APS
ARCHITECTURAL PRECAST SYSTEMS
A BMGROUP COMPANY

Downloadable Project Resource

Precast vs Cast in Place Concrete Decision Checklist

A practical planning tool for contractors, project managers, architects, engineers, and owners comparing precast concrete with cast-in-place concrete.

Use this checklist before selecting a concrete method

This resource helps project teams review schedule,site logistics, design repetition,quality control, cost risk, and installation requirements before deciding whether precast, cast-in-place, or a combined method is the better fit.

1

Review project conditions

Identify schedule, access, design, and quality requirements.

2

Score the method fit

Check Precast, Cast in Place, or Both for each planning question.

3

Plan next steps

Use the score to guide drawings, logistics, and quote discussions.

Project Profile

Start by documenting the project conditions. These details help clarify whether a component is better manufactured off-site as precast concrete, poured on-site as cast-in-place concrete, or coordinated as part of a hybrid structural system.

Project Name

Location

Date

Project Team / Company

Estimated Installation Window

Project type

- [ ] Commercial
- [ ] Civic
- [ ] Infrastructure
- [ ] Mixed-use
- [ ] Industrial
- [ ] Residential / multi-family
- [ ] Other

Components under review

- [ ] Architectural wall panels
- [ ] Structural wall panels Columns and beams
- [ ] Stairs
- [ ] Sills and copings
- [ ] Custom precast elements
- [ ] Foundations / slabs / cores
- [ ] Ramps or monolithic pours

Quick fit rule

Precast is often stronger for repeatable components, controlled finish quality, faster site installation, and reduced site congestion. Cast-in-place often remains practical for foundations, slabs, cores, ramps, and field-adapted continuous pours.

Before you continue

- Review architectural, structural, and envelope drawings before finalizing a method.
- Confirm site access, crane access, delivery timing, and installation sequencing early.
- Discuss tolerances, connection details, finish requirements, and inspection needs with the project team.

Decision Checklist

For each question,check the method that appears to fit the project best. Use Both when the project may benefit from a combined approach, such as cast-in-place foundations with precast wall panels, stairs, beams, columns, or facade elements.

Planning Question	Precast	Cast in Place	Both	Notes
Does the project need a faster installation window? Off-site production may reduce time on site.	☐	☐	☐	
Can components be produced while other scopes continue? Useful when sequencing is tight.	☐	☐	☐	
Does the design include repeated panels or profiles? Repetition can support efficient precast production.	☐	☐	☐	
Is consistent finish quality a priority? Plant-controlled production can improve consistency.	☐	☐	☐	
Are colour, texture, profile, or facade details important? Architectural precast can support controlled finishes.	☐	☐	☐	
Is site space limited or highly congested? Precast may reduce formwork and curing space.	☐	☐	☐	
Is crane access available for lifting and placement? Precast requires planned lifting access.	☐	☐	☐	
Are delivery routes and staging areas workable? Panel delivery and sequencing must be coordinated.	☐	☐	☐	
Are design decisions finalized early enough? Precast benefits from early coordination.	☐	☐	☐	
Does the work require continuous pours or field adaptation? Cast-in-place may fit changing site conditions.	☐	☐	☐	
Is the work mainly foundations, slabs, cores, or ramps? These often suit cast-in-place construction.	☐	☐	☐	
Is weather or curing risk a concern for the schedule? Field curing can be exposed to site conditions.	☐	☐	☐	

Score and Next Steps

Count the marks from the checklist.**The score does not replace engineering review,** but it helps the project team frame the discussion before requesting pricing, drawings, coordination, or technical input.

Precast Checks	Cast-in-Place Checks	Both Checks
_____ total	_____ total	_____ total

How to read the result

More Precast checks

Review precast components early. The project may benefit from off-site production, repeated components, controlled finishes, and faster installation.

More Cast-in-Place checks

Review the site-poured scope carefully. The project may need continuous pours, foundations, slabs, cores, ramps, or field-adapted work.

Many Both checks

Use a hybrid strategy. Many projects combine cast-in-place structural work with precast wall panels, stairs, facade elements, or custom components.

Next steps before requesting a quote

1. Confirm components
List the wall panels, beams,columns, stairs, sills, copings, or custom pieces under review.

2. Review drawings
Prepare architectural,structural, envelope, and connection details for coordination.

3. Check logistics
Confirm delivery route, staging space, crane access, lifting plans, and installation sequencing.

4. Define finishes
Document requiredcolour, texture, profile, repetition, tolerances, and exposed-surface expectations.