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: Durex Quantum Select is a pressure moderated, Exterior Insulation and Finish System that includes a water resistive barrier, or optional air/vapour barrier applied to the substrate to act as a secondary moisture barrier. This system is intended for use on buildings where the Building Code allows the use of fire-tested wall assemblies which include combustible foam plastic insulation.

SPEC NOTE

The Designer must decide whether the wall assembly of this structure requires an air barrier or an air/vapour barrier. Durabond Products Ltd. recommends that an air/vapour barrier (such as our Durex Green Guard) is required when more than 2/3 of the R-Value is located outward of the assembly.

1.2 COORDINATION

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

1.3 RELATED SECTIONS

.1	Poured Concrete Walls:	Section 03300
.2	Unit Masonry Walls:	Section 04200
.3	Load Bearing Studs:	Section 05410
.4	Air barrier: (other than air barrier specified in this Section):	Section 07196
.5	Sheet Metal Flashing & Trim:	Section 07600
.6	Sealants: (other than sealants specified in this Section):	Section 07900
.7	Windows & Doors	Section 08500
.8	Cement board/glass fibre faced gypsum sheathing:	Section 09200

1.4 DESIGN CRITERIA

.1 Substrate Sheathing/Substrate System:

.1 Apply Durex Quantum Select to one of the following recommended substrate sheathings or substrate system or approved equivalent:

- .1 Cement Board as per ASTM C1325
- .2 Glass fibre faced gypsum sheathing conforming to ASTM C1177
- .3 Fibre reinforced gypsum sheathing conforming to ASTM C1278

SPEC NOTE

Sheathing/substrate system type and condition shall be approved by Durabond Products Ltd..

Questionable substrates to be reviewed by Durabond Products Ltd. and/or the Designer.

.2 Sheathing shall be engineered with framing to resist required wind loads, with a maximum design deflection of substrate not to exceed L/240 times the span.

.3 Sheathing substrates shall be installed in accordance with the sheathing manufacturer's lasted installation instructions and installed in general conformance with ASTM C1280. Sheathing joints shall be properly staggered, offset by at least one framing member. Sheathing shall be:

.1 Installed with fasteners tight and flush to the sheathing surface and shall not be countersunk.

.2 Replaced where damaged or weathered.

.4 Cast-in-place and pre-cast concrete shall be at least 28 days old.

.5 Unit masonry and brick veneer shall be at least 28 days old and have mortar joints struck flush or recessed.

.6 All substrates for Durex Quantum Select shall be free of surface contamination, including (but not limited to): dirt, form release agents, efflorescence, oil, chalkiness and cracks greater than 1mm.

.1 Ensure substrate is flat within 2 mm/m (1/4" per 10'), as per ASTM C1397

.2 Water Resistive Barrier (WRB)

SPEC NOTE

Designer to indicate if water resistive barrier shall act an air barrier or as an air/vapour barrier.

.1 A water based water penetration barrier which can be applied by trowel, roller or spray and is reinforced across all substrate interfaces, i.e. sheathing joints, dissimilar substrates and transitions. This system includes a cold-applied self-adhering styrene butadiene based membrane reinforced with a polyester mesh, spray-in-place polyurethane foam and/or sealant according to Section 07900 of this specification.

.3 Projections

.1 Ensure termination of Durex Quantum Select at roof parapet is covered with a continuous waterproofing membrane and sheet metal cap that is coordinated with the roofing contractor.

.2 Conform with the following guidelines for length and slope of inclined surfaces:

.1 Minimum slope (6:12), maximum running width of projection of 305mm (12")

.2 Minimum slope (3:12), maximum running width of projection of 102mm (4")

SPEC NOTE

Where Durex Quantum Select is to project out from the exterior wall plane, it should be sloped to deflect rain water & resist snow accumulation. ASTM C1397 recommends a minimum slope of 6:12, however, wall areas that are less exposed could have a slope of 3:12, if the Designer deems appropriate. Projections that are partially enclosed or situated beneath overhangs may have a more modest slope, if the Designer deems appropriate.

.3 Durex Quantum Select shall not be used for areas defined by code as roofs.

.4 Sealant System

.1 Joints in Durex Quantum Select shall be sealed using an elastomeric sealant with a closed-cell foam backer rod or bond breaker tape, as specified in Section 07900 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 19mm (3/4") for expansion joints, however, site and design conditions may require the nominal width to vary

.5 Expansion and Termination Joints

.1 Provide two stage sealant joints at all expansion and termination joint locations. The inner joint seal is not required if the water penetration system is continuous behind the outer joint seal and /or penetrations.

.2 Sealant Joint Venting

All two stage sealant joints shall be vented:

.1 Horizontal joints shall be vented at not greater than 1.2m (4'-00") on center

.2 Vertical joints shall be vented at not greater than 3m (10-00") on center and/or at not greater than 50mm (2") below the intersection of vertical and horizontal joints.

SPEC NOTE

The designer shall determine the spacing and amount of drainage and/or venting required for a particular system. Note, the venting is only required at points where gravity-induced drainage is expected to occur, hence, roof parapets and the underside of window sill flashing would not require sealant vents.

.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 floor lines of all wood frame structures and as required by the structural design of other framing types

.4 At junctions with different cladding materials and components

.5 At changers in roof line, building shape or structural system

.6 At changes in substrate materials

.7 At all other locations specified or indicated on Drawings

.3 Termination joints are required at the following locations:

.1 All terminations of Durex Quantum Select with windows, doors and through-wall penetrations shall be sealed.

.6 Fire Resistance

.1 Durex Quantum Select is intended for use on non-combustible construction, in compliance with the National Building Code of Canada in accordance with:

.1 CAN/ULC-S101-M89, Standard Methods of Fire Endurance Tests of Building Construction and Materials.

.2 CAN4-S114-M80 (R1985), Standard Method of Test for Determination of Non-Combustibility in Building Materials.

1.5 SUBMITTALS

.1 Product Data

.1 Submit Durex Quantum Select 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.

.3 Closeout Submittals

- .1 Durabond Products Ltd. maintenance, repair and cleaning procedures
- .2 Durabond Products Ltd. material warranty as per section 1.9
- .3 Workmanship warranty by EIFS applicator as per section 1.9

1.6 QUALITY ASSURANCE

.1 Qualifications

.1 Work of this Trade shall be executed by a qualified applicator approved by Durabond Products Ltd. Applicator shall have EIFS Mechanics who have been trained in the most recent application procedures and shall have a minimum of 5 years of 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.

.2 The EIFS manufacturer shall be a member of the EIFS Council of Canada in good standing.

.2 Mock-Up

.1 Construct full mock-up of Durex Quantum Select system demonstrating method of attachment, water resistive barrier, insulation adhesive, insulation, reinforcing mesh, base coat, coloured finish texture and all typical components and typical connections to opening (windows, doors etc.) and roofing assemblies.
.2 Mock-up to be constructed to dimensions and in location specified by the Designer.
.3 Mock-up shall serve for initial review purposes by the Consultant and when accepted shall represent the minimum standard for work.
.4 All materials used for mock-up shall be in strict accordance with this Specification.
.5 Accepted mock-up may remain as part of the work.

.3 Pre-Installation Meeting

.1 Attend pre-installation meeting to be scheduled by the Consultant or General Contractor on site.
.2 Representatives of the Owner, Consultants (Architect or Engineer), General Contractor, third party inspector, Durabond Products Ltd., EIFS applicator, substrate manufacturer and contractor, sealant manufacturer and contractor and window manufacturer and contractor shall attend to review contract documents and site conditions.

.4 Field Quality Control

.1 The Owner's representative (Architect, Engineer or third party inspector) shall examine and monitor the installation of Durex Quantum Select for compliance with specifications, drawings, shop drawings and generally accepted good building practice.
.2 Durabond Products Ltd. shall conduct periodic site reviews during the installation and requested by the Consultant.
.3 Deficiencies in the work of this section shall be rectified at no expense to the Owner.

1.7 DELIVERY, STORAGE, HANDLING & PROTECTION

.1 Deliver all required materials to the job site in original unopened containers with all identifying labels and markers clearly visible and intact. Upon delivery inspect materials for damages and advise Durabond Products Limited in writing of any unacceptable materials.
.2 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 5ºC and below 35ºC. Protect all materials from freezing.
.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 capping and flashing by others have been immediately and properly installed in co-ordination with the application of the Durex Quantum Select, unless temporary protection by others has been provided. If capping and flashing or temporary protection have not been provided advise Architect and General Contractor in writing.
.5 Protect insulation from direct sunlight.

1.8 PROJECT/SITE CONDITIONS

.1 Prior to installation of Durex Quantum Select, the substrate shall be examined as follows:

.1 The substrate shall be type approved by Durabond Products Ltd.
.2 The substrate surface shall be free of foreign 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 or loose joints, voids and projections , etc.
.4 The substrate shall be examined for compliance with Contract Documents.

.2 Climatic Conditions

.1 Do not proceed with applications of base coat and/or finish coat at ambient air temperatures below 5ºC, or above 35ºC. Avoid coating surfaces directly exposed to hot sun or 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 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.

.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 adverse weather is anticipated within 24 hours after application.
.5 Do not apply finish coat in areas where dust is being generated.
.6 Proceed with work only when surfaces and conditions are satisfactory for production of a first class application.
.7 Protect applied coating from rapid evaporation during dry and hot weather. Consult Durabond Products Limited for recommendations should adverse conditions exist.

1.9 WARRANTY

.1 The warranty period stipulated in the General Conditions of the Contractor shall be extended as follows:
  .1 Durabond Products Ltd. shall provide a ten (10) year warranty from the date of Substantial Completion, for all components of the Durex Quantum Select, against any defects, including excessive fading of finish, excessive change in colour, or other deterioration such as cracking or crazing
  .2 The EIFS applicator shall provide a two (2) year warranty from the date of Substantial Completion, against faulty workmanship .

PART 2 - PRODUCTS

2.1 MANUFACTURER

.1 All components of the Durex Quantum Select 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 Flexcrete, a two component, polymer based cementitious air barrier. Mixed with Flexcrete B at 1:1 ratio.

.1 Mix the Flexcrete as follows: Pour 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. Allow the mixed materials to stand for a few minutes until they begin initial stiffening. Mix only enough materials that can be used within 45 minutes. Re-temper the mix and use. Discard all materials that have begun to stiffen for a second time.

.2 Durex GreenGuard, a ready to use, single component, water based copolymer rubber air/vapour barrier

.3 Durex BlueShield, a ready to use, single component, water based copolymer rubber air barrier

.4 Durex Mastic 100, a ready to use, single component, water based acrylic air barrier, used only for wood substrates.

SPEC NOTE

For selection of appropriate water resistive barrier please consult your Durabond Products Ltd. representative

2.3 SHEATHING JOINT REINFORCING

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

2.4 TRANSITION MEMBRANE

.1 Durex EIFS Tape, a 30mil thick, cold applied, self-adhering, Styrene Butadiene modified rubberized asphalt membrane with a polyester top surface. Available in rolls 914mm(36"), 457mm(18"), 225mm(9"), 152mm(6") and 102mm(4") wide.

.2 Durex Flex-Seal, a 40 mil thick, cold applied, self-adhering, rubberized asphalt membrane with a high density cross-laminated polyethylene reinforcement. Available in rolls 914mm(36"), 457mm(18"), 225mm(9"), 152mm(6") and 102mm(4") wide.

.3 Durex Flex-Seal Primer, a fast drying, rubber based, resin cut-back primer used as a pre-treatment for application of Durex Flex-Seal Membrane and Durex EIFS Tape.

2.5 INSULATION ATTACHEMENT

.1 Durex Flexcrete, a two component, polymer based cementitious insulation adhesive. Mixed with Flexcrete B, at 1:1 ratio.

.2 Durex Monobase, a single component, polymer based cementitious insulation adhesive. Mixed with water at 1 bag Monobase: 5-6 ltrs water.

.3 Durex V.C.A. 3.0 Insulation Adhesive, a two component, polymer based cementitious insulation adhesive. Mixed with Durex V.C.A. 3.0 Insulation Adhesive Powder, at 1:1 ratio.

.4 Mechanical fasteners and fastener plates: Durex Mechanical Anchors for concrete and masonry, self-tapping screws for wood and steel. All fasteners shall be corrosion resistant coated in conformance with ASTM C1002-83, ASTM C954-81, or ASTM A548-82. Fasteners shall be embedded into the substrate a minimum of 23mm (1") for masonry substrates, 18mm (3/4") for wood substrates and 9mm (3/8") for metal framing substrates. Fastener plates shall be Durex WPD plastic plates.

2.6 INSULATION

.1 Durex Quantum Select Board; Type I expanded polystyrene insulation to CAN/CGSB-51.20-M87, minimum "RSI" value of 0.67 per 25 mm thickness ("R" value of 3.88 per inch), measuring 1.2 m (4'-0") by 0.6 m (2'-0") and a minimum thickness of 50 mm (2"), total thickness as indicated on drawings. The board shall be pre-machined with rectangular channels parallel to the short edge of the board to ensure vertical alignment of the channels required for positive drainage. The depth of the rectangular channels of the Durex Quantum Select Board shall be not less than 5mm (3/16"), or not less than 10mm (3/8"), and as required by the project specifications and/or the drawings.

.2 Durex Quantum Vent Board: Type I expanded polystyrene insulation to CAN/CGSB-51.20-M87, minimum "RSI" value of 0.67 per 25 mm thickness ("R" value of 3.88 per inch), measuring 667mm (8") wide by 2.4 m (8'-0") long with a minimum thickness of 50mm (2"). The Durex Quantum Vent Board is supplied complete with rectangular channels and it is pre-back wrapped with factory applied base coat and reinforcing mesh. The depth of the rectangular channels of the Durex Quantum Vent Board shall be not less than 5mm (3/16"), or not less than 10mm (3/8"), and as required by the project specifications and/or the drawings.

.3 Durex Boundary Board: Type 1 polystyrene insulation to CAN/CGSB-51 2—M87, minimum "RSI" value of 0.67 per 25mm thickness ("R" value of 3.88 per inch), measuring 152mm(6") wide by 2.4m(8'-0") long with a minimum thickness of 50mm(2"). The Durex Boundary Board is pre-back wrapped with factory applied base coat and reinforcing mesh.

2.7 REINFORCING MESH

.1 Standard reinforcing mesh, open weave, glass fibre mesh, weighing 152 g/m^2 (4.5 oz/yd2). Durex 040 Mesh in 965mm x 50m (38" x 150') rolls.

.2 Standard reinforcing mesh, open weave, glass fibre mesh, weighing 168 g/m^2 (6 oz/yd2). Durex 039 Mesh in 965mm x 50 m (38" x 150') rolls.

.3 Detail reinforcing mesh, standard duty, open weave, glass fibre mesh, weighing 152 g/m^2 (4.5 oz/yd2). Durex 040 detail mesh in 250mm x 50 m (10" x 150') or Durex Adhesive Back detail mesh in 300cm x 50m (12" x 150') rolls.

4 Intermediate mesh, open weave, glass fibre mesh, weighing 349 g/m^2 (11 oz/yd2). Durex 323 mesh in 965mm x 22.8 m (38" x 75') rolls.

.5 High impact mesh, open weave, glass fibre mesh, weighing 509 g/m^2 (15 oz/yd2). Durex 330 mesh in 965mm x 22.8 m (38" x 75') rolls.

.6 High impact mesh, open weave, glass fibre mesh, weighing 694 g/m^2 (21oz/yd2). Durex 391 mesh in 965mm x 22.8 m (38" x 75') rolls.

2.8 BASE COAT

.1 Durex Uniplast, a two component polymer modified cementitious base coat mixed with Acrybond S, a water based 100% acrylic polymer additive at a ratio of 1 bag Durex Uniplast to 5 liters of Acrybond S.

.1 Pour the Durex Acrybond "S" into an empty clean mixing container. While under slow mixing action add the Durex Uniplast in the required mixing proportions. Mix well until the mixture is free of lumps. Do not over mix or use excessive mixing speed. Allow the mixed materials to stand for a few minutes until they begin initial stiffening. Mix only enough material that can be used within 45 minutes. Re-temper the mix and use. Discard all materials that have begun to stiffen for a second time.

.2 Durex Monobase, a single component, polymer based cementitious base coat which is mixed with water at a ratio of 1 bag Monobase to 6-7 liters of water.

.1 Pour the clean, potable water into an empty clean mixing container. While under slow mixing action add the Durex Monobase in the required mixing proportions. Mix well until the mixture is free of lumps. Do not over mix or use excessive mixing speed. Allow the mixed materials to stand for a few minutes until they begin initial stiffening. Mix only enough material that can be used within 45 minutes. Re-temper the mix and use. Discard all materials that have begun to stiffen for a second time.

2.9 PRIMER

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

2.10 FINISH COAT

.1 Durex Architectural Coating, a 100% acrylic based, high build, multi-coloured, textured, protective coating. (colour and texture to be selected)

2.11 TRIM ACCESSORIES

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

2.12 ACCESSORY PRODUCTS

.1 Sealant: a low modulus sealant, as recommended and approved in writing by Durabond Products Ltd. Standard colour selected by Consultant.

.2 Foamed-in-place Insulation: Class 1, single or two component, polyurethane foam, moisture cured with flame spread rating of 25, fuel contributed 0 and smoke developed 20 (ULC S710.1). Must be ozone friendly and containing no fluorocarbons and have a density of 27.2 kg/m3 (1.75 lbs/ft3) and a minimum "RSI" value of 0.91 per 25mm ("R" value of 5 per inch) thickness.

2.13 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.
.2 Hot knife or hot groover complete with all accessories such as cutting blades and appropriately sized sleds
.3 Metal or paper rasps with a nominal size of 15 grit.
.4 Metal trowels, hawks, utility knives, corner trowels and plastic floats

PART 3 - EXECUTION

3.1 EXAMINATION

.1 Examine surfaces to receive the Durex Quantum Select for defects that will 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 Durex Quantum Select. Check with Durabond Products Ltd for questionable substrate materials and conditions.

.3 Ensure substrate tolerance is within 2 mm/m (1/4" in 10'-0")
.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 Durex Quantum Select.
.5 Report in writing to Consultant all adverse conditions, which will be detrimental to work of this Trade.
.6 Do not start work until unsatisfactory conditions have been corrected.

.7 Commencement of work shall indicate acceptance of substrate conditions

3.2 PREPARATION

.1 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, loose coatings and other contaminants detrimental to newly applied system.

.2 Where necessary, mask all surrounding surfaces to provide neat, clean, true juncture lines with no over-spray of the coatings on surrounding surfaces.

.3 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 application of the Durex Quantum Select.

3.3 APPLICATION

.1 General:

.1 Install the Durex Quantum Select in strict accordance with the approved mock-up and Durabond Products Ltd's printed instructions (and reviewed shop drawings).

SPEC NOTE

Correlate requirements for shop drawings with Article 1.6.

.2 Water Resistive Barrier (WRB):

.1 Apply Durex Barrier Seam Tape at all vertical and horizontal sheathing board joints and all sheathing. board corners.

.2 Apply the selected water resistive barrier as per our application instructions, over the entire substrate surface, applying sufficient pressure in the trowelling 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 Durex Seam Tape or Durex EIFS Tape in strict accordance with Durabond Products Ltd.'s printed instructions, to maintain continuity of the water resistive barrier.

.3 Durex Quantum Vent Board

.1 Around all openings such as windows, doors, louvers etc. install the Durex Quantum Vent Board by applying the selected insulation adhesive using the specially cut notched steel trowel on the back of the Durex Quantum Vent Board and placing it firmly over the cured selected water resistive barrier, around each opening. The Durex Quantum Vent Board shall be cut at a 450 angle, at all outside corners of openings.

.2 At all horizontal interfaces and/or terminations between Durex Quantum Select and other cladding systems such as brick, stone, metal cladding, precast, metal flashing etc. install the Durex Quantum Vent Board by applying the selected insulation adhesive using the specially cut notched steel trowel on the back of the Durex Quantum Vent Board and placing it firmly over the cured selected water resistive barrier, allowing a space between the Durex Quantum Select and the specified cladding system of approximately 12.7mm (1/2").

.4 Durex Boundary Board

.1 Durex Boundary Board shall be installed at all upper horizontal terminations and/or interfaces with dissimilar substrates, except at around fenestrations and/or minor penetrations and other terminations, by using the following procedure:
Apply the selected insulation adhesive using a steel notched trowel, on the back of the Durex Boundary Board and placing it over the cured selected water resistive barrier, using uniform pressure. Allow a space of approximately 12.7mm (1/2") between the Durex Insulation Starter Strip and the specified cladding system.

.5 Insulation and Adhesive:

.1 Durex Quantum Select - Two Step WRB/Adhesive Application Procedure
Utilizing a specially cut notched steel trowel apply the selected insulation adhesive on the back of the Durex Quantum Select Board, ensuring that there is a ribbon of insulation adhesive in the center of the upper side of each pre-machined channel. Immediately install the Durex Quantum Select Board over the cured selected water resistive barrier with firm and uniform pressure Apply the selected insulation adhesive so as to avoid excess material in the pre-machined channels. Ensure that the Durex Quantum Select Board is installed so that the pre-machined channels are vertically aligned.

.2 Durex Quantum Select – Two Step WRB/Adhesive Application Procedure Apply Durex Flexcrete
Adhesive at 2mm (3/32") thick uniformly over the cured Durex Flexcrete Water Resistive Barrier (WRB). Immediately adhere the Durex Quantum Select Board by firmly pressing it into the wet adhesive, ensuring full contact between them.

.3 Install the Durex Quantum Select Boards to the substrate in running bond pattern and with points offset with respect to joints in the substrate by a minimum of 150 mm (6") and with the pre-machined vertical channels in alignment.

.4 Interlock Durex Quantum Select Boards at all inside and outside corners.

.5 Immediately after applying the insulation adhesive, before initial set begins, firmly press the insulation board into place. Begin installation at one end, from a baseline, to form an uninterrupted surface.

.6 Butt the insulation boards to moderate tight fit. Ensure a full thermal barrier throughout.

.7 Gaps occurring in or between the insulation boards shall be filled with foamed-in-place polyurethane insulation.

.8 Create all reveals in insulation boards in accurate alignment over the entire wall surfaces as indicated on architectural drawings. Ensure reveals are true to size, straight, plumb and level throughout.

.9 Rasp the entire insulation surface and edges to a tolerance of not more than 3 mm (1/8") in 3 m (10').

.5 Base Coat and Reinforcing Mesh

.1 Ensure that the insulation boards have been rasped and the surface is dry and free of loose insulation, dirt, yellowing from UV exposure, etc. and that detail work has been completed.

.2 At all areas where detail reinforcing mesh has been installed, apply a layer of base coat to the exposed edges and face of the insulation boards. Pull the detail reinforcing mesh into the base coat so that it is fully embedded. Using an edging tool, smooth the corner to render it square.

.3 Reinforce all corners of openings where no control joints are detailed with an additional strip of reinforcing mesh, 230 mm by 305 mm (9" by 12") installed diagonally across the corners.

.4 Apply a layer of base coat over the insulation surface, not less than 2 mm, applying sufficient pressure in the trowelling process to ensure full contact with the insulation. 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.

.5 Provide high impact reinforcing mesh where indicated on drawings. Tightly about the edges; do not lap high impact mesh. Embed the mesh into 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 base coat to dry before applying the standard reinforcing mesh

.6 Install the reinforcing mesh tight, straight and free of wrinkles, ripples and waves.

.7 Embed the standard reinforcing mesh into the base coat with joints overlapped a minimum of 63 mm
(2-1/2") and double wrapping inside and outside corners a minimum of 203 mm (8").

.8 Overlap detail reinforcing mesh with standard reinforcing mesh 100 mm (4") at all locations where detail reinforcing mesh has been installed.

.6 Final Base Coat:

.1 In hot, dry 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 base 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 base coat shall be achieved at an application rate not less than 7.2 kg/m^2 (1.5 lbs/$ft^{2)}$.

.5 When the base coat has taken initial set, use a wood or sponge float and work the surface with light circular motions 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 3.2 mm in 3 m (1/8" in 10'-0"). Surface shall be free of trowel marks, irregularities and visible mesh pattern.

.7 Allow a minimum of 3 days for curing and drying.

.7 Finish Coat Primer

.1 Evenly apply the primer throughout with a high pile roller at a rate of 2.8 m^2/liter (600 ft^2/pail). Substrate shall not be visible through the applied primer.

.2 Avoid excessive build-up in any one area.

.3 Allow minimum 4 hours for curing prior to application of finish coat.

.8 Finish Coat

.1 Apply Durex Architectural Finish Coating within 3 days after application of Durex Brush Coat Primer. Longer periods may be scheduled between operations provided that the primed surface is kept clean and in good condition.

.2 Apply Durex Architectural Finish Coating in strict accordance with Durabond's printed instructions for the selected finish.

.3 Durex Architectural Finish Coating texture and colour shall match the approved site mock-up.

.4 Do not apply Durex Brush Coat Primer and/or Durex Architectural Finish Coating onto surfaces that will 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^2 (215 ft^2). Neither dimension within the panel should be greater than 2.5times the other.

.5 All horizontal joints shall be vented by means of the prefabricated Durex Quantum Vent Board and 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 CAULKING

.1 Caulk all expansion joints within the Durex Quantum Select.

.2 Caulk all expansion joints between the Durex Quantum Select and 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 spotting and blemishes from work not intended to receive Durex Quantum Select and leave work in clean condition.

.2 Entirely reinstate at this Trades 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.