SUPERIOR WALLS CSI GUIDE SPECIFICATION



GUIDE SPECIFICATION

**Licensor:**

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Copy and paste this master guide specification into the written construction document(s) and edit entire master to suit project requirements. Modify or add items as necessary. Delete items which are not applicable. Words and sentences within brackets [ ] reflect a choice to be made regarding inclusion or exclusion of a particular item or statement, or act as a placeholder to add project-specific information. This section may include performance, proprietary, and descriptive type specifications. Edit to avoid conflicting requirements. Editor notes to guide the specifier are included between lines of asterisks to assist in choices to be made. Remove these notes before final printing of the specification.

This guide specification is written around the Construction Specifications Institute (CSI) Section Format standards. References to section names and numbers are based on MasterFormat 2020.

For specification assistance on specific product applications, please contact our offices above or any of our licensed fabricators throughout the country [(https://www.superiorwalls.com/superior-walls-locator/).](http://www.superiorwalls.com/superior-walls-locator/%29)

Superior Walls of America, Ltd. reserves the right to modify these guide specifications at any time. Updates to this guide specification will be posted to our website and/or in printed matter as they occur. Superior Walls of America, Ltd. makes no expressed or implied warranties regarding content, errors, or omissions in the information presented.

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**SECTION 03 40 00 PRECAST CONCRETE**

**PART 1 - GENERAL**

* 1. **SECTION INCLUDES**
		1. Product design, manufacturing, transportation, and installation of the insulated, pre-studded, precast concrete [foundation] wall system.
	2. **COORDINATION / SEQUENCING**
		1. [Crushed Stone] Footing and foundation drainage for foundation wall applications requires General Contractor coordination with excavation contractor.

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* + 1. Stacked panel projects will require General Contractor sequencing coordination with structural floor contractor.
	1. **SUBMITTALS**

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* Required by State Statute.
* Projects are not governed by the International Residential Code.
* Projects utilize Superior Walls panels that are over 10’-0” in height.
* Net lateral soil loads will be greater than 60 pounds per square foot per foot (psf/ft) below grade.

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* + 1. Precast concrete wall panel Submittal Drawings “Shop Drawings” [sealed by a design professional licensed in the state where the project is located] are to be submitted for approval by the owner’s representative or architect prior to panel fabrication.
		2. Provide evaluation service report(s) which document tested product attributes used in substantiating compliance with project performance requirements.
	1. **QUALITY ASSURANCE**
		1. Qualifications
			1. Manufacturers
				1. Manufacturer shall be a licensee of Superior Walls of America, Ltd., New Holland, PA.
				2. Manufacturer shall be certified to operate under the Superior Walls Quality Assurance Program and be third-party inspected by PFS Corporation, Cottage Grove, WI.
			2. Installers
				1. Precast concrete wall panel installers shall be certified by Superior Walls of America. Ltd.
		2. Sustainability Standards Certifications

a. Product shall be NGBS Green Certified to the National Green Building Standard (ICC 700-2008) and eligible for LEED-H and LEED-NC credits.

**PART 2 – PRODUCTS**

* 1. **SYSTEMS**
		1. The precast concrete wall panels shall be the Superior Walls Xi [Plus] system. No substitutions.
	2. **MANUFACTURER**
		1. The Superior Walls panels shall be manufactured by:

[HERE enter the name and address of the local Superior Walls licensee.]

[(https://www.superiorwalls.com/superior-walls-locator/)](http://www.superiorwalls.com/superior-walls-locator/%29)

* 1. **DESIGN AND PERFORMANCE CRITERIA**
		1. Axial Loads
			1. Precast concrete wall panels shall be capable of supporting a combined maximum allowable axial compressive load of 7,500 lbf/ft (109.45 kN/m).
			2. Precast concrete wall panels shall be capable of supporting the concentrated loads at the magnitude and locations identified on the construction document(s).
		2. Lateral Loads
			1. Precast concrete wall panels shall be capable of supporting equivalent lateral fluid pressures up to 100 pounds per square foot per foot (psf/ft) below grade.
			2. Precast concrete wall panels shall be capable of withstanding transverse wind loads as specified in the construction document(s).
			3. Precast concrete wall panels shall be capable of withstanding in-plane shear force of 745 pounds per lineal foot (plf) (10.87 kN/m).
		3. Wind Load Parameters

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* + - 1. Basic wind speed: [ ]
			2. Exposure Category: [ ]
		1. Seismic Design Category

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* + - 1. Seismic Design Category: [ ]
		1. Cavity Insulation R-Value (For factory installed insulation)

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* + - 1. Factory installed cavity insulation R-Value: [ ]
	1. **SEALANT**
		1. Panel joints shall be sealed with a one-part polyurethane sealant meeting ASTM C920, Type S, Grade NS, Class 25, Use NT, M or A.
	2. **FINISHES**
		1. Exterior panel surfaces shall have a factory-applied broom [Or, HERE insert the desired finish.] finish.
		2. Unless waterproofing is required by the building code, no dampproofing coatings are required to be applied to the exterior of the panels.

**PART 3 – EXECUTION**

* 1. **PREPARATION**
		1. Site Access
			1. The general contractor shall ensure that there is access for cranes and low-clearance delivery trailers from public roads to the identified location of crane pads.
			2. The general contractor shall provide level pad sites of adequate size to accommodate crane(s).
			3. The general contractor shall be responsible for removal or shielding of overhead wires within reach of the crane pad site(s).
		2. Surface Preparation
			1. All footings or other bearing surfaces prepared by others shall be level and at the specified elevation.
			2. If appropriate, the general contractor shall provide frost protection of the footing prior to backfilling.
	2. **BACKFILLING / BRACING**
		1. Backfilling
			1. Precast concrete wall panels shall be braced by the floor system or other suitable method at the top and bottom of the wall panels prior to backfilling.
			2. Unless connection details are specifically engineered for greater loads, the maximum allowed height of the backfill is 6” below the top of the precast concrete wall panels, and the net lateral soil loads shall be limited to 60 pounds per square foot per foot (psf/ft) below grade.
		2. Temporary Bracing
			1. For above grade projects, temporary wall bracing shall be installed and remain in place until permanent floor or roof decking is in place and properly connected to the precast concrete wall panels.
	3. **WARRANTY**
		1. The manufacturer shall warrant the Superior Walls product against defects in materials and workmanship for a period of five (5) years from the date of installation.

**END OF SECTION**