# ARCHITECTURAL SPECIFICATIONS

# rev 11/20/2010

# DECO-POUR TERRAZZO & DECORATIVE OVERLAYMENT FOR NEW CONCRETE SECTION 09400 - SPECIAL CONCRETE FLOOR FINISHES

This specification is provided by Deco Pour as a service, it is intended to be used as a guideline for preparing the appropriate project specific specification sections. Delete headings not used and re-number remaining used headings to be numerically correct.

# PART 1 GENERAL

#### 1.01 SUMMARY

- A. This section includes the following.
  - 1. Specification of the Deco-Pour Densifiable and Polishable Terrazzo and Decorative Concrete Overlayment.
- B. Related Sections:

1.

Section [03 30 00 Cast-in-Place Concrete ]
(\*See PART 3 EXECUTION for SURFACE CONDITIONS 3.01 B for FLOOR FLATNESS)

# 1.02 REFERENCES

- A. American Society for Testing and Materials:
  - 1. ASTM C579, Compressive Strength
  - 2. ASTM C779/procedure A, Standard Test Method for Abrasion Resistance
  - 3. ASTM C307, Tensile Strength
  - 4. ASTM D3931, Bond Strength
  - 5. ASTM C348, Flexural Strength
  - 6. ASTM C531, Shrinkage
  - 7. ASTM G23, Waterproof Test
  - 8. ASTM C-67 Permeability Test
- B. American Concrete Institute ACI 302, 1R-89, Guide of Concrete Floor and Slab Construction
- C. National Floor Safety Institute NFSI 101-A, non-slip properties

# 1.03 SUBMITTALS

- A. Comply with pertinent provisions of Section 01600-Product Requirements.
  - 1. Provide submittal information within 35 calendar days after the contractor has received the owner's notice to proceed.
- B. Product data:
  - 1. Submit special concrete finishes specifications and test data.
  - 2. Submit special concrete finishes Technical Data information describing product to be provided, giving manufacturer's name for the material proposed to be specified under this section.

#### 1.03 SUBMITTALS (continued)

- 3. Submit Deco-Pour recommended installation procedures; which when approved by the Architect, will become the basis for accepting or rejecting actual installation procedures used on the work.
- Submit Deco Pour finishes technical data sheet giving descriptive data, 4. curing time, and application requirements.
- 5. Submit special concrete finishes manufacturer's Material Safety Data Sheet (MSDS) and other safety requirements.
- Follow all special concrete finishes published manufacturer's installation 6. instructions.

#### C. Test Reports:

Provide certified test reports, prepared by an independent testing 1. laboratory, confirming compliance with specified performance criteria.

#### 1.04 **QUALITY ASSURANCE**

#### A. **Installer Qualifications:**

- Use an installer certified by the special concrete finish manufacturer; with an adequate number of skilled workmen who are thoroughly trained and experienced in the necessary craft.
- 2. Installer shall be familiar with the specified requirements, along with the methods required for proper performance of work in this section.
- 3. Installer MUST have a minimum of 3 years experience performing projects of similar scope and size, and have received field training by the manufacturer.

#### В. Manufacturer's Certification:

Current contractor's certificate signed by manufacturer declaring contractor as an approved installer of Deco Pour system, currently in good standing.

#### C. Mock-ups:

- Apply mock-ups of each type finish, to demonstrate typical joints, surface finish, color variation (if any), and standard of workmanship.
  - a. Build mock-ups in the location indicated or if not indicated, as directed by the Architect or Owner Representative.
  - Notify Architect or Owner Representative seven days in advance b. of dates and times when mock-ups will be constructed.
  - Obtain from the Architect or Owner Representative approval of c. mock-ups before starting construction.
  - If the Architect or Owner Representative determines that mock-ups d. do not meet requirements, demolish and remove them from the site and cast others until mock-ups are approved.
  - Maintain mock-ups during construction in an undisturbed e. condition as a standard for judging the completed work.
  - f. Approved mock-ups may become part of the completed work if undisturbed at time of substantial completion.

#### D. Protection

- 1. No satisfactory chemical or cleaning procedure is available to remove petroleum stains from the concrete surface. Prevention is therefore essential so as to not interfere with bond between Deco Pour and substrate.
  - a. All hydraulic powered equipment must be diapered to avoid staining of the concrete.
  - b. No trade will park vehicles on the inside slab. If necessary to complete their scope of work, drop cloths will be placed under vehicles at all times.
  - c. No pipe cutting machine will be used on the concrete floor slab.
  - d. Steel will not be placed on slab to avoid rust staining.
  - e. Acids and acidic detergents will not come into contact with slab.
  - f. All trades informed that the slab must be protected at all times.
  - g. All repairs and additional slab profiling which are necessary due to the actions, or inactions of the general contractor or their subcontractors, will be performed and charged for at cost of time and materials.

#### E. Pre-Installation Conference:

1. Conduct conference at project site to comply with requirements in Division 1 Section "Project Management and Coordination."

# 1.05 DELIVERY, STORAGE AND HANDLING

- A. Deliver material in original containers, with seal's unbroken, bearing manufacturer labels indicating brand name and direction for storage.
- B. Dispense special concrete finish material from factory numbered and sealed containers. Maintain record of container numbers.

# 1.06 PROJECT CONDITIONS

#### A. Environmental limitations:

- 1. Comply with manufacturers written instructions for substrate temperature and moisture content, ambient temperature and humidity, ventilation, and other conditions affecting topping performance.
  - a. Substrate concrete slab must be cured a minimum of 28 days or as directed by the manufacturer before application of Deco Pour can begin.
  - b. Application of Deco Pour shall take place 15 days prior to installation of equipment and substantial completion, thus providing a complete, uninhibited concrete slab for application.
- B. Close areas to traffic during floor application and after application, for time period recommended in writing by manufacturer.

#### 2.01 MATERIAL AND MANUFACTURERS

A. Ensure that manufacturer has minimum 5 years experience in manufacturing components meeting or exceeding project requirements.

# 2.02 A. Deco Pour Decorative Concrete

- 1. Manufactured by Deco Pour, 13614 SR9 SE, Snohomish, Washington 98296, 1.360.668.2218
  - a. Performance Criteria
    - i. Compressive Strength, PSI (ASTM C-579) (1 day 2950 psi) (7 days 4500 psi) (28 days 6200 psi)
    - ii. Abrasion Resistance: (ASTM C779 Procedure A) (30 minutes .032) (60 minutes .065)
    - iii. Tensile Strength, PSI (ASTM C307) (28 days 750)
    - iv. Bond Strength, PSI (ASTM D3931) (28 days 600)
    - v. Flexural Strength, PSI (ASTM C348) (28 days 1500 psi)
    - vi. Shrinkage, % (ASTM C531) (28 days -.07%)
    - vii. Waterproof Test (ASTM G23) (no visible change)
    - viii. Permeability Test 7 foot on a 0.491 sq. inch area (Water absorption %: 0.22 cc per hr.)

#### 2.02 RELATED MATERIALS

- A. Water
  - 1. Potable
  - 2. Available within 100 feet of area where work is being performed
- B. Electricity
  - 1. Adequate 3 Phase electrical source required within 100 feet of area where work is being performed or installer may bill for the cost of wiring or generator
- C. Lighting
  - 1. Adequate lighting is required that will allow the installer to perform their work safely.

# 2.03 PRODUCT SUBSTITUTIONS

A. Substitutions: **no substitutions are allowed**.

# **PART 3-EXECUTION**

### 3.01 SURFACE CONDITIONS:

A. Examine substrate, with installer present, for conditions affecting performance of finish. Correct conditions detrimental to timely and proper work. Do not proceed until unsatisfactory conditions are corrected.

# 3.01 SURFACE CONDITIONS (continued)

- B. Verify that base slab meets finish and surface profile requirements in Division 3, Section "Cast-In-Place Concrete" and Project Conditions above. For new construction, concrete surface should receive a Medium Broom Finish profile, and provide a minimum overall floor flatness of FF50 and Local floor flatness of FF35.
- C. Prior to application, verify that floor surfaces are free of construction latents.

# 3.02 APPLICATION

- A. Start any of the floor finish applications in presence of manufacturer's technical representative.
- B. Prior to installation of overlay, complete the following procedures
  - 1. Confirm proper floor profile, performing any additional surface preparation required to meet floor specification.
  - 2. Thoroughly clean floor prior to applying primer.
  - 3. Apply primer/bonding agent to floor per manufacturer guidelines and allow to thoroughly dry.
  - 4. Layout specified divider strips per manufacturer recommendations, and to meet architect's layout. Confirm acceptance of layout prior to proceeding.
  - 5. Confirm with architect that Deco Pour material matches control sample. Retain approved sample throughout project.
- C. Proceed with installation of Dec Pour product per manufacturer and architect specifications, including finishing polishing to pre-determined diamond level.

# 3.03 WORKMANSHIP AND CLEANING:

- A. The premises shall be kept clean and free of debris at all times. Any damage created by other trades during installation, or following completion acceptance by general contractor will be repaired, if possible, at time and materials.
- B. Remove spatter from adjoining surfaces, as necessary.
- C. Remove debris from jobsite

### 3.04 PROTECTION

A. Protect finished work until fully cured in accordance with manufacturer's recommendations. Protection of installation following completion is the responsibility of the general contractor.

END OF SPECIFICATION SECTION 09400