

Certification of Precast Concrete Gravity or Semi-Gravity Block (PGB)

Key Number	Project Number	Project Name	
Item Number	Date Concrete Placed	Quantity Placed (CY)	Blocks Completed (EA)

Concrete Mix Design

Mix Design Number	Supplier			Concrete Class	w/c max. by mass
Material	SSD Mix Design (1 CY)	Relative Density (SG)	Volume (CF)	Source (or manufacturer)	Description (size, type, brand or class)
Coarse Agg 1					
Coarse Agg 2					
Fine Agg 1					
Fine Agg 2					
Water					
Cement					
Fly Ash					
SCM					
Admixture #1					
Admixture #2					
Admixture #3					
Admixture #4					
w/cm ratio					
Air Content (%)					
Max Theoretical Density (lb/ft ³)					
Yield					

-Attach concrete cylinder test reports and source approval.
 -Attach ASR test results and mitigation results if aggregate requires ASR mitigation.

Concrete Test Results from Batching

Metric	Results from Batching
Unit Weight (pounds per cubic foot)	
Air Content (%)	
Yield	
Average Compressive Strength (psi) 28-day	

Reinforcing Steel (if used) – Meet Section 503 requirements. Attach mill test reports and ITD-0914 if reinforcing steel is used.

Concrete – Concrete used for the production of precast modular block units must be prepared for the express purpose of casting the precast modular gravity block (PGB) units. No returned, reconstituted, re-purposed, or “waste” concrete is permitted for the production of PGB units under this specification. Additionally, each PGB unit must be cast complete in a single, uninterrupted pour. Construction joints are permissible in accordance with the requirements of the proprietary wall system design.

- Concrete per section 502 Class 40A, or as specified, meeting ASTM C94, and manufactured from wet-cast concrete mixes.
- Concrete unit acceptance with respect to compressive strength based on production lots. A production lot is defined as a group of units represented by a single compressive strength (an average of three cylinder results) sample (at 28 days) that consists of 40 blocks or a single day’s production, whichever is less. For every single compressive strength sample, cure at least two cylinders in the same manner for early testing. If the early test results indicate a compressive strength in excess of 4,000 psi, then the Engineer will use these test results for that production lot and may waive the requirement for testing at 28 days for that particular production lot.

Dimensional Requirements

- PGB width must be greater than or equal to PGB height.
- Unit weight of concrete must meet or exceed the unit weight used in the calculations for the gravity or semi-gravity wall.

Material Certifications and Test Reports

The manufacturer or fabricator company providing this certification must also provide ITD with any certifications or test reports for the materials used in the manufacturing or fabrication of the contract item required by the specifications. The quantity listed must represent the amount delivered (CY) for the concrete placement of PGB.



Manufacturer’s Certification

I hereby certify that the precast concrete gravity or semi-gravity block was constructed per the requirements of the contract, and Sections 502 and 503 of the _____ (year) version of Standard Specifications for Highway Construction and the _____ (year) version of the Standard Supplementals. I further certify the required quality control testing was performed and are attached.

Precast Gravity or Semi-Gravity Block Supplier	Manufacturer’s Representative Signature	Date
Manufacturer’s Representative (Print Name)	Title	

Note: The document must be signed by manufacturer’s representative who has quality control responsibility for the manufacture or fabrication of material (QA Manual 230.01).

This certificate is not valid if not signed by a person having quality control responsibility.

To be completed by the Contractor:

Date Blocks Placed	Quantity Placed (EA)	Location Placed