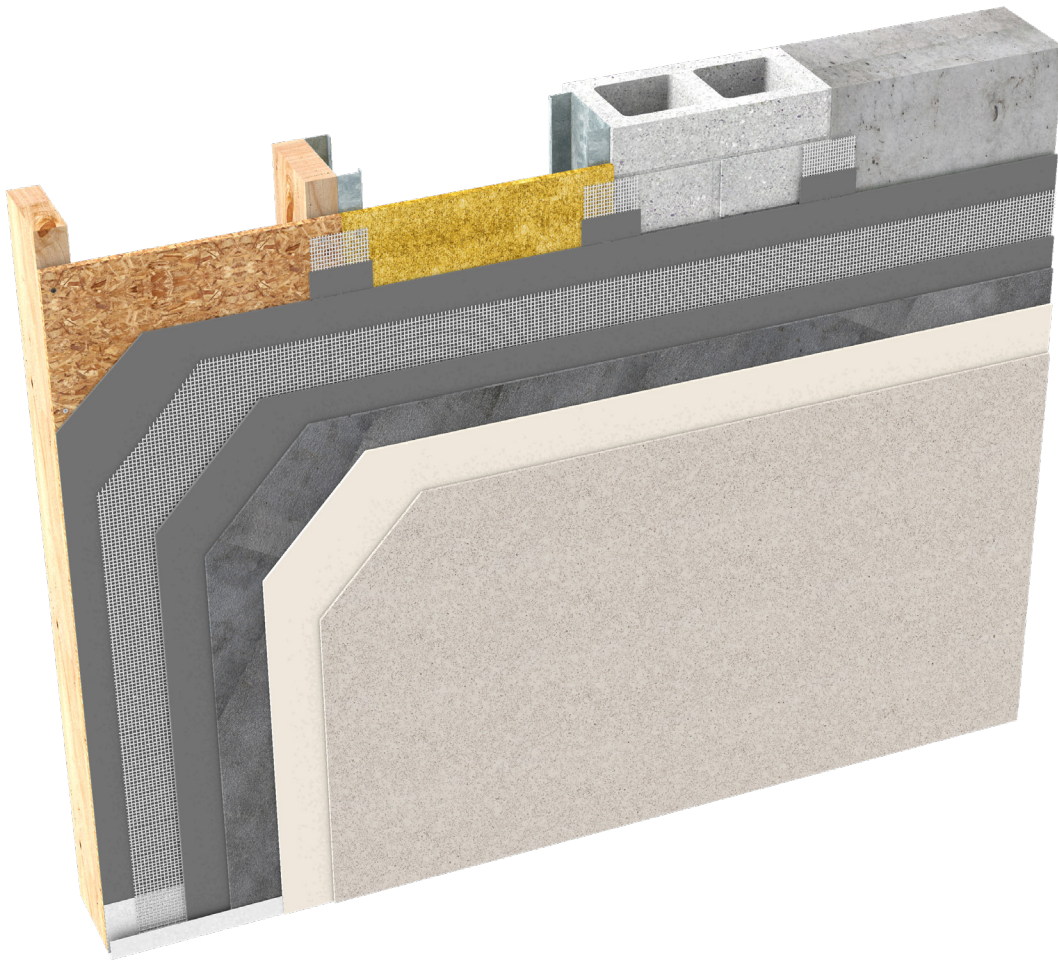


# Durex® Stucco Lite HM

*Fiberglass Reinforced Wall Cladding System  
For Pools & High Moisture Areas*



Waterproof



Moisture Barrier



Flexible



High Impact  
Resistance

Protect. Enhance. Outperform.

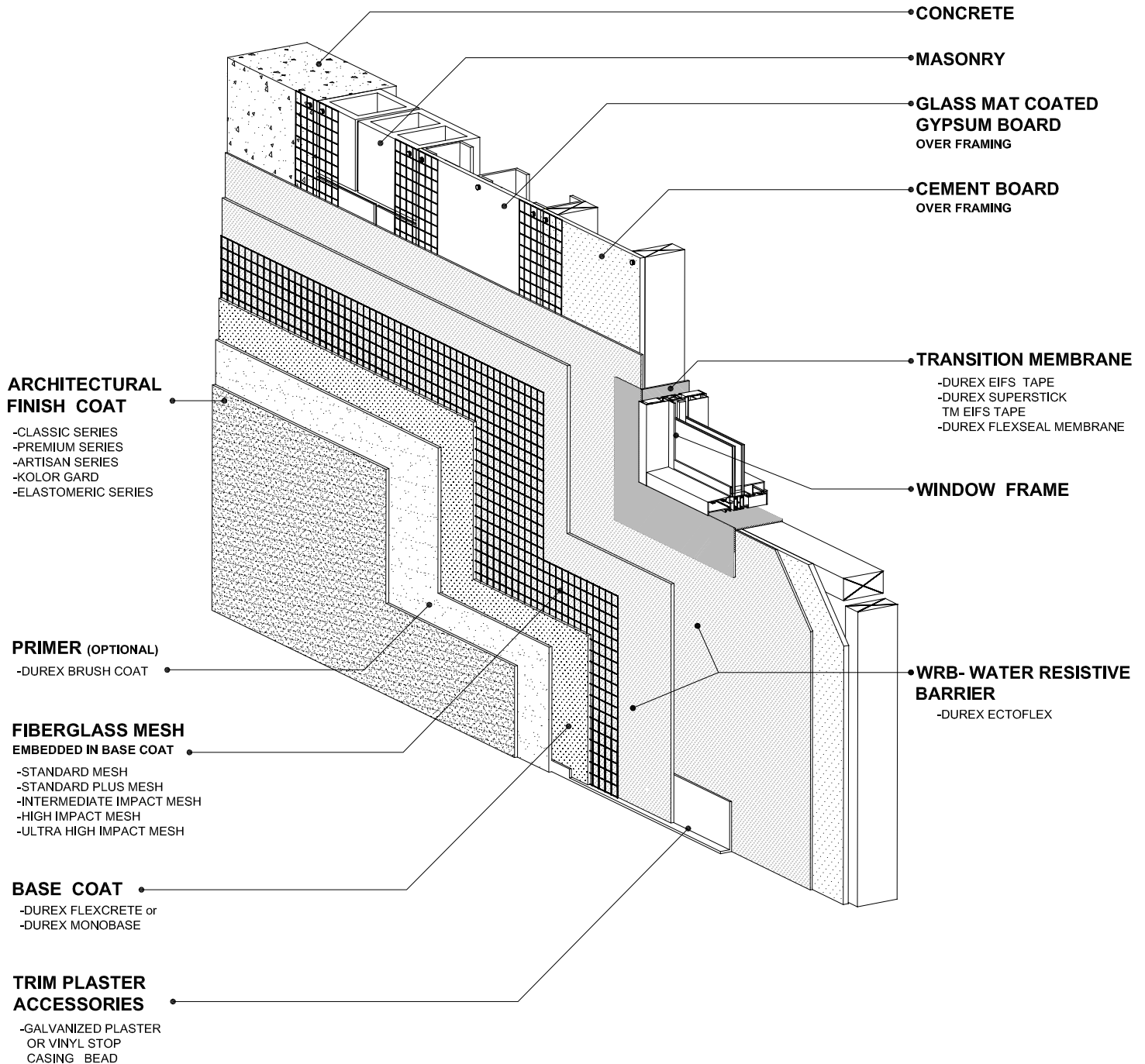
**DURabond**   
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www.durabond.com

**ISOMETRIC & SPECIFICATIONS**

# Durex®

## Stucco Lite HM

*High Moisture Areas, Indoor Pools Moisture Management System*



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Durabond details are offered to assist in the development of project specific details; principles and variables incorporated in all details are the sole responsibility of the project professional(s).

*System Isometric  
& Components*

## **PART 1: - GENERAL**

### **1.1 GENERAL REQUIREMENTS**

- .1 All conditions of the contract and Division 1, General Requirements apply to this section.
- .2 All work shall meet applicable codes and standards, the Occupation Health & Safety Act, manufacturer's recommendations and good building practice.
- .3 System Description: A polymer modified, glass fiber mesh reinforced stucco cladding system that is intended for direct application in steel-framed walls having cementitious or glass-mat-surfaced gypsum sheathing, in high moisture areas with relative humidity (RH) equal or greater than 50% @ 25°C.
- .4 The direct-applied, glass fiber reinforced stucco system is intended for use on buildings required to be of noncombustible or combustible construction, and where the applicable Building Code requires the use of fire-tested wall assemblies that include noncombustible or combustible claddings.

### **1.2 COORDINATION**

- .1 Ensure that the work of this section is coordinated with the work of related sections.

### **1.3 RELATED SECTIONS**

- |    |                  |                                |
|----|------------------|--------------------------------|
| .1 | Section 05 41 00 | Structural Metal Stud Framing  |
| .2 | Section 06 10 00 | Rough Carpentry                |
| .3 | Section 06.16.00 | Sheathing                      |
| .4 | Section 07.26.00 | Vapour Barrier                 |
| .5 | Section 07 62 00 | Sheet Metal Flashing and Trim  |
| .6 | Section 07 90 00 | Joint Protection (Sealants)    |
| .7 | Section 08 00 00 | Openings                       |
| .8 | Section 08 50 00 | Windows                        |
| .9 | Section 09 28 00 | Backing Board and Underlayment |

### **1.4 REFERENCES**

- .1 American Society for Testing Materials
  - .1 ASTM B117 Standard Practice for Operating Salt Spray (Fog) Apparatus.
  - .2 ASTM C1177/C1177M Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing.
  - .3 ASTM C1185 Standard Specification for Flat Fiber-Cement Sheets
  - .4 ASTM C1338 Standard Test Method for Determining the Fungi Resistance of Insulation Materials and Facings.
  - .5 ASTM C1382 Standard Test Method for Determining Tensile Adhesion Properties of Sealants When Used in Exterior Insulation and Finish Systems (EIFS) Joints.
  - .6 ASTM C1481 Standard Guide for Use of Joint Sealants with Exterior Insulation and Finish Systems (EIFS).
  - .7 ASTM D5035 Standard Test Method for Breaking Force and

[PROJECT NO.]  
[DATE]

[PROJECT NAME]  
[PROJECT LOCATION]

- |     |  |   |
|-----|--|---|
| .8  | ASTM E84   | Elongation of Textile Fabrics (Strip Method).<br>Standard Test Method for Surface Burning<br>Characteristics of Building Materials.   |
| .9  | ASTM E96/E96M  | Standard Test Methods for Water Vapor Transmission of<br>Materials.   |
| .10 | ASTM E330  | Standard Test Method for Structural Performance of<br>Exterior Windows, Doors, Skylights and Curtain Walls<br>by Uniform Static Air Pressure Difference.  |
| .11 | ASTM E1131   | Standard Test Method for Compositional Analysis by<br>Thermogravimetry.   |
| .12 | ASTM E1252   | Standard Practice for General Techniques for Obtaining<br>Infrared Spectra for Qualitative Analysis.  |
| .13 | ASTM E2098   | Standard Test Method for Determining Tensile Breaking<br>Strength of Glass Fiber Reinforcing mesh for Use in<br>Class PB Exterior Insulation and Finish Systems (EIFS),<br>after Exposure to a Sodium Hydroxide Solution. |
| .14 | ASTM G154  | Standard Practice for Operating Fluorescent Ultraviolet<br>(UV) Lamp Apparatus for Exposure of Nonmetallic<br>Materials.  |
| .15 | ASTM G155-05a  | Standard Practice for Operating Xenon Arc Light<br>Apparatus for Exposure of Non-Metallic Materials.  |
| .2  | Canadian Standards Organization (CSA)                |   |
| .1  | CSA S16  | Design of Steel Structures.   |
| .2  | CAN/CSA-S136   | North American Specification for the Design of Cold-<br>Formed Steel Structural Members   |
| .3  | International Organization for Standardization (ISO) |   |
| .1  | ISO 7892   | Vertical Building Elements – Impact Resistance Tests-<br>Impact Bodies and General Test Procedures  |
| .2  | ISO 7895   | Façades made of components - Tests for resistance to<br>positive and negative static pressure generated by<br>wind.   |
| .3  | ISO 15148  | Hygrothermal performance of building materials and<br>products - Determination of water absorption coefficient<br>by partial immersion.   |
| .4  | ULC (Underwriters Laboratories of Canada)            |   |
| .1  | CAN/ULC-S101   | Standard Methods of Fire Endurance Tests of Building<br>Construction and Materials.   |
| .2  | CAN/ULC-S102   | Standard Method of Test for Surface Burning<br>Characteristics of Building Materials and Assemblies.  |
| .3  | CAN/ULC-S114   | Standard Method of Test for Determination of Non-<br>Combustibility in Building Materials.  |

## 1.5 DESIGN CRITERIA

- .1 Structural Design
  - .1 Design professional shall design the back-up wall in full compliance with the requirements of the National Building Code (NBC) of Canada and/or applicable provincial or territorial building codes. Sufficient details on architectural plans and drawings shall demonstrate compliance to the NBC.

*SPEC NOTE: When used over stud wall framing, the structural wall framing members shall be at a maximum spacing of 406 mm (16") o/c.*

- .2 Supporting Substrate
  - .1 All substrates shall be flat and plumb within 2 mm/m (1/4" per 10'), as per ASTM C 1397.
  - .2 All substrates shall be free of surface contamination, including (but not limited to): dirt, form release agents, efflorescence, oil and chalkiness.
  - .3 All substrates shall be free of any loose materials and cracks greater than 1 mm (1/24") in width.
- .3 Sheathing Substrates
  - .1 Apply the system to one of the following recommended substrate sheathings or substrate system or approved equivalent:
    - .1 Cementitious backer Board as per ASTM C1325.
    - .2 Glass-mat gypsum sheathing conforming to ASTM C1177/C1177M.

*SPEC NOTE: Sheathing/substrate system type and condition shall be as approved by Durabond Products Ltd. Questionable substrates to be reviewed by Durabond Products Ltd. and/or the Designer.*

- .2 Sheathing shall be designed with framing to resist applicable wind loads, with a maximum design deflection of substrate not to exceed L/240.
- .3 Sheathing substrates shall be installed in accordance with the sheathing manufacturer's latest installation instructions and installed in general conformance with ASTM C1280. Sheathing joints shall be properly staggered. Vertical joints shall be offset by at least one framing member. Sheathing shall be:
  - .1 Minimum 12.7 mm (1/2") thick for glass-mat gypsum, cementitious and fibre cement boards.
  - .2 Continuously supported by framing.
  - .3 Having sheathing joints not exceeding 3.0 mm (1/8").
  - .4 Installed with corrosion resistance fasteners tight and flush to the sheathing surface (Not to be countersunk).
  - .5 Replaced where damaged or weathered.
- .4 Air/Vapour/Moisture Resistive Barrier
  - .1 The air/vapour/moisture control shall be designed using the specified, designated control membrane. Continuity of these membranes shall be maintained at all wall interfaces.
  - .2 The use, location and performance of the air barrier shall be determined by the design professional.
  - .3 The use and location of the vapour retarder within the wall assembly shall comply with the requirements of Part 5 of the National Building Code (NBC) of Canada and/or the applicable provincial or territorial building codes.
- .5 Water Resistive Barrier
  - .1 A ready-mix, 1 or 2 components, polymer-based water resistive barrier which can be roll, spray or trowel applied in a continuous layer over the substrate.
  - .2 All sheathing and/or water damage susceptible substrates shall be protected with the specified Durex® water resistive barrier and as shown on the drawings.

- .3 The designated water resistive barrier system shall include the specific sheathing joint transition membrane.
- .4 The water resistive barrier shall be applied in conformance with the lite stucco system manufacturer's instructions.
- .5 The continuity of water resistive barrier shall be maintained across windows, openings, joints and all other wall interfaces.
  
- .6 Air/Vapour/Moisture Transition Membrane
  - .1 The continuity of the air/vapour/moisture control elements shall be maintained across joints, windows, openings and all other wall interfaces using the specified transition membranes.
  - .2 Through wall penetrations and openings shall be sealed to the water resistive barrier with transition membranes.
  - .3 Transition membranes shall be installed at all movement joints, roof junctions and window and door interfaces.
  - .4 Transition membranes shall be installed in conformance with manufacturers' instructions.
  - .5 Transition membranes shall be as listed in Part 2, "Products" of this specification. No other generic transition membranes should be permitted.

*SPEC NOTE: Allowance for use of generic transition membranes could result in membranes that may not be compatible with the stucco system.*

- .7 Code-related Fire Protection
  - .1 The direct applied fiber reinforced stucco system is intended to be used in combustible or noncombustible constructions. When used in non-combustible construction, the scratch coat and the base coat shall be in conformance with CAN/ULC S114, Test for Determination of Non-Combustibility in Building Materials".
  - .2 Where required to meet the requirements of CAN/ULC S114, the compliant direct applied stucco system shall be listed with an accredited 3rd party certification organization for validating such performance.

*SPEC NOTE: Fire protection requirements are subject to provincial variations, refer to specific provincial fire protection code compliance requirements for specific allowances/limitations that may apply.*

*SPEC NOTE: Refer to manufacturer's fire protection code compliance report for specific limitations that may apply.*

- .8 Design Details at Terminations
  - .1 The direct applied stucco system shall not be used on wall surfaces subject to continuous or intermittent water immersion or hydrostatic pressure.
  - .2 The direct applied stucco system shall be terminated a minimum of 12.7 mm (1/2") from adjoining materials at interfaces for sealant applications.
  
- .9 Sealant System
  - .1 Joints in the direct applied stucco system shall be sealed using an elastomeric sealant with a closed-cell foam backer rod or bond breaker tape, as specified in Section 07 90 00 and as tested to ASTM C1382.
  - .2 Minimum joint width shall be four times greater than the anticipated range of

movement. Sealant shall be applied in a width to depth ration of (4:1), (3:1), (2:1) as recommended by the Sealant manufacturer.

.3 Sealant installation shall conform with the requirements of ASTM C1481.

*SPEC NOTE: Recommended joint width is 19 mm (3/4") for expansion joints, however, site and design conditions may require the nominal width to vary.*

.10 Impact Resistance

Design professional shall design the building façade to the desired Impact Resistance Levels that could be expected at various sections of the façade.

The required impact resistance level may vary for the various sections of the façade, based on the type, level and frequency of exposure to expected energy levels associated to impact loads. Sufficient details on architectural plans and drawings shall demonstrate compliance to the required Impact Resistance Level of the finish system. Table 1.5.9 below shall be utilized to establish and to specify the Impact Resistance Levels of the finish system.

**Table 1.5.9 – Impact Resistance in accordance with ASTM E 2486**

Impact Resistance Classification	Reinforcing Mesh <sup>(1)(3)(4)</sup>			Impact Resistance	
	Layer 1	Layer 2	Layer 3	Retention of Physical Properties (No Cracks / Damage)	Retention of Performance (No Breakage of Reinforcing Mesh)
Standard Impact Resistance <sup>(2)</sup>	Standard Mesh	n/a	n/a	3 N.m	10 N.m
Medium Impact Resistance	Intermediate Mesh	n/a	n/a	8 N.m	15 N.m
High Impact Resistance	Standard Mesh	Standard Mesh	n/a	13 N.m	20 N.m
Ultra High Impact Resistance	High Impact Mesh	Standard Mesh	n/a	20 N.m	30 N.m
Extreme Impact Resistance	High Impact Mesh	High Impact mesh	Standard Mesh	25 N.m	40 N.m
<p>(1) Each layer of reinforcing mesh shall be fully embedded in the base coat and allowed to individually cure.</p> <p>(2) "Standard" is the minimum mesh grade that could be used in conjunction with EPS-based EIFS.</p> <p>(3) Refer to section 2.7 of this specification for reinforcing mesh details.</p> <p>(4) Other combinations of reinforcing mesh layers may be utilized to achieve the desired Impact Resistance Level based on confirmed tested performance by accredited laboratory.</p>					

*SPEC NOTE: Ultra High Impact Resistance is recommended to be provided to a minimum height of 2.0 meters above finished floor and at all areas accessible to pedestrian traffic and/or exposed to abnormal impact loads. Refer to manufacturer's guidelines for the recommended Impact Resistance Levels relative to the building code occupancy classification.*

- .11 Expansion and Termination Joints
  - .1 Provide the specified backer rods for sealant joints at all expansion and termination joint locations.
  - .2 Expansion joints are required at the following locations:
    - .1 At movement joint locations within the substrate.
    - .2 At building movement joint locations.
    - .3 At junctions with different cladding materials and components.
    - .4 At changes in substrate materials.
    - .5 At all other locations specified or indicated on drawings
  - .3 Termination joints are required at the following locations:
    - .1 At windows, doors and through-wall penetrations interfaces.
- .12 Flashing
  - .1 The direct applied stucco system shall be used in conjunction with flashing conforming to Subsection 9.27.3 of Division B of the National Building Code (NBC) of Canada and/or the equivalent requirements of the related applicable provincial or territorial codes.
  - .2 Provide corrosion-resistant flashing at all roof-wall intersections, windows and door heads and sills, decks, balconies, chimneys, parapet walls, projecting features and other areas as necessary to direct water to the exterior and to prevent water entry behind the cladding.
  - .3 Flashing must be installed in accordance with section 07 62 00 and the applicable building codes.
  - .4 Flashing shall have a slope of not less than 6% towards the exterior, lap not less than 10 mm (3/8") vertically over the building element below, terminate in a drip offset not less than 5 mm (3/16") outward from the outer face of the building and terminate at each end with an end-dam.

## **1.6 SUBMITTALS**

- .1 Product Data
  - .1 Submit direct applied stucco system's specifications and individual component data sheets to show compliance to the intent of the design specifications, and installation instructions.
  - .2 Submit approvals and/or evaluations applicable to the system and/or components to be installed.
- .2 Shop Drawings
  - .1 Submit shop drawings in accordance with requirements specified in Division 1.
  - .2 Clearly indicate dimensions, tolerances and materials in large-scale details for terminations, drainage/venting, description of related and abutting components and elevations of units with locations of expansion joints, control joints, and reveals.



- .3 Samples
  - .1 Prior to application of mock-up, submit duplicate 150mm x 200mm (6" x 8") representative colour samples of each colour and finish coat texture.
  - .2 Maintain an approved sample at the project site.
- .4 Closeout Submittals
  - .1 Provide direct applied stucco system's maintenance, repair and cleaning procedures.
  - .2 Provide direct applied stucco system's material warranty as per section 1.10.
  - .3 Provide workmanship warranty by stucco applicator as per section 1.10
  - .4 Provide identification labels of colour batch numbers, water resistive barriers, base coat, finish coats and reinforcing mesh used.

### 1.7 QUALITY ASSURANCE

- .1 Qualifications
  - .1 System Manufacturer: All system components shall be manufactured or sold by the direct applied stucco system's manufacturer and purchased from the system's manufacturer and/or its authorized distributors.
  - .2 Contractor: Shall be knowledgeable in the proper installation of the system and shall be in possession of the system's current Certificate of Installer. Work of this specification shall be executed in conformance with good trade practices and manufacturer's installation manual.
- .2 Mock-Up
  - .1 The contractor shall, before installation works, provide the owner/consultant with a mock-up demonstrating the lite stucco system's components and application.
  - .2 The Mock-up shall be constructed to dimensions and in location specified by the Designer.
  - .3 The mock-up system's component shall include the water resistive barrier, reinforcing mesh, base coat and finish coats that would include each colour and texture to be used.
  - .4 The mock-up shall demonstrate methods of application as well as typical details at opening (windows, doors etc.) and roofing assemblies.
  - .5 The Mock-up shall serve for initial review purposes by the Consultant and when accepted shall represent the minimum standard for work and the basis for acceptance for the rest of the project.
  - .6 The mock-up shall be prepared with the same products, components, tools and techniques required for the actual project.
  - .7 The approved mock-up shall be available at all time at the jobsite and shall form the basis for acceptance for the remainder of the project.
  - .8 Accepted mock-up may remain as part of the work.

*SPEC NOTE: More than one mock-up may be required if more than one coating colour and/or texture is required for the project.*

### 1.8 DELIVERY, STORAGE, HANDLING & PROTECTION

- .1 All required materials and components shall be supplied by the manufacturer of the direct applied stucco system and shall be delivered to job site in original, unopened

packaging with all identifying labels and markers clearly visible and intact. Upon delivery, materials shall be inspected for any damages and the system's manufacturer shall be advised, in writing of any damaged and/or unacceptable materials. Any defective materials and/or components shall not be used.

- .2 Materials shall be stored in a dry, vented, weatherproof enclosures, stacked off the ground, out of direct sunlight and other detrimental conditions. Pail products and liquid materials shall be stored at ambient temperatures above 5°C and below 35°C. All materials shall be protected from freezing or overheating.
- .3 Protective coverings shall be provided to all freshly-applied coatings to protect them from damages due to rain, inclement weather and/or any other damages until the coatings have fully set and cured.
- .4 All capping and flashing shall be immediately and properly installed in co-ordination with the application of the lite stucco system, unless temporary protection has been provided. If capping and flashing or temporary protection have not been provided, the Architect and General Contractor shall be advised accordingly in writing.
- .5 All insulation boards shall be protected from direct sunlight.

## 1.9 PROJECT/SITE CONDITIONS

- .1 Prior to installation of the direct applied stucco system, the substrate shall be examined with respect to the following:
  - .1 The substrate shall be type-approved by system's manufacturer.
  - .2 The substrate surface shall be free of any deleterious materials such as oil, dust, direct form-release agents, paint, wax glazing, water, moisture, efflorescence, frost, etc.
  - .3 The substrate shall be examined for soundness, such as tightness of connections, crumbling, spalling, delamination, voids, loose joints and projections.
  - .4 The substrate shall be examined for compliance with Contract Documents.
- .2 Ambient Conditions
  - .1 Application shall take place when ambient and substrate temperatures are within the specified limits by manufacturer and when the substrate is free from any moisture arising from condensation, frost, and/or rainfall.
  - .2 Do not proceed with application of materials immediately prior to, during, or immediately after inclement weather conditions, nor if adverse weather is anticipated within 24 hours after application.
  - .3 Do not apply materials to wet, frozen or frosted surfaces.
  - .4 Application of water resistive barrier, base coat and finish coat shall not proceed during rainy conditions or weather conditions with ambient air and/or wall surface temperatures below 5°C, or above 38°C. Wet applied coatings shall be protected from rain until they are completely dry.
  - .5 Avoid coating surfaces that are directly exposed to direct sunlight or windy conditions.
  - .6 When necessary, provide temporary enclosures for exterior work and ensure that temporary climatized enclosure is provided in the area of work to maintain the required ambient air temperature prior to, during application and for a minimum of 24 hours after application of coating.

*SPEC NOTE: Carefully co-ordinate to determine whether or not the General Contractor is to provide temporary enclosure and heat.*

- .7 Do not apply finish coat in areas where dust is being generated.
- .8 Proceed with work only when surfaces and conditions are satisfactory for the production of perfect application.
- .9 Protect applied coating from rapid evaporation during dry and hot weather.
- .10 Consult system's manufacturer for recommendations should adverse conditions exist.

### **1.10 WARRANTY**

- .1 The warranty period stipulated in the General Conditions of the Contractor shall be extended as follows:
  - .1 The system is eligible for a manufacturer's warranty from the date of substantial completion, upon written request, against defective material. For full applicable warranty details contact the system manufacturer.
  - .2 The manufacturer warranty is effective only when materials and workmanship comply with this specification.
  - .3 The system manufacturer does not warrant workmanship.
  - .4 The system applicator shall warrant workmanship separately against faulty workmanship.

*SPEC NOTE: Substitution of materials and/or components specified in this specification shall void the manufacturer's warranty.*

## **PART 2: - PRODUCTS**

### **2.1 MANUFACTURER**

- .1 All components of the Durex® Stucco Lite High Moisture Area system shall be manufactured and/or distributed by Durabond Products Ltd. or one of its authorized distributors. No substitutes of materials shall be allowed without prior written notice of the manufacturer.

### **2.2 WATER RESISTIVE BARRIER (WRB)**

- .1 Durex® Ecto-Flex, a two component, wet mix, polymer-based cementitious air/water/vapour resistive barrier, mixed with Ecto-Flex "B" in 1:1 ratio.

*SPEC NOTE: For selection of appropriate water resistive barrier please consult your Durabond Products Ltd. representative.*

*SPEC NOTE: The water resistive barrier system may also be designed to act as the wall assembly air barrier and/or vapour barrier material as determined by the consultant of the wall assembly.*

## 2.3 SHEATHING JOINT REINFORCING

- .1 Durex® Barrier Seam Tape, a polyester reinforcing mesh supplied in rolls 100 mm (4").

## 2.4 TRANSITION MEMBRANE

- .1 Durex® EIFS Tape, a 30 mil thick, self-adhering, Styrene Butadiene Styrene (SBS) modified rubberized asphalt membrane with a polyester top surface. Available in rolls 914 mm (36"), 457 mm (18"), 225 mm (9"), 152 mm (6") and 102 mm (4") wide. Durex® EIFS Tape requires the use of Durex® Flex-Seal Primer for proper adhesion.
- .2 Durex® EIFS Tape Super Stick TM, a 17 mil, self-adhering, high performance tape with a polyester fabric top layer. Available in rolls 914 mm (36"), 457 mm (18"), 225 mm (9"), 152 mm (6") and 102 mm (4") wide. Durex® Super Stick TM requires the use of Durex® Flex-Seal primer for proper adhesion.
- .3 Durex® Flex-Seal Membrane, a 40 mil thick, self-adhering, rubberized asphalt membrane with high density cross-laminated polyethylene reinforcement. Available in rolls 914 mm (36"), 457 mm (18"), 225 mm (9"), 152 mm (6") and 102 mm (4") wide. Durex® Flex-Seal Membrane requires the use of Durex® Flex-Seal Primer.

*SPEC NOTE: Durex® Flex-Seal Primer, a primer specifically designed to enhance the adhesion of Durex® Flex-Seal Membrane and Durex® EIFS Tape on porous surfaces and cementitious coatings at temperatures above -30°C. It is composed of SBS synthetic rubbers, adhesive enhancing resins and volatile solvents. Durex® Flex-Seal Primer can be used on exterior gypsum boards, wood, metal and concrete.*

## 2.6 REINFORCING MESH

- .1 Durex® Detail Mesh: A nominal 152 g/m<sup>2</sup> (4.5 oz/yd<sup>2</sup>), flexible, open-weave, alkaline-resistant glass-fibre mesh, supplied in 241 mm (9.5") wide by 45.7 m (150') long rolls. Used for standard back wrapping and aesthetic detailing applications.
- .2 Durex® Adhesive Detail Mesh. A nominal 152 g/m<sup>2</sup> (4.5 oz/yd<sup>2</sup>), flexible, open-weave, alkaline-resistant glass-fibre adhesive mesh, supplied in 241 mm (9.5") wide by 45.7 m (150') long rolls. Used for corner reinforcement and aesthetic detailing applications.
- .3 Durex® Standard Mesh (4.3 oz): A nominal 146 g/m<sup>2</sup> (4.3 oz/yd<sup>2</sup>), flexible, open-weave, alkaline-resistant glass-fibre adhesive mesh, supplied in 965 mm (38") wide by 45.7 m (150') long rolls. Used for application over the field of the wall, providing standard impact resistance.
- .4 Durex® Standard Plus Mesh (5.0 oz): A nominal 170 g/m<sup>2</sup> (5.0 oz/yd<sup>2</sup>), flexible, open-weave, alkaline-resistant glass-fibre adhesive mesh, supplied in 965 mm (38") wide by 45.7 m (150') long rolls. Used for application over the field of the wall, providing a medium impact resistance.
- .5 Durex® Intermediate Mesh (6.0 oz): A nominal 203 g/m<sup>2</sup> (6.0 oz/yd<sup>2</sup>), flexible, open-weave, alkaline-resistant glass-fibre adhesive mesh, supplied in 965 mm (38") wide

by 45.7 m (150') long rolls. Used for application over the field of the wall, providing a moderately high-duty impact resistance.

- .6 Durex® Intermediate Plus Mesh (11.0 oz): A nominal 373 g/m<sup>2</sup> (11.0 oz/yd<sup>2</sup>), flexible, open-weave, alkaline-resistant glass-fibre adhesive mesh, supplied in 965 mm (38") wide by 22.8 m (75') long rolls. Used for application over the field of the wall, providing an intermediate high-duty impact resistance.
- .7 Durex® High Impact mesh (15.0 oz): A nominal 509 g/m<sup>2</sup> (15.0 oz/yd<sup>2</sup>), flexible, open-weave, alkaline resistant glass fibre adhesive mesh, supplied in 965 mm (38") wide by 22.8 m (75') long rolls. Used for application over the field of the wall, providing a high-duty impact resistance.
- .8 Durex® Ultra Impact mesh (21.0 oz): A nominal 695 g/m<sup>2</sup> (21.0 oz/yd<sup>2</sup>), flexible, open-weave, alkaline-resistant glass-fibre adhesive mesh, supplied in 965 mm (38") wide by 22.8 m (75') long rolls. Used for application over the field of the wall, providing an ultra-high-duty impact resistance.

## 2.7 BASE COAT

- .1 Durex® Flexcrete, a two component, wet mix, polymer-based cementitious air/water/vapour resistive barrier, mixed with Flexcrete B in 1:1 ratio.
- .2 Durex® Monobase, a single component, polymer-based cementitious base coat which is mixed with water in a ratio of 1 bag Durex® Monobase to 5-6 l of potable water.

## 2.8 PRIMER

- .1 Durex® Brush Coat Primer, a water-based, 100% acrylic coating, colour-tinted to suit the colour of the final finish coat.

*SPEC NOTE: Except for special finishes, the Primer is an optional component of the EIFS where its usage is recommended for providing uniform substrate absorption and finish colour.*

## 2.9 FINISH COAT

- .1 Durex® Architectural Coatings, Classic Series, a 100% acrylic, water-based, multi-coloured, textured, protective coating. (Colour and texture to be selected).
- .2 Durex® Architectural Coatings, Premium Series, high build, multi-coloured, protective and decorative coating consisting of coloured quartz aggregates and oversized mica flakes embedded in a clear 100% acrylic resin, textured, protective coating. (Colour and texture to be selected)
- .3 Durex® Architectural Series, Artisan Series, a 100% acrylic, water-based, high-build, multi-coloured, textured with special patterns and artistic reliefs, protective coating. (Colour, texture and finish pattern to be selected)
- .4 Durex® Architectural Series, Kolor Gard Series, a 100% acrylic, Fade Resistant Decorative High Build Protective Textured Coating for Accent & Bright Colours. (Colour, texture and finish pattern to be selected)

- .5 Durex® Architectural Coatings, Elastomeric FX Series, a 100% acrylic, water-based, high-build, high flexibility, multi-coloured, textured, protective coating. (Colour and texture to be selected)

*SPEC NOTE: In cases where the selected colours of the finish texture are of a vibrant accent and/or mass tone nature (Colours that require organic pigments in order to attain and retain the colour intensity), the designer is encouraged to consider specifying, exclusively, the use of Durex® Kolor Gard Series Coatings to augment and heighten the colour fastness of bright and mass tone coloured finishes. This engineered augmented UV fade resistance is limited to the Kolor Gard line of finishes that may result in additional application requirements that should be considered prior to tender.*

## 2.10 TRIM ACCESSORIES

- .1 As selected by the Consultant and recommended by Durabond Products Ltd.

## 2.11 ACCESSORY PRODUCTS

- .1 Sealant: a low modulus sealant, as recommended and approved by Durabond Products Ltd. Standard colour shall be selected by consultant.
- .2 Foamed-in-place Insulation: Class 1, single or two components, polyurethane foam, moisture cured with flame-spread rating of  $\leq 25$ , fuel contribution 0 and smoke developed  $\leq 20$ , as per (ULC S710.1). Must be ozone friendly and containing no fluorocarbons and have a density  $\geq 27.2 \text{ kg/m}^3$  (1.75 lb/ft<sup>3</sup>) and a minimum "RSI" value of 0.91 per 25 mm ("R" value of 5 per inch) thickness.

## 2.12 EQUIPMENT

- .1 All mixing shall be carried out with a clean, rust-free paddle mixer that shall minimize air entrainment, powered by a power-drill at 400-500 rpm maximum speed.
- .2 Metal trowels, hawks, utility knives, corner trowels and plastic floats

## PART 3: - EXECUTION

### 3.1 EXAMINATION

- .1 Examine surfaces to receive the direct applied stucco system for defects that could adversely affect execution and quality of work.
- .2 Ensure substrate surfaces, including each applied base coat, are dry, solid and sound, free of weak and powdery surfaces, free from ice, snow and frost, oil, grease, releasing agents and other deleterious materials detrimental to a positive bond.

*SPEC NOTE: Deteriorating, weak, powdering or flaking surfaces may require further preparation work prior to installation of the exterior insulation and finish stucco system. Check with the system's manufacturer for questionable substrate materials and conditions.*

- .3 Ensure substrate tolerance is within 2 mm/m (0.25"/10').

- .4 Ensure that flashing at all openings, roof-wall intersections, terminations and other areas as required, have been installed to divert water away from the exterior insulation and finish system.
- .5 Report in writing to Consultant all adverse conditions which will be detrimental to work of this Trade.
- .6 Do not start work until all unsatisfactory conditions have been corrected.
- .7 Commencement of work shall indicate acceptance of substrate conditions.

### 3.2 PREPARATION

- .1 Prepare substrates to receive the direct applied stucco system as recommended in manufacturer's instructions.
- .2 Thoroughly clean and wash (existing) surfaces, including each applied base coat, (and including existing coated surfaces) by wire brushing or other approved methods to remove all dirt, dust, grease, oil, latent, efflorescence, loose coatings and any other deleterious materials.
- .3 Where necessary, mask all surrounding surfaces to provide neat, clean, true juncture lines with no over-spray of the coatings on surrounding surfaces.
- .4 Co-operate and co-ordinate with other trades penetrating or abutting to the work of this Trade. Ensure that components by other trades are in position before the application of the direct applied stucco system.

### 3.3 APPLICATION

- .1 General:
  - .1 Supply experienced and qualified installers and applicators to carry out the work.
  - .2 Mix materials in accordance with manufacturer's instructions.
  - .3 Install the stucco system in strict accordance with the approved mock-up and manufacturer's printed instructions (and reviewed shop drawings).

*SPEC NOTE: Correlate requirements for shop drawings with Article 1.6.*

- .2 Trim Accessories
  - .1 Install all trim accessories prior to the installation of the reinforcing mesh, except for external reinforcing beads.
  - .2 Install all trims uniformly throughout the entire area to the specified substrates.
  - .3 Install all trims 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 what are damaged in any way.
  - .5 Secure all trims at not more than 300 mm (12") o.c.
- .3 Water Resistive Barrier (WRB)
  - .1 Apply the direct applied stucco system's moisture transition membrane at all vertical and horizontal sheathing board joints and all sheathing board corners.
  - .2 Apply the selected stucco system's water resistive barrier as per the

manufacturer's application instructions, over the entire substrate surface, applying sufficient pressure in the troweling process to ensure full contact with the substrate.

- .3 Allow a minimum of 24 hours for drying and curing.
- .4 At all locations where the substrate material changes, install a 30 mm (12") strip of the system's moisture barrier transition membrane in strict accordance with the manufacturer's printed instructions to maintain continuity of the water resistive barrier.

*SPEC NOTE: Refer to manufacturer's standard details.*

*SPEC NOTE: Transition membranes used in conjunction with the WRB must be applied over clean, dry and contaminants free substrates that are primed with the specified primer. To ensure the proper level of adhesion and bond strength of the transition membrane, applicators must strictly follow the setting time, setting temperature conditions and tack characteristics of the primer.*

.4 Base Coat

- .1 Ensure that the surface of the substrate is dry and free of loose materials, and dirt and that detail work has been completed.
- .2 In hot, dry weather, if the substrate surface is exceptionally dry, lightly dampen the surface with a fog mist of clean potable water. Do not oversaturate with water, as it will impair the bonding of the base coat.
- .3 Apply a layer of base coat over the substrate, not less than 2 mm, applying sufficient pressure in the trowelling process to ensure full contact with the substrate. Immediately place the reinforcing mesh onto the wet base coat and trowel the mesh from the centre to the edges, filling all voids in the mesh until the mesh is completely embedded.
- .4 Provide high impact reinforcing mesh where indicated on drawings. Tightly abut the edges; do not lap high impact mesh. Embed the mesh into the wet base coat and trowel the mesh from the centre to the edges, filling all voids in the mesh until the mesh is completely embedded. Allow the high impact mesh-reinforced base coat to dry before applying the successive standard reinforcing mesh.
- .5 Install the reinforcing mesh tight, straight and free of wrinkles, ripples and waves.
- .6 Embed the standard reinforcing mesh into the base coat with joints overlapped a minimum of 102 mm (4") and double wrapping inside and outside corners a minimum of 203 mm (8").
- .7 Overlap detail reinforcing mesh with standard reinforcing mesh 100 mm (4") at all locations where detail reinforcing mesh has been installed.
- .8 Final surface shall be smooth, straight and true to a tolerance of not more than 3.2 mm in 3 m (1/8" in 10'-0"). Surface shall be free of trowel marks, irregularities and visible mesh pattern.
- .9 Allow a minimum of 3 days for curing and drying.



*SPEC NOTE: When applying high impact reinforcing meshes, do not overlap high impact mesh, the joints between meshes shall just be tightly butted.*

- .5 Finish Coat Primer
  - .1 Evenly apply the primer throughout with a high pile roller at a rate of 2.8 m<sup>2</sup>/l (600 ft<sup>2</sup>/pail). The substrate shall not be visible through the applied primer.
  - .2 Avoid excessive build-up in any one area.
  - .3 If required, re-coat when the first coat is dry to the touch, but in any event not earlier than 2 hours after initial setting.
  - .4 Allow minimum 4 hours for curing prior to application of finish coat.
- .6 Finish Coat
  - .1 Apply the direct applied stucco system's selected finish coat, within 3 days after application of the system's selected primer. Longer periods may be scheduled between operations provided that the primed surface is kept clean and in good condition.
  - .2 Apply the selected finish coat in strict accordance with manufacturer's printed instructions for the Selected finish.
  - .3 Apply the finish coat in such a way as to match the colour and texture of the approved site mock-up.
  - .4 Do not apply the finish coat onto surfaces that are intended to be caulked.

### 3.4 JOINTS

- .1 Provide expansion joints in alignment with building expansion joints.
- .2 Install expansion joints at all locations where dissimilar substrates meet.
- .3 Install expansion joints at all locations of maximum stress, in the direction as shown on drawings.
- .4 Install control joints and/or reveals horizontally and vertically so to divide the wall surface into panels of not more than 20 m<sup>2</sup> (215 ft<sup>2</sup>). Neither dimension within the panel should be greater than 2.5 times the other.
- .5 All horizontal joints shall be located and spaced at intervals not greater than three stories.
- .6 Unless otherwise noted, provide all joints 12.7 mm (1/2") wide.

*SPEC NOTE: As a rule of thumb, fulfill requirements 1 and 2 and then arrange the other requirements to best suit the intended aesthetics of the building.*

### 3.5 SEALANTS

- .1 Seal and caulk all joints in the lite stucco system with the system's specified elastomeric sealant that shall be applied over a compatible closed-cell foam backer rod or bond breaker tape.
- .2 Seal and caulk all expansion joints between the lite stucco system and dissimilar abutting building components.

- .3 Apply sealant and/or sealant primer in strict accordance with the sealant manufacturers printed instructions.

*SPEC NOTE: Apply sealant and/or sealant primer to base coat only.*

### **3.6 SPECIAL CLEANING**

- .1 Clean off all surfaces and work area of foreign materials resulting from material installation and leave work in clean condition.
- .2 Entirely reinstate at this Trade's own expense, any surface not to be coated, but soiled and attributable to this Trade due to spillage, mixing of material or any other cause.

### **3.7 PROTECTION**

- .1 Protect the installed direct applied stucco system from damage during construction.
- .2 Provide protection of installed materials from precipitation, freezing, excessive heat, dust, and dirt during installation and curing of the system.
- .3 Provide protection to adjacent materials that could be damaged by the system's installation.
- .4 Post appropriate warning signs while work is in progress and during curing period.
- .5 Clean off all surfaces and work area of foreign materials resulting from material installation and leave work in clean condition.

END OF SECTION