

MANUFACTURER'S SPECIFICATIONS
Section 04900 – MASONRY REPOINTING AND RECONSTRUCTION

ST. ASTIER NATURAL HYDRAULIC LIME CONCRETE

PART 1 – GENERAL

1.1 General

A. This section describes the requirements for floors and slabs on grade.

1.2 Products furnished but not installed under this section

A. [Section 03100 – Concrete Formwork: placement of [joint device] [joint device anchors] in formwork.]

1.3 Related sections

A. Section [_____ – _____]: Sidewalks, curbs, and gutters.

B. Section 03100 – Concrete Formwork: Formwork and Accessories.

C. Section 03200 – Concrete Reinforcement.

D. Section 03346 – Concrete Floor Finishing.

E. Section 03370 – Concrete Curing.

F. Section 05800 – Expansion Control.

G. Section 09415 – Exterior-Interior LimeStone Mortar Le Décor LimeFloor

1.4 References

A. ASTM C33 – Concrete Aggregate.

B. ASTM C141 – Standard Specification for Hydraulic Lime for Structural Purposes.

C. European Standard

1. EN 459-1 Building Lime – Part 1: Definitions, Specifications and Conformity Criteria

2. EN 459-2 Building Lime – Part 2: Test Methods

3. EN 459-3 Building Lime – Part 3: Conformity Evaluation

1.5 Quality Insurance

A. Manufacturer: All St. Astier NHL shall be obtained from:
LimeWorks.us

3145 State Road
Telford, PA 18969
215-536-6706
215-453-1310 Fax
info@limeworks.us
www.LimeWorks.us

Or its authorized distributors.

B. Perform work in accordance with ACI 301.

1.6 Submittals

A. Submit under provisions of Section [01300] [_____].

B. Submit manufacturer's installation instructions.

1.7 Project Record Documents

A. Accurately record actual locations of embedded utilities and components that are concealed from view.

1.8 Field Samples

A. Sample Panel: Sufficient size to indicate special treatment or finish required.

B. Locate [where directed] [_____].

C. Accepted sample panel is considered basis of quality for the finished work. Keep sample panel exposed to view for duration of concrete work.

D. Accepted panel may [not] remain as part of the Work.

PART 2 – PRODUCTS

2.1 Concrete Materials

A. Lime: St. Astier Natural Hydraulic Lime: NHL 5.

B. Fine and Coarse Aggregate: ASTM [C33] [C330].

C. Water: clean and not detrimental to concrete.

D. Glass Fiber Reinforcement: [ASTM C948] [_____]; [_____] manufactured by [_____].

2.2 Joint Devices and Filler Materials

A. [Construction Joint Devices: Integral [galvanized steel] [extruded plastic]; [_____] inch ([_____] mm)

thick, formed to tongue and groove profile, [with removable top strip exposing sealant through,] knockout holes spaced at [6] [___] inches ([150] [___] mm), ribbed steel spikes with tongue to fit top screed edge; [_____] manufactured by [_____].]

- B. [Expansion [and Contraction] Joint Devices: ASTM B221 [___] alloy, extruded aluminum; resilient [elastomeric] [vinyl] [neoprene] filler strip with a Shore A hardness of [35] [___] to permit plus or minus [25] [___] percent joint movement with full recovery.]

2.3 Concrete Mixes

- A. Mix in accordance with manufacturer's recommendations.
- B. Select proportions for concrete in accordance with manufacturer's instructions.
- C. Provide concrete to the following mix design:

<u>Unit</u>	<u>Measurement</u>
Compressive Strength (28 days)	1,000 psi (7 mpa)
Compressive Strength (6 months)	2,400 psi (17 mpa)
[Glass fiber reinforcement	[___] percent by volume]
Water/Lime Ratio	3-1/2 Gallon by 66 lbs of lime

PART 3 – EXECUTION

3.1 Inspection

- A. Verify site conditions under provisions of Section [01039] [___].
- B. Verify requirements for concrete cover over reinforcement. (1-1/2 inch minimum)
- C. Verify that anchors, seats, plates, reinforcement, and other items to be cast into concrete are accurately placed, positioned securely, and will not cause hardship in placing concrete.

3.2 Placing Concrete

- A. Place concrete in accordance with manufacturer's instructions.
- B. Notify Architect/Engineer minimum 24 hours prior to commencement of operations.
- C. Ensure reinforcement, inserts, embedded parts, formed joint fillers [, joint devices] and [___] are not disturbed during concrete placement.
- D. Separate slabs on grade from vertical surfaces with [___] inch ([___] mm) thick joint filler.

- E. Install joint devices in accordance with manufacturer's instructions.
- F. Install joint device anchors. Maintain correct position at allow joint cover flush with floor finish.
- G. Maintain records of concrete placement. Record date, location, quantity, air temperature, and test samples taken.
- H. Place concrete continuously between predetermined expansion, control, and construction joints.
- I. [Do not interrupt successive placement; do not permit cold joints to occur.]
- J. Place floor slabs in [checkerboard] [_____] pattern indicated.
- K. Screed [floors] [and] [slabs on grade] level, maintaining surface flatness of maximum [1/4] [____] inch in 10 ft. ([3] [__] mm / 3 m).

3.3 Concrete Finishing

- A. [Finish concrete floor surfaces to requirements of Section _____ .]
- B. [Wood float surfaces which will receive [quarry tile] [ceramic tile] [__] will full bed setting system.]
- C. Steel trowel surfaces which are scheduled to be exposed.
- D. In areas with floor drains, maintain floor elevation at walls; pitch surfaces uniformly to drains [at [1/8] [1/4] [__] inch per foot ([10] [20] [__] mm per m) nominal] [as indicated on Drawings].

3.4 Curing and Protection

- A. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.
- B. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of lime and hardening of concrete.
- C. Cure concrete floor surfaces according to manufacturer's instructions.
- D. Spraying: Spray water over slab areas and maintain wet for [7] [__] days.

3.5 Schedule

END OF SECTION