FINALIT CLEANING PROTECTION/RESTORATION MASTER SPECIFICATION

- Finalit No. 21S Pores Filler
- Finalit No. 9 Lime and Cement Bloom Remover
- Finalit No. 1 Intensive Cleaner
- Finalit No. 21 Fixative Penetrating Stopper
- Finalit No. 20 Hot Impregnation
- Finalit No. 22 Cool Impregnation
- Finalit No. 25 Anti-Slip Impregnation

This specification has been numbered, organized and formatted in accordance with the MasterFormat, Section Format and Page Format documents published jointly by Construction Specifications Canada (CSC) and Construction Specifications Institute (CSI).

The content of this specification is of general order and must be adapted to the specific requirements of a project. It is offered as a guide to experienced and knowledgeable construction professionals who must assume full responsibility for its interpretation and use. Finalit and its Certified Applicator Partners, is both a material supplier and cleaning/restoration contractor for stone, ceramic, concrete, masonry, and other materials.

Square brackets [ ] containing texts indicate an option to be selected/inserted by the specifier. Remove brackets and unused options before printing.

Part 1 - General

1.01 SECTION INCLUDES

A. Cleaning protection/restoration of [_____] surfaces in contract area where indicated [_____].

B. Areas to include [walls] [floors] [stairs] [columns] [_____].

1.02 ALTERNATES

A. Obtain in writing from [Consultant] [Architect] [Engineer] authorization for changes of standard cleaning method, cleaning medium, tools, pressure, and flow rates.

SPEC NOTE: *The above refers primarily to the cleaning of historic masonry.*

1.03 REFERENCES

A. Canadian Environmental Assessment Act (CEAA) 1995.

B. Mine Safety and Health Administration/National Institute for Occupational Safety and Health (MSHA/NIOSH) Standards.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Pre-installation Meeting:

1. Prior to start of cleaning protection/restoration activities; conduct a meeting on site to review requirements of Contact Documents to examine areas to receive work.

2. Have representatives of Owner, [Consultant] [Architect] [Engineer], Contractor, applicator, cleaning protection/restoration products manufacturer, and other affected parties present.

1.05 SUBMITTALS

A. Submit the following in accordance with Section [01 33 00 – Submittal Procedures].

1. Product Data: Provide cleaning protection/restoration manufacturer's product literature specifications, and MSDS and WHMIS Sheets.

2. Documentation, showing:
   a) areas for treatment
   b) general description of work areas including types of material to be treated c/w nominal dimensions of areas.
   c) Any special protective measures required of adjacent materials and or objects.

3. Samples: Provide samples of each building material to be treated.

4. Maintenance Instructions: Provide recommended cleaning products data and methods for maintaining treated surfaces.

5. Extra Stock Materials: Upon completion of work, provide Owner with one litre of each material used for every 100 m² (1000 sq. ft.) of treated surface. In addition, provide 3 months' supply of proprietary citrus-scent cleaner for day-to-day care and maintenance.

1.06 QUALITY ASSURANCE

A. Applicator Qualifications: Certified Applicator Partner of cleaning protection/restoration products manufacturer having a minimum three years' application experience.

B. Mock-up: Provide approx. [1m x 1m] [3'-0" x 3'-0"] mock-up of each treatment area for any different building materials. Based on mock-up treatment, obtain acceptance by [Consultant] [Architect] [Engineer] prior to start of work.

1.07 WASTE MANAGEMENT AND DISPOSAL

A. Separate and recycle waste materials in accordance with Section [01 74 19 Construction/Demolition Waste Management And Disposal].

B. Remove from site and dispose of packaging materials at appropriate recycling facilities.

C. Collect and separate for disposal [paper] [polystyrene] [corrugated cardboard] packaging material [in appropriate on-site containers] for recycling in accordance with Waste Management Plan.

D. Divert unused cleaning agents from landfill to official hazardous material collections site approved by [Consultant] [Architect] [Engineer].

E. Do not dispose of unused cleaning agents into sewer systems, into lakes, streams, onto ground or in other location where it will pose health or environmental hazard.

1.08 AMBIENT REQUIREMENTS

A. Do not use wet cleaning methods where there is threat of frost.

B. Do not use chemical cleaners where temperature is below 10ºC.

C. Provide shading to areas to avoid cleaning in full, hot sunlight.

D. Do not clean if there is risk of chemicals spray being blown onto publicly accessible areas.

1.09 EXISTING CONDITIONS

A. Report to [Consultant] [Architect] [Engineer] conditions of deteriorated surfaces found during cleaning.

B. Record existing conditions, using [photographs] [or] [video tape], before and after cleaning. Advise [Consultant][Architect] [Engineer] of potential cleaning problems.

C. Do not clean areas of deteriorated masonry without prior written approval of [Consultant] [Architect] [Engineer].

1.10 SCHEDULING

A. Submit work schedule indicating progress of stages within time of final completion shown in [Tender] documents, and in accordance with Section [01 33 00 –Submittal Procedures].

B. Complete Work within approved schedule time.

C. Do not change Schedule without written approval of [Consultant] [Architect] [Engineer].

D. Co-ordinate cleaning work schedule with other work on site.

E. Perform cleaning protection/restoration:
   1. after the restoration of the building exterior and
   2. after the installation of new doors, windows, roofing and flashings and before interior finishing work.

1.11 DELIVERY, STORAGE AND HANDLING

A. Deliver and store materials in original wrappings and containers with manufacturer's seals and labels intact. Protect from damage and ambient conditions in accordance with manufacturer's recommendations.

B. Store materials in cool, dry location.

1.12 SITE CONDITIONS

A. Ambient Conditions: Provide adequate ventilation and/or heat according to cleaning protection/restoration manufacturer's recommendations.

B. Existing Conditions: Report to [Consultant] [Architect] [Engineer] conditions of deteriorated [stonework] [brick work] [mortar] found during cleaning.

C. Do not clean areas of deteriorated surfaces until advised to do so by [Consultant] [Architect] [Engineer].

Part 2 - Products

2.01 MANUFACTURERS

A. Acceptable cleaning protection/restoration products manufacturer: Finalit StoneCare Canada Corporation, P.O. Box 731, 27 St. Clair Ave., East, Toronto, ON M4T 2N5, Tel: 416-928-6556; Fax: 416-928-6556 Email: finalit@istar.ca ;Web: www.finalitstonecare.ca

2.02 MATERIALS

A. Finalit No. 21S Pores Filler

SPEC NOTE: No. 21S is a pre-requisite treatment and basic protection, for highly absorbent materials, and for Finalit No. 20 Hot Impregnation/Finalit #25 Anti-slip Impregnation to form an anti-slip surface. Surfaces must be cleaned of all dirt, efflorescence and special stains such as rust before application of No. 21S Pores Filler, using Finalit No. 1 Intensive Cleaner and other special cleaning products.

B. Finalit No. 9 Lime and Cement Bloom Remover

SPEC NOTE: No. 9 is a mildly acidic cleaner specially developed for the cleaning of lime and cement efflorescence and mortar residues. Finalit No. 1 Intensive Cleaner must be used as a neutralizing agent for No. 9.

C. Finalit No. 1 Intensive Cleaner

SPEC NOTE: No. 1 is an alkaline cleaner specially developed for the basic cleaning of badly soiled surfaces and even removes oil and red wine stains. No. 1 is also used as a neutralizing agent for Finalit acidic special cleaners.

D. Finalit No. 21 Fixative Penetrating Stopper

SPEC NOTE: No. 21 Fixative Penetrating Stopper is a hardening agent that offers excellent adhesion to porous and chalk surfaces and is therefore used as a stabilizer and adhesion mediator for subsequent coats. It is also a pre-requisite for Finalit No. 20 Hot Impregnation / Finalit No. 25 Anti-Slip Impregnation to form an anti-slip surface.

E. Finalit No. 20 Hot Impregnation

SPEC NOTE: No. 20 has been specially developed to provide protection against stains, graffiti, de-icing salt and UV-rays on natural stone and ceramic tiles and other manufactured materials while allowing stone to breathe, in order to maintain a natural appearance and easy day-to-day care. In most instances, cleaning the surface with Finalit basic and special cleaning products is a pre-requisite to starting the application of No. 20 which has been approved by the Austrian Historical Board.

F. Finalit No. 22 Cool Impregnation

SPEC NOTE: No. 22 is a substantially less expensive version of No. 20 Hot Impregnation. The protection is mid-term rather than long-term. No. 22 has been specially developed to provide protection against stains for natural stone, ceramic tiles and other manufactured materials while allowing stone to breathe, in order to maintain a natural appearance and easy day-to-day care. In most instances, cleaning the surface with Finalit basic and special cleaning products is a pre-requisite to starting the application of No. 22.

G. Finalit No. 25 Anti-Slip Impregnation

SPEC NOTE: No. 25 has been specially developed to produce a high resistance to slipping and to provide protection against stains and slipping for natural stone, ceramic tile and other manufactured materials while allowing stone to breathe, in order to maintain a natural appearance and easy day-to-day care. In most instances, cleaning the surface with Finalit basic and special cleaning products is a pre-requisite to starting the application of No. 25. Also, Finalit No. 21 Fixative Penetrating Stopper or Finalit No. 21S Pores Filler is a pre-requisite for absorbent materials to the application of Finalit No. 25 Anti-Slip Impregnation to produce a high resistance to slipping.

H. Water: Clean, potable and free of contaminants. Treat water that has high metal content before using for cleaning, to eliminate producing iron and/or copper stains on surfaces.

I. Air: Free from oil or other contaminants.

J. Tools and Equipment: As recommended by cleaning protection/restoration products manufacturer.

2.03 MIXES

A. Where applicable, mix materials as recommended by cleaning products manufacturer prior to use.

PART 3 - Execution

3.01 PREPARATION

A. Remove decayed sections of [stone] [brick][_____] until sound surface is obtained. Obtain [Consultant's] [Architect's] [Engineer's] approval for methodology and tools to be employed before commencing removal.

B. Prevent damage to [building] [fencing] [trees] [landscaping] [pavement] [_____]. Make good any damage.

C. Mask or seal vents, windows, and other openings, to prevent water entry.

D. Mask glass and metal adjacent to masonry and stonework.

E. Seal or repair openings and joints, and cover surfaces not to be cleaned in work area.

F. Protect surrounding terrain from excessive watering and water damage.

G. Provide adequate troughs or other approved means to channel water to disposal source, and adequate protection to adjacent surfaces to prevent damage.

H. Hang sheeting material from scaffolding to enclose water spray.

I. Have workers wear protective gloves, coveralls, boots and eye, head, and face protection, and filter mask.

J. When cleaning by pressured water systems is employed, check building interior side of walls minimum once every hour for water infiltration. Should there be any signs of water entry, no matter how insignificant, immediately stop use of

K. water and notify [Consultant] [Architect] [Engineer] for inspection and direction.

3.02 APPLICATION

A. General

1. Follow recommendations as outlined in cleaning protection/restoration products manufacturer's Technical Information (applicator) manual.

2. Clean all surfaces to receive treatment of all dirt, efflorescence and special stains such as rust before application.

3. All areas to be protected/impregnated must be clean and dry.

4. Adhere to recommendations provided in Material Safety Data Sheets (MSDS).

5. Ensure good ventilation/exhaust in application areas. Keep ignition sources away from products, including the smoking of tobacco products.

5. Employ safety measures/devices in accordance with cleaning products manufacturer including gloves, eye protection and protective clothing.

SPEC NOTE: Delete any of the materials and application clauses not required.

B. Finalit No. 21S Pores Filler

1. Pour into tray or spray mechanism, full strength or diluted at ratio of up to1:3 (one part filler to 3 parts water).

2. If using tray, dip woolly washer into tray and apply the filler with one or two swipes depending upon surface absorbency. Immediately after application, wipe excess material from surface with dry cotton cloth.

3. If using spray mechanism, spray filler onto surface and wipe excess material from surface using dry cotton cloth.

4. Allow surfaces to dry for approximately one hour; polish with a white pad and a high speed machine to remove any surplus filler or to achieve a glossier surface if required.

5. Apply Finalit impregnation afterwards in order to achieve maximum protection.

6. Allow 24 hours for full cure.

C. Finalit No. 9 Lime and Cement Bloom Remover

1. Brush in full strength or diluted at ratio of up to1:20 (one part No. 9 to 20 parts water).

2. Clean surfaces by thoroughly scrubbing with fibre brush, walk-behind cleaning machine or ride-on machine with nylon pads or brushes, depending on surface finish.

3. Allow to stand for about 5-60 minutes, then rinse thoroughly with water.

4. Neutralize surfaces with Finalit No. 1 Intensive Cleaner diluted with water at ratio of 1:20, and repeat as per steps 2 and 3 above, if necessary.

5. Extract all dirty water from surfaces using wet vac prior to application of any proprietary protections.

D. Finalit No. 1 Intensive Cleaner

1. Apply full strength or diluted up to 1:20 with fresh water depending on degree of dirt.

2. Clean surfaces by thoroughly scrubbing with fibre brush, walk-behind cleaning machine or ride-on machine with nylon pads or brushes, depending on surface finish.

3. Allow to stand for about 5 to 10 minutes, then rinse thoroughly with water and repeat as per steps 1 and 2 above, if necessary.

4. Extract all dirty water from surfaces using wet vac prior to application of any proprietary protections.

E. Finalit No. 20 Hot Impregnation

1. Heat container with top open in water bath to 50 - 70ºC (122 - 158º F).

2. Pour into tray or into spray mechanism.

3. If using tray, dip woolly washer into tray and apply hot impregnation with one or two swipes depending on surface absorbency. Immediately after application wipe excess material from surface with dry cotton cloth.

4. If using spray mechanism, spray hot impregnation onto surface and wipe excess material from surface using dry cotton cloth.

5. Polish with a white pad and a high speed machine to remove any surplus Impregnation or to achieve a glossier surface if required.

6. Allow surfaces to dry for approximately one hour before surface is ready for use.

7. Allow 24 hours for cure.

F. Finalit No. 22 Cool Impregnation

1. Pour into tray or spray mechanism, full strength.

2. If using tray, dip woolly washer into tray and apply the cool impregnation with one or two swipes depending upon surface absorbency. Immediately after application, wipe excess material from surface with dry cotton cloth.

3. If using spray mechanism, spray cool impregnation onto surface and wipe excess material from surface using dry cotton cloth.

4. Polish with a white pad and a high speed machine to remove any surplus impregnation or to achieve a glossier surface if required.

5. Allow surfaces to dry for approximately one hour.

6. Allow 24 hours for full cure.

G. Finalit No. 21 Fixative Penetrating Stopper

1. Pour into tray or spray mechanism, full strength.

2. If using tray, dip woolly washer into tray and apply the penetrating stopper with one or two swipes depending upon surface absorbency. Immediately after application, wipe excess material from surface with dry cotton cloth.

3. If using spray mechanism, spray penetrating stopper onto surface and wipe excess material from surface using dry cotton cloth.

4. Allow surfaces to dry for approximately one hour.

5. Polish with a white pad and a high speed machine to remove any surplus fixative or to achieve a glossier surface if required.

6. Apply Finalit impregnation afterwards in order to achieve maximum protection

7. Allow 24 hours for full cure.

H. Finalit No. 25 Anti-Slip Impregnation

1. Before starting, use Finalit No. 21 Fixative Penetrating Stopper (Finalit No. 21S Pores Filler for absorbent materials) to improve anti-slip characteristics.

2. Pour into tray or spray mechanism, full strength.

3. If using tray, dip woolly washer into tray and apply the anti-slip impregnation with one or two swipes depending upon surface absorbency. Immediately after application, wipe excess material from surface with dry cotton cloth.

4. If using spray mechanism, spray anti-slip impregnation onto surface and wipe excess material from surface using dry cotton cloth.

5. Allow surfaces to dry for approximately one hour and then polish with a white pad and a high speed machine.

6. Allow 24 hours for full cure.

3.03 CLEAN-UP

A. Rinse off surfaces [to satisfaction of [Consultant] [Architect] [Engineer] [until no indications of chemicals are present].

B. Rinse from bottom to top and from top to bottom.

C. Clean up work area as work progresses. [At end of each day, remove debris and waste from site].

D. Upon completion, clean and restore areas used for work to condition at least equal to that previously existing.

END OF SECTION