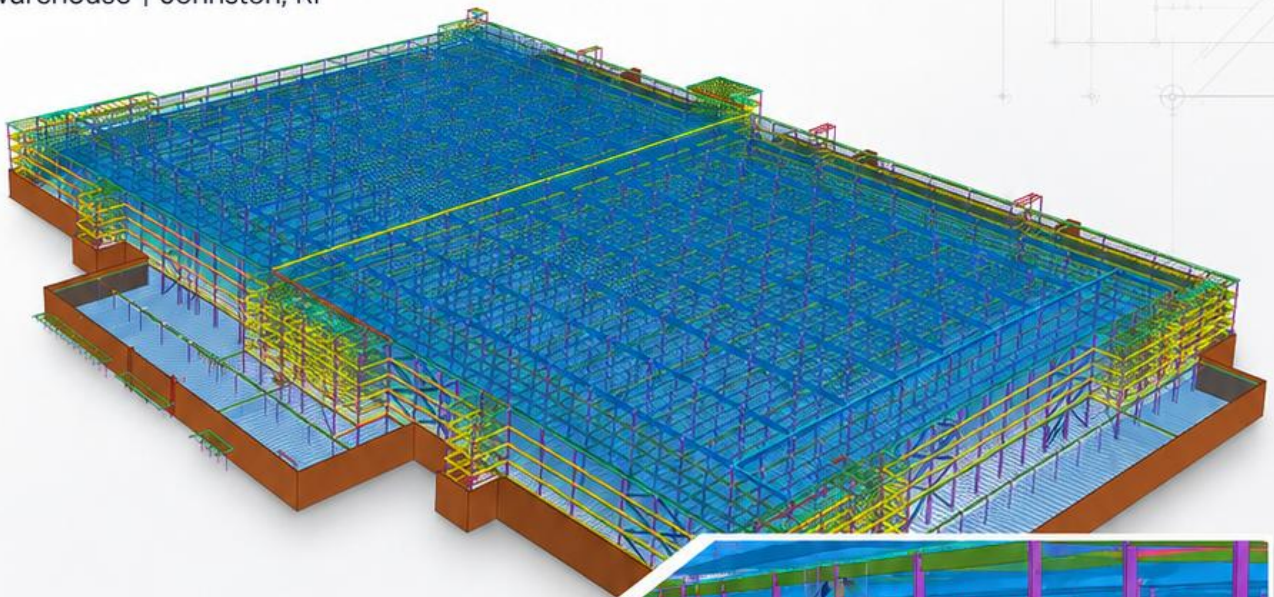




Amazon PVD2 Fulfillment Center

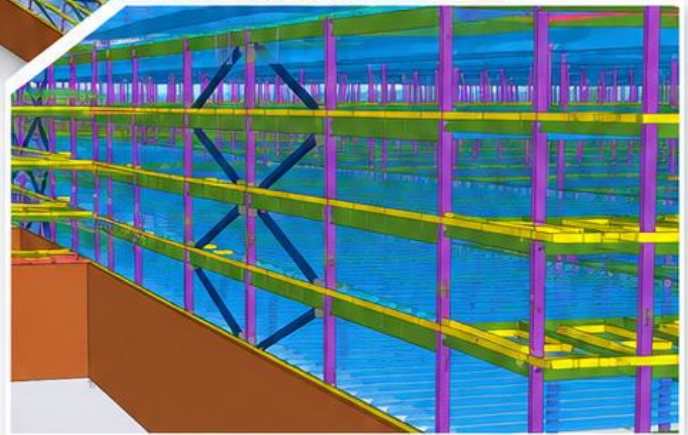
INDUSTRIAL STEEL DETAILING CASE STUDY

📍 Warehouse | Johnston, RI



PROJECT SUMMARY

A high-tonnage warehouse steel detailing engagement for a technologically sophisticated retail distribution and fulfillment center. The project involved a 1300' x 765' building with 5 floors, large columns and beams, complex bracings, and moment connections, all delivered on an aggressive schedule.



11,000
TONNAGE



16
WEEKS



5
FLOORS



26-30
TEAM MEMBERS

Built for high-volume fulfillment steel delivery.



Amazon PVD2 Fulfillment Center in Johnston, Rhode Island is a major warehouse steel detailing assignment for a technologically sophisticated retail distribution project. The building footprint is approximately 1300' x 765', with a five-floor structural system, large columns and beams, complex bracings, and moment connections delivered under a compressed 16-week programme.



11,000
TONNAGE



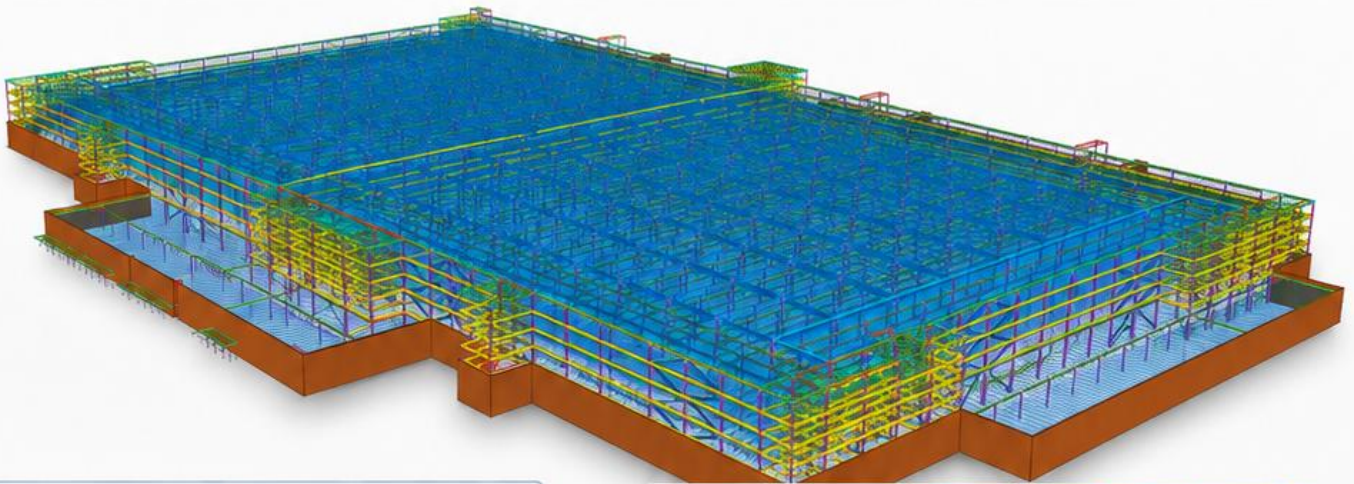
16
WEEKS



1300' x 765'
FOOTPRINT

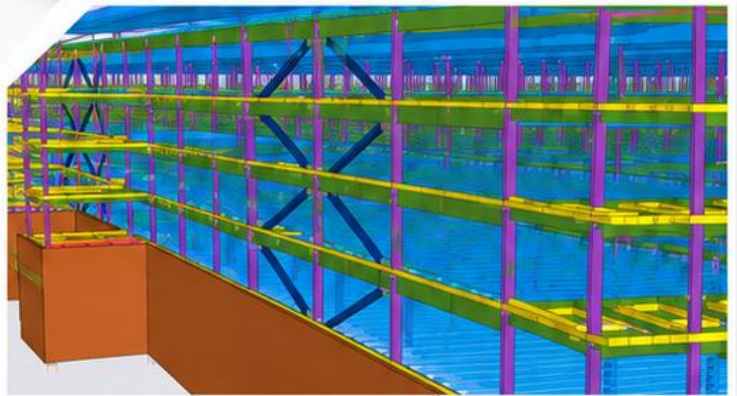


5
FLOORS



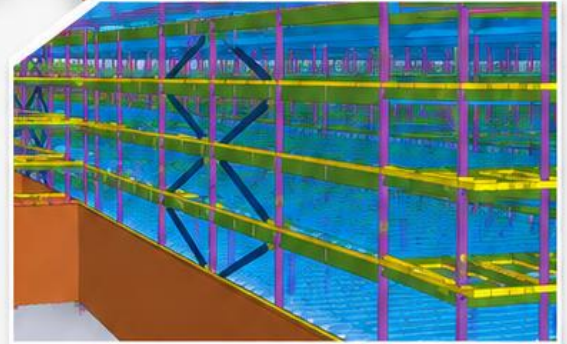
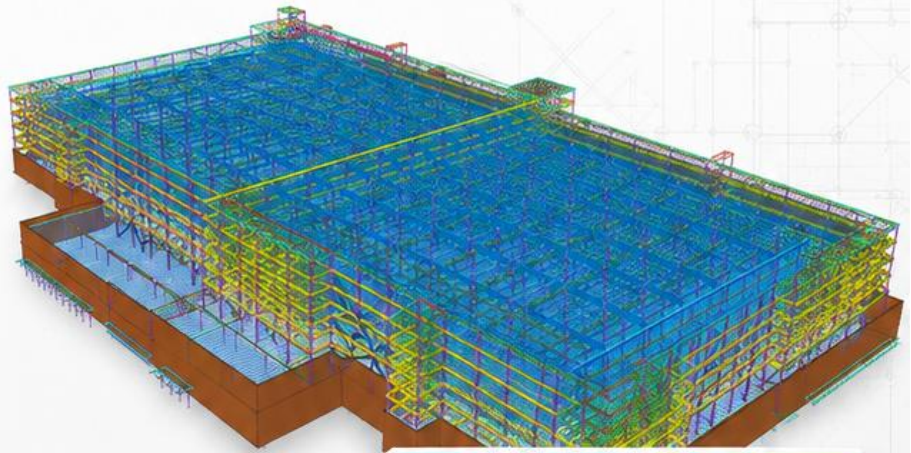
PROJECT SNAPSHOT

- ✓ Warehouse fulfillment center in Johnston, RI
- ✓ Approx. 1300' x 765' building size
- ✓ Five-floor steel framing system
- ✓ Complex bracings and moment connections
- ✓ Aggressive schedule with 26-30 team members



Five-level warehouse framing, bracing and connection detailing

Moldtek supported detailing across the primary warehouse steel frame, large beam-and-column systems, multi-level floor framing, complex bracing arrangements, and moment connections. The project required accurate modelling and shop drawing support for a high-tonnage, multi-floor fulfillment structure under a fast-track schedule.



11,000
tons of steel



16
week schedule



5
floor structure



moment
connections + bracings



Primary steel framing

Detailed the complete primary steel frame for structural accuracy and fabrication readiness.



Large columns and beams

Modelled heavy sections and complex connections with high precision.



Multi-floor framing tiers

Developed five levels of floor framing with consistent geometry and coordination.



Complex bracing systems

Detailed vertical and horizontal bracing systems for stiffness and stability.



Moment connection detailing

Produced shop-ready moment connections to meet design intent and tolerances.

Our Delivery Method

1



Capture
project frame

2



Plan detailing
packages

3



Model
core steel

4



Coordinate
interfaces

5



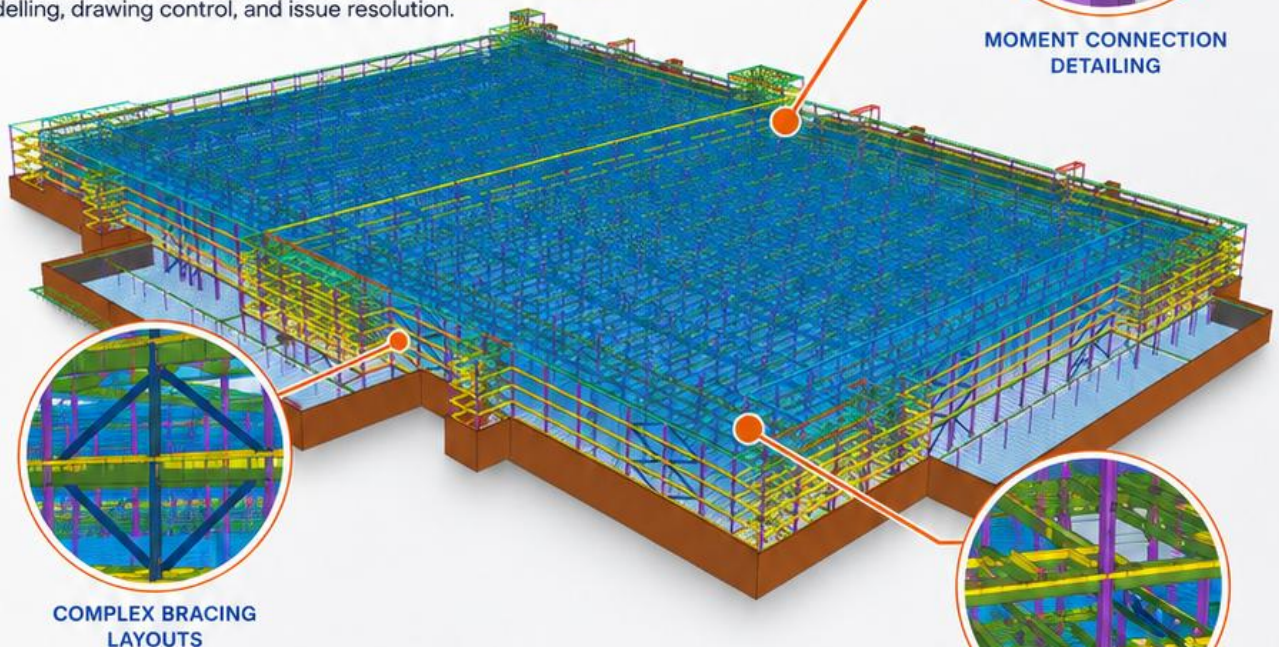
Release
drawings



Amazon PVD2 | Industrial Steel Detailing Case Study

Managing multi-floor steel complexity across a fast-track programme.

The project demanded close coordination across a large five-floor warehouse structure where high tonnage, deep member sizes, complex bracings, and moment connections had to be developed in an accelerated production environment. The detailing team worked across critical framing interfaces while maintaining clarity in modelling, drawing control, and issue resolution.



COORDINATION CHALLENGES

- 01 **Large columns and beams**
Deep member sizes requiring accurate modelling and shop detail definition.
- 02 **Complex bracing layouts**
Dense bracing systems coordinated across multiple bays and elevations.
- 03 **Moment connection detailing**
High-capacity connections with stringent accuracy and fabrication requirements.
- 04 **Multi-level framing interfaces**
Critical coordination at floor-to-floor and steel-to-steel interfaces across five levels.
- 05 **Aggressive 16-week drawing control**
Tight schedule with continual issue tracking, QA, and timely layout releases.

MULTI-LEVEL FRAMING INTERFACES

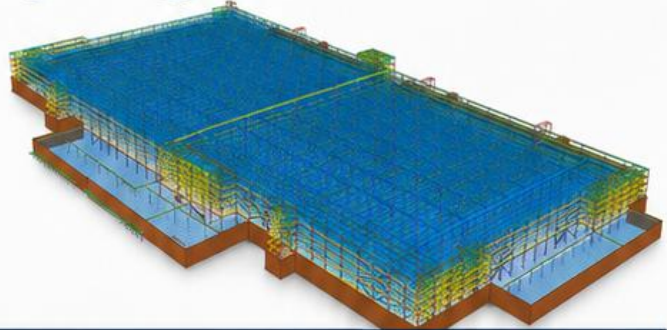


DETAILING IMPLICATION

Through proactive coordination, robust QA, and disciplined drawing control, Moldtek delivered clash-free, build-ready steel detailing within an accelerated 16-week programme.

Fast-track detailing support across a 16-week programme.

This large warehouse package required disciplined release planning to support an 11,000-ton steel scope within a short schedule. The workflow balanced primary steel framing, bracing packages, connection detailing, modelling reviews, and coordination milestones for timely release.



11,000
TONNAGE



16
WEEKS



26-30
TEAM MEMBERS



5
FLOORS



Main steel

- Primary steel framing from foundations to roof level
- Major beams, girders and columns
- Secondary members and floor framing
- Clarity on member sizes and elevations



Bracing packages

- Complex X and K bracing systems
- Horizontal and vertical bracings
- Accurate geometry and connection points
- In-line with design intent and codes



Connection detailing

- Moment, shear and base plate connections
- High-tonnage connection details
- Shop-ready fabrication information
- Consistency across typical conditions



Model coordination

- 3D modelling with clash awareness
- Interface coordination with other trades
- Review and issue management
- Disciplined model check and approvals

Delivery Method



01 Capture project frame



02 Sequence the work



03 Detail major packages



04 Coordinate interfaces



05 Release drawings

Schedule Lens - 16 Week Programme



Value delivered

- ✓ Clear breakdown of an 11,000-ton warehouse steel package
- ✓ Support for five-floor framing and major member systems
- ✓ Better control over complex bracings and moment connections
- ✓ Strong follow-up on production, coordination items and drawing release

