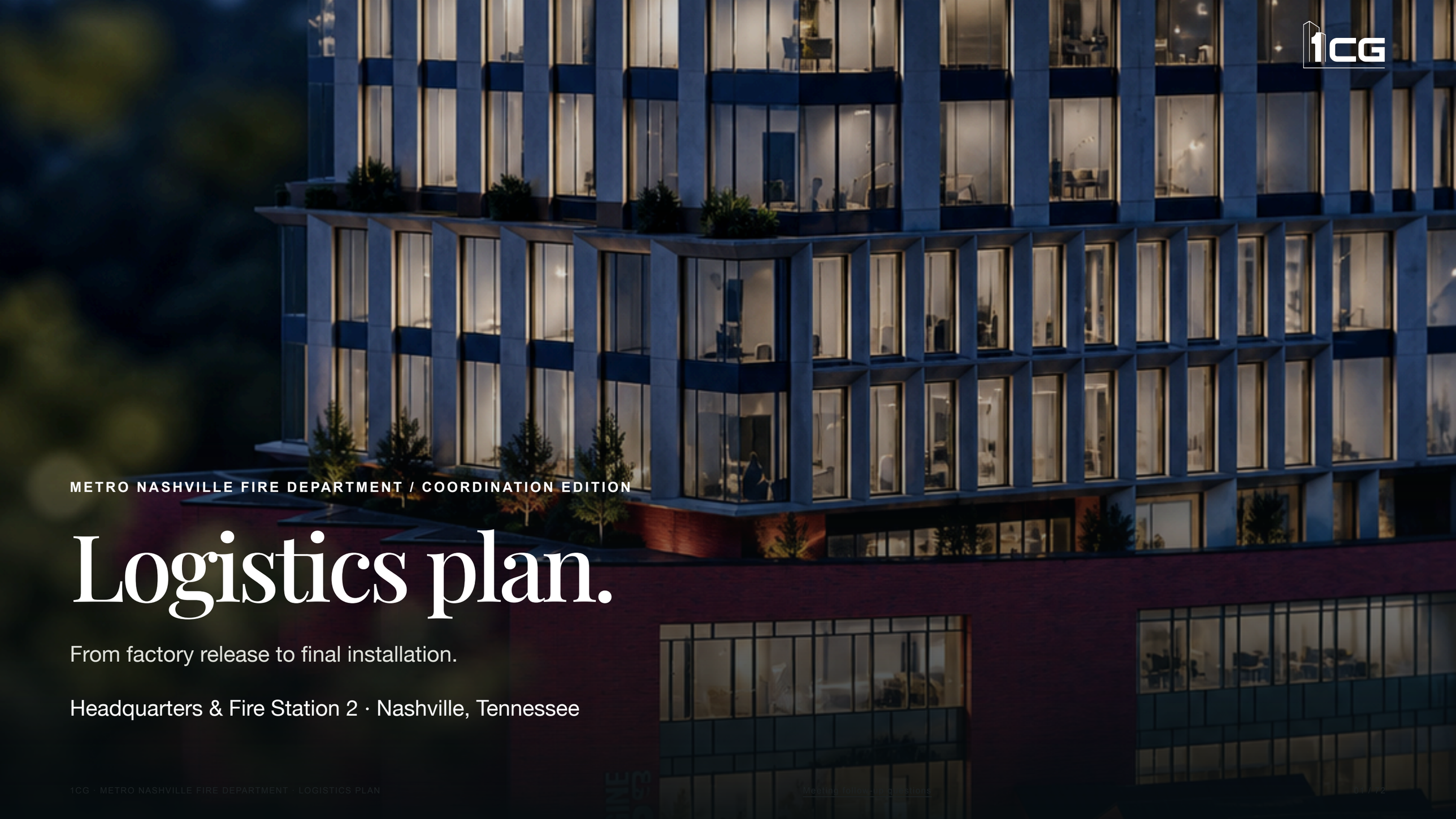


METRO NASHVILLE FIRE DEPARTMENT / COORDINATION EDITION

Logistics plan.

From factory release to final installation.

Headquarters & Fire Station 2 · Nashville, Tennessee

PROJECT ORGANIZATION

Project organization

One coordinated delivery team, with clear ownership of decisions and handoffs.

Proposed methods based on the current project documents. Final site, equipment and supplier coordination governs each release.



Project visualization

PROJECT ORGANIZATION

The delivery team

1CG connects the design, supplier and site teams around one façade delivery sequence.

01

1CG · Façade coordination

Coordinate scope, design interfaces, release gates, logistics tracking, installation interfaces and closeout.

02

IGS · Supplier

U.S.-based supplier with manufacturing plants in Turkey; coordinate fabrication, inspections, packing and dispatch.

03

Clark · General contractor

Coordinate site access, delivery booking, shared equipment availability and interfaces with other trades.

04

Field delivery team

Assign receiving, material control, installation, safety and quality responsibilities before mobilization.

PROJECT ORGANIZATION

Make every handoff explicit

Each package moves only when its receiving team has the information needed to accept it.

Handoff	Lead coordination	Required record
Design → supplier	1CG + IGS	Approved drawings, scope and revision register
Factory → transport	IGS + logistics provider	Inspection release and packing list
Offsite → site	1CG + Clark	Booked delivery and installation-zone allocation
Receiving → installation	Field lead + quality lead	Receipt, condition and location record
Installation → closeout	1CG + field team	Inspection, exceptions and handover documents

The Metro scope baseline

Keep separate material streams visible throughout procurement, transport, storage and installation.

- Plan factory-built glass, framing and integrated panel units on every floor, including grade.
- Establish package counts and handling requirements from actual supplier packing data.

Material stream	Current project quantity	Logistics focus
Glazing	42,752 SF	Protected handling and installation-zone identification
Façade panels	39,956 SF	Finish protection and elevation sequencing
Grade doors / louvers	2,900 SF	Opening identification and protected storage
Terrace rails	940 SF	Late-phase access and finish protection

PERSONNEL & COMPETENCE

Personnel & competence

Assign qualified people to the work, then keep the communication loop short.

PERSONNEL & COMPETENCE

Field roles and accountability

The project roster ties every operational role to a named person, deputy and contact method.

Role	Primary responsibility
Project / field lead	Daily coordination, workfront release and escalation
Material coordinator	Delivery booking, receipts, inventory and redelivery
Installation foreman	Crew briefing, sequence and completed-work protection
Safety lead	Task planning, access controls and equipment checks
Quality lead	Inspection points, traceability and nonconformance closure

PERSONNEL & COMPETENCE

Competence before mobilization

Verify role-specific qualifications and make the current method available to the people performing the work.

- Maintain a roster of trade experience, equipment training and project-required safety qualifications.
- Brief crews on approved drawings, work methods, lifting arrangements and emergency contacts.
- Use a daily coordination brief and a weekly lookahead to resolve deliveries, access and trade conflicts.
- Record changes and pass them to supervisors, receiving staff and supplier contacts.

FABRICATION, ASSEMBLY & TRANSPORT

Fabrication, assembly & transport

Connect factory production to the sequence the field can actually receive and install.



Transport concept illustration

Release materials with the workfront in mind

Approved design information drives procurement, fabrication and the arrival order of each material stream.

01

Confirm requirements

Reconcile specifications, approved samples, quantities and interface details.

02

Release purchasing

Issue the current material schedule and required production dates.

03

Track long-lead items

Review supplier readiness and the effect of changes on installation.

04

Release fabrication

Use approved drawings and controlled revisions for each production batch.

FABRICATION, ASSEMBLY & TRANSPORT

A traceable fabrication flow

A controlled job card connects each material item to its drawing, operation and inspection record.

01

Approved drawing + material schedule

Identify the current revision, finish and installation zone.

02

Production plan + job card

Assign the operation sequence, equipment and responsible team.

03

Material issue + cutting

Verify material identity, protect finishes and inspect the first operation.

04

Machining + assembly

Check hole locations, joints and component fit before the next operation.

05

Inspection + release

Complete quality records before protection, packing and dispatch.

FABRICATION, ASSEMBLY & TRANSPORT

Aluminum fabrication

Protect the finished surface while controlling dimensions and connection geometry.

- Match extrusion profiles, finish and material identification to approved fabrication drawings.
- Use suitable cutting and machining equipment; support long members to prevent distortion.
- Inspect cut length, end angle, hole locations and burr removal against approved tolerances.
- Label accepted components before they move to assembly or packing.

PRODUCTION AND STAGING

Profile storage and fabrication

Supplied factory photography shows stored profiles and a profile-processing workstation.



Metal profiles grouped on wheeled carts alongside a marked circulation aisle.



Operators at a profile-processing machine with bundled metal profiles beside it.

FABRICATION, ASSEMBLY & TRANSPORT

Steel, brackets and accessories

Keep connection parts traceable from material receipt through their final protective finish.

01

Prepare + identify

Check material grade, thickness, drawing revision and component mark.

02

Cut + form + drill

Inspect dimensions and connection geometry at the defined checkpoints.

03

Weld + finish

Use approved procedures and inspect welds and protective treatment.

04

Sort + pack

Group matching parts by installation zone with fixings and identification.

Production readiness

Agree the supplier's production and inspection resources before each manufacturing release.

Resource	Readiness check
Cutting / machining	Suitability, maintenance and operation controls
Assembly stations	Work instructions, fixtures and protected surfaces
Sealant application	Approved materials, environment and test records
Inspection equipment	Identification, condition and calibration status
Packing, handling and test resources	Protective supports, handling arrangements and required mock-up / performance testing

PRODUCTION AND STAGING

Assembly workstations

Mobile worktables support frame assembly and insulated panel work.



Assembly workstations arranged along marked aisles beneath overhead cranes.



Framed panel with exposed insulation on a mobile assembly table.

FABRICATION, ASSEMBLY & TRANSPORT

Assembly with inspection gates

Adapt the assembly route to each approved Metro system and preserve the product record through the process.

01

Frame and connections

Verify profile identity, corner assembly, fixings and accessory positions.

02

Infill and backing

Install glazing, panels, insulation or backpans where the approved system requires.

03

Seal and cure

Use approved materials, joint details and manufacturer conditions.

04

Final assembly inspection

Check dimensions, completeness, operation and the inspection record.

05

Protect and pack

Release accepted work into the planned installation sequence.

PRODUCTION AND STAGING

Glazing and handling

Frames and glazed panels share work areas equipped with overhead lifting devices.



Frames and glazed panels positioned beneath an overhead vacuum glass lifter.



Glazed panels on mobile worktables beneath an overhead hoist.

Check the finished assembly

Inspection confirms both the physical product and the records that travel with it.

Check	Evidence
Geometry	Approved dimensions, squareness, alignment and clearances
Completeness	Fixings, accessories, gaskets, infill and backing
Operation	Moving components and hardware checked where applicable
Appearance	Finish, glass edges, panel faces and clean joints
Traceability	Product mark, drawing revision, inspector and release date

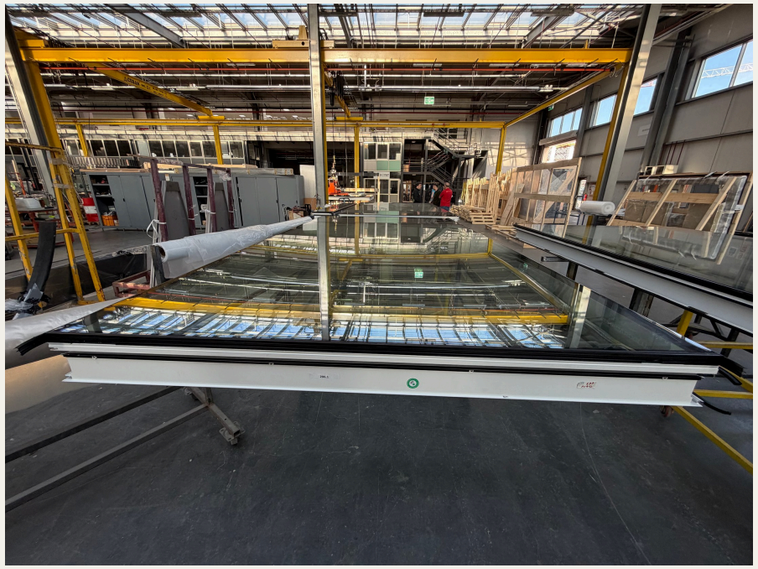
PRODUCTION AND STAGING

Glazed panels and frame details

These views show glazed panels, perimeter seals and frame connections on the factory floor.



Glazed panels on mobile worktables beside upright glass racks.



Large glazed panel supported horizontally at an assembly workstation.



Glazed panel showing perimeter seals and bolted frame connections.

FABRICATION, ASSEMBLY & TRANSPORT

Sealant preparation and application

Treat the sealant process as a controlled manufacturing operation.

- Verify approved product, batch, expiry, storage condition and compatibility documentation.
- Clean and prepare substrates using the approved manufacturer's procedure.
- Check joint dimensions, application conditions and tooling before curing.
- Protect curing assemblies and maintain the application and release records.

Sealant test records

Use the tests required by the approved system and sealant manufacturer to support release.

Control	Purpose
Mix check / butterfly test	Check two-part mix uniformity where applicable
Snap-time check	Verify the approved two-part mixing process
Adhesion testing	Check preparation and bonding on specified substrates
Deglazing / production checks	Verify the structural sealant assembly where required
Cure and release record	Confirm acceptance before movement or dispatch

FABRICATION, ASSEMBLY & TRANSPORT

Pack for the installation sequence

Protection and identification are established before materials leave the supplier.

- Use suitable racks or crates with supports that protect glass, panels, edges and finished surfaces.
- Pack by material stream, elevation or installation zone so one workfront can be released independently.
- Keep dissimilar or incompatible components separated and protect accessories against loss.
- Hold damaged or nonconforming products before packing; document and resolve the exception.

Protection and staging

Upright racks and horizontal stands show how framed units are supported between operations.



Glazed frames with protective film and corner guards secured on a wheeled rack.



Framed units stacked horizontally with spacers on mobile stands.

Every package has an identity

The same package mark connects supplier records, transport, warehouse inventory and site receipt.

Package record	Required content
Identity	Project, package mark, supplier and drawing revision
Contents	Product marks, quantities and material stream
Destination	Elevation / level / installation zone and release order
Handling	Verified dimensions, gross weight, handling points and storage instructions
Release	Inspection status, dispatch reference and condition photographs

FABRICATION, ASSEMBLY & TRANSPORT

Factory to workfront

A controlled transport chain protects the product and preserves the installation order.

01

IGS production

Complete inspection, package identification and dispatch release.

02

International and domestic transport

Confirm the route, documents, forwarder and shipment milestones.

03

Local offsite storage

Receive, inspect and inventory materials by their installation zone.

04

Booked site delivery

Release the required workfront to the agreed Clark delivery slot.

05

Installation handoff

Verify receipt, move to the approved location and record custody.

FABRICATION, ASSEMBLY & TRANSPORT

Offsite storage and staged redelivery

Use local storage to support small, sequenced site deliveries and protect the material between releases.

- Long-term onsite storage is prohibited. Select suitable local warehousing and coordinate staged redelivery with Clark.
- Maintain package-level inventory, condition records and a clear separation of accepted and held materials.
- Release only the installation zones that Clark and the field team can receive.
- Use dunnage and approved supports; preserve labels and the supplier's protection during storage.

PRODUCTION AND STAGING

Panel storage arrangements

Glazed and insulated panels are shown on mobile supports within the factory.



Glazed panels on mobile stands beside packaged insulation.



Insulated panels and frames stored upright on wheeled supports.

Book, receive and release

Every arrival is coordinated with the receiving team before the truck leaves storage.

01

Book with Clark

Submit the delivery at least 48 hours ahead, with vehicle and package information.

02

Check readiness

Confirm receiving crew, access, unloading method and the approved destination.

03

Receive and inspect

Check package identity, quantity, damage and handling instructions.

04

Record custody

Sign the receipt, photograph exceptions and update the inventory.

05

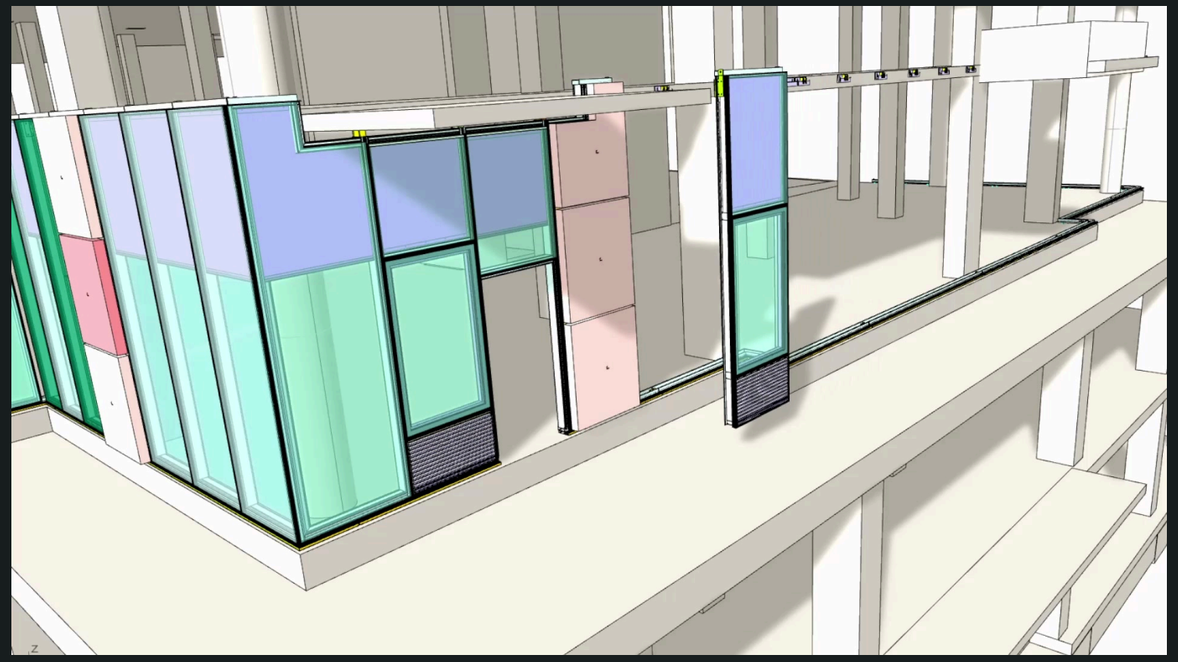
Clear the delivery area

Return reusable packaging as agreed and leave routes clear.

INSTALLATION PLAN

Installation plan

Release safe, coordinated workfronts and install each façade stream in the agreed order.



Supplied model-video still

INSTALLATION PLAN

Release the workfront

A short readiness check prevents deliveries from arriving before the site can use them.

- Confirm receiving access, protected pedestrian routes and the approved unloading area.
- Coordinate workfront availability, adjoining trades, temporary works and material movement routes.
- Verify storage and floor-loading arrangements before placing materials.
- Release installation only with the current drawings, method and required access equipment.

INSTALLATION PLAN

Survey, setting out and anchors

Establish the interface before the façade components reach the opening.

01

Confirm control

Receive and check project datums, grids and survey references.

02

Inspect substrates

Check openings, embeds and supporting construction against approved details.

03

Resolve discrepancies

Record variations and obtain the agreed disposition before affected installation.

04

Install connections

Set and inspect anchors or brackets using approved fixings and tightening requirements.

05

Release the zone

Record acceptance of the connection interface for the installation crew.

INSTALLATION PLAN

Controlled unloading

Use the verified package information and the approved handling method for each delivery.

- Provide required traffic controls, trained personnel and an exclusion area for unloading.
- Verify package weights, dimensions and lifting instructions. Never crane-hoist materials on pallets.
- Inspect packages on arrival and isolate damage or missing material for resolution.
- Keep receiving records linked to package marks and the installation-zone inventory.

INSTALLATION PLAN

Move materials to the point of use

Agree the route, destination and loading arrangement before material enters the building.

- Coordinate the actual package with Clark before reserving suitable hoist access.
- Maintain clear movement routes and protect finished or occupied areas.
- Distribute loads using the approved stocking arrangement and engineering where required.
- Stage only the current workfront and keep access and emergency routes clear.

Coordinate the shared hoist

Book access around Clark’s site operations, with verified package geometry and a suitable handling method.

Access requirement	Planning rule
Normal hoist window	7:00 am–3:15 pm, Monday–Friday; subject to scheduled availability.
Personnel priority	No material deliveries at the start or end of the working day.
Package suitability	Confirm actual cab, door opening, capacity and clearances before booking.
Off-hour access	Coordinate separately; costs remain with the subcontractor.
Delivery vehicles	Use short city trucks of 40 ft or less when Clark requires them.

INSTALLATION PLAN

Glazing installation sequence

Set the approved system in the sequence supported by its connections, joints and access plan.

01

Prepare the opening

Verify accepted interfaces, access, material identity and the installation method.

02

Position and secure

Use the approved handling arrangement and engage the required supports or fixings.

03

Align and connect

Check location, elevation, alignment and joint relationships.

04

Inspect the installation

Complete connection and assembly checks before the next dependent operation.

05

Seal and protect

Complete specified seals and protection, recording remaining interfaces.

Coordinate the other material streams

Façade panels, doors, louvers and rails need their own receiving and workfront releases.

Stream	Installation coordination
Façade panels	Substrate, support, finish direction and elevation sequence
Storefront	Opening readiness, glazing access and adjacent finishes
Doors / louvers	Opening identity, hardware, operation and service access
Terrace rails	Edge conditions, connections, waterproofing and late-phase access



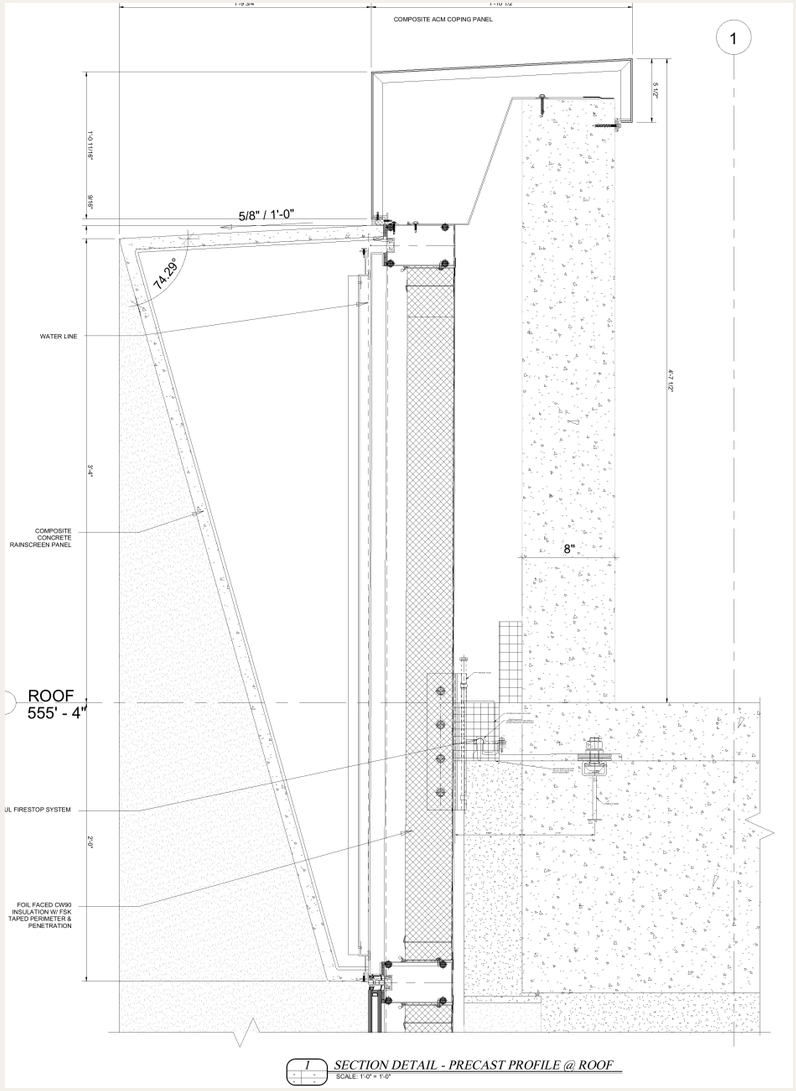
System visualization

INSTALLATION PLAN

Leave-outs and final closure

Treat hoist-run and later closure work as distinct releases with their own access and material plans.

- Track each planned leave-out by location, material identity and responsible trade.
- Protect stored closure materials and verify their condition before the later release.
- Confirm hoist removal, access equipment, reach and package information before closure planning.
- Coordinate the engineered closure method and commercial allowance with Clark before scheduling picks.



IGS proposal drawing SD103 · September 10, 2026

Power and equipment readiness

Select equipment from the verified operation and package information, then coordinate site services.

Planning item	Required confirmation
Unloading equipment	Actual package weight, dimensions and handling instructions
Hoists / cranes / rigging	Capacity, reach, access, engineered arrangement and availability
Platforms / access equipment	Work location, suitable support, inspections and trained users
Temporary power	Equipment demand, connections, charging and available supply
Daily readiness	Condition checks, communication and controlled work area

Unitized curtain wall: means, methods & safety

Metro Nashville Fire Department Headquarters & Fire Station 2. A field execution framework from layout and logistics through unit setting.

Field issue basis

Prepared by 1CG · Metro coordination draft · Revision 00 · September 15, 2026.

Verify against the approved Metro safety plan, engineered equipment design, current logistics plan and site conditions before field issue.

Installation control sequence

Safety ownership and crew readiness.

Layout and anchor setting.

Unload and receive.

Distribute to the workfront.

Set, align and secure units.

Temporary power and charging.

Equipment design and operating controls.

Safety ownership

The Project Manager, Site Supervisor and General Foreman monitor installation progress, identify hazards and oversee daily operations, safety standards and employee welfare.

Project leadership

- Determine during planning, as far as reasonably possible, likely hazards, fire precautions, responsibility allocations, protective clothing, and other necessary facilities.
- Investigate potential hazards and dangerous occurrences on site and make recommendations to minimize risk.
- Organize the site so work can be carried out to appropriate standards with minimum risk to the public and employees.
- Ensure employees receive instruction on correct work methods so unnecessary risks are not taken, including safety meetings and toolbox talks.
- Ensure protective clothing, head and eye protection, and other required safety equipment/PPE are readily available.
- Conduct weekly safety meetings.
- Record and report all accidents.

All field employees

- Must be familiar with their obligations under the Health and Safety Procedure included in the Health and Safety Plan.
- Must wear hard hats, protective footwear, high-visibility clothing, and any other required PPE at all times while on site.
- Must learn, observe, and take all sensible safety precautions.
- Should bring forward suggestions or ideas that could improve safety.
- Must not leave conditions that could be dangerous to others.
- Drugs and alcohol are strictly forbidden.
- Must attend all required safety meetings and toolbox talks.
- Must record and report all accidents.
- Shall hold OSHA 30 certification.

Layout, anchors & access

Use floor-by-floor control marks and the approved access system to release each Metro workfront.

Survey control

1CG requires axis lines and elevation benchmarks on every floor. 1CG will lay out anchors from these control marks.

Clark shall be notified of discrepancies. 1CG will wait for direction on necessary adjustments before further curtain wall activity on that floor.

Embeds with excessive concrete overspill, observable concrete voids, damage, or skew from concrete placement shall be reported to Clark for remediation.

1CG will set curtain wall anchors as a separate operation to the provided axis lines.

Nuts shall be tightened to the required torque.

Scissor-lift controls

When a scissor lift is required for anchor setting, operators shall know the safe operating procedures and inspection requirements and hold a current certificate of training for the equipment used.

Before operation, conduct and document a pre-use visual and operational check.

Workers shall be protected from falls by the scissor lift guardrail system.

When the basket platform is outside building edge protection, workers shall use personal fall-arrest systems anchored to manufacturer-provided scissor lift anchorages.

Workers shall not stand or climb on guardrails to gain elevation; feet must remain firmly planted on the platform floor.

Hand tools that breach the perimeter guardrail system shall be tied or tethered back.

Hard hats shall be tethered to the wearer.

Suspended access

Face-of-column anchor installation that is inaccessible by scissor lift shall be accessed by spider lift or custom, portable, one-tier suspended scaffold.

All custom suspended scaffolds shall be designed by a registered professional engineer.

Suspended scaffold erection and installation shall be performed under the supervision of a competent person qualified in the system and in accordance with engineered drawings.

A competent person shall inspect each suspended scaffold before use; inspections shall be documented and logged.

Only trained and competent scaffold users shall be permitted to work on suspended scaffold systems. 1CG shall verify and evaluate user training and competency.

Workers shall be protected by guardrails incorporated into the suspended scaffold system.

Workers shall also use personal fall-arrest systems independently anchored to the building structure by vertical lifelines and rope grabs.

Hand tools that breach the suspended scaffold basket shall be tied or tethered back.

Hard hats shall be tethered to the wearer.

Unloading & floor distribution

Coordinate truck access, hoist movements, floor loading and clear installation zones with Clark before deliveries.

Curtain wall unloading

Each crate shall carry an exterior packing list identifying its contents.

Curtain wall crates will be delivered to the site by tractor-trailer.

Provide necessary flaggers at street level for Temporary Traffic Control zone safety for vehicles and pedestrians.

Barriers shall be provided by others to separate truck-unloading activities from public ways.

Proposed dock method: back the trailer into the coordinated hoist dock, roll crates off using pallet jacks, then transfer onto dollies using approved lifting equipment. Confirm transfer equipment and stability before use.

Dock plates shall bridge gaps between the loading dock and tractor-trailer bed.

The dock provided by others must support the verified crate, pallet-jack and operating loads. The source basis is approximately 4,000-lb crates plus a counterweighted pallet jack; confirm actual Metro loads.

The loading dock shall provide a landing of sufficient dimensions and a clear path for rolling crates from the truck to the hoist car.

Curtain wall distribution

Typical curtain wall unit crates shall be distributed by hoist car to their respective installation floors.

1CG shall provide Clark with a floor loading and stocking plan. Stocking plans shall be agreed upon before shipments arrive on site.

Before stocking, others shall provide an unobstructed path from the hoist car, along the building core, to agreed crate- staging areas.

Coordinate MEP risers, piping and ductwork with curtain wall staging, laydown and launching. Identify early MEP work and shear walls that constrain Metro work areas; agree the installation sequence with Clark.

Coordinate authorized removal of interfering concrete shoring before layout, anchor setting or equipment setup; release must follow the approved structural sequence.

1CG will coordinate with Clark by marking MEP drawings to identify items that would interfere with unit laydown and distribution.

Units shall be moved to the slab perimeter on dollies and laid out around the building in installation sequence.

Clark to coordinate and maintain the perimeter work zone for unit shakeout and installation. Confirm the source 20-foot allowance against Metro floor geometry and the approved stocking plan.

Metro coordination: confirm crate weights, dock and floor capacities, transfer equipment and clearances. The 4,000-lb crate and 20-foot work zone are source planning allowances, not verified Metro limits.

Unit setting: core controls

Release a coordinated sequence, controlled perimeter and agreed hoisting communication before the first pick.

Sequence and coordination

Install from the lowest released floor, around the building and upward without skipping intermediate floors. The source counterclockwise sequence begins and ends at the hoist; confirm Metro direction and access with Clark.

Perimeter edge protection is typically removed for curtain wall unit installation. Protection removable one or two bays at a time is preferred.

Edge-protection stanchions that interfere with installation shall be removed by others before curtain wall work begins.

Out-of-sequence work and leapfrogging are not permitted. Hoist runs and tower-crane tiebacks shall be mutually agreed as the only leave-outs.

Tower-crane tiebacks must pass through vision or spandrel glass—not through horizontal or vertical mullions—so only glass leave-outs are required. A tieback through a mullion requires unit leave-outs comparable to another hoist run.

Edge and fall-protection zone

Before edge protection is removed, 1CG shall establish a restricted-access perimeter at least 15 feet from the exposed side or edge.

Yellow rope or danger tape secured to stanchions is acceptable for the restricted-access perimeter.

Workers inside the 15-foot restricted-access zone shall use a personal fall-arrest system.

1CG shall provide sufficient fall-protection anchorage installed and used as part of a complete personal fall-arrest system maintaining a factor of safety of at least two.

Hoisting communications

Before hoisting, the monorail outrigger hoist operator or tower-crane operator and signaler shall meet and agree on the signals to be used.

Only qualified signalers may signal the crane operator, except for the emergency all-stop signal.

Use a hands-free system for communication between the setting crew and the monorail outrigger hoist or tower-crane operator.

Dollies used to roll units to the slab edge during hoisting shall be tethered or tied back to prevent unwanted movement and platform-edge encroachment.

Metro coordination: confirm installation direction, leave-outs, tieback interfaces, restricted-zone dimensions and fall-protection design in the approved lift and safety plans.

Typical units & screen wall setting

Confirm the selected Metro system, approved shop drawings, anchor details and rigging design before applying either sequence.

Typical curtain wall setting

Typical curtain wall units are hung using a mini crane or workhorse (crab), usually located several floors above the setting floor. The mini crane or crab travels the floor perimeter and is tied back to the structure or an engineered D- ring in the slab.

Hoist the rigged curtain wall unit off the floor, out of the building, and down into position on the façade.

Interlock the unit mullions into the adjacent mullion several inches above the set position.

Lower the unit into position, interlocking the bottom horizontal with the gutter of the unit below.

Set the unit onto its anchors before releasing redundant rigging. Verify left/right position and install anti-walk screws.

Adjust elevation using the jacking bolts on the anchor hooks.

Once the unit reaches final position, release the primary rigging connections.

1CG shall reinstall perimeter edge protection at open bays whenever installation is inactive, including at the end of the day.

An enclosed building perimeter does not require perimeter edge protection to be reinstalled.

Screen wall setting, where applicable

Hang screen wall units using a monorail or tower crane. The monorail hoist travels the floor perimeter on its own rail.

Hoist the rigged curtain wall unit off the floor, out of the building, and down into position on the façade.

Interlock the unit mullions into the adjacent mullion several inches above the set position.

Lower the unit into position, interlocking the bottom horizontal with the gutter of the unit below.

Set the unit onto its anchors before releasing redundant rigging. Verify left/right position and install anti-walk screws.

Adjust elevation using the jacking bolts on the anchor hooks.

Once the unit reaches final position, release the primary rigging connections.

1CG shall reinstall perimeter edge protection at open bays whenever installation is inactive, including at the end of the day.

An enclosed building perimeter does not require perimeter edge protection to be reinstalled.

Equipment shown or named is a coordination option. Final equipment location, travel path, tiebacks and lift geometry require the approved equipment design.

Splice caulking & temporary power

Close the splice before the next tier and coordinate power from the final equipment schedule.

Curtain wall splice caulking

Complete curtain wall splice caulking through the perimeter cables before the next level of units is set.

Caulking guns that breach perimeter edge protection shall be tied or tethered back.

Open only the bottom several feet of perimeter netting in the active work bay.

Complete splice caulking with proper chemical gloves and eye protection.

Reinstall netting before moving to the next bay.

Temporary power planning

Source welding-power allowance: 3-phase / 220V / 30A equipment; aggregate operating allowance 60A average and 90A peak. Confirm the Metro equipment schedule.

Source charging allowance: 24-hour 110V supply for scissor lifts and pallet jacks; overnight allowance 60A average and 90A peak. Confirm actual charger demand.

For floor crabs, swing stages, monorail hoists, spider cranes and Jekko equipment, confirm the NEMA connection type and rating from the approved equipment design.

Final electrical requirements will be submitted when the equipment design is complete.

Confirm final voltage, phase, amperage, charging locations, distribution and connection type against the approved equipment design before Metro mobilization. Source power figures are planning references.

Lifting crab & mini crane

Diagrammatic equipment references for Metro lift planning. Verify selection, capacity, rigging, tiebacks, operating radius, engineered design and manufacturer requirements before field use.

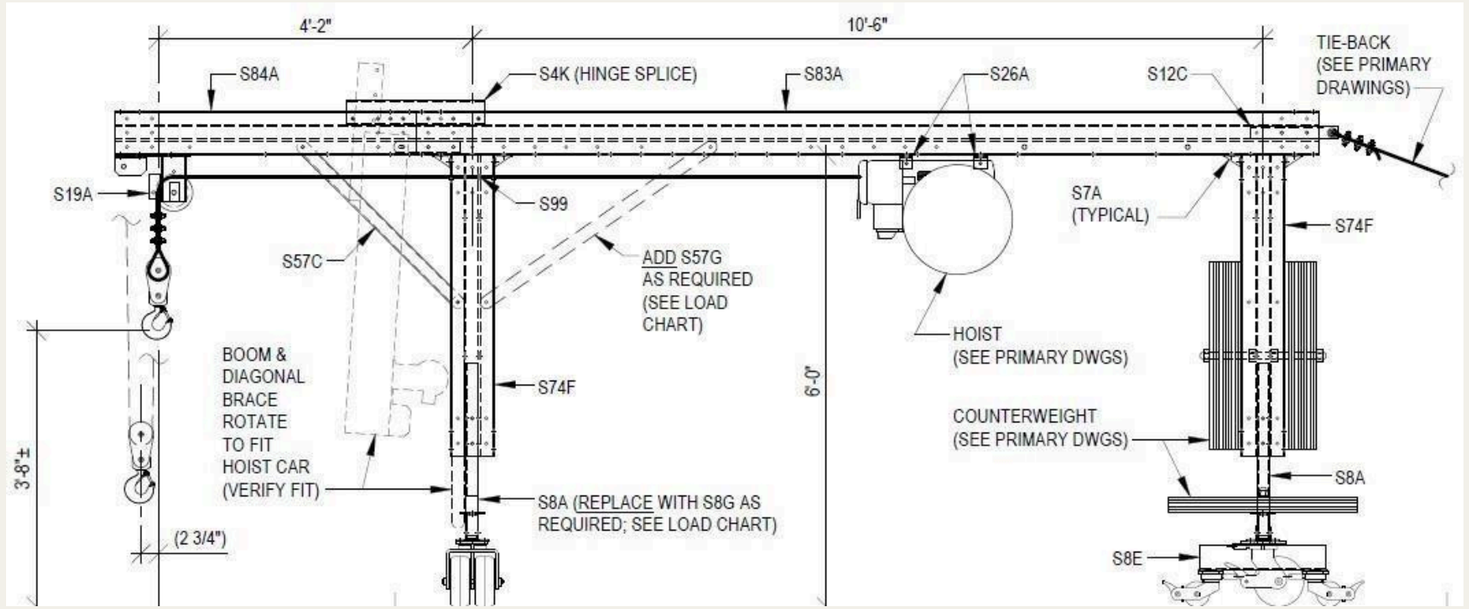


Figure 01 · Greg Beeche lifting crab / hoist arrangement

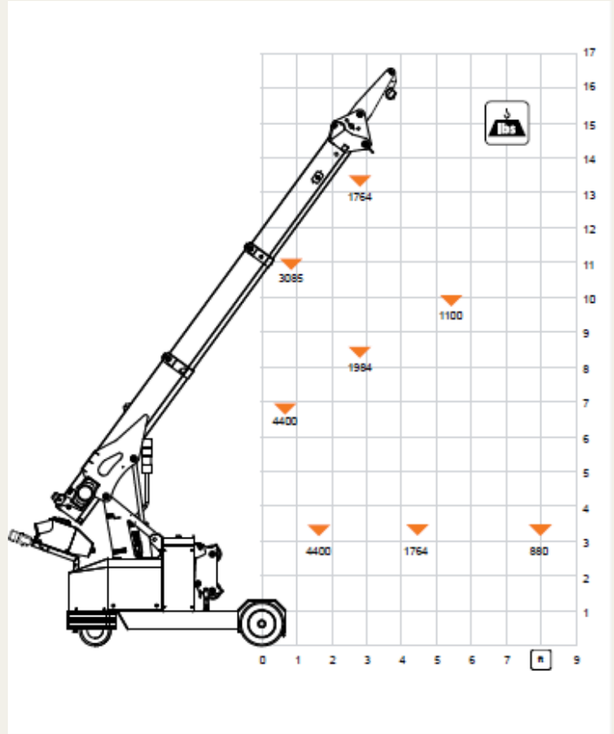


Figure 02 · Jekko mini crane reference chart

Reference illustrations only. Use current manufacturer information for the exact equipment and configuration.

Spyder mini crane

Working radius and hook-height reference for equipment coordination.

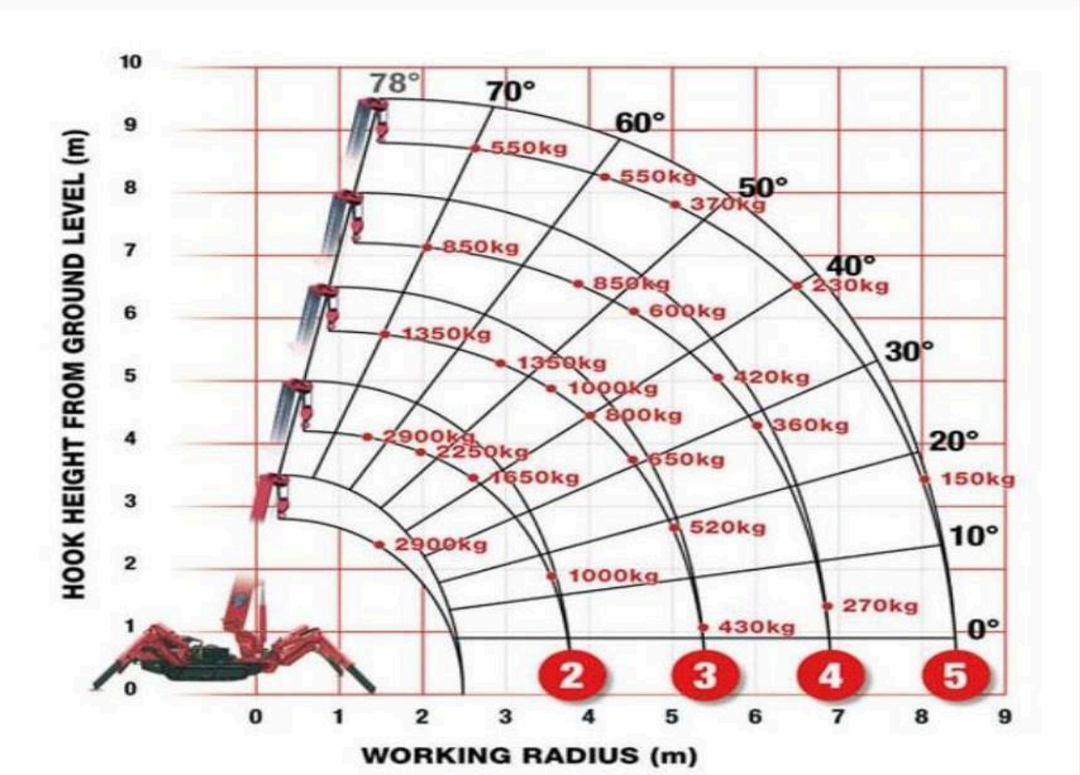


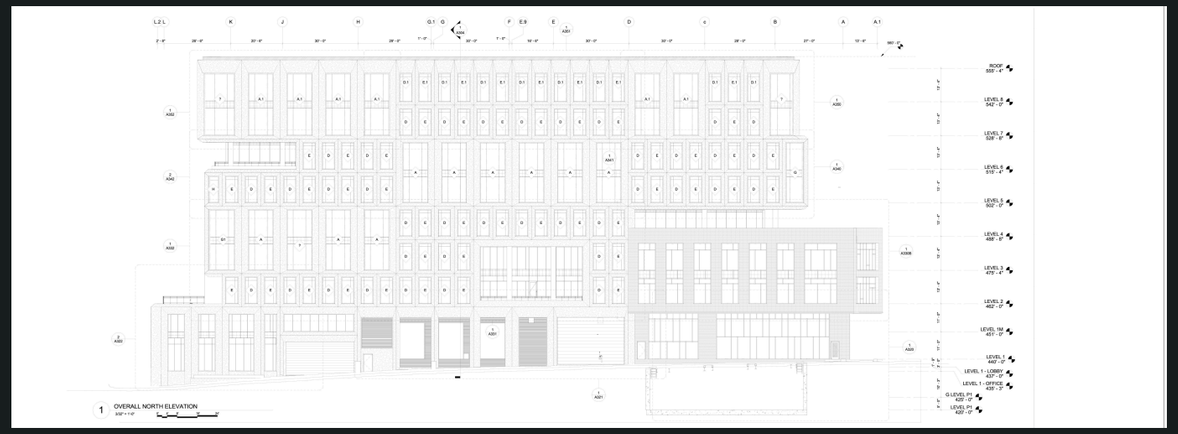
Figure 03 · Spyder mini crane load chart

> Use the current manufacturer load chart for the exact crane configuration. This legacy reference image is not the approved Metro lifting plan.

PROJECT SCHEDULE

Project schedule

Use the supplier programme as the date baseline and release work through practical readiness gates.

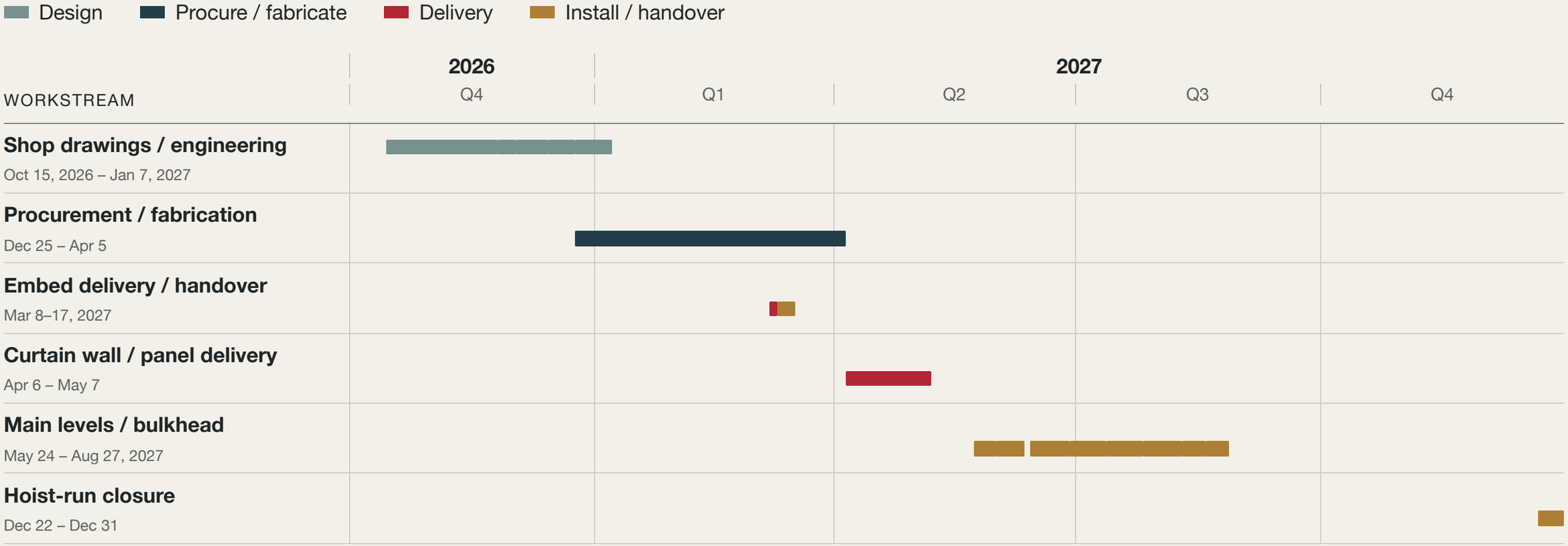


IGS proposal drawing C02 · September 10, 2026

PROJECT SCHEDULE

The supplier date baseline

The IGS 9.9 programme connects fabrication, delivery and the first installation workfronts.

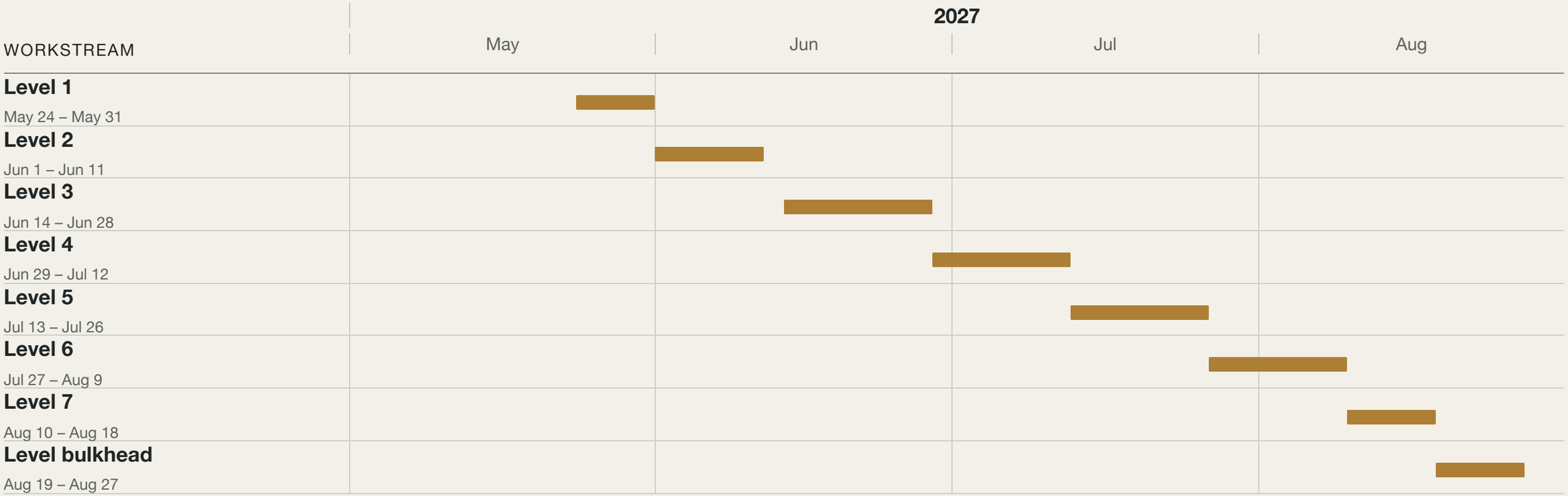


PROJECT SCHEDULE

Level-by-level release

Prepare receiving, access and material allocations ahead of each planned installation period.

Installation

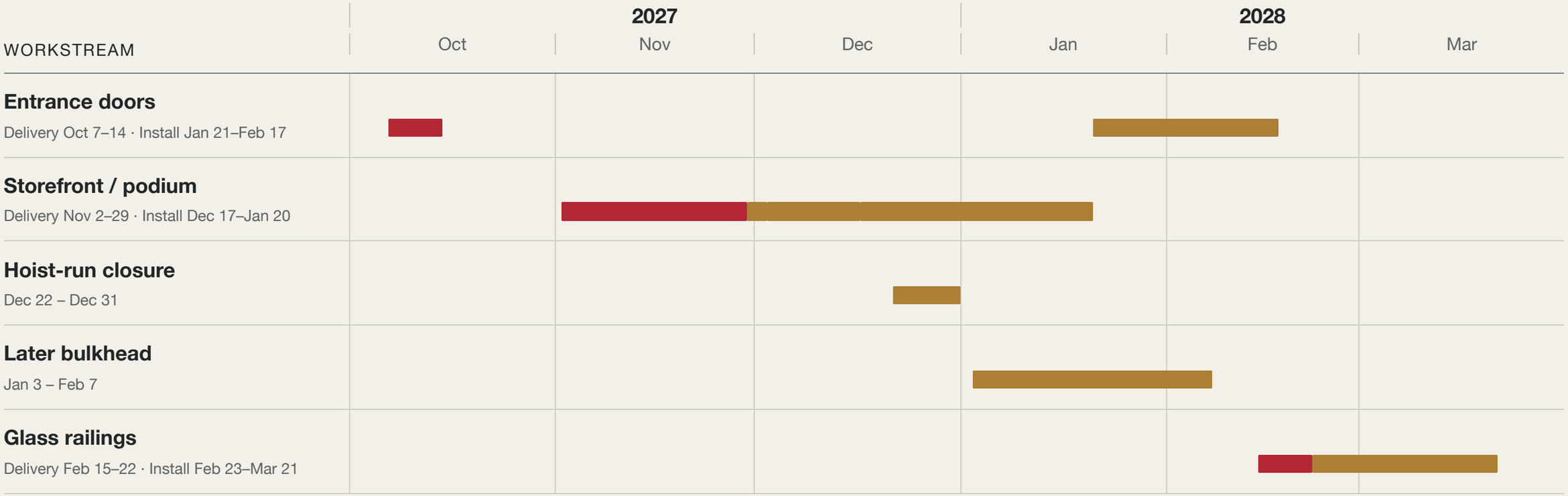


PROJECT SCHEDULE

Later deliveries and closeout access

Reserve storage, handling and access for the streams that follow the main façade installation.

Delivery Install / handover



PROJECT SCHEDULE

Plan from the next release backward

The weekly lookahead converts supplier dates into packages, people and usable workfronts.

- Escalate design changes, shipment exceptions and access conflicts with their effect on the next release.

01

Design readiness

Approved details, dimensions and interfaces allow procurement and fabrication.

02

Supplier readiness

Inspection release, package data and dispatch documents allow transport.

03

Site readiness

Accepted interfaces, booked access and suitable equipment allow delivery.

04

Installation readiness

Material, crew, method and inspections allow the workfront to proceed.

SAFETY PLAN

Safety plan

Build the safety controls into receiving, material movement and installation.

SAFETY PLAN

Daily safety coordination

The supervisor aligns the task, the crew and the work area before the operation begins.

- Review the task plan, hazards, access controls and required equipment with the crew.
- Use trained operators and designated communication roles for handling and lifting activities.
- Check changing site conditions and stop affected work when the agreed controls are unavailable.
- Record incidents, defects and corrective actions through the project reporting process.

SAFETY PLAN

Plant, tools and temporary power

Use equipment within its approved purpose and keep defects out of service.

- Inspect tools, leads, plugs, guards and equipment before use; report and isolate defects.
- Confirm operators are trained for the equipment and task.
- Keep maintenance, inspection and required certification records accessible.
- Coordinate temporary electrical work and equipment connections through the project's authorized personnel.

SAFETY PLAN

Hot work, fuels and fire controls

Coordinate ignition sources and combustible materials before cutting, welding or similar work.

- Follow the site hot-work process, including required permits, fire protection and post-work checks.
- Keep combustibles clear of the work area and maintain access to fire equipment.
- Store cylinders upright and secured; inspect connections and follow supplier handling instructions.
- Control flammable materials, clean spills and remove waste through the agreed site process.

SAFETY PLAN

Personal protection for the task

Match the protection to the exposure and make its correct use part of the crew briefing.

Exposure	Protection planning
Site and overhead hazards	Project-required head, foot and visibility protection
Sharp edges and glass	Suitable hand and body protection
Cutting, drilling and sealants	Task-specific eye and face protection
Noise	Hearing protection based on the task assessment
Dust, fumes or vapors	Exposure controls and required respiratory protection

SAFETY PLAN

Handling and lifting

Plan the route and the load before movement begins.

- Use verified package data and approved lifting methods. Crane hoisting on pallets is prohibited.
- Check the route, destination, ground condition and clearance before moving a load.
- Inspect glass-handling equipment and surfaces according to the manufacturer's instructions.
- Account for wind and changing conditions; secure materials and protect other people from the operation.

SAFETY PLAN

Access, edges and protected routes

Temporary access and protection must remain coordinated with the installation method.

- Use inspected access equipment with trained users and the required fall-protection arrangements.
- Control temporary removal of edge protection and restore protection when the work area is unattended.
- Secure tools and materials where falling objects could affect people below.
- Keep pedestrian routes and emergency access separated from delivery and lifting operations.

SAFETY PLAN

Emergency readiness and housekeeping

Keep the work area usable throughout the shift and ready for an emergency.

- Brief the crew on site emergency contacts, reporting, evacuation routes and the assembly point.
- Keep access to exits, fire equipment and emergency routes clear.
- Remove broken glass, waste and packaging using suitable containers and the agreed disposal process.
- Secure materials against movement or wind before leaving the workfront.

QUALITY ASSURANCE & CONTROL

Quality assurance & control

A complete record connects design intent, supplier release, installed work and handover.

QUALITY ASSURANCE & CONTROL

One quality record through the project

Define inspection responsibilities and preserve evidence at every transfer of custody.

01

Requirements

Approved scope, specifications, samples, drawings and required mock-up or performance testing define acceptance.

02

Production

Material checks and process inspections support supplier release.

03

Delivery

Packing, transport and receiving records preserve identity and condition.

04

Installation

Workfront inspections verify the approved construction.

05

Handover

Close exceptions and assemble the final product and service records.

QUALITY ASSURANCE & CONTROL

Control requirements and revisions

Each team works from the same accepted design information.

- Review the contract, specification and approved material requirements before release.
- Record design inputs, interface decisions, reviews and acceptance of shop drawings.
- Identify drawings and changes by revision; withdraw superseded information from active use.
- Assess changes for their effect on procurement, fabrication, delivery and installed work.

QUALITY ASSURANCE & CONTROL

Supplier and purchasing controls

Quality requirements travel with the purchase order and remain visible through production.

- Confirm product identity, grade, finish, quantity and delivery sequence in the purchasing record.
- Require applicable certificates, warranties, test reports and approved product data.
- Track supplier progress and resolve departures before they affect fabrication or shipment.
- Link purchasing, inspection and receipt records to the relevant product and package marks.

QUALITY ASSURANCE & CONTROL

Receive, identify and segregate

Keep acceptance status visible so held materials cannot enter production or installation.

Status	Control
Accepted	Identify and release to the approved destination
Awaiting inspection	Hold separately with clear status and required checks
Damaged / nonconforming	Isolate, document and assign a disposition owner
Corrected / replaced	Reinspect and record acceptance before release
Inventory record	Maintain product, quantity, location and condition history

QUALITY ASSURANCE & CONTROL

Inspect each material stream

Use the approved requirements and appropriate checks for each product type.

Material	Inspection focus
Aluminum / steel components	Identity, geometry, machining, finish and connection details
Glass assemblies	Dimensions, edge condition, visual quality and sealed-unit details
Façade panels	Identity, finish, flatness and fabrication details
Gaskets / accessories	Specification, dimensions, condition and suitability
Completed assemblies	Completeness, alignment, operation and release record

QUALITY ASSURANCE & CONTROL

Verify the process, then release the product

Inspection checkpoints prevent concealed defects and preserve the evidence behind acceptance.

- Check first operations and defined intermediate stages before subsequent work conceals the result.
- Record sealant product, batch, preparation, application conditions, tests and cure acceptance.
- Use approved inspection tools and maintain required calibration records.
- Release finished products only when checks are complete and exceptions are closed or formally accepted.

QUALITY ASSURANCE & CONTROL

Resolve exceptions and close the loop

Quality issues and client comments remain visible until the agreed action is verified.

- Maintain a client communication and service log through installation, handover and aftercare.

01

Record

Identify the issue, location, product mark and affected requirement.

02

Contain

Hold affected material or work and protect dependent operations.

03

Agree disposition

Coordinate repair, replacement or another accepted resolution.

04

Verify and close

Reinspect, update records and share lessons with the responsible teams.

QUALITY ASSURANCE & CONTROL

Complete the handover package

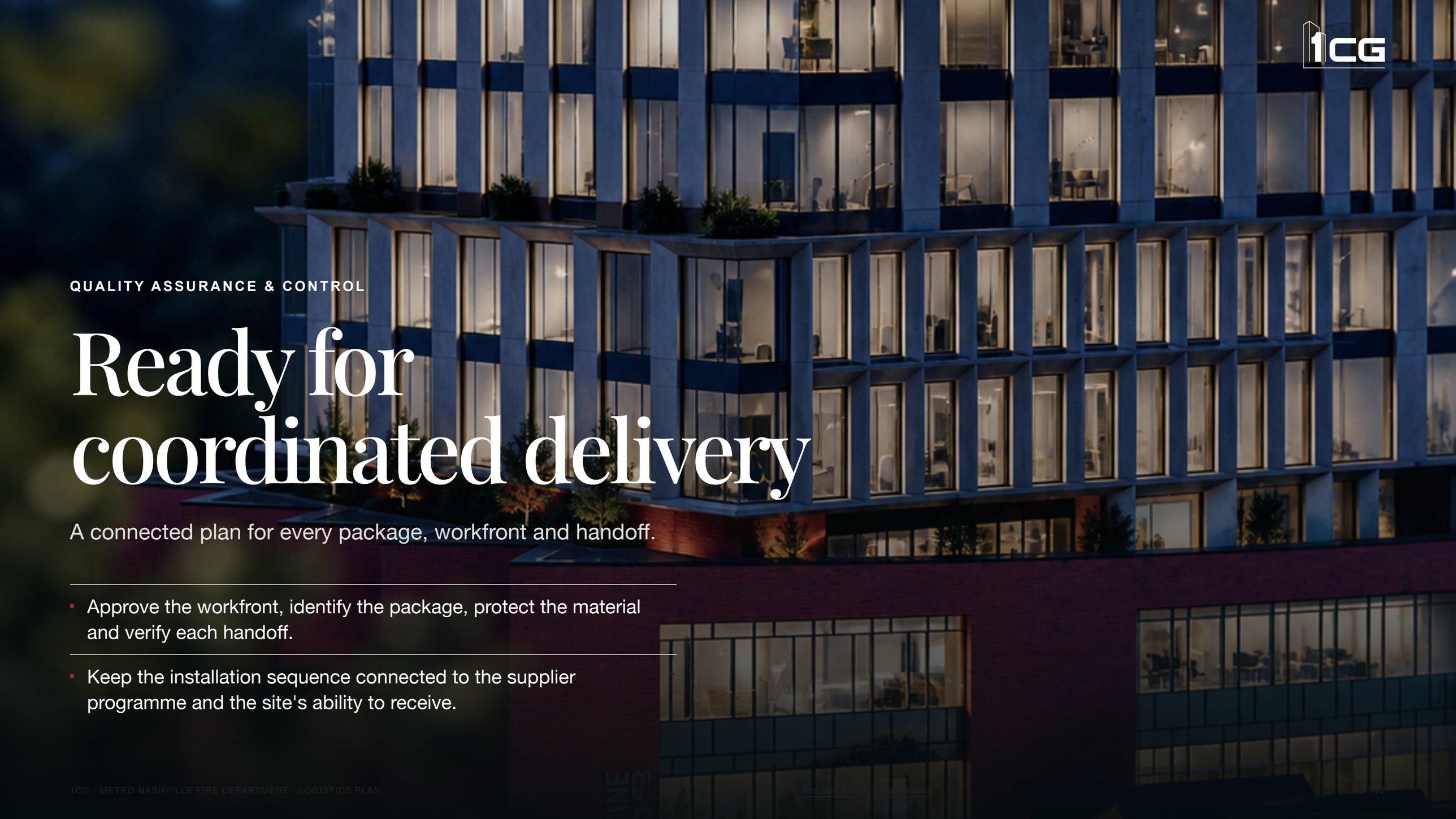
Assemble the records progressively so final acceptance does not depend on reconstructing the work.

Record group	Closeout content
Design and product	Approved / record drawings, product data and material schedules
Quality	Factory, receipt, installation and required test records
Exceptions	Punch-list and nonconformance closure
Operation and maintenance	Cleaning, care, service instructions and warranties
Handover and aftercare	Acceptance record, contacts and feedback / service log

Confirm before the first logistics release

Resolve these project-specific decisions in the coordination register, with an owner and required-by date.

Decision	Required output
Package and transport data	Actual weights, dimensions, counts, forwarder, route and delivery milestones
Storage and redelivery	Local facility, three-month allowance, handling scope and commercial terms
Site access and equipment	Receiving location, routes, stocking plan, hoist suitability and engineered handling
Closure works	Hoist removal date, pick weights / reach, access method and quotation
People and system approvals	Named team, qualifications, emergency arrangements, panel material/supports and accepted work methods



QUALITY ASSURANCE & CONTROL

Ready for coordinated delivery

A connected plan for every package, workfront and handoff.

- Approve the workfront, identify the package, protect the material and verify each handoff.
- Keep the installation sequence connected to the supplier programme and the site's ability to receive.