



*SPECIFICATION*  
Section 09770

**DUROPLAST 150 F.R. (FIBER REINFORCED)  
EPOXY WALL COATING**

Note to Specifiers

The purpose of this outline specification document is to assist the specifier to compile a specification for the proper use of Duroplast 150 F.R. Wall Coating System. This document has been prepared to be part of a complete project specification and is not intended as a project document by itself.

**PART 1 - GENERAL**

- 1.01 RELATED DOCUMENTS: Drawings and General Provisions of Contract, including General and Supplementary Conditions and Division 1 - General Requirements, apply to work of this section.
- 1.02 WORK INCLUDED: Application of reinforced epoxy wall coating, complete, and including surface preparation, and finish coats.
- 1.03 QUALITY ASSURANCE:
- A: **Applicator of coating system shall have a minimum of three years recent experience in applying similar coatings and shall be an "Authorized Applicator" recognized in writing by the manufacturer of the coating materials.**
  - B: Prior to commencement of any work, a minimum 2 m<sup>2</sup> (20 ft<sup>2</sup>) mock-up will be installed on site for each system. This will be viewed by all parties, and only when accepted will work of same system be allowed to proceed. The mock-up will serve as a benchmark for the installation of each system for the entire project.
  - C: During job mock-up and initial period of installation, manufacturer of coating system will provide a trained employee to insure proper use and installation of product. Periodic site visits will also be made during installation to verify continued proper installation.
- 1.04 SUBMITTALS: Comply with Section 01300.
- A: Samples: Submit two samples representative of coating system applied to suitable rigid substrate.
  - B: Manufacturer's Literature: Submit two copies of manufacturer's literature, specifications and application instructions for all products provided.

- 1.04 C: Attestation: Submit a minimum of three projects of similar nature which have been installed during the last five years, including name, locations and installation date.
- D: Applicator Certificate: Submit "Authorized Applicator" certificate issued to system applicator by coating material manufacturer.
- 1.05 DELIVERY AND STORAGE:
- A: Deliver materials to job site in sealed, undamaged containers clearly labelled with name and manufacturing date or batch number.
- B: Store materials according to manufacturer's directions to prevent deterioration due to moisture, heat, cold, direct sunlight or any other causes.
- 1.06 JOB CONDITIONS:
- A: Provide temporary barriers and supervision necessary to control traffic during coating operations.
- B: Ensure that surfaces to receive coating products are above 13°C (55°F) and below 29°C (85°F) for a minimum of 48 hours prior to installation.
- C: Commencement of installation implies acceptance of the surface as suitable to receive the wall coating. Contractor must be notified in writing of any deficiency of wall surface or if the surface is unacceptable.
- D: Apply coating materials in strict accordance to the manufacturer of coating materials printed application procedures.
- E: Establish appropriate health, safety and environmental protection practices, in consultation with appropriate regulatory authorities, if necessary, to achieve compliance with any existing applicable regulatory requirements prior to use of products.

## **PART 2 – PRODUCTS**

- 2.01 GENERAL: All components and products of the coating system shall be manufactured and supplied by a single manufacturer.
- 2.02 MANUFACTURER: DUOCHEM INC., 1250 Graham Bell, Boucherville, Quebec J4B 6H5, Telephone 450-655-6421 or 1 888 577-6421. Branch Offices: Dartmouth, N.S., 902-468-7878 or 1 877 829-9769; Toronto, Ont., 416-630-2736 or 1 800 268-7936; Western Ontario, 519-245-8151; Vancouver, B.C., 604-521-0572, Western Canada 1 877 455-9595.
- 2.03 EPOXY WALL COATING SYSTEM: Duroplast 150, two component, waterbased epoxy coating, consisting of Duochem LR, reinforcing fabric and topcoats. Available in standard colors.
- A: Laminating compound: Duochem LR
- B: Fibreglas reinforcement: Scandatex 6164 by KSI Multitex
- C: Finish Coats: Duroplast 150

**Note to Specifiers**

**Concrete block surfaces require a leveling coat of Duroplast 401 cementitious surfacer prior to application of Duroplast 150 F.R.**

**PART 3 - EXECUTION**

**3.01 INSPECTION:**

Examine surfaces and conditions under which coating is to be applied. Moisture content of surfaces and building air temperatures must be within limits recommended by the coating manufacturer. Do not start work until unsatisfactory conditions have been corrected. Application of materials indicates acceptance of surfaces.

**3.02 SURFACE PREPARATION:**

A: Clean surfaces free of laitance, dirt, dust, grease, oil and other foreign material.

B: For pour-in-place concrete, abrasive brush blast surface to remove laitance.

**3.03 MATERIAL PREPARATION:** Carefully prepare and mix materials used in compliance with manufacturer's directions. Proceed with application immediately after mixing.

**3.04 APPLICATION:**

Apply each component of wall coating system in compliance with manufacturer's directions to produce a pinhole free surface. Total dry film thickness of complete system to be 750 microns (30 mils) uninterrupted except at expansion joints.

A: Fill all interior corners with Duochem Duropli Vertical caulking compound and tool to one inch radius. Allow to cure minimum 12 hours prior to proceeding with subsequent coats.

B: Apply a coat of Duochem LR 100 at the approximate rate of 4 m<sup>2</sup>/l (165 ft<sup>2</sup>/US gallon). Before it hardens, press a woven glass fiber cloth (Scandatex 6164 by KSI Multitex) into coating and scrape with a rubber squeegee or putty knife to remove wrinkles and excess Duochem LR. Overlap joints in cloth and cut with a sharp instrument around openings at floor and at ceiling. Apply a second coat of Duochem LR at a rate of approximately 4 m<sup>2</sup>/l (165 ft<sup>2</sup>/US gallon) to fill surface. When dry, sand and apply two coats of Duroplast 150 at a total dry film thickness of 75 microns (3 mils) per coat.

**3.05 CLEANING AND PROTECTION:**

A: Protect work, including work of other trades, against damages and spillages.

B: Clean uncured coating-spattered surfaces with Duochem 201 Solvent. Cured coating requires scraping to remove.

C: Remove discarded materials, rubbish, cans and rags from site.

END OF SECTION

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## *SPECIFICATION*

Section 09770

# **DUROPLAST 150 WATER BASED EPOXY WALL COATING**

### Note to Specifiers

The purpose of this outline specification document is to assist the specifier to compile a specification for the proper use of Duroplast 150 Wall Coating System. This document has been prepared to be part of a complete project specification and is not intended to be used as a project document by itself.

### **PART 1 - GENERAL**

- 1.01 RELATED DOCUMENTS: Drawings and General Provisions of Contract, including General and Supplementary Conditions and Division 1 - General Requirements, apply to work of this section.
- 1.02 WORK INCLUDED: Application of epoxy wall coating complete including surface preparation, primer and finish coats.
- 1.03 QUALITY ASSURANCE:
- A: **Applicator of coating system shall have experience in applying similar coatings and shall be an "Authorized Applicator" recognized in writing by the manufacturer of the coating materials.**
  - B: Prior to commencement of any work, a minimum 2 m<sup>2</sup> (20 ft<sup>2</sup>) mock-up will be installed on site for each system. This will be viewed by all parties, and only when accepted will work of same system be allowed to proceed. The mock-up will serve as a benchmark for the installation of each system for the entire project.
  - C: During job mock-up and initial period of installation, manufacturer of coating system will provide a trained employee to insure proper use and installation of product. Periodic site visits will also be made during installation to verify continued proper installation.
- 1.04 SUBMITTALS: Comply with Section 01300.
- A: Samples: Submit two samples representative of coating system applied to suitable rigid substrate.
  - B: Manufacturer's Literature: Submit two copies of manufacturer's literature, specifications and application instructions for all products provided.

- 1.04 C: Applicator Certificate: Submit "Authorized Applicator" certificate issued to system applicator by coating material manufacturer.
- 1.05 DELIVERY AND STORAGE:
- A: Deliver materials to job site in sealed, undamaged containers clearly labelled with name and manufacturing date or batch number.
- B: Store materials according to manufacturer's directions to prevent deterioration due to moisture, heat, cold, direct sunlight or any other causes.
- 1.06 JOB CONDITIONS:
- A: Provide temporary barriers and supervision necessary to control traffic during coating operations.
- B: Ensure that surfaces to receive coating products are above 13°C (55°F) and below 29°C (85°F) for a minimum of 48 hours prior to installation.
- C: Commencement of installation implies acceptance of the surface as suitable to receive the wall coating. Contractor must be notified in writing of any deficiency of wall surface or if the surface is unacceptable.
- D: Apply coating materials in strict accordance to the manufacturer of coating materials printed application procedures.
- E: Establish appropriate health, safety and environmental protection practices, in consultation with appropriate regulatory authorities, if necessary, to achieve compliance with any existing applicable regulatory requirements prior to use of products.

## **PART 2 - PRODUCTS**

- 2.01 General: All components and products of the coating system shall be manufactured and supplied by a single manufacturer.
- 2.02 MANUFACTURER: DUOCHEM INC., 1250 Graham Bell, Boucherville, Quebec J4B 6H5, Telephone 450-655-6421 or 1 888 577-6421. Branch Offices: Dartmouth, N.S., 902-468-7878 or 1 877 829-9769; Toronto, Ont., 416-630-2736 or 1 800 268-7936; Western Ontario, 519-245-8151; Vancouver, B.C., 604-521-0572, Western Canada 1 877 455-9595.
- 2.03 EPOXY WALL COATING SYSTEM: Duroplast 150, two component, water based epoxy coating, consisting of primer and topcoat. Available in standard colors.
- A: Primer: Duochem 265 or Duochem VA or Duochem EE
- B: Finish Coat: Duroplast 150

### **Note to Specifiers**

**Different primers are required for different surfaces. Select the primer as indicated below for your application.**

**Concrete Block: Duochem VA Blockfiller**

**Poured in place or precast concrete: Duochem 265**

**Concrete surfaces in damp environments: Duochem EE Blockfiller**

**Gypsum Wall Board: Duochem 265**

### **PART 3 - EXECUTION**

#### **3.01 INSPECTION:**

Examine surfaces and conditions under which coating is to be applied. Moisture content of surfaces and building air temperatures must be within limits recommended by the coating manufacturer. Do not start work until unsatisfactory conditions have been corrected. Application of materials indicates acceptance of surfaces.

- A: Moisture content of the concrete shall be checked using a Delmhorst moisture meter. Moisture content shall be within the limits set by the manufacturer prior to commencing work.
- B: Surfaces shall be free of membrane curing compounds, laitance, dust, dirt, grease, oil and other contaminants that may affect proper adhesion of the coating.
- C: Do not apply coating system if ambient temperature is below 10°C (50°F) or above 32°C (90°F) or if relative humidity is above 80%.

#### **3.02 SURFACE PREPARATION:**

- A: Clean surfaces free of laitance, dirt, dust, grease, oil and other foreign material.
- B: For pour-in-place concrete, abrasive brush blast surface to remove laitance.

**3.03 MATERIAL PREPARATION:** Carefully prepare and mix materials used in compliance with manufacturer's directions. Proceed with application immediately after mixing.

#### **3.04 APPLICATION:**

Apply each component of wall coating system in compliance with manufacturer's directions to produce a pinhole free surface. Total dry film thickness of epoxy finish coat to be 200 microns (8 mils) uninterrupted except at expansion joints.

- A: Primer: Apply appropriate primer by spray, brush or roller at spreading rate recommended by manufacturer to achieve a pinhole free surface in two coats.
- B: Finish Coat: Apply finish coat in two coats by spray, brush or roller at spreading rate recommended by manufacturer to achieve a total dry film thickness as specified.

#### **3.05 CLEANING AND PROTECTION:**

- A: Protect work completed against damages and spillages.
- B: Clean uncured coating-spattered surfaces with warm water. Cured coating requires scraping to remove.
- C: Remove discarded materials, rubbish, cans and rags from site.

END OF SECTION  
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