

ART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

- .1 Conform to requirements of General Conditions and Division 1.

1.2 SCOPE OF WORK

- .1 Provide all labour, materials and necessary equipment to supply and install the **Durex® “Stucco Lite” Stucco System** where shown on the Architectural drawings and as specified.

1.3 RELATED WORK SPECIFIED ELSEWHERE

- | | | |
|----|-------------------|---------------|
| .1 | Concrete walls: | Section 03300 |
| .2 | Masonry walls: | Section 04200 |
| .3 | Gypsum wallboard: | Section 09250 |

1.4 REFERENCES

- .1 All materials used shall conform to the requirements of applicable CSA and CGSB standards and the governing building codes and local by-laws.

1.5 FIELD SAMPLE

- .1 (Prior to application of mock-up), submit duplicate 300 mm x 300 mm (12" x 12") samples of (each) colour and texture of the specified coating system in accordance with requirements specified in Division 1.

NOTE: Include (Prior to application of mock-up) only if mock-up is required. Correlate with Article 1.10. Include (each) if more than one colour and/or texture is required for project.

1.6 TEST REPORTS

- .1 Submit products data including certified copies of test reports verifying **Durex® “Stucco Lite” Stucco System** applied to substrate as constructed on project will meet or exceed requirements of Specifications.

1.7 MAINTENANCE DATA

- .1 Provide maintenance data for special coating system for incorporation into Maintenance Manual specified in Division 1.

1.8 QUALIFICATIONS OF APPLICATOR

- .1 Work of this Trade shall be executed by qualified applicator approved by **Durabond Products Limited**. Applicator shall have been trained in the most recent application procedures and shall have minimum 5 years proven satisfactory experience in this type of work, having proper equipment and skilled personnel to expediently complete work of this Trade in an efficient and very best workmanlike manner.

1.9 MANUFACTURER'S SUPERVISION AND INSPECTION

- .1 Arrange for **Durabond Products Limited** to have a qualified technical representative visit site prior to commencement of work to discuss with General Contractor, Applicator and Architect, the application procedures to be used and to analyse conditions of surfaces to be coated, in order that alternative recommendations may be made to Architect should adverse conditions exist.
- .2 Also arrange for the qualified technical representative to visit site at regular intervals during application and upon completion of work to ensure adherence to specifications and to check quality of completed work.
- .3 The above supervision shall be at no extra cost to owner.

1.10 JOB MOCK-UP

- .1 When directed, apply 3 m x 3 m (10' x 10') of (each colour and/or texture of) coating system where applicable in mock-up area designated by Architect.
NOTE: *Revise size of mock-up to suit Architect's requirements. Also, more than one mock-up may be required if more than one coating colour and/or texture is required for project.*
- .2 Apply samples of finish required in presence of Architect, General Contractor and **Durabond's** representative. Apply mock-up using correct material, number of coats, colour, texture and degree of gloss required.
- .3 Maintain mock-up until completion of work. Approved mock-up shall serve as a standard for similar work throughout project. Refinish work, which does not match approved mock-up.

1.11 DELIVERY

- .1 Deliver all required materials to the job site in original unopened containers with all identifying labels and markers clearly visible and intact. Upon arrival inspect materials for damages and advise **Durabond Products Limited** in writing of any unacceptable materials.

1.12 SPECIAL STORAGE AND PROTECTION

- .1 Store materials in a dry, vented, waterproof location, stacked off the ground, out of direct sunlight and other detrimental conditions. Store liquid materials at ambient temperatures above 5°C and below 35°C. Protect all materials from freezing.
- .2 Keep thinner-soaked rags and other similar combustible materials in closed metal containers containing water, to prevent spontaneous combustion and remove them from job site at end of each work day.
- .3 If coatings have been applied, provide protective coverings to protect freshly applied coatings from damage due to inclement weather until coatings have fully set and cured.
- .4 Ensure that all cappings and flashings have been immediately installed by others after completion of the **Durex, "Stucco Lite" Stucco System**, unless temporary protection has been provided by others. If cappings and flashings or temporary protection have not been provided advise Architect and General Contractor in writing.

1.13 ENVIRONMENTAL CONDITIONS

- .1 Do not coat exterior work at ambient air temperatures below 5°C, nor above 35°C. Avoid coating surfaces directly exposed to hot sun. Do not coat interior work at temperatures below 5°C, nor on surfaces where condensation has or will form due to presence of high humidity and lack of proper ventilation.
- .2 When necessary, provide temporary enclosures for exterior work and ensure that temporary heat is being provided in the area of work to maintain the required ambient air temperature prior to, during application and for minimum 24 hours after application of coating system.
NOTE: *As the above work can be costly, carefully co-ordinate to determine whether or not the General Contractor is to provide temporary enclosure and heat.*
- .3 Do not apply materials to wet, frozen or frosted surfaces.
- .4 Do not proceed with application of materials immediately prior to, during or immediately after inclement conditions, nor if wet weather is anticipated within 24 hours after application.
- .5 Do not apply coating finish in areas where dust is being generated.
- .6 Ensure that adequate controlled ventilation, heat and light is provided by General Contractor during application and drying period of interior work.
- .7 Proceed with work only when surfaces and conditions are satisfactory for production of a first class application.
- .8 Protect applied coating from rapid evaporation during dry and hot weather.
Consult **Durabond Products Limited** for recommendations should adverse conditions exist.

PART 2 - PRODUCTS

2.1 MATERIALS

- .1 All components of **Durex® "Stucco Lite" Stucco System** shall be manufactured/supplied by **Durabond Products Limited**, 55 Underwriters Rd. Scarborough, Ontario, Canada, M1R 3B4 (416) 759-474. No substitutions or addition of other materials shall be permitted.
- .2 **Standard Reinforcing Mesh:** Standard reinforcing mesh shall be **Durex® 040 Fibreglass mesh** in 1 m x 50 m rolls, or **Durex® Adhesive back mesh** in 1 m x 50 m rolls.
- .3 **Trim Accessories:** All trim, expansion and control joints, casing beads and corner beads shall be vinyl with a minimum ground of 6 mm (1/4").
- .4 **Over Sheathing:**
Scratch Coat and Base Coat: Both scratch coat and base coat shall be **Durex® Flexcrete** and **Durex® Flexcrete 'B'** mixed at a ratio of:

Durex® Flexcrete	1 pail
Durex® Flexcrete 'B'	1 bag

OR

Over Concrete/Masonry:

Scratch Coat and Base Coat: Both scratch coat and base coat shall be **Durex® Uniplast Medium** mixed **Durex® Acrylic Resin Bond** mixed at a ratio of:

Durex® Uniplast Medium	1 bag
Durex® Acrylic Resin Bond	5 liters

OR

Durex® Dryplast Medium	1 bag
Potable water	4-5 liters

- .5 **Finish Primer Coat:** Primer coat shall be **Durex® Brush Coat** colour number _____.
NOTE: **Durex® Brush Coat** shall be the same colour as the **Durex® Architectural Coating** finish.
- .6 **Finish Coat:** Finish coat shall be **Durex® Architectural Coating:** _____;
Colour number: _____.
- NOTE:** Refer to the Product Data Sheets for selection of Finish Coat which would be desired for the project.
- .7 **Sealant:** Low modulus sealant as recommended and approved by **Durabond Products Limited**.
- .8 **Surface Sealer (Optional):** Surface sealer shall be **Durex® Wall Seal 15** manufactured by **Durabond Products Limited**.

2.2 MIXES

- .1 Perform all mixing under conditions as set forth in Article 1.13: Environmental Conditions.
- .2 Prepare and mix primer, scratch and base and finish coats in strict accordance with **Durabond's** printed instructions to obtain a homogenous consistency of mixture. Other than those specified by **Durabond**, do not add any other additives, rapid binders, antifreeze, accelerators, fillers or pigments to the mixtures without approval from **Durabond Products Limited**.
- .3 Mix both scratch and base coats in accordance with the following formula by weight:

Over Sheathing:

Durex® Flexcrete	1 pail
Durex® Flexcrete 'B'	1 bag

Pour the **Durex® Flexcrete** into an empty clean mixing container. While under slow mixing action add the **Durex® Flexcrete 'B'** in the required mixing proportions. Mix well until the mixture is free of lumps. Do not over-mix or use excessive mixing speed.

OR

Over Concrete/Masonry:

Durex® Uniplast Medium	1 pail
Durex® Acrylic Resin Bond	1 bag

Pour the **Durex® Acrylic Resin Bond** into an empty clean mixing container. While under slow mixing action add the **Durex® Uniplast Medium** in the required mixing proportions. Mix well until the mixture is free of lumps. Do not over-mix or use excessive mixing speed.

OR

Durex® Dryplast Medium

1 bag

Potable water

4-5 liters

Mix **Durex® Dryplast Medium** with potable water in the required proportions.

- .4 Let mixed material stand for a few minutes to begin initial stiffening. Mix only enough materials which can be used within 45 minutes. Re-temper and use. Discard all materials which have begun to stiffen for a second time.

PART 3 - EXECUTION

3.1 EXAMINATION

- .1 Examine surfaces to receive the **Durex® "Stucco Lite" Stucco System** for defects, which will adversely affect execution and quality of work.
- .2 Ensure substrate is dry, solid and sound, free of weak and powdery surfaces, free from ice and frost, oil, grease, releasing agents and other deleterious materials detrimental to a positive bond.
- .3 Ensure substrates have no irregularities greater than 6 mm in 2430 mm (1/4" in 8'-0") in plane and in plumbness.
- .4 Report in writing to Architect all adverse conditions which will be detrimental to work of this Trade.
- .5 Do not start work until unsatisfactory conditions have been corrected.
- .6 Commencement of work shall indicate acceptance of substrate conditions.

3.2 PREPARATION

- .1 Thoroughly clean and wash (existing) surfaces, (including existing coated surfaces) by wire brushing or other approved methods to remove all dirt, dust, grease, oil, laitance, loose coatings and other contaminants detrimental to permanent of (new) applied coating.
- .2 Where necessary, mask all surrounding surfaces to provide neat, clean, true juncture lines with no over-spray on surrounding surfaces.
- .3 Co-operate and co-ordinate with other trades and ensure that penetrations in the substrate have been provided by other trades before applying coating system.
- .4 Advise other trades that fixtures and fittings should not be installed on surfaces to be coated before work of this Trade has been completed.
- .5 Deteriorating, weak, powdering or flaking surfaces may require further preparation work prior to installation of the **Durex® "Stucco Lite" Stucco System**. Check with **Durabond Products Limited** for questionable substrate conditions.

3.3 APPLICATION

- .1 Apply **Durex® "Stucco Lite" Stucco System** in strict accordance with approved mock-up and **Durabond's** printed instructions.

- .2 **Trim Accessories:**
 - .1 Install all trim accessories prior to installation of the reinforcing mesh, except for external corner reinforcing beads.
 - .2 Install all trim uniformly throughout the entire area to the specified ground.
 - .3 Install trim straight, level and plumb to a tolerance of not more than 3 mm in 3.0 m (1/8" in 10'-0").
 - .4 Discard all trim sections which are damaged in any way.
 - .5 Secure trim at not more than 300 mm (12") o.c.
 - .6 Install casing beads at all terminations, around all openings and at all control joints and leave a 12mm (1/2") space for caulking.
 - .7 Install expanded wing corner beads continuously at all external corners.

- .3 **Expansion and Control Joints:**
 - .1 Install expansion joints in alignment with building expansion joints.
 - .2 Install joints at all points of maximum stress (such as: corners of openings), in the direction as shown on drawings.
 - .3 Install control joints shall be placed at all points where dissimilar substrates meet.
 - .4 Install expansion joints at the lesser of: each floor horizontally at the level of the underside of ceiling, or spaced at not more than 3.0 m (10'-0") o.c. vertically.
 - .5 Install control joints vertically, spaced at not more than 6.0 m (20'-0") o.c..
 - .6 Lay out control joints so to divide the wall surface into panels of not more than 12 m². (130 ft²).
 - .7 Lay out expansion/control joints in a pattern that enhances the over all aesthetics of the structure to Architect's approval.

- .4 **Reinforcing Mesh:**
 - .1 **Durex® Reinforcing Fibreglass mesh** shall be installed in a horizontal pattern.
 - .2 Horizontal and vertical joints shall be lapped not less than 50 mm (2").
 - .3 **Durex® Reinforcing Fibreglass mesh** shall be installed simultaneous with mesh base coat and be fully embedded into the mesh base coat.
 - .4 Corners of openings where no expansion joint is detailed, shall be reinforced with an additional strip 225 mm x 300 mm (9" x 12") reinforcing mesh installed diagonally across top of corner.
 - .5 Mesh shall be installed tightly, ensuring it is straight and free of wrinkles, ripples or waves.

.5 **Scratch Coat:**

- .1 Apply scratch coat trim where accessories have been securely fastened in place.
- .2 Firmly apply scratch coat over the mesh and accessories. Scratch coat shall not be less than 4 mm (1/16") thick, uniformly and forcefully applied to fully fill all voids to ensure full bond with the substrate and to sufficiently cover and embed the reinforcing mesh and accessories.
- .3 Rake the surface of the newly applied scratch coat with a plaster rake to form fairly uniform indentations which will act as a key surface for the base coat.
- .4 Allow minimum 3 days for curing and drying.

.6 **Base Coat:**

- .1 During hot weather, if the scratch coat surface is exceptionally dry, lightly dampen the surface with a fog mist of clean potable water. Do not over-saturate with water as it will impair the bonding of the base coat.
- .2 Trowel apply the base coat applying sufficient pressure to ensure full bond with the scratch coat.
- .3 Use a straight edge tool to darby the surface and bring it to a straight, even and true surface.
- .4 Total thickness of both the scratch and base coats shall be not less than 7 mm (1/8").
- .5 When the base coat has taken initial set, use a wood or sponge float and work the surface with light circular motion to remove all high points and to fill low points.
- .6 Final surface shall be smooth straight and true to a tolerance of not more than 7 mm in 3 m (1/4" in 10'-0"). Surface shall be free of towel marks, irregularities and no mesh pattern.
NOTE: *The primer and finish coats require a straight smooth and even surface; thus careful attention at this stage of the application is most important to complete the final application of the finish. 75% of curing occurs in the first 7 days from initial application. In this period application of sufficient moisture is most important to avoid shrinkage and subsequent cracking.*
- .7 Allow minimum 3 days for curing and drying.

.7 **Primer for Finish Coat:**

- .1 Apply primer with high pile roller at the rate of 2.8 litres/m² or 600 ft²/pail.
For porous surfaces apply additional primer to ensure full coverage of substrate.
- .2 Evenly apply primer throughout. Substrate shall not be visible through the primer.
- .3 Avoid excessive build-up in any one area.
- .4 If required, re-coat when first coat is dry to the touch, but in any event not earlier than 2 hours after initial application.

.8 **Finish Coat:**

- .1 Apply finish texture coat within 3 days after application of primer coat. Longer periods may be scheduled between operations provided that the primed surface is kept clean and in good condition.

- .2 Apply final texture coat in strict conformance with manufacturer's printed instructions for the selected finish.
- .3 Final texture finish and colour shall match the approved site mock-up.

3.4 CAULKING

- .1 Caulk all expansion and control joints, termination joints and terminations, including below grade terminations, with sealant. Apply sealant in strict accordance with sealant manufacturer's printed instructions. Sealant should be applied to base coat only and sealant primer should be used prior to application of sealant.

3.5 CLEAN-UP

- .1 Clean all spotting and blemishes from surfaces which are not intended to receive coating and leave such surfaces in their original condition.
- .2 Entirely reinstate surfaces, which are not to be coated but which are soiled and attributable to the coating applicator at coating applicator's own expense.