

- .8 Provide temporary dust screens, barriers, warning signs in locations where renovation and alteration work is adjacent to areas used by public.
- .9 Execution of work within occupied premises shall cause a minimum interference with the use of the building or other Contractors. Maintain maximum safety to occupants during work. Take reasonable measures for control of noise during operations.
- .10 Provide and maintain temporary fire protection equipment during performance of work required by insurance companies having jurisdiction and governing codes, regulations and bylaws.
- .11 Open fires and burning of rubbish are not permitted on the site.
- .12 Do not operate any equipment or machinery, or undertake any dust generating operations, near or adjacent to air intakes. Provide protection to air intakes as required to prevent the entry of dust or other contaminants into the building or building mechanical systems.

17 Cleaning

- .1 When the work is Substantially Performed, remove surplus products, tools, construction machinery and equipment not required for the performance of the remaining work.
- .2 Provide a waste container and remove waste materials and debris from the site at regularly scheduled times or dispose of as directed by the Consultant. Cost for removal and disposal of waste material shall be included in the contract cost.
- .3 Make arrangements with and obtain permits from authorities having jurisdiction for disposal of waste and debris.
- .4 Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.
- .5 Broom clean paved surfaces, rake clean other surfaces of grounds as directed by Owner or Consultant.
- .6 Make good any damage to the landscaping of the site damaged by the contractor's equipment, materials or his work force. Re-seeding of grass areas will not be accepted, sod will.
- .7 Clean all newly installed cladding components including all windows, window tracks, balcony decks, etc.

18 Documents

- .1 Provide warranties fully executed and notarized.
- .2 Submit a final statement of accounting giving total adjusted Contract Sum, previous payments, and moneys remaining due.
- .3 Provide a statutory declaration that all sub trades and suppliers have been compensated for materials and labour.

- .4 Submit Workers' Compensation Certificates.

19 Inspection/Takeover
Procedures

- .1 Prior to application for certificate of Substantial Performance, carefully inspect the work and ensure it is complete, that major and minor construction deficiencies are complete and/or corrected and the building is clean and in condition for occupancy. Notify the Consultant, in writing, of satisfactory completion of the work and request an inspection.
- .2 During the inspection by the Consultant and Owner, a list of deficiencies and defects will be tabulated. Correct same.
- .3 All deficiencies and defects are to be corrected prior to release of all hold backs.

20 Building Manual

- .1 Prior to the declaration of Substantial Performance by the Consultant the Contractor shall submit a Building Manual which shall include the following:
 - .1 General Contractor information including phone/fax numbers, contact names and Contractor warranties.
 - .2 Sub-Trade list including names of sub-trades, phone/fax numbers and contact names.
 - .3 Confirmation of materials used including manufacturers exact product identification and colors.
 - .4 All warranties as required by the contracts and specifications including manufacturer's material warranties for all materials used.
 - .5 All warranties duly executed addressed to the Owners.
 - .6 Maintenance requirements, of all materials including those with extended warranties as well as proper cleaning instructions of cladding and deck membranes
- .2 **SPECIAL HOLDBACK:** A \$2,500 special holdback shall be withheld from the Substantial Performance progress draw until a Building Manual, acceptable to the Consultant, has been submitted.

END OF SECTION 01016
JUNE 18, 2001

PART 1 - GENERAL

1.1 General

- .1 Expend each allowance as directed by the Consultant.
- .2 Each cash allowance will be adjusted to actual cost as defined hereunder and contract price will be amended accordingly by written order.
- .3 Progress payments for work and material authorized under allowances will be made in accordance with contract terms of payment.

PART 2 - MATERIAL AND INSTALLATION ALLOWANCE

2.1 Structural Restoration

- .1 Include \$55,000 (fifty five thousand dollars) contingency allowance exclusive of GST, for supply and installation of structural restoration. (Clause 11.1.4, Section 00300)
- .2 Replacement of deteriorated framing and sheathing members not already included for in the contract as well as structural restoration, including complete structural repairs and any other related repairs (i.e., mechanical, electrical, etc.). Claims and payments against the allowance will be administered per Section GC, Clause 4.2 –Contingency Allowance of CCDC-2 1994.
- .3 The Contractor will use hourly rates and markups per Clause 12.1 – Section 00300.
 - .1 Hourly rates are not applicable for electrical or mechanical contractors. These will be established during construction.

2.2 Interior Restoration

- .1 Include \$12,000 (twelve thousand dollars) contingency allowance exclusive of GST, for supply and installation of interior restoration. (Clause 11.1.5, Section 00300)
- .2 Replacement of damaged interior drywall, caulking and any other related repairs not already included for in the contract. The interior repairs shall be completed to a "paint ready" state only. Claims and payments against the allowance will be administered per Section GC, Clause 4.2 –Contingency Allowance of CCDC-2 1994.
- .3 The Contractor will use hourly rates and markups per Clause 12.1 – Section 00300.

2.3 Architectural Steel
Modifications

- .1 Include \$15,000 (fifteen thousand dollars) contingency allowance exclusive of GST, for modifications to the architectural steel connections to the building frame. (Clause 11.1.6, Section 00300)
- .2 The Contractor will use hourly rates and markups per Clause 12.1 – Section 00300.

PART 3 - NOTES

3.1 Notes

- .1 Charges for supervision of extra work completed under the contingency allowances is to be included in the bid price.
- .2 Expenditures from above allowances may be made only upon receipt of order signed by the Consultant.
- .3 Unexpended portion of the above allowance shall be credited to the Owner on completion of the project. The Owner reserves the right to use any or all of the cash allowances or increase the allowance amount as required.

END OF SECTION 01020
July 18, 2001

PART 1 - GENERAL

1.1 Description of Work

- .1 Work includes but is not limited to:
 - .1 Removal and disposal of the existing stucco, sheathing paper, finishes and accessories as indicated on the drawings and specified herein.
 - .2 Complete removal and disposal of all exterior sheathing.
 - .3 Removal and disposal of existing railing assemblies on balconies only.
 - .4 Removal of existing balcony and walkway slab membranes where required.
 - .5 Removal and dispose of all metal cap flashings located at the roof perimeter and as indicated on drawings.
 - .6 Removal and disposal of existing rainwater leader system.

1.2 Related Work

- .1 General Requirements Section 01016

1.3 Safety Code

- .1 Carry out demolition in accordance with "Safety Measures at Construction and Demolition Sites," Part 8, City of Vancouver Building By-Law, 1999 edition.
- .2 Maintain a copy of the same on site at all times.

1.4 Existing Conditions

- .1 Take over structures to be demolished based on their condition at time of examination prior to tendering.
- .2 Examine all areas and report any existing damage to windows, skylights, fixtures, etc., in writing to the Consultant prior to commencing demolition work. Commencement of the work will be interpreted as acceptance of condition. Any non-reported damage is the responsibility of the contractor to repair or make good.

1.5 Protection

- .1 Protect occupants from dangerous airborne contaminants and moulds exposed during demolition.

- .2 Take all precautionary measures prior to, during, and after demolition to prevent movement, settlement or damage of adjacent structures, services, walks, paving, trees, landscaping, adjacent grades and part of existing building to remain. Maintain precautionary measures to substantial performance.
- .3 Take all precautionary measures prior to, during, and after demolition to prevent damage of adjacent structures, services, walks, paving, trees, landscaping, adjacent grades and parts of existing building, interior and exterior, from weather, weather elements and unauthorized access during and after demolition. Erect all necessary scaffolding tarps and temporary enclosures required to effect the same. Maintain precautionary measures to substantial performance.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

3.1 General

- .1 Dispose of demolished materials except where noted otherwise and in accordance and compliance with all governing authorities having jurisdiction.
- .2 All demolished material is to be carefully contained and removed by chutes, controlled hoisting or other approved means from wall surfaces and other areas affected in order of procedures listed generally.
- .3 Demolished materials are to be deposited in containers and removed from site as soon as possible. Container locations to be in pre-approved areas only. Keep general areas clean at frequent intervals. Keep public areas clean continuously.
- .4 Damage to interior area caused by inadequate precautionary measures will be repaired by the contractor at no additional cost to the owners.
- .5 Notify the Consultant immediately upon the discovery of damaged or deteriorated wall components.
- .6 Do not commence EIFS work until the substrate and site conditions are satisfactory. Commencement of EIFS installation implies acceptance of the substrate as suitable to accept siding.

3.2 Preparation

- .1 Notify Owners to remove all objects on balconies and patios and all plantings that impede access to the areas of work. Notify Strata to remove/retain/protect any landscaping that will be disturbed during the construction period.
- .2 Do not disrupt active or energized utilities designated to remain undisturbed.
- .3 Remove, retain, and protect for reuse the following:
 - .1 Any items interfering with the work.
 - .2 Any items identified for reuse.

3.3 Demolition

- .1 Demolish items as indicated on plans and as required by all sections of this specification.
- .2 Remove existing equipment, service, and obstacles where required for refinishing or making good of existing surfaces and replace as work progresses.
- .3 Remove and demolish materials by means of saw cutting in all cases except as noted. Pneumatic or impact tools are not to be used for demolition unless stated otherwise. Keep hammering and pounding to a minimum.
- .4 Inspect and examine the interior cavities and all affected surfaces for deterioration, damage or rot and report same to the Consultant.
- .5 Remove and dispose of deteriorated building components including, wet insulation, wall sheathing, structural etc., interior drywall and vapour barrier, and any other component as directed by the Consultant.
- .6 Protect interior wiring, plumbing and mechanical from damage that may result from demolition and secure from shock or hazard. Take all necessary steps required to become familiar with the locations of wiring and plumbing hidden from view prior to demolition.
- .7 Remove and set aside items that have been identified for re-use. Protect these items from damage.
- .8 At the end of each day's work, leave work in a safe condition so that no part is in danger of toppling or falling. Protect interiors from exterior elements at all times.
- .9 Demolish to minimize dusting. Keep dusty materials wetted.
- .10 Remove contaminated or dangerous materials from site and dispose of in a safe manner to minimize danger at site or during disposal.
- .11 Take care to not damage existing vapour barrier during demolition.

END OF SECTION 02050
Revised on July 26, 2001

PART 1 - GENERAL

1.1 Description of Work

- .1 Work of this section includes, but is not restricted to:
 - .1 Supply and installation of an engineered aluminum guardrail system, fascia mounted with welded pickets on balcony decks only. Guardrail system shall not tie back into walls unless noted otherwise.

1.2 Related Work

- | | | |
|----|------------------------|---------------|
| .1 | Rough Carpentry | Section 06101 |
| .2 | Metal Flashings | Section 07620 |
| .3 | Self-adhesive Membrane | Section 07650 |
| .4 | Sealants | Section 07900 |

1.3 References

- .1 Vancouver Building By-law 1999 – section 4.1.10.1 “Loads on Guards”
- .2 BOCA National Building Code 1993 – Sections 1615.8.2 “Guard Designs and Construction”
- .3 National Building Code of Canada 1995 – Section 4.1.10.1 “Loads on Guards”

1.4 Submittals

- .1 Submit shop drawings and product data in accordance with GC 3.11.
- .2 Indicate extrusion alloy, wall thickness, schedule of elevations, dimensions, component details, material lists, finish, welds, fasteners and anchorage methods, and the relationship to adjoining work.
- .3 Shop drawings shall be signed and sealed by the professional engineer responsible for the design, registered in the Province of British Columbia.
- .4 Submit samples of finishes.

1.5 Quality Assurance

- .1 Manufacturers Representative is to attend a pre-construction meeting to be held with the Consultant, Contractor and Job Forman and other involved trades, to discuss waterproofing practices and details applicable to this project.

- .2 Design criteria: railing assemblies (including top rail, bottom rail, pickets, post and connections) shall be designed to conform with all applicable building codes and loading requirements. Design must specify aluminum alloy type and wall thickness.

1.6 Warranty

- .1 Manufacturer's 25 year warranty covering powder coating and structural defects.

1.7 Delivery, Storage & Handling

- .1 Deliver materials to the job site in good condition and store in clean, dry location, properly protected against damage to finished surfaces.
- .2 Store away from uncured concrete, masonry, or stucco.

1.8 Mock-up

- .1 Construct mock-up in a location as directed by the Consultant. Manufacturers representative to be present during mock-up.
- .2 Mock-up will include siding, roofing, railing and support post details.

PART 2 - PRODUCTS

2.1 Manufacturer

- .1 Dunne & Brounstein Construction Limited, 20283-37A Avenue, Langley, B.C. V3A 2S9
Telephone: 604-220-4004, Fax: 604-534-2816

2.2 Railing System

- .1 Component Glass Rail System
 - .1 Color: To match existing guardrail colour.
 - .2 Profile of top rail, corner posts and center posts to match existing.

2.3 Materials

- .1 Extrusion Alloy: 6061-T6
- .2 Fasteners, screws, anchors and inserts: corrosion resistant cadmium plated steel or stainless steel.

2.4 Finishes

- .1 Polyester powder coat finish, electrostatically applied to 2-3 mil thickness.

2.5 Accessories

- .1 Support bracing as designed by the professional engineer responsible for the design.
- .2 Base plates, wall mounts, sleeves, and end clips, flat bar aluminum as required.

2.5 Fabrication

- .1 Fabricate from structural aluminum only.
- .2 Fabricate railing assembly to design dimensions, details, and specified requirements for structural performance. Fabricate members and fittings to provide flush, smooth, rigid hairline joints. All fabrication work is to be completed in accordance with the approved shop drawings.
- .3 Preassemble items in shop to greatest extent possible to minimize field splicing and assembly.
- .4 Disassemble only as required for shipping. Clearly identify each unit for installation.
- .5 Fasteners and welds to be concealed as much as design will allow.
- .6 Connect non-welded members using manufacturer's standard concealed fasteners and fittings unless noted otherwise.
- .7 Close exposed ends of railing members with manufacturer's standard end fittings.
- .8 Picket and post spacing to be set in accordance with shop drawings and with applicable building codes.
- .9 Provide manufacturer's standard brackets, fittings, flanges, and anchors for connection to other work unless otherwise noted.
- .10 Provide inserts and anchors for connecting guardrail system to support structure in accordance with all applicable codes.
- .11 Contractor is to verify dimensions on site prior to fabrication.

PART 3 - EXECUTION

3.1 General

- .1 All work and materials relating to the metal handrail and railing shall be in strict accordance with the Manufacturers recommendations unless otherwise specified in the contract documents.

- .2 Work in conjunction with other trades for the timely completion and sequencing of the work including installation of substrate, curbs, flashings, exterior cladding and railings.

3.2 Installation

- .1 Install work in accordance with the final shop drawings and manufacturer's instructions.
- .2 Erect work plumb, square, straight, level and true, free from distortion or defects detrimental to appearance or performance.
- .3 Anchor posts to substrate with approved fasteners.
- .4 Use end posts with welded sleeves and end cap where guardrail terminates. Do not tie guardrails into walls.
- .5 A tapered neoprene gasket will be installed under the handrail mounting bracket. Gasket should be slightly recessed so as not to be visible around the edge of the mounting bracket.
- .6 Handrails will be fastened through the mounting bracket and gasket to the balcony wall using non-corrosive screw-type fasteners with gasketed washers.
- .7 Caulk the edges of the gasket under the mounting brackets and caulk the fasteners used to secure the guardrail with caulk.

3.3 Cleaning

- .1 As installation is completed, wash railing using clean water and soap, rinse with water.
- .2 Do not use acid solution, steel wool, or other harsh abrasives.

3.4 Elevated Walkway Guardrails

- .1 The existing guardrails on the elevated walkways shall be left in place. Adjust ends of handrails to new dimensions of rainscreen walls.

END OF SECTION 05720
June 18, 2001

PART 1 - GENERAL

1.1 Description of Work

- .1 Work includes, but is not limited to:
 - .1 Supply and installation of wood blocking as required.
 - .2 Replacement of all damaged framing members in the canopy structure at the main entrance to the courtyard.

1.2 Related Work

- .1 Metal Flashings Section 07620

1.3 Source Quality Control

- .1 Lumber identification: by grade stamp of an agency certified by Canadian Lumber Standards Accreditation Board.
- .2 Pressure treatment in accordance with CSA 080-M1983.

1.4 Reference Standards

- .1 Do rough carpentry work in accordance with the following specifications and standards:
 - .1 CSA 0141-1970 Softwood Lumber
 - .2 CSA B111-1974 Wire, Nails, Spikes and Staples
 - .3 NLGA Standard Grading Rules for Canadian Lumber, 1989 edition.
 - .4 Pressure treatment in accordance with CSA 080-M1983

PART 2 - PRODUCTS

2.1 Lumber Material

- .1 Lumber: unless specified otherwise, softwood, S2S, moisture content 19% or less in accordance with following standards:
 - .1 CSA 0414-1970
 - .2 NLGA Standard Grading Rules for Canadian Lumber, 1989 edition.
 - .3 Pressure treated with Borate in accordance with CSA 080.34-97

- .2 Dimension sizes: "Standard" light framing or better grade.

2.2 Fasteners

- .1 Fasteners used to attach timber to metal framing shall be stainless steel screws c/w washers or approved equal.

2.3 Wood Preservative

- .1 Acceptable Products:
.1 Borate 20-2BD

PART 3 - EXECUTION

3.1 Construction

- .1 Comply with requirements of the National Building Code of Canada (1990) and the Vancouver Building By-Law, Part 9.

3.2 Examination & Preparation

- .1 Carefully examine all existing visible framing and surrounding sheathing.
.2 Ensure all existing materials are in good condition suitable to accept the work of this section.
.3 Notify Consultant of all locations where there is evidence of water damage before proceeding with the Work.

3.3 Cutting

- .1 Ensure all cuts are straight, true and square.
.2 Ensure resulting surface left after cutting is in good condition with no loose or broken edges and suitable to receive the patch without resulting gaps.
.3 Treat cut wood surfaces of all pressure treated material with wood preservative, before installation.

3.4 Wood Blocking

- .1 Install wood blocking, as required. Where beveling is indicated, ensure that finished slope does not allow water to pond at any point on sloped surface.
- .2 Align and plumb faces of blocking to a tolerance of 1:600.

3.5 Surface-Applied Wood Preservative.

- .1 Treat cut wood surfaces of all pressure treated material with approved wood preservative, before installation.
- .2 Apply preservative by dipping, or by brush to completely saturate and maintain wet film on surface for minimum 3 minute soak on lumber and one minute soak on plywood.
- .3 Re-treat surfaces exposed by cutting, trimming or boring with liberal brush application of preservative before installation.

END OF SECTION 06101
June 18, 2001

PART 1 - GENERAL

1.1 Description of Work

- .1 Work includes but is not limited to:
 - .1 Supply and installation of Dens-Glass Gold exterior wall sheathing.
 - .2 Make good existing vapour barrier where required before installation of new exterior wall sheathing.

1.2 Related Work

- | | | |
|----|--------------------------|---------------|
| .1 | Building Sheathing Paper | Section 07198 |
| .2 | Stucco | Section 07240 |
| .3 | Metal Flashings | Section 07620 |
| .4 | Self-adhesive Membrane | Section 07650 |
| .5 | Selants | Section 09900 |

1.3 Submittals

- .1 Submit manufacturer's descriptive literature including material composition, thickness, size, and fire resistance.
- .2 Submit manufacturer's written certification that product meets specified requirements.

1.4 Quality Assurance

- .1 Fire-Resistance Ratings: Where applicable, provide materials and construction which are identical to those of assemblies whose fire resistance ratings are indicated.

1.5 Delivery, Storage & Handling

- .1 Deliver materials to the job site in manufacturer's original packaging, containers and bundles with manufacturer's name and identification intact and legible.
- .2 Store level and handle materials to protect against contact with damp and wet surfaces, exposure to weather, breakage and damage to edges. Provide air circulation under covering and around stacks of materials.

1.6 Limitations

- .1 Do not use Dens-Glass Gold sheathing as a base for nailing or mechanical fastening. Fasteners should be flush to the Dens-Glass Gold's face.
- .2 Do not laminate Dens-Glass Gold sheathing to masonry surfaces; use furring strips or framing spaced at manufacturer's specifications.
- .3 Do not apply Dens-Glass Gold sheathing below grade.
- .4 During winter months, use of non-vented direct combustion heaters shall not be used in excess to the point where moisture accumulation/condensation occurs around Dens-Glass Gold sheathing.
- .5 Dens-Glass Gold sheathing is not intended for roof applications.

1.7 Warranty

- .1 **Materials Warranty:** Provide sheathing manufacturer's standard warranty covering sheathing materials for five years commencing on date of substantial completion.
- .2 **Weathering Warranty:** Provide sheathing manufacturer's standard warranty covering in-place exposure damage to sheathing for six months commencing on date of substantial completion.

PART 2 - PRODUCTS

2.1 Exterior Sheathing

- .1 **Acceptable Products:**
 - .1 G-P Gypsum Corporation 5/8" (15.9 mm) Dens-Glass Gold Fireguard sheathing.
- .2 **Characteristics:**
 - .1 Size: Nominal 5/8" (15.9 mm) thick by 4' by 8', 9' or 10' (2.5 lbs. per square foot).
 - .2 Composition: Gypsum sheathing manufactured in accordance with ASTM C 1177 with glass mats both sides and long edges, water-resistant treated core.
 - .3 Fire resistance:
 - .1 Noncombustible when tested in accordance with ASTM E 136
 - .2 Flame spread 0, smoke developed 0, when tested in accordance with ASTM E 84
 - .3 Rated as "Type X" as defined in ASTM C 36 when tested according to ASTM E 119.

2.2 Accessories

- .1 Joint Tape: 2" wide, 10" x 10" glass mesh tape.
- .2 Joint Compound: G-P Gypsum Corporation GyProc 90 setting-type joint compound.
- .3 Screws:
 - .1 All screws to be no. 8 x 1¼ metal to metal hot dipped galvanized with bugle head for attaching Dens-Glass Gold.

PART 3 - EXECUTION

3.1 Preparation

- .1 Examine subframing; verify that surface of framing and furring members to receive sheathing does not vary more than ¼" from the faces of adjacent members.
- .2 Repair existing vapour barrier as required before installation of exterior wall sheathing.

3.2 Installation

- .1 Provide Dens-Glass Gold sheathing where indicated on drawings. Install sheathing in accordance with manufacturer's instructions.
- .2 Install Dens-Glass Gold sheathing with gold side out.
- .3 Use maximum lengths possible to minimize number of joints.
- .4 Attach Dens-Glass Gold sheathing to metal framing with screws spaced 8" o.c. at perimeter where there are framing supports; and 8" o.c. along intermediate framing in field.
- .5 Drive fasteners to bear tight against and flush with surface of sheathing. Do not countersink.
- .6 Locate fasteners minimum ¾" from edges and ends of sheathing panels.
- .7 Keep vertical and horizontal joints at least 6" from the edges of doors, windows, and other openings.

END OF SECTION 06113
Revised on July 26, 2001

PART 1 - GENERAL

1.1 Description of Work

- .1 Work includes but is not limited to the supply and installation of Tyvek CommericalWrap to produce both a continuous an air resisting membrane and water shedding barrier over the substrates.

1.2 Related Sections

- | | | |
|----|-----------------------------|---------------|
| .1 | Exterior Sheathing | Section 06113 |
| .2 | Stucco | Section 07240 |
| .3 | Pedestrian Membranes | Section 07530 |
| .4 | Modified Bituminous Roofing | Section 07550 |
| .5 | Metal Flashings | Section 07620 |
| .6 | Aluminum Windows | Section 08520 |
| .7 | Aluminum Doors | Section 08521 |

1.3 References

- .1 CCMC Evaluation Report CCMC 12857-R "Air Barrier Material" dated 98-03-12
- .2 CCMC Evaluation Report CCMC 12808-R "Breather-type Sheathing Membrane" dated 97-05-16

PART 2 - PRODUCTS

2.1 Materials

- .1 Tyvek CommericalWrap by DuPont Company to the performance level required in the City of Vancouver Building By-law 5.4.1.2 (1) and Appendix A-9.25.3.2.
- .2 Wide staples with minimum 1" crown and 3/8" length for plywood sheathing.
- .3 Sealing Tape: CCMC evaluated air resistant, pressure-sensitive adhesive tape, 25 mm wide.

PART 3 - EXECUTION

3.1 Installation

- .1 Install in accordance with specifications, detail drawings and manufacturer's instructions to produce a continuous sealed water-shedding barrier and air resisting membrane over substrates applicable.
- .2 Overlap all horizontal and vertical seams by a minimum 150 mm (6 inches) and seal with approved tape.
- .3 Minimize the number of staples required to hold the sheathing membrane in place prior to application of strapping and/or cladding. Locate staples under laps, throughwall flashings, and under strapping. Exposed staples are to be sealed.
- .4 Sheathing membrane shall be air-tight, free from holes, tears, and punctures.
- .5 Seal joints and laps with CCMC evaluated sealing tape prior to installation of finish material.
- .6 Seal any penetration of the sheathing membrane (e.g., electrical outlets, hose bibs, lighting outlets, vents, etc.) to Tyvek with self-adhesive membrane.
- .7 All window and door penetrations are to be sealed in accordance with the drawings and specifications.
- .8 Install with printed side facing outward and protected from exposure to ultraviolet radiation from the sun within sixty (60) days.

END OF SECTION 07198

July 18, 2001

PART 1 - GENERAL

1.1 Description of Work

- .1 Work includes, but is not limited to:
 - .1 Supply and install new stucco with acrylic coating finish for rain screen stucco walls including, metal hat tracks, breather board, wire lath, and metal trim as detailed on the plans, elevations and details.
 - .2 Finishing of some existing stucco surfaces with primus and acrylic finish as noted on drawings.
 - .3 Supply and installation of a new PVC rainwater leader system.

1.2 Related Work

- | | | |
|----|--------------------------|---------------|
| .1 | Building Sheathing Paper | Section 07198 |
| .2 | Performed Metal Flashing | Section 07620 |
| .3 | Self-Adhesive Membrane | Section 07650 |
| .4 | Sealants | Section 07900 |
| .5 | Aluminum Windows | Section 08520 |
| .6 | Aluminum Doors | Section 08521 |

1.3 Quality Assurance

- .1 All work shall be done by skilled tradesmen experienced in the application of stucco, all according to best trade practice to produce a first class job, and all at last according to the Association of Wall and Ceiling (AWCC) standard specifications.
- .2 Stucco shall meet the requirements of the City of Vancouver for rain screen stucco.

1.4 Guarantee

- .1 Provide the Owner with a written guarantee that the stucco system will remain free from defects for a period of five (5) years.

1.5 Product Delivery, Storage and Handling

- .1 Deliver and store material undamaged in original wrappings or containers with the manufacturer's labels and seals intact.

- .2 Prevent damage to materials during handling and storage. Keep cementitious materials under cover and free from moisture.
- .3 Corner beads, casing beads, and such trim shall be shipped in rigid packages to avoid damage. Bent or deformed material will be rejected by the Consultant.

1.6 Submittals

- .1 Sample Panel: a 1'-0" x 1'-0" sample panel of type, finishes and colour of stucco specified will be required by the Consultant. The approved sample shall form a standard for this project, and no work of an inferior quality will be allowed. Start no final work until approval of sample is given by the Consultant.
- .2 Submit samples of trim accessories and any other materials as requested by the Consultant.

1.7 Job Conditions

- .1 Examine the underlying surfaces and adjoining work and report to the Consultant in writing defects which might impair the lathing and stucco work.
- .2 Commencement of work shall imply acceptance of surfaces to receive lath.

PART 2 – PRODUCTS

2.1 Accessories

- .1 20 ga. 3/4" galvanized steel hat track c/w no. 8 x 1 1/4 metal to metal hot dipped galvanized wafer head screws for attaching hat tracks to wall.
- .2 Breather Board – Hal-Tex Breather Board (3 ply) or approved alternate.
- .3 Stucco mesh – Self furring wilded wire 2" x 2"
- .4 Stucco stops shall be formed from minimum 26 gauge galvanized steel. Surfaces of all stops to be concealed in finished work. Horizontal stop to be self draining type.

2.2 Stucco Materials

- .1 Stucco materials, lath, and accessories shall be to B.C. Wall and Ceiling standard specifications and as noted on the drawings.
- .2 Bonding Agent: To the manufacturer's recommendation.
- .3 Finish: the finish shall be factory-mixed, water-based acrylic coating with integral colour and texture. Type, texture and colour shall be as to Consultant's selection.

- .4 It is the responsibility of this section to insure that mix designs and proportions are suitable for this project to obtain specified finishes and crack free installation.

PART 3 EXECUTION

3.1 Mock-up

- .1 Construct a mock-up of the rainscreen stucco system including exterior sheathing, air barrier, self-adhesive membrane, sealant, adhesive coat, EPS board, mesh, finish coat, and all other accessories. Allow Consultant to review mockup at predetermined stages of completion. Mock-up shall be a minimum one story in height and sufficient width to include at least one window, external and internal corner.

3.2 Installation

- .1 Install a breather board over all wall areas to receive stucco. Sheets must be cut to fit around all penetrations and openings. Horizontal laps should be made in shingle fashion, vertical joints may be butted and taped.
- .2 Attach the breather board to the $\frac{3}{4}$ " galvanized hat track on the wall using stainless steel screws. Do not exceed 12" span between supports. Furring strips to coincide with wall stud positions. Nails shall have a minimum head diameter of 7/16 inch. Use only enough nails to secure the drainage mat until the stucco lath is installed. Do not leave the breather board exposed to the sun for more than 14 days.
- .3 Install a self-furring welded wire 2 inches by 2 inches on centre lath over the breather board. The lath shall have weight .30 lb/ft². Install the 2 inches by 2 inches on centre lath in accordance with AWCC recommendations. Fasten the lath to the wall at stud locations only.
- .4 Install a conventional three-layer stucco system. The application must be in accordance with AWCC recommendations. The scratch coat must be scored horizontally to form a mechanical key for the second base coat, or brown coat. Apply scratch coat using a slightly reduced trowel pressure to avoid deflection of the backing sheet. When the scratch coat hardens, at least 24 hours, the brown coat should be applied in the normal manner.
- .5 The stucco lath must be fully embedded in the first base coat, or scratch coat. The scratch coat must be $\frac{1}{2}$ inch thick; $\frac{1}{4}$ inch behind the stucco lath, and $\frac{1}{4}$ inch in front of the lath.
- .6 The brown coat should be at least $\frac{1}{4}$ inch thick. Thinner application is only acceptable if required to blend the new stucco with the existing stucco.
- .7 The brown coat should cure a minimum of 14 days before application of the finish coat. The texture of the finish coat must match the original finish coat. Colour will be as specified by the Consultant.

- .8 During hot, windy, or dry weather, cover the stucco in polyethylene to assist the curing process by preventing excessive evaporation.
- .9 The finish coat should be applied only after the base coats have sufficiently cured. It should be at least 3 mm (1/8 inch) thick. Thinner application is only acceptable if required to blend the new stucco with the existing stucco.

3.3 Existing Stucco Walls

- .1 Paint all existing stucco surfaces not scheduled for rehabilitation in accordance with Section 09900 – Painting.
- .2 At tie-ins between EIFS and existing stucco, grind off approximately 1/4" (6 mm) of the finish coat of the existing stucco to a distance of 6" beyond the tie-in. Overlap the cold joint between the EIFS and the existing stucco a minimum of 8" with a new fiberglass reinforcing mesh. Apply a compatible primus over the fiberglass reinforcing mesh before application of the finish coat.

3.4 Adjust & Clean

- .1 Upon completion of work of this Contract, remove any protective coverings from exposed surfaces and clean surfaces free of all smears, marks, and discolouration.
- .2 The Contractor shall be responsible for immediately cleaning off all smears, marks, etc., caused by his own forces.
- .3 Remove waste and excess material off site at completion of stucco work. Repair and make good any defects to this application or any defects to any other work caused by this application, all to the approval of the Consultant.

3.5 Rainwater Leaders

- .1 Supply and install new square Mitten Vinyl Rainwater Leader System to match dimensions of existing rainwater leader system. Colour to match new stucco.

END OF SECTION 07240
Revised on July 26, 2001

PART 1 - GENERAL

1.1 Description of Work

- .1 Work includes, but is not limited to, the following:
 - .1 Supply and installation of liquid applied traffic bearing coating system for all balcony decks excluding units 402 and 404

1.2 Related Work

- | | | |
|----|--------------------------|---------------|
| .1 | Aluminum Railings | Section 05720 |
| .2 | Rough Carpentry | Section 06101 |
| .3 | Exterior Sheathing | Section 06113 |
| .4 | Building Sheathing Paper | Section 07198 |
| .5 | Stucco | Section 07240 |

1.3 Submittals

- .1 Product Data: Submit manufacturers standard submittal package including specification, installation instructions, and general information and a cured 6" by 6" sample for each waterproofing material.
- .2 Contractor to submit colour fan of manufacturer's standard range of colours.
- .3 Applicator Qualifications: Submit current "Approved Applicator" certificate from the specified waterproofing manufacturer. Name all subcontractors involved in membrane application.

1.4 Quality Assurance

- .1 Primary pedestrian traffic membrane materials shall be products of a single manufacturer. Secondary materials shall be recommended by the primary manufacturer. Manufacturer shall have a minimum of 10 years experience in the manufacture of materials of this type.
- .2 Applicators shall have a minimum of 5 years experience in the application of waterproofing materials of the type specified.

- .3 Pre-Installation Conference: just prior to commencement of the traffic membrane system, meet at the site with a representative of the coating manufacturer, the waterproofing contractor, the general contractor, the consultant and other parties affected by this section. Review methods and procedures, substrate conditions, scheduling and safety.

1.5 Product Delivery,
Storage and Handling

- .1 Store materials in the original unopened containers until ready for use.
- .2 Follow the special handling or storage requirements of the manufacturer for cold weather, hot weather, etc.

1.6 Environmental
Conditions

- .1 Weather: Proceed with work of this section only when existing and forecasted weather conditions will permit the application to be performed in accordance with the manufacturer's recommendations.
- .2 Safety: Post signs to advise the other trades of the hazards that may be associated with this particular application. Refer to all applicable data, including, but not limited to MSDS sheets, PDS sheets, etc. for specific personal protection required.
- .3 Substrate: Proceed with work of this section only after substrate construction and penetration work have been completed.
- .4 Ventilation: Provide adequate ventilation to prevent the accumulation of hazardous fumes during application.

1.7 Warranty

- .1 Provide the Owner, through "Membrane Manufacturer" a material guaranty stating this roofing system shall remain watertight and free from materials defects for a total of five (5) years after the final completion date non pro-rated and that all repairs and/or replacement shall be carried out at no additional cost to the Owner.

PART 2 - PRODUCTS

2.1 Materials

- .1 Pedestrian deck system for installation on concrete as manufactured by Tremco. The system shall consist of the following components.
 - .1 Vulkem 360 NF Waterproofing Base Coat.
 - .1 Thickness: 30 dry mils
 - .2 Vulkem 351 Slip-Resistant Top Coat.
 - .1 Thickness: 15 dry mils
 - .2 Colour: To be chosen by Consultant from manufacturer's standard range
- .2 Misc. Accessories: All items incorporated into this system shall be compatible with and approved by the coating manufacturer.

2.2 Performance Qualifications

- .1 General: This entire system including all accessories shall be a waterproof, non-skid surface designed for pedestrian foot traffic.

PART 3 - EXECUTION

3.1 Technical Advice

- .1 The installation of this waterproofing membrane shall be accomplished in the presence of, or with the advice of the manufacturer's technical representative.

3.2 Preparation

- .1 Clean substrate to remove any and all surface contaminants. Refer to Manufacturer's instructions for surface preparation.
- .2 Mask off all adjoining areas that are not to receive the fluid applied waterproofing.
- .3 Provide a suitable work station to mix the coating materials.

3.3 Installation

- .1 Apply base and top coat in accordance with the manufacturer's instructions at the recommended coverage rate to the specified thickness.
- .2 Allow appropriate cure time between applications.
- .3 Extend membrane not less than 8 inches up walls.

3.3 Field Quality Control

- .1 General: The contractor shall maintain a system to verify compliance with this specification. It is recommended to keep a job log for this purpose, since attempting to remove samples to verify thickness is difficult and can leave an unsightly repair. Any deviations from this specification shall be corrected by the contractor.
- .2 Inspections: A minimum of three (substrate, application and final) inspections, by an approved manufacturers representative, will be required on all projects requiring a warranty.

END OF SECTION 07530
June 18, 2001

PART 1 - GENERAL

1.1 Description of Work

- .1 Work of this section includes, but is not restricted to, the following:
 - .1 Strip in new slab waterproofing membrane around the base of the building perimeter as shown on the attached drawings.
 - .2 Remove and reinstall existing pavers and exposed aggregate concrete as required to complete the work.
 - .3 Excavate the planters indicated on the attached drawings. Save soil for re-use.

1.2 Related Work

- | | | |
|----|--------------------|---------------|
| .1 | Exterior Sheathing | Section 06113 |
| .2 | Stucco | Section 07240 |
| .3 | Metal Flashings | Section 07620 |

1.3 References

- .1 CAN/CGSB 37.56-98, Membrane Modified, Bituminous, Prefabricated, and Reinforced for Roofing.
- .1 The Roofing Contractors' Association of British Columbia (RCABC) Roofing Practices Manual
- .2 CSA A231.1-[1972], Precast Concrete Paving Slabs
- .4 City of Vancouver Building By-Laws, 1999 edition.

1.4 Qualifications

- .1 Roofing Contractor is required to submit evidence that the contractor has successfully completed similar work over a period of not less than 5 years.
- .2 Applicator: Company trained and certified by the system provider in performing the work of this section with current certification on file

1.5 Quality Assurance

- .1 Confirm that surfaces to which modified membrane is to be applied are in a condition suitable for this application.
- .2 Unless otherwise specified, comply with manufacturer's latest printed instructions for materials and installation methods.