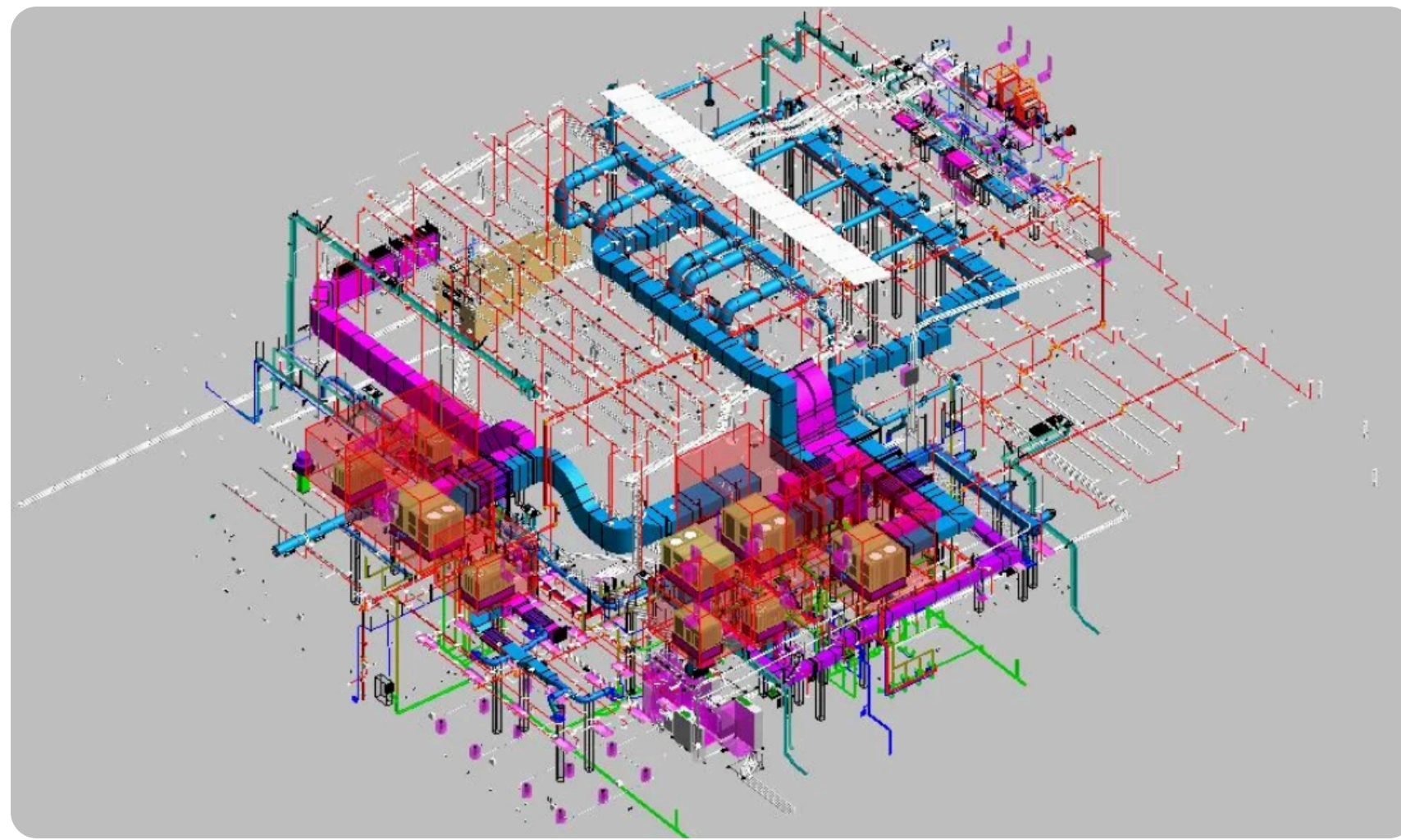


Everett Alvarez - Performing Arts Center



Project Details

- Location:** California, USA
- Type of Building:** Recreational Building
- Turnaround time:** 3 weeks
- Area:** 22,343 sq. ft.
- Software:** Revit, Navisworks
- Accuracy:** 0.001 m

MEP BIM Modeling, Clash Detection, and BIM Coordination at LOD 350

We are pleased to announce the completion of a complex BIM modeling project (LOD 350) for a recreational building in North America. Execution of the project was a challenge in itself owing to the complex coordination required between plumbing and other disciplines such as HVAC, Fire, and Electrical systems. It took us close to 7 days to complete this recreational building with LOD 350 BIM Modeling, Clash detection and BIM Coordination.

A key feature of this project was the use of seismic bracing in the plumbing hangers enhancing both stability and safety, which added another layer of complexity and innovation to our work. We conducted various coordination meetings where we reviewed all the clashes which identified all points of conflict between the plumbing and other discipline.

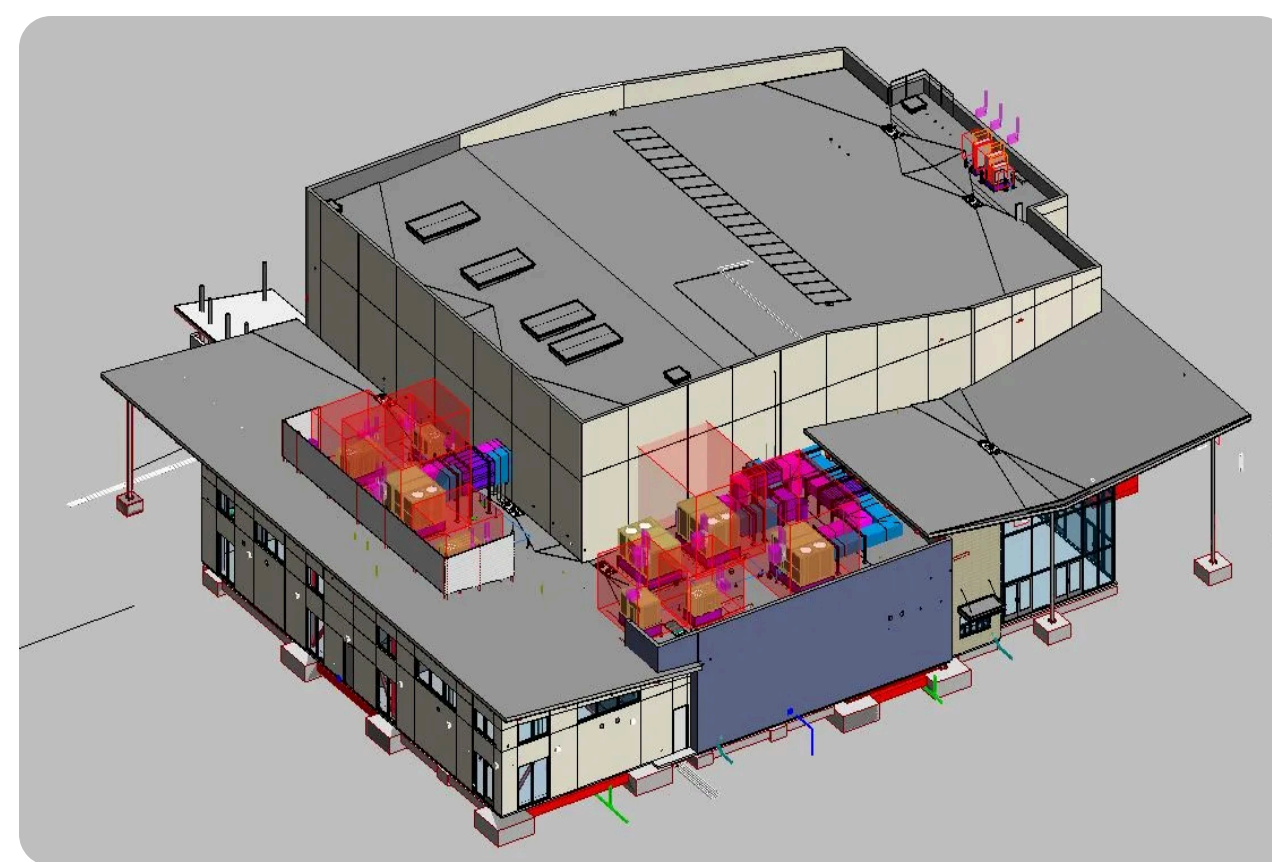


"Working with Tesla Outsourcing Services on our last project was just great. Their contributions were significant, and they consistently attended coordination meetings in our timezone. They were also able to quickly pick up new concepts and make necessary changes, demonstrating a high level of adaptability. This saved us a ton of time and money. We will definitely work with them again and recommend them to anyone looking for the best BIM services out there."

- Rousseau

Scope of Work:

- MEP BIM Modeling
- Clash detection and BIM Coordination with Coordination Meetings in USA time zones
- Applying the design changes or modifications post coordination meeting
- A key feature of this project was the use of seismic bracing in the plumbing hangers enhancing both stability and safety, which added another layer of complexity and innovation to our work. We conducted various coordination meetings where we reviewed all the clashes which identified all points of conflict between the plumbing and other discipline.



Model Contents:

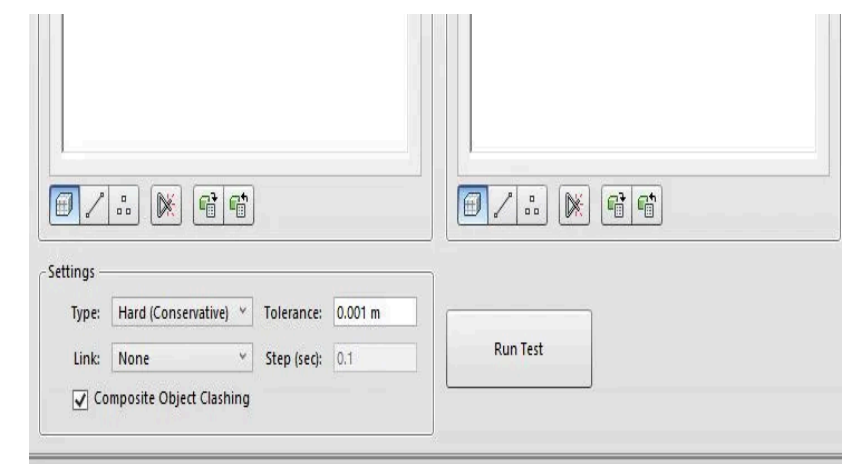
We modeled the drainage and domestic water supply systems based on the provided CAD inputs. Using Navisworks Manage, we resolved internal clashes through a comprehensive clash detection process, identifying conflicts between architectural, structural, title="Everett Alvarez 02" mechanical, and electrical services.



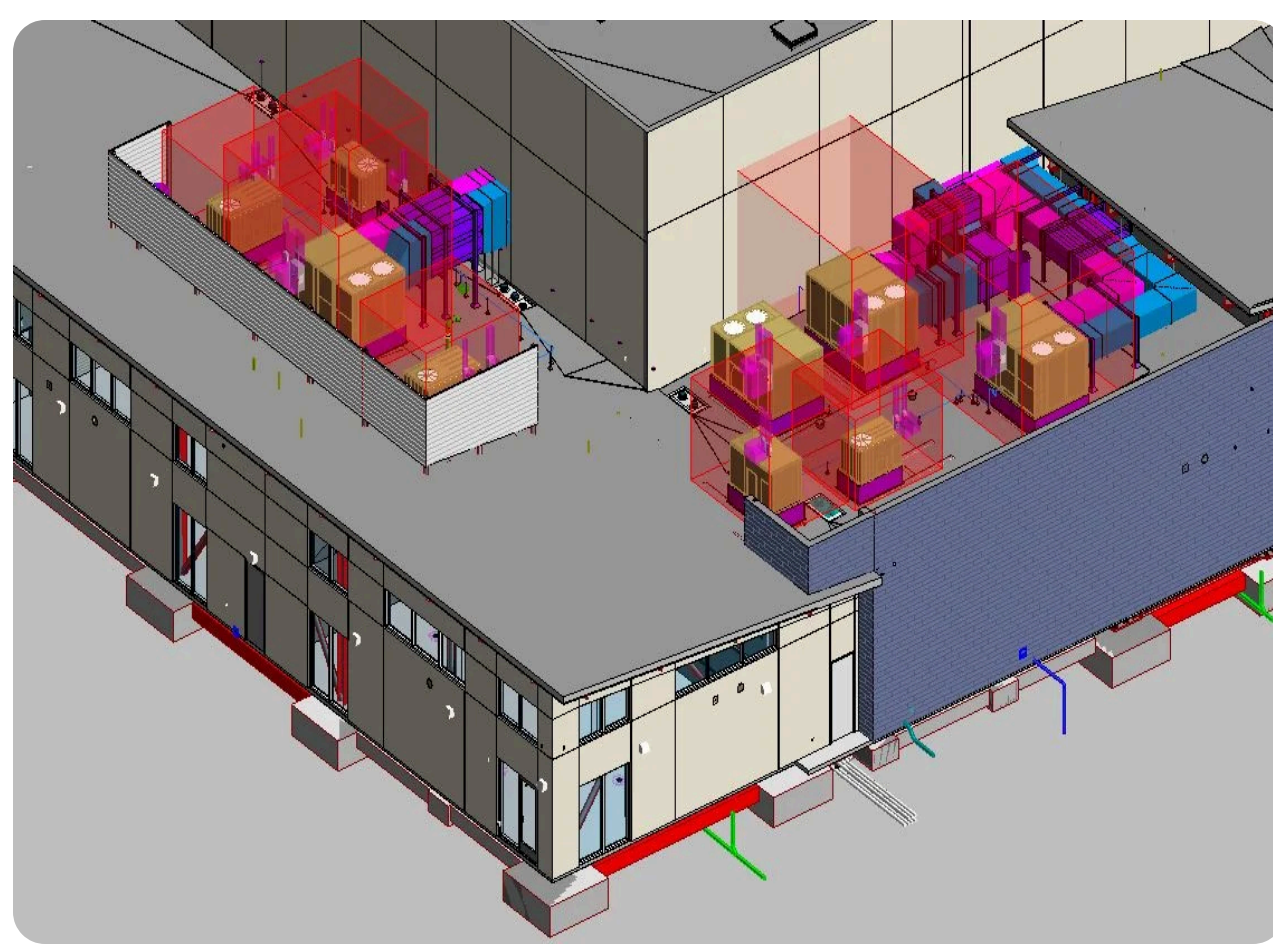
3D Coordinated BIM Model

Name	Status	Clashes	New	Active	Resolved	Approved	Rejected
EL + FP	OK	18	7	2	0	0	9
EL + MH	OK	75	25	13	0	7	30
EL + MP	OK	34	8	0	0	1	5
EL + RL	OK	32	13	1	0	8	18
EL + ST	OK	45	4	23	1	3	14

Plumbing clashes with other discipline fire, Plumbing, HVAC, Structure and Arch Model



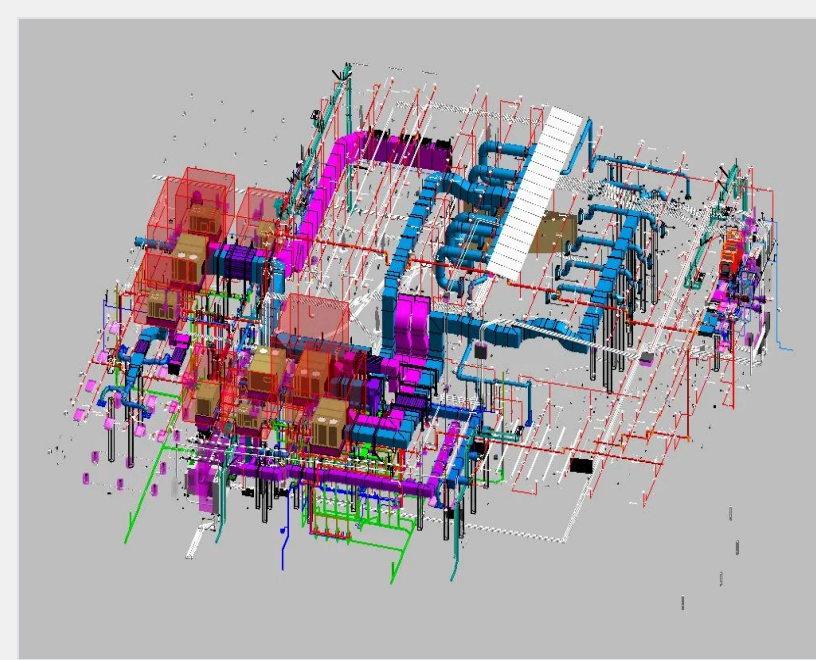
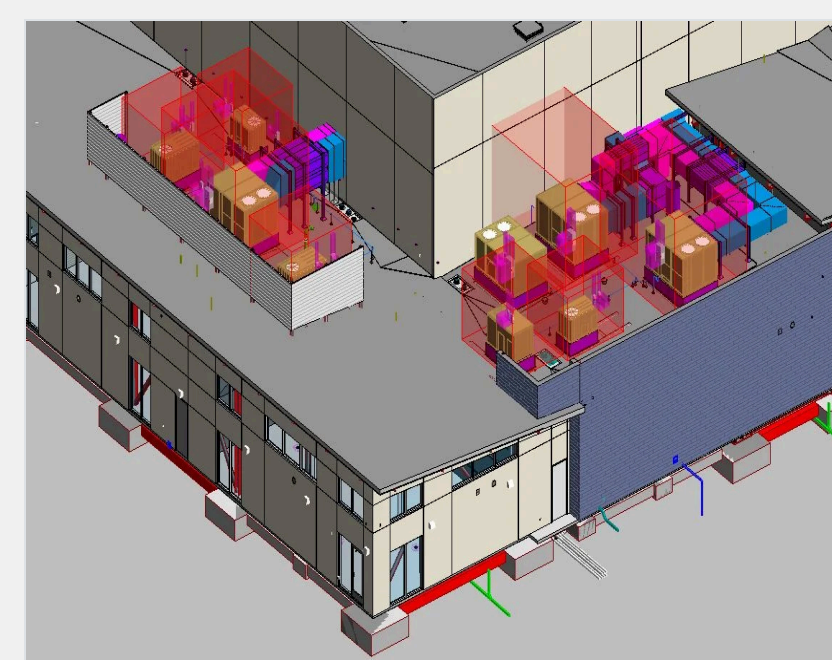
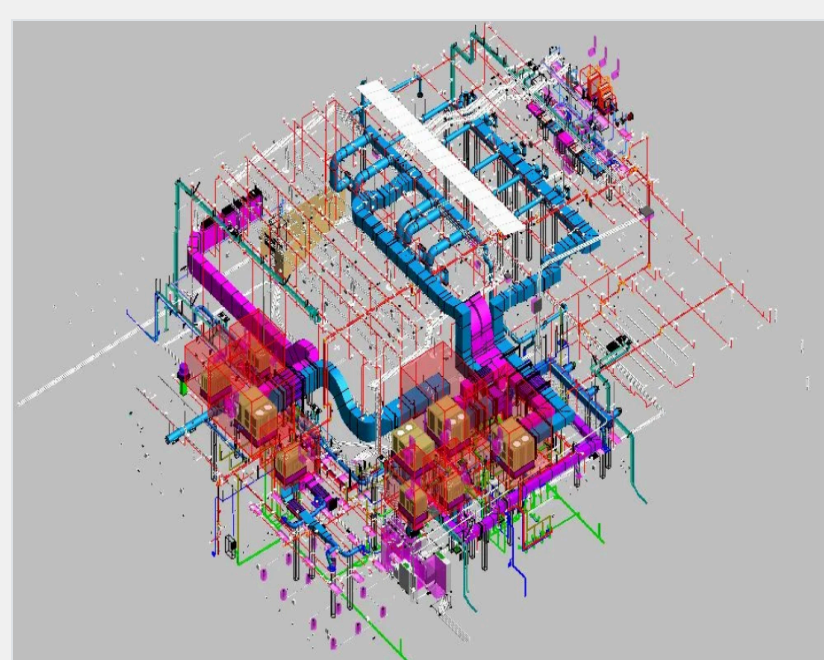
Above settings were used to carry out clash detections in Navisworks



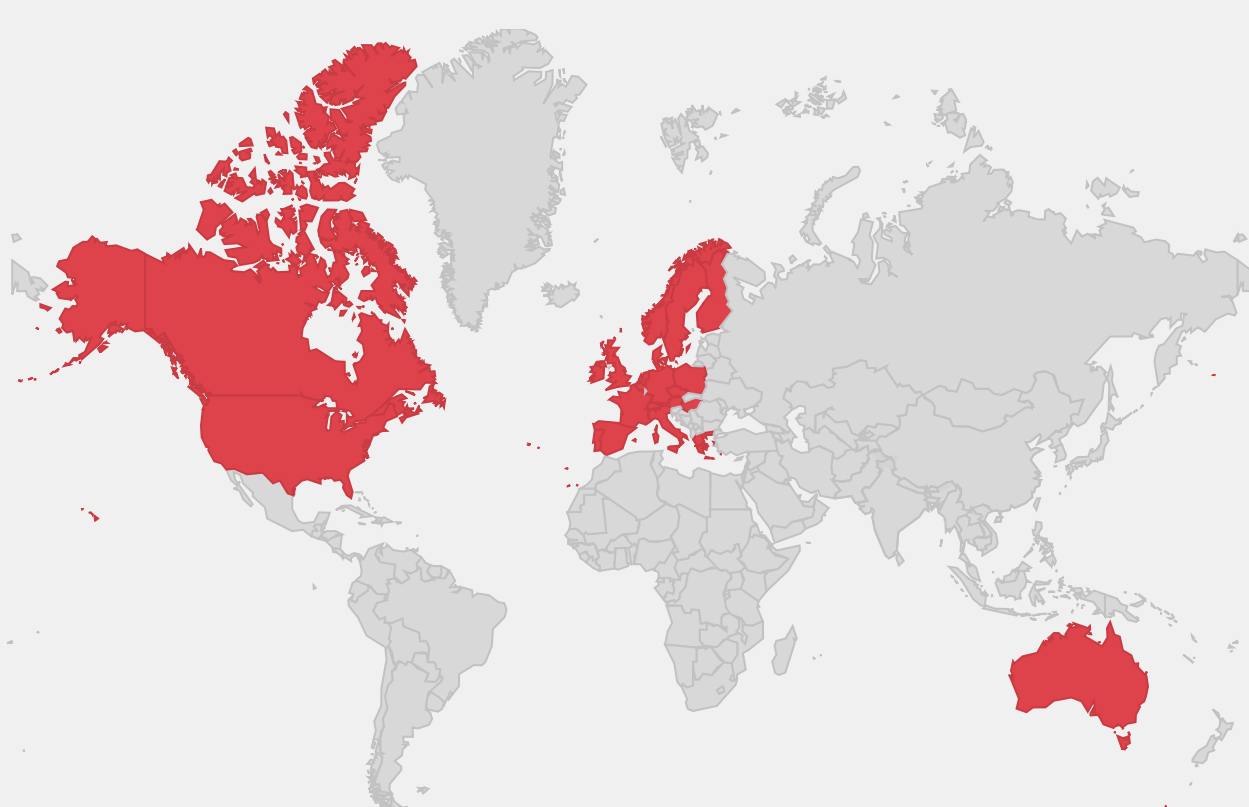
BIM Coordination Meeting

- Review all the clashes Identify all points of conflict between the plumbing and other disciplines.
- Participating in Coordination Meetings with Mechanical and Electrical teams to review the clashes in detail. During this meeting, we discussed potential rerouting options or modifications to both systems to avoid conflicts.
- Once the clashes are identified and resolved, ensure that updated plans are shared with all relevant parties, including contractors, to implement the changes accurately and avoid further issues during the installation phase.
- Regular follow-up meetings or reviews to ensure that the coordination remains on track, and any new clashes that arise can be addressed promptly.

Project Gallery



We Serve Globally



- | | | | |
|------------|-------------|-----------------|----------------|
| Australia | Norway | USA | • Minnesota |
| Austria | Poland | • California | • Nevada |
| Belgium | Portugal | • Colorado | • New Jersey |
| Denmark | Spain | • Connecticut | • New York |
| France | Sweden | • Florida | • Oregon |
| Germany | Switzerland | • Georgia | • Pennsylvania |
| Ireland | UK | • Illinois | • Tennessee |
| Italy | Canada | • Louisiana | • Texas |
| Netherland | Mexico | • Massachusetts | • Utah |