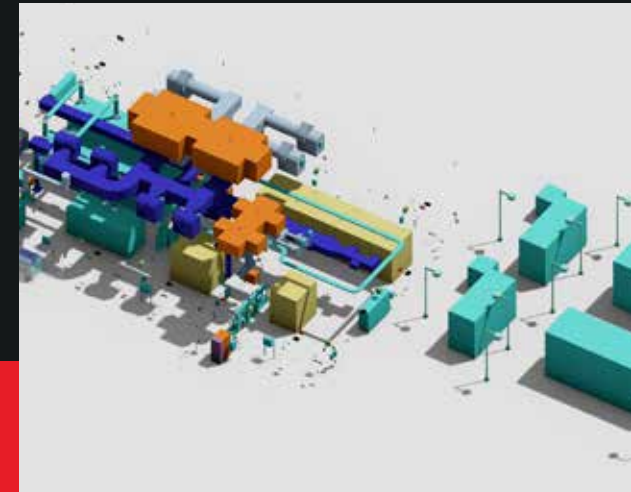
- Define BIM Scope & Requirements
We review LOD needs, coordination goals, and project milestones.
- Develop & Coordinate BIM Models
Our team builds and integrates architectural, structural, and MEP models.
- Run Clash Detection & Reviews
We conduct coordination meetings and issue clash reports.
- Deliver Final Models & Drawings
We submit fully coordinated BIM models and permit-ready documentation.



BIM Architectural Development



BIM Management & Coordination



MEP Design & Integration



As-Built Drawings



Construction Documentation



Permit Drawings

FROM CONCEPT TO COMPLETION ENGINEERED FOR EXCELLENCE.

END-TO-END DELIVERY

From design and engineering to fabrication and installation—we handle every stage for a seamless workflow.

PRECISION & QUALITY FOCUS

Our detailed processes reduce errors, minimize rework, and ensure top-quality results.

COLLABORATIVE PROJECT SUPPORT

We coordinate closely with architects, GCs, and owners to align with project goals.

SCHEDULE-DRIVEN EXECUTION

Our team prioritizes deadlines, delivering fast and efficient results without compromising quality.

TECHNOLOGY-ENABLED WORKFLOWS

Using BIM, 3D scanning, and advanced detailing tools, we improve coordination and reduce RFIs.



YOU IMAGINE. WE BUILD.

Scope	Master Format Code	NAICS Code
Guardrails & Handrails	05 52 00	332323
Bollards	32 39 00	332323
Canopies	10 73 13	332311
Fencing	32 31 00	332323
Gates	08 34 53	332323
Metal Staircases	05 51 00	332323
Stair Railings	05 52 13	332323
Bicycle Racks	12 93 13	332323
Cladding	07 42 13	332322
Roofing	07 41 13 & 07 53 23	332322 & 238160
Escalator & Elevator Enclosures	14 91 23	238290
Ticket Booths	13 41 13	332311
Wayfinding	10 14 23	339950
Sign Boxes	10 14 33	339950
Logos & Letters	10 14 43	339950
Directories	10 14 23	339950
Bulletin Boards	10 14 23	339950
Plaques	10 14 13	339950
ADA Signage	10 14 00	339950
Glass & Glazing	08 80 00	327215

MASTER FORMAT & NAICS CODES