## **SPECIFICATION**

# adex **STENCILEX**

Section 09 94 00 Decorative Finishing

This document contains information made available to specialised designers, architects, engineers or other professionals, as a guide only, to help them prepare a technical specification. Specialised designers, architects, engineers or other professionals bear the complete responsibility of evaluating usability, conformity and relevance of the information in view of the particular project and they commit to verify all technical data in the present document in order to assess their suitability in the project. When such use is done by specialised designers, architects, engineers or other professionals, they take full responsibility for the information as if it were their own. Use by a non-specialised person is strongly advised against.

## Application instructions for use of STENCILEX on vertical walls

### PART 1 GENERAL

- 1.1 Related Sections
  - 1. Section 01 40 00: Quality Requirements

2. Section 03 30 00: Cast-in-Place Concrete

- 3. Section 04 20 00: Unit Masonry
- 4. Section 05 40 00: Cold-Formed Metal Framing
- 5. Section 06 10 00: Rough Carpentry
- 6. Section 07 24 00: Exterior Insulation and Finish Systems
- Section 09 28 00: Backing Boards and Underlayments
- 8. Section 09 90 00: Painting and Coatings
- **1.2** Description
  - **1.2.1** ADEX STENCILEX is an exciting decorative finish effect that creates unlimited creativity in the hands of professional designers. Using customized laser-cut stencils and specialized combinations of ADEX Finish Coats, designers are able to create unique repeating patterns with appealing textural depth.
- **1.3** Design Requirements
  - **1.3.1** All work undertaken must comply with the current codes and standards, best practice guides, as well as the manufacturer's installation instructions.
  - **1.3.2** The substrate shall be engineered to withstand all applicable loads, including live, dead, seismic, suction, etc.
  - 1.3.3 Recommended substrates:
    1.3.3.1 Adex EIFS Base Coat: STENCILEX will replace the typical Adex Finish Coat materials when used in an Exterior insulation Finish system (EIFS).
  - **1.3.3.2** Exteriors; properly installed and prepared stucco, concrete, or masonry.
  - **1.3.3.3** Interiors; properly installed and prepared drywall, plaster, concrete, or masonry.
  - **1.3.4** The architect and general contractor shall be advised of any discrepancies. Work shall not proceed

until unsatisfactory conditions are corrected.

- **1.3.5** Expansion joints shall be planned in accordance with the chosen substrate over which the STENCILEX will be installed.
- 1.4 Quality Assurance
  - 1.4.1 Manufacturers
    - **1.4.1.1** EIFS manufacturer shall be Adex Systems Inc.
    - **1.4.1.2** Be a member of and in good standing with the EIFS Council of Canada.
    - **1.4.1.3** All other third-party material manufacturers shall be recognized by Adex Systems Inc.
  - 1.4.2 Applicators
  - **1.4.2.1** Applicators shall have the necessary permits.
  - **1.4.2.2** Applicator shall have a minimum of (2) two-years of experience in applying EIFS systems and employ sufficient, knowledgeable personnel to complete work on schedule.
  - **1.4.2.3** Applicator shall follow all EIFS manufacturer's directions when installing system components.
- 1.5 Delivery & Storage
  - **1.5.1** Deliver materials to the job site in their original unopened packages, clearly marked with the manufacturer's name, and description of contents.
  - **1.5.2** Store in a clean, dry, well-ventilated area at a temperature not less than  $5^{\circ}C$  (41°F).
  - **1.5.3** Protect materials from the elements of weather, and keep away from excessive heat (temperatures above 32°C (90°F)).
- 1.6 STENCILEX Mock-Up
  - **1.6.1** Construct a STENCILEX mock-up panel on site as part of the actual wall on an area as indicated by the Consultant. The approved mock-up panel shall form a standard for the project.
- **1.7** Job Conditions
  - 1.7.1 Ambient and surface temperatures shall be minimum 5°C (41°F) during installation.



- **1.7.2** When installing in climatic temperatures below 5°C (41°F), tarping, heating and ventilation shall be provided to maintain proper installation temperatures.
- **1.7.3** Ambient temperature shall be maintained above 5°C (41°F) for a minimum of 24 hours after installation to ensure that drying is complete. Allow for extended drying times in cool, higher humidity conditions.
- **1.7.4** Installation of Adex materials shall be coordinated with other construction trades.
- 1.8 Warranty
  - **1.8.1** Upon request, the manufacturer shall provide a (5) five-year limited warranty, stating that materials conform to specifications and are free of manufacturing defects.

### PART 2 MATERIALS

- 2.1 Manufacturer
  - 2.1.1 All components of the Adex STENCILEX shall be obtained from Adex Systems Inc., or its authorized distributors. No substitution or addition of other materials is permitted without the written consent from the manufacturer.
- 2.2 Products
  - 2.2.1 Base Coat (optional)
    2.2.1.1 Shall be 100% acrylic-based such as Adex BASE COAT or Adex NIVELEX.
  - **2.2.1.2** Base Coat shall be only required when substrate conditions do not allow for the adhesion of the Adex Finish Coats part of the STENCILEX.
  - **2.2.2** Fiberglass Reinforcing Mesh (optional)
  - **2.2.2.1** Shall be alkali-resistant and selected from the following options below:
    - a)QUICK TAPE MESH: 65g/m<sup>2</sup> (2 oz yd<sup>2</sup>)
    - b)STANDARD MESH: 150g/m<sup>2</sup> (4.5oz/yd<sup>2</sup>)
  - **2.2.2.** Fiberglass Reinforcing Mesh shall be used in conjunction with the Base Coat only when required.
  - **2.2.3** Primer (optional)
  - 2.2.3.1 Shall be a tinted, acrylic-based, roll-on or spray-on priming agent, such as PRIMEX PRIMER or PRIMEX NG PRIMER, manufactured by Adex Systems Inc. PRIMEX/PRIMEX NG is not mandatory but highly recommended as it will enhance the depth of colour, increase the yield and enhance the longevity of the finish

coat.

- 2.2.4 "Base Layer" Finish Coat.
  2.2.4.1 The following, smoothappearance, base coatings are recommended.
- SPEC NOTE: PLEASE SELECT ONE OF THE FOLLOWING FINISH COATS WITH
- ATTRIBUTED COLOUR, DELETE ALL OTHERS
- a)Adex SONORA; Ultra-smooth finish coat (two-coats).
  - Colour: [Reference the Adex Serial Number used to develop the required colour].
  - b) Adex SIENA Finish Coat; Smooth finish coat with suede-like finish appearance.
  - Colour: [Reference the Adex Serial Number used to develop the required colour].
  - c) Adex GRANULAR Finish Coat; Smooth finish coat.
  - Colour: [Reference the Adex Serial Number used to develop the required colour].
  - d)Adex CRYSTAL Liquid Coat; Metallicsheen, roll-on coating (two-coats).
  - Colour: [Reference the Adex Serial Number used to develop the required colour].
  - e) Adex REVIFLEX Liquid Coat; acrylic latex paint coating (two-coats).
  - Colour: [Reference the Adex Serial Number used to develop the required colour].
  - **2.2.4.2** For custom or alternative base layers, please contact your local Adex Representative.
  - 2.2.5 Adex STENCILEX templates.
  - **2.2.5.1** A custom designed template with self-adhesive backing manufactured from recycled High-Impact PolyStyrene (HIPS) plastic or alternative.
  - **2.2.5.2** Ensure adequate volume of templates have been ordered and are available to complete the area of wall required to receive the STENCILEX application.
  - 2.2.6 "Top Layer" Finish Coat
  - **2.2.6.1** Shall be a factory-mixed, 100% acrylic-based Adex Finish Coat, containing integral colour and texture.
  - **2.2.6.2** Texture: [Reference the desired Adex standard or specialty textured finish coat].
  - **2.2.6.3** Colour: [Reference the Adex Serial Number used to develop the required colour].
- 2.3 Other Materials
  - 2.3.1 Water
  - **2.3.1.1** Shall be clean, potable, and free of sediment.
  - 2.3.2 Cement



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**2.3.2.1** Shall be lump-free, Type GU or Type 10 Portland cement conforming to CSA-A-3001.

### PART 3 APPLICATION

- **3.1** Inspection of the Substrate **3.1.1** Adex EIFS Base Coat:
  - 3.1.1 All layers of Adex Fiberglass Reinforcing Mesh must be fully embedded into the EIFS Base Coat.
  - **3.1.1.2** The Adex BASE COAT must be smooth, with minimal deflection, to ensure proper adhesion of the STENCILEX templates.
  - **3.1.1.3** The Adex BASE COAT must be fully dried (minimum of 24 hours, depending on environmental conditions).
  - **3.1.1.4** All walls shall be free of dust, dirt, efflorescence and all other surface contaminants, which may impair the adhesion of any Adex components.
  - **3.1.2** Other substrate:
  - **3.1.2.1** Inspect the substrate to verify that it is structurally sound and solid, ensuring there are no irregular voids or projections.
  - **3.1.2.2** If the substrate requires leveling and/or reinforcement, the installation of Adex BASE COAT and/or NIVELEX with appropriate Fiberglass Reinforcing Mesh may be required. Follow the installation instructions included in respective technical data sheet, or contact an Adex Representative for recommended preparation procedures.
- 3.2 Preparation
  - **3.2.1** Ensure conduit pipes, cables and outlets are adequately covered before commencing with installation.
  - **3.2.2** Adjacent finish work (such as brick, siding, concrete, etc.) must be protected from damage during the installation of Adex materials.
- 3.3 Mixing
  - 3.3.1 Adex BASE COAT
  - **3.3.1.1** Mix the contents of the Adex BASE COAT pail until thoroughly blended. This will remove any settling of the contents due to storage.
  - **3.3.1.2** In a clean container, combine Adex BASE COAT with fresh, lumpfree Type GU Portland cement at a ratio of 1:1 by weight. Thoroughly mix to a homogenous state using a paddle mixer and electric drill. Add Portland cement in small increments

to prevent lumps from occurring.

- **3.3.1.3** Allow mixture to set up for 5 minutes, then mix again to break the initial set.
- **3.3.1.4** Small amounts of water may be added to adjust the consistency. All other additives (antifreeze, accelerators, or otherwise) are strictly forbidden
- 3.3.2 Adex NIVELEX
- **3.3.2.1** Mix the contents of the Adex NIVELEX pail until thoroughly blended. This will remove any settling of the contents due to storage.
- **3.3.2.2** In a clean container, combine Adex NIVELEX with fresh, lump-free Type GU Portland cement at a ratio of 2:1 by weight. Thoroughly mix to a homogenous state using a paddle mixer and electric drill. Add Portland cement in small increments to prevent lumps from occurring.
- **3.3.2.3** Allow mixture to set up for 5 minutes, then mix again to break the initial set.
- **3.3.2.4** Small amounts of water may be added to adjust the consistency. All other additives (antifreeze, accelerators, or otherwise) are strictly forbidden
- **3.3.3** Adex PRIMEX/ PRIMEX NG primer;
- **3.3.3.1** Prior to installation, PRIMEX NG must be well-shaken or thoroughly mixed with a paddle mixer and electric drill.
- **3.3.3.2** Ensure all mixing equipment in direct contact with the PRIMEX NG priming agent is clean and free from debris and loose particles. Do not overmix.
- **3.3.3.3** Refer to the Adex PRIMEX NG Technical Data Sheet for more information.
- **3.3.4** Adex CRYSTAL and REVIFLEX liquid coats;
- **3.3.4.1** Thoroughly agitate Adex liquid coats or mix with a clean paddle mixer and electric drill. For CRYSTAL liquid coat, periodically remix the product to avoid separation of the metallic flake.
- **3.3.4.2** Ensure all mixing equipment in direct contact with the Adex liquid coats is clean and free from debris and loose particles.
- **3.3.4.3** The addition of water is not necessary, but small amounts may be added to adjust consistency in the spray equipment. Do not overmix.
- **3.3.4.4** Refer to the CRYSTAL and REVIFLEX Adex Technical Data Sheets for more information.



- 3.3.5 Adex Finish Coats;
  3.3.5.1 Refer to the individual Adex Technical Data Sheets for more information on mixing instructions
  - information on mixing instructions for finish coats.
- 3.4 Installation
  - 3.4.1 Overview
  - **3.4.1.1** STENCILEX is a multi-layered application with depth and texture variations to create its effect. There is a large variety of Adex finish coat combinations that can be used together to achieve a unique look. There are a few examples in Table 1 at the end of this document:
  - 3.4.2 Basecoat & Reinforcing Mesh
  - **3.4.2.1** Apply ADEX BASECOAT over the surface to a uniform thickness of approximately 1.6 mm (1/16"). Work horizontally or vertically in strips of 1016mm (40"), and immediately embed Adex STANDARD MESH into the wet basecoat.
  - **3.4.2.2** Install an additional 300mm (12") long piece of STARTER/DETAIL MESH (at a 45°-degree angle) at the corners of all wall openings.
  - **3.4.2.3** STANDARD MESH shall be double lapped not less than 200mm (8") at all corners and overlapped not less than 63mm (2.5") at mesh joints. Avoid wrinkles from forming in the mesh.
  - **3.4.2.4** The final thickness of the basecoat shall be such that the REINFORCING MESH is fully embedded and not visible. Apply additional skim coats as required.
  - **3.4.2.5** Allow the basecoat to dry before applying the primer and finish coat (24-hours).
  - 3.4.3 Primer (as required)
  - **3.4.3.1** Where specified, apply an even coat of Adex PRIMEX or PRIMEX NG primer (tinted to the same colour as the finish coat) with a good-quality paintbrush, 10mm (3/8") nap roller, or sprayer.
  - **3.4.3.2** Allow PRIMEX or PRIMEX NG primer to dry before commencing with the first coat, base layer for STENCILEX.
  - 3.4.4 "Base Layer" Finish Coat
  - **3.4.4.1** Avoid applications in direct sunlight.
  - **3.4.4.2** Avoid applying finish coat at locations where caulking will be installed.
  - **3.4.4.3** Adex Smooth Finish Coats; a)Trowel-apply a tight coat of Adex
  - Finish Coat, texture [SONORA / SIENA / GRANULAR] to a thickness not greater than the largest aggregate.

- b)Apply the finish coat with a stainless steel trowel in a continuous fashion, maintaining a wet edge.
- c)Levelling and texturing shall take place in one operation to give the Adex Finish Coat a uniform appearance.
- d)Refer to the individual Adex Technical Data Sheet for specific installation instructions of each finish coat.
- 3.4.4.4 Adex Liquid Coats;
- a)Apply an even coat of Adex liquid coat, coating [REVIFLEX / CRYSTAL] with a good-quality 10mm (3/8") nap roller, or adequate paint sprayer setup.
- b)Refer to the individual Adex Technical Data Sheet for specific liquid coat installation instructions and required number of application coats.
- **3.4.4.5** Allow all base layers to dry for minimum 24-hours prior to installation of STENCILEX adhesive templates.
- 3.4.5 STENCILEX template installation
- **3.4.5.1** Each STENCILEX template size varies with its design and project requirements. Refer to the architectural renderings (if any) for pattern starting location(s) and relative pattern positioning to outside corners, windows, and system terminations.
- **3.4.5.2** Do not apply STENCILEX templates in temperatures below 10°C (50°F) or above 32°C (90°F). Only apply stencils at locations that will be finished in the same day.
- **3.4.5.3** Make sure the STENCILEX application area is free of dust, moisture, and other contaminants.
- **3.4.5.4** Remove the release paper from the back of the STENCILEX template and apply the stencil to the wall (adhesive side to the wall). Align the STENCILEX template to make sure it is level and in place correctly with full contact to the wall surface. Consistent adhesive contact is important to prevent bleeding of the top layer coating underneath the stencil.
- **3.4.5.5** Align and abut additional STENCILEX templates to each other. Stencils are designed in a repeating pattern and are meant to connect seamlessly to each other, but gaps and overlaps may occur. Connect adjacent STENCILEX templates by taping stencils to each other.
- **3.4.5.6** At inside and outside corner locations, cut STENCILEX templates and use the excess cut pieces as the starting course for the adjacent



return location.

- **3.4.6** Top Layer Finish Coat**3.4.6.1** Avoid applications in direct sunlight.
- **3.4.6.2** Avoid applying finish coat at locations where caulking will be installed.
- **3.4.6.3** Trowel-apply a tight coat of Adex Finish Coat, texture to a thickness not greater than the height of the installed STENCILEX templates. Apply the finish coat with a stainless steel trowel in a continuous fashion, maintaining a wet edge.
- **3.4.6.4** Avoid any build-up of finish on the top surface of the STENCILEX templates, as this may cause edge tearing when the templates are removed from the wall.
- **3.4.6.5** Float finish coat to a smooth appearance, taking care to minimize trowel lines. Avoid floating the material when leveling to prevent accidental movement of the stencils.
- **3.4.6.6** Prior to the finish coat drying, immediately remove the STENCILEX templates taking care not to disturb the installed finish coat. Waiting too long to remove the stencils will cause edge tearing and jagged edges.

- **3.4.6.7** At areas where finish coat has seeped underneath the stencils, use a small paint brush and the base layer coating to touch up the areas.
- **3.4.6.8** The Finish Coat shall cure a minimum of 24 hours.
- **3.4.6.9** Weather conditions will be a factor in the application and drying time of the Finish Coat.
- 3.5 Protection
  - **3.5.1** Provide protection against dirt, moisture, high humidity, and freezing temperatures until materials are fully dry.
- 3.6 Clean Up
  - **3.6.1** After completion, remove waste and leftover materials from job site.
  - **3.6.2** Clean all adjacent materials and surfaces, and repair any defects to this application or any defects to any other work caused by this application, all to the approval of the Consultant.

#### ALL REQUESTS FOR APPLICATION PROCEDURAL CHANGES MUST BE AUTHORIZED IN WRITING BY ADEX SYSTEMS INC.

| EXAMPLE | PRIMER (OPTIONAL)            | BASE LAYER                            | TOP LAYER<br>(WITH STENCIL)  |
|---------|------------------------------|---------------------------------------|--|
| 1       | PRIMEX                       | SIENA (1-TO-2 COATS)                  | CHOOSE ONE:<br>SIENA<br>GRANULAR<br>SANDED<br>MISTRAL<br>MEDARO<br>MONACO<br>QUARTEX<br>CLASSIX 1.5<br>MEDIUM 16<br>COARSE |
| 2       | PRIMEX                       | SIENA (1 COAT) + CRYSTAL (2<br>COATS) |  |
| 3       | PRIMEX NG                    | REVIFLEX (2 COATS)                    |  |
| 4       | SURFAGLAZE XT +<br>PRIMEX NG | CRYSTAL (2 COATS)                     |  |
| 5       | PRIMEX                       | GRANULAR (1 COAT)                     |  |
| 6       | PRIMEX NG                    | SONORA (2 COATS)                      |  |

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Table 1

Information in this document contains the current recommendations for the installation of the GRAPHEXcoat. It is only provided as a guide and is subject to modifications at any time without notice. ADEX Systems Inc. reserves the right to make any modification according to technological progress. Specialised designers, architects, engineers or other professionals that choose to make any use of this information bear the complete responsibility, whatever it be, direct or indirect, that could follow from such use. ADEX Systems Inc. does not bear any responsibility that could give way to damages, defaults, deficiencies, prejudices, loss or decrease of profit, be they direct or indirect, resulting from such use of this information by specialised designers, architects, engineers or other professionals. Please refer to www.adex.ca for the latest version of this document.

