

MEP

DESIGN SUPPORT

MEET UPPTTEAM



Since Uppteam's founding in 2006, we have been dedicated to helping AEC firms grow through qualified and cost-effective remote staffing. With an operational division located in India and representative staff in the US, our unique model starts with a state-of-the-art training institute and provides continuous education for our architectural and engineering designers, resulting in exceptional design and construction document sets for clients. We work together to achieve huge cost savings and quick turnaround times by leveraging the benefits of a 24-hour international business.

THE UPPTTEAM ADVANTAGE

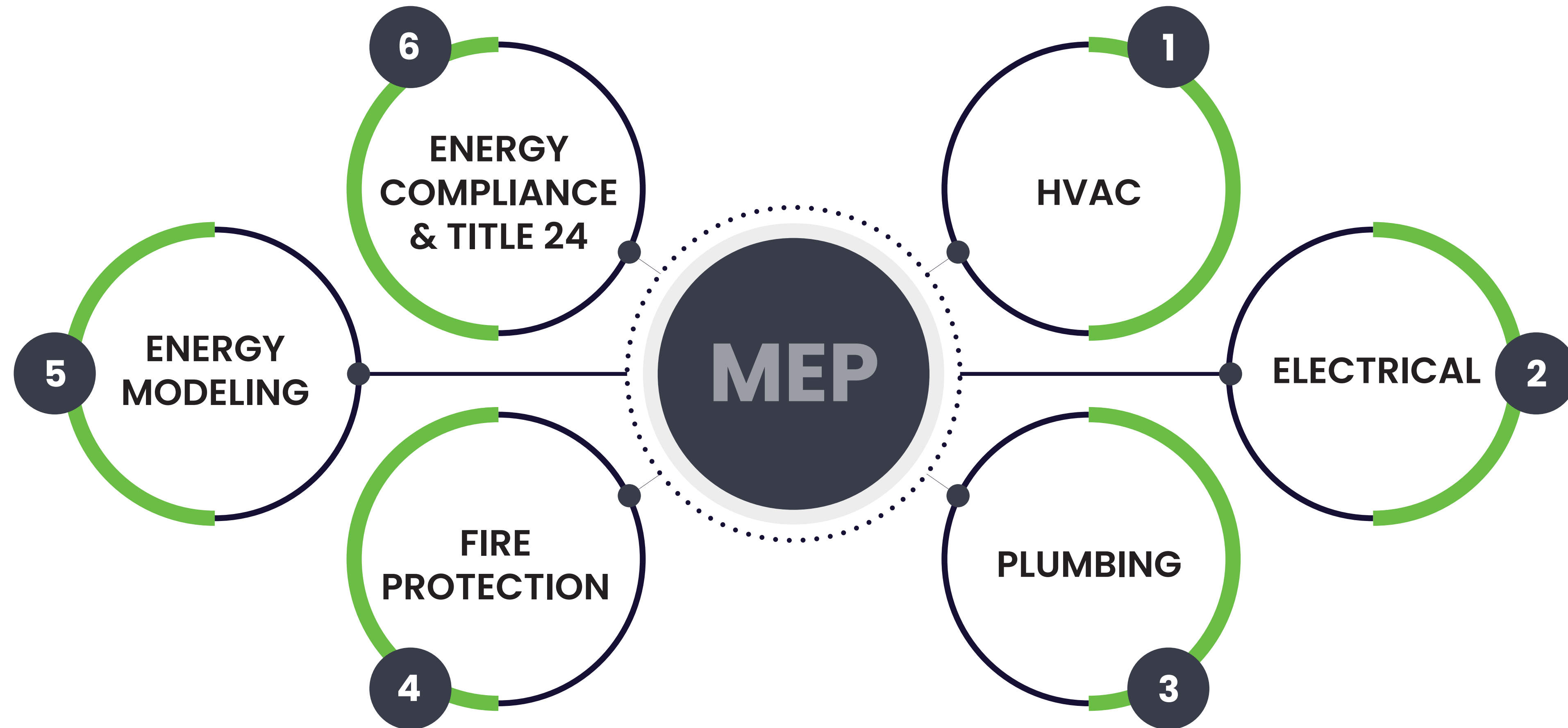
- Reduce deadline stress with 24-hour working efficiency
- Grow through cost savings by employing Uppteam at a lower monthly rate and no overhead costs
- Produce high-quality deliverables through exceptional internal quality control and adaption to your standards
- Spend more time on business development and winning new work with a dedicated production team

→ The Value We Provide Starts with Our Team:

Our technical expertise consistently exceeds client expectations, from recruiting professionals with engineering degrees from accredited universities to ensuring every designer is certified in AutoCAD and REVIT and training our employees in the US standards and regulations. We also know the importance of communication when collaborating under tight deadlines. We invest in our team's professional development by hiring individuals with exceptional English communication skills and providing ongoing training by a dedicated in-house English tutor.



MEP DESIGN SUPPORT



MECHANICAL/HVAC

Uppteam works as an extension of your existing MEP Engineering Staff. Our highly trained engineers can deliver everything from calculations to complete construction documents and, finally, code-based energy calculations with minimal oversight from your team. Your in-house engineers completely control the design throughout the process, while your remote design team takes a huge load off of your production at lower costs.

HVAC LOAD & VENTILATION CALCULATION

- HVAC ductwork layout ASHRAE standards
- Mechanical piping layout with pipe sizing (CHW/HW/REF/COND)
- Enlarged mechanical room plans
- Sections for better clarity where one service crosses another
- Fire and smoke damper as per Architect life safety plans and code
- Mechanical room layout with consideration of clearance requirement of all equipment when equipment is in operation.
- Coordinate power requirements with the electrical team
- Coordinate BMS i/o points with ELV
- Coordinate mechanical room/louver requirements with architect trade
- Coordinate equipment/piping operating weight with structure trade

HVAC CALCULATIONS

- Cooling/ heating load calculation
- Ventilation calculation
- Annual energy calculation
- Duct static pressure drop calculation
- Pump head calculation
- Expansion tank sizing calculations

ASSIGN US MECHANICAL/ HVAC TASKS

- Load, ventilation, air balance calculations
- Duct/ piping/ US equipment design
- Schedules & details
- Enlarged mechanical room plans/sections
- Flow & control diagrams
- Structure & building clash detection

ELECTRICAL

POWER & SYSTEM DESIGN

- Layout all power devices per Code and industry-standard system design per code
- Electrical load calculations
- Enlarged power plan design
- Circuiting devices per panel

RISER DIAGRAM & PANEL SCHEDULES

- Circuiting per proper breaker size
- Complete all circuiting and verify the final panel sizes per the standard rating
- Breaker sizing + AIC rating
- Calculation per NEC demand factor for different load
- Connected and demand load calculation per NEC

We calculate the incident energy and arc flash boundaries following the NFPA 70E, IEEE 1584 & NESC standards.

LIGHTING DESIGN & PHOTOMETRICS

- Lighting plan design per required lumen with circuiting
- Lighting controls with energy code-compliant devices
- Emergency lighting design & photometric per code
- Complete fixture schedules per company standards



POWER SYSTEM ANALYSIS

We can give you a reliable design of a power system that saves costs by identifying and correcting system weaknesses efficiently and systematically. With SKM analysis, we will do a balanced load distribution to help your project live a long and safe life. If you require commercial or residential work to be done quickly and with an eye for quality, look no further than Uppteam. We have highly-trained, university-certified engineers working for both commercial and residential clients. We are highly efficient in delivering power engineering work at a given period of time.



LIGHTING DESIGN & PHOTOMETRICS

Lighting plan design per required lumen with circuiting
Lighting controls with energy code-compliant devices
Emergency lighting design & photometric per code
Complete fixture schedules per company standards

ASSIGN US ELECTRICAL TASKS

Electrical preliminary calculation
Lighting & power system design
Riser & one-line diagrams
Load calculations
Design panel & Equipment Schedule
Wire/ feeder sizing
Short circuit/ voltage drop calculations
Lighting photometric analysis
Conduit fill calculations/ sizing
Load flow analysis
Compliance report
Structure & building clash detection
Electrical enlarged room plans/ sections

PLUMBING

PLUMBING DESIGN

- Domestic water/sanitary/storm/hot water piping layout with riser diagram
- Water tank and pump room design
- Commercial kitchen design
- Compressed air/ natural gas piping layout and schematic diagram
- Condensate drainage system layout and schematic diagram
- Industrial waste piping layout
- Plumbing fixture and equipment selection
- Sump pit design

ASSIGN US PLUMBING TASKS

- Water demand/ fixture load calculations
- Piping pressure drop and pump head calculations
- Schedules, quantity take-off, and details
- Water tank and pump room design
- Control diagrams and sequence of operations
- Clash detection and resolution

PLUMBING CALCULATIONS

- Cold/hot water demand calculation
- Drainage fixture load calculations
- Stormwater calculations
- Pump head calculations
- Expansion tank calculations
- Compressed air system calculations
- Natural gas sizing and demand calculations
- Pipe sizing calculations (Water/Sanitary/Storm/Vent)

PLUMBING SCHEDULE

- Plumbing fixture schedule
- Hot water heater schedule
- Domestic water/Booster pump schedule
- Grease interceptor schedule
- Sump pump schedule

FIRE PROTECTION

FIRE PROTECTION SYSTEM DESIGN

- Sprinkler system and standpipe system
- Sprinkler system design in accordance to NFPA 13
- Wet pipe sprinkler system design
- Dry pipe sprinkler system design
- Pre-action fire sprinkler system design
- Stand-pipe system design

ASSIGN US FIRE PROTECTION TASKS

- Hydraulic calculations, gaseous system calculations
- Sprinkler piping design
- Fire protection system schedule
- Fire pump room and tank with an enlarged plan
- Schematic and riser diagram
- Clash resolve with other services using Navisworks
- Clean agent fire extinguishing system
- Fire protection system calculation



ENERGY MODELING

At Uppteam, we believe energy modeling is fundamental and essential to complying with continuously evolving building codes and sustainability rating systems. By identifying viable solutions, we can perform Energy Modeling using different design options, pushing environment-friendly technology, human comfort, lighting levels, airflow, and more. We use modern tools like eQuest, EnergyPro, Energy Gauge, Carrier HAP, Trane Trace, Chvac, and many more to match your company's standards. LEED ASHRAE & Energy Star compliance and reporting can be easily performed using our Energy Team.



INCREASE SYSTEM EFFICIENCY



REDUCE ENERGY CONSUMPTION



SAVE ENGINEERING TIME

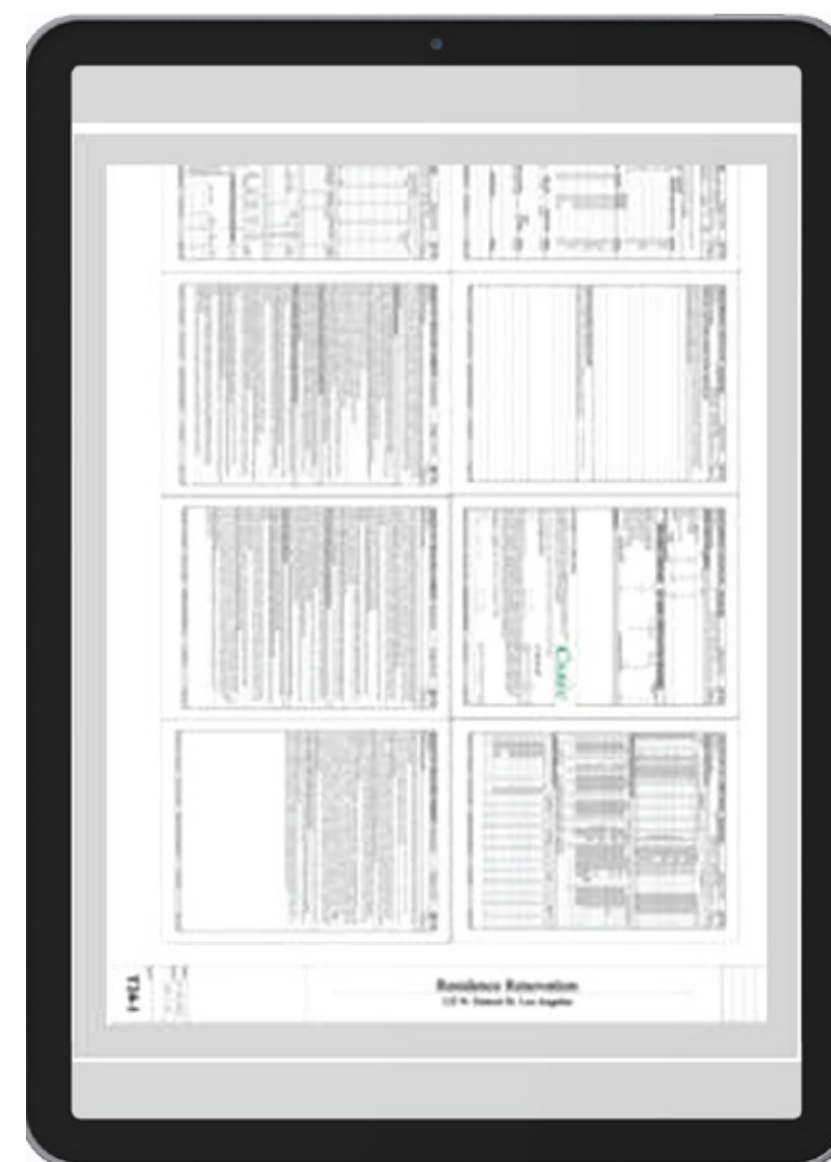
We model buildings in accordance with all IECC, LEED, and ASHRAE 90.1 procedures & we model your building in any software.

ENERGY COMPLIANCE & TITLE-24

Uppteam's engineering designers can complete Title 24 energy calculations and compliance reports for your project. Whether it's residential or commercial, a renovation project, or a new project, we do it all. Using the software approved by the California Energy Commission, we ensure the highest accuracy of the calculations and compliance report.



RESIDENTIAL T24 REPORT CF-IR



T24 REPORT CF-IR+ MANDATORY



FLOOR PLAN

3RD PARTY QC

Send your Uppteam QC Team a complete or interim set of documents from all trades, and we will perform a QC using a detailed checklist. The Uppteam team will send a marked-up PDF file and a spreadsheet of comments for your design team to review and update.

HOW WE WORK

- 1 Send us your CD set at any phase
- 2 Our team uses a detailed checklist to verify CD
- 3 Your construction project goes smoother with less RFI delays & E/O costs

ASSIGN US QC TASKS

General & Title Sheets

Life Safety Sheets

Civil

Landscape

Demolition

Architectural

Structural

Electrical

Plumbing

Mechanical

Millwork and Details

Fire Protection

Fire Alarm

Technology

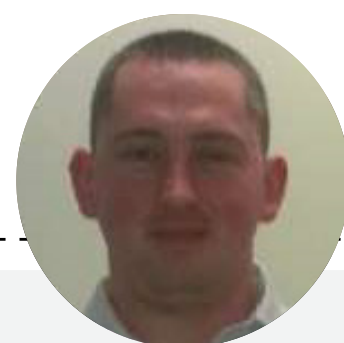
AV / Security

TESTIMONIALS



Uppteam has been a valued partner providing MEP design/drafting services. Teaming with Uppteam has allowed our firm to expand the quantity of work we are capable of producing, all while not sacrificing quality or the ability to meet scheduled deadlines. Our firm looks forward to continuing this relationship for years to come.

*Kenneth L. Gonzalez, P. E., LEED AP
McVeigh & Mangum Engineering, Inc*



We've been using Uppteam for a few months now, and their deliverables are stellar. They take our registered point clouds and create Revit and CAD files that we can use right away. Their turnaround time is also very impressive. We often get things back faster than ever expected. I highly recommend them.

*Bryan Clapper, Owner & Founder
Clapper Structural Engineering, PLLC*



The commitment and focus on meeting our expectations by Uppteam's leaders and engineers are excellent. They have completed MEP drafting, calculations, risers, photometrics, Revit drafting & much more for our firm. They pay attention to deadlines & get us to work back faster than we anticipate, which has helped tremendously. We highly recommend them.

*Cat O'melia, Administration
Peterson Engineering Group LLC*



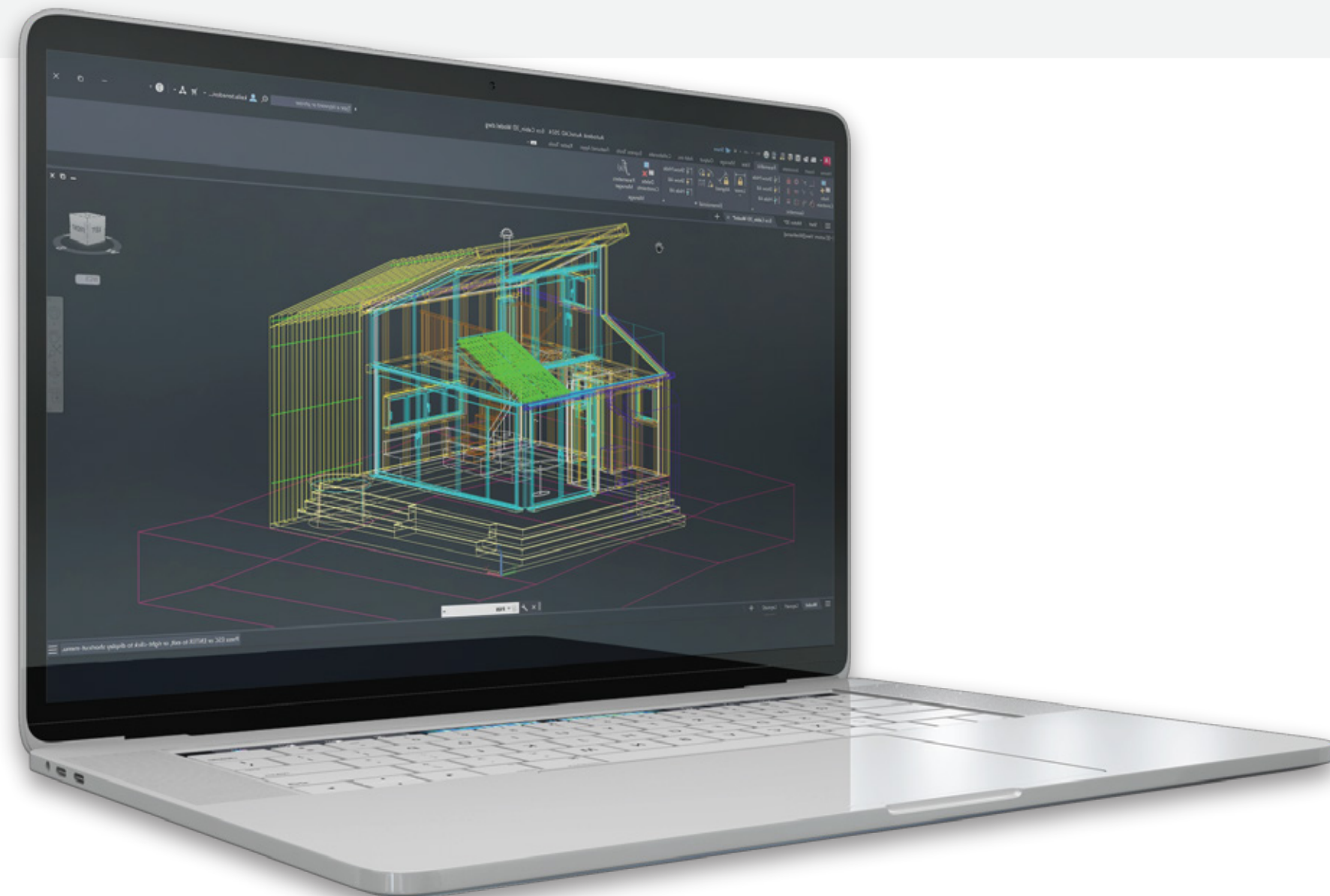
We have enjoyed our relationship with Uppteam and have found them to be a vital partner in our MEP business. They have helped us streamline our operations and have added valuable resources that we have been able to pass on to our customers. We are looking forward to a continued partnership with Uppteam.

*Russ Cammack, Owner
RB Marks Contructions, Inc*

SOFTWARE EXPERTISE

Our professional architectural and engineering designers, CADD operators, construction estimators, administrative assistants, and quality control engineers are trained and skilled in utilizing the latest versions of industry software.

Need an expert in an application not listed? We are lifelong learners and adept at picking up new technology. Just let us know and we will be happy to look into it.



READY TO GET STARTED?

CONTACT US TODAY!

(+1)-407.619.6442

uppteam.com

sales@uppteam.com

Architectural Design Support

MEP Design Support

Structural Design Support

Civil/ Survey Design Support

3rd Party QC

Virtual Admin Services

Home Design Modifications

BIM / Clash Detection Services