

<b>Sto Canada Master Specification</b>	<b>Continuous Insulation Cladding System</b>
<b>StoTherm® ci Mineral</b>	
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*SPEC NOTE: This master specification section includes SPEC NOTEs for information purposes and to assist the design/construction professional in making appropriate decisions. A SPEC NOTE always immediately precedes the text to which it is referring. This specification Section serves as a guideline only and should be edited with deletions and additions to meet specific project requirements.*

*SPEC NOTE: The incorporation of components indicated in this Section within the wall assembly are not intended to correct faulty design, workmanship, or faulty components of construction such as leaky windows or window installations. As with any exterior wall assembly the proper detailing and integration of components to direct water to the exterior, in particular the proper use and integration of flashing, is essential.*

*SPEC NOTE: The StoTherm ci Mineral System with non-combustible continuous mineral wool insulation and non-combustible base coat is suitable for use on non-combustible construction, without sprinklers, and without height or setback limitations, for all occupancies defined in the National Building Code of Canada 2015. The system may also be used where spatial limitations restrict unprotected opening to less than 10%. The system maintains the hourly fire-resistive rating of concrete, concrete masonry, and non-load-bearing steel frame wall assemblies.*

## PART 1: GENERAL

### 1.1 SUMMARY

- .1 This Section includes requirements for supply and installation of a continuous insulation (ci) cladding system applied over concrete, masonry or sheathing substrates, and complete with air and moisture barrier, drainage medium, mechanical fasteners, continuous insulation, reinforcing mesh, base coat, primer and finish coating.

*SPEC NOTE: Include in this paragraph only those sections and documents that directly affect the work of this section. Do not include Division 00 Documents or Division 01 Sections since it is assumed that all technical sections are related to all project Division 00 Documents and Division 01 Sections to some degree. Refer to other documents with caution since referencing them may cause them to be considered a legal part of the Contract. Edit the following paragraphs to suit specific project conditions.*

### 1.2 RELATED REQUIREMENTS

- .1 Section 03 30 00: Cast-In-Place Concrete
- .2 Section 04 20 00: Unit Masonry
- .3 Section 06 10 00: Rough Carpentry
- .4 Section 07 26 00: Vapour Retarders
- .5 Section 07 27 00: Air Barriers
- .6 Section 07 50 00: Membrane Roofing
- .7 Section 07 62 00: Sheet Metal Flashing and Trim
- .8 Section 07 92 00: Joint Sealants

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- .9 Section 08 40 00: Entrances, Storefronts, and Curtain Walls
- .10 Section 08 50 00: Windows
- .11 Section 09 21 16: Gypsum Board Assemblies
- .12 Section 10 14 00: Signage

### 1.3 REFERENCES

- .1 American Society for Testing and Materials
  - .1 ASTM C612 Specification for Mineral Fiber Block and Board Thermal Insulation
  - .2 ASTM C1382 Standard Test Method for Determining Tensile Adhesion Properties of Sealants When Used in Exterior Insulation and Finish Systems (EIFS) Joints
  - .3 ASTM C1481 Standard Guide for Use of Joint Sealants with Exterior Insulation and Finish Systems (EIFS)
  - .4 ASTM E283 Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen
  - .5 ASTM E330 Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference
  - .6 ASTM E331 Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference
  - .7 ASTM E2178 Standard Test Method for Air Permeance of Building Materials
  - .8 ASTM E2357 Standard Test Method for Determining Air Leakage of Air Barrier Assemblies
  - .9 ASTM E 2486 Standard Test Method for Impact Resistance of Class PB and PI Exterior Insulation and Finish Systems (EIFS)
  - .10 ASTM E2568 Standard Specification for PB Exterior Insulation and Finish Systems
- .2 Underwriters Laboratories of Canada (ULC)
  - .1 ULC S101 Standard Methods of Fire Endurance Tests of Building Construction and Materials
  - .2 ULC S102 standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies
  - .3 ULC S114 Standard Method of Test for Determination of Non-Combustibility in Building Materials
  - .4 ULC S702 Standard for Mineral Fibre Thermal Insulation for Buildings
  - .5 ULC S716.1 Standard for Exterior Insulation and Finish System (EIFS) – Materials and Systems
  - .6 ULC S716.2 Standard for Exterior Insulation and Finish Systems (EIFS) - Installation
  - .7 ULC S716.3 Standard for Exterior Insulation and Finish Systems (EIFS) – Design Application
- .3 Industry Publications

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- .1 EIFS Council of Canada EIFS Practice Manual Version 1.0
- .2 National Building Code of Canada 2015
  
- .4 Proprietary Publications
  - .1 StoTherm ci Mineral Design Guide
  - .2 StoTherm ci Mineral Installation Guide
  - .3 StoTherm EIFS Reference Guide: Repair and Maintenance

*SPEC NOTE: Refer to EIFS Practice Manual for a list of relevant terms and definitions. Include definitions deemed necessary below for this Section or reference the Manual.*

#### 1.4 DEFINITIONS

- .1 Refer to EIFS Practice Manual

#### 1.5 ADMINISTRATIVE REQUIREMENTS

- .1 Coordination: Coordinate the Work of this Section with the installation of substrate. Sequence work so that installation of ci cladding system coincides with installation of substrate materials without causing delay to the Work. Comply with ci cladding system manufacturer's written recommendations for sequencing construction operations with other Work.
- .2 Pre-Installation Conference: Conduct on-site pre-installation conference in accordance with Section 01 31 19 – Project Meetings before installing ci cladding system and in conjunction with installation of mock-up attended by Contractor, Consultant, Owner, ci Cladding System contractor, adjacent trades, and system manufacturer's representative to:
  - .1 Review methods and procedures related to installation, including manufacturer's written instructions.
  - .2 Coordinate sequence of installation in connection with adjacent trades.
  - .3 Examine substrate conditions for compliance with manufacturer's installation requirements.
  - .4 Review temporary protection measures required during and after installation.

#### 1.6 SUBMITTALS

- .1 Provide requested information in accordance with Section 01 33 00 Submittals Procedures.
- .2 Action Submittals: Provide the following submittals before starting any work of this Section:
  - .1 Product Data: Submit manufacturer's product data for each type of product specified and manufacturer's guide details.
  - .2 Samples for Initial Selection: Submit one (1) sample panel, 150 mm x 150 mm (6" x 6") for each colour and texture, for review by the Consultant, on backing of manufacturer's choice.
  - .3 Samples for Verification: Submit two (2) samples 300 mm x 300 mm (12" x 12") for colour and texture verification for each finish specified in this Section prior to ordering products from ci cladding system manufacturer.

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- .3 Informational Submittals: Provide other information as requested by the Design Professional or Consultant.

## 1.7 CLOSEOUT SUBMITTALS

- .1 Operation and Maintenance Data: Submit manufacturer's written instructions for cleaning solutions, materials and procedures. Include name of original installer and contact information in accordance with Section 01 78 23 Operation and Maintenance Data.
  - .1 Provide specific warning of any maintenance practice or materials that may damage or disfigure the finished Work.
  - .2 Provide a complete list of repair and replacement parts with cuts and identifying numbers.
  - .3 Include:
    - .1 Finish coat colour batch numbers.
    - .2 Identification of each type of reinforcing mesh used.
    - .3 Identification of adhesive or mechanical fastener, base coat, primer and finish coat products used.

## 1.8 DESIGN AND PERFORMANCE REQUIREMENTS

- .1 Design:
  - .1 Structural:
    - .1 Design Professional shall design back-up wall construction for ci cladding assembly to comply with L/240 deflection criteria and applicable requirements of NBC 2015.
    - .2 Ultimate wind load resistance: +12.1 kPa (253 lb/ft<sup>2</sup>), -6.03 (-126 lb/ft<sup>2</sup>)
  - .2 Design Professional shall provide sufficient details on drawings to demonstrate compliance with NBC 2015 Division C Sentence 2.2.5.2.(1).
  - .3 Design details shall follow sound design principles for moisture control:
    - .1 Prevent the accumulation of water into or behind the ci cladding system, either by condensation or leakage into the wall construction, in the design and detailing of the wall assembly:
      - .1 Provide corrosion-resistant flashing to protect exposed elements and to direct water to the exterior, including: above window and door heads, beneath window and door sills, at floor lines (when or as deemed necessary by the design professional), at roof/wall intersections, decks, abutments of lower walls with higher walls, above projecting features, and at the base of the wall.
      - .2 Air Leakage Prevention: Prevent excess air leakage in the design and detailing of the wall assembly. Provide continuity between air barrier components in the wall assembly.
      - .3 At expansion joints, back joints with transition membrane.
      - .4 Seal ci cladding system terminations with sealant in conformance with ASTM C1382 and ASTM C1481.
  - .4 Design details at grade:
    - .1 Do not specify ci cladding system for use below grade or on surfaces subject to continuous or intermittent water immersion or hydrostatic pressure. Provide

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minimum 200 mm (8") clearance above earth grade, minimum 51 mm (2") clearance above finished grade (pavers/sidewalk). Provide increased clearance in freeze/thaw climate zones.

- .2 Ensure use of intermediate mesh reinforcement for ultra-high impact resistance of system to 2000 mm (6.5') minimum above grade and in other locations indicated on architectural drawings.

*SPEC NOTE: Periodic inspections and increased maintenance may be required to maintain surface integrity of finishes on weather-exposed sloped surfaces. Limit projecting features to easily accessible areas and limit total area to facilitate maintenance and to minimize maintenance burden. Refer to EIFS Practice Manual 2.10.1 Design Considerations.*

- .5 Design of sloped or horizontal surfaces (Including Trim and Projecting Architectural Features):
  - .1 Avoid the use of ci cladding system on build-outs or weather-exposed sloped and horizontal surfaces.
  - .2 Do not use ci cladding system on weather-exposed projecting ledges, sills, or other projecting features unless supported by framing or other structural support and protected with metal coping or flashing.
- .6 Design of joints and joint accessories:
  - .1 Provide expansion joints in the ci cladding system where building movement is anticipated (refer to ULC S716.3, clause 13.1.1):
    - .1 at expansion joints, deflection joints, or other movement joints in the substrate or supporting construction,
    - .2 where the system is to be installed over dissimilar construction or substrates,
    - .3 at changes in building height, or any other areas of anticipated building movement or stress lines in the construction,
    - .4 at floor lines in wood frame construction or other construction types where vertical shrinkage is expected to occur,
    - .5 at cold or control joints in concrete, masonry, or concrete masonry.
  - .2 Back expansion joints, deflection joints, and other movement joints with transition membrane to provide a secondary seal at the joint location.
  - .3 Provide minimum 13 mm (1/2") wide joints where the system abuts windows, doors and other through wall penetrations.
  - .4 Provide appropriate sealant at ci cladding system terminations.
  - .5 Indicate location of joints, size of joints, and joint design on architectural drawings.
- .2 Material and Assembly Performance:
  - .1 Liquid-Applied Water-Resistive Barrier, ULC 716.1: complies with performance requirements
  - .2 Air Barrier Material Air Leakage Resistance, ASTM E2178: less than 0.02 L/s·m<sup>2</sup> @ 75 Pa (0.004 cfm/ft<sup>2</sup> @ 1.57 lb/ft<sup>2</sup>)
  - .3 Air Barrier Assembly Air Leakage Resistance, ASTM E2357: less than 0.2 L/s·m<sup>2</sup> @ 75 Pa (0.04 cfm/ft<sup>2</sup> @ 1.57 lb/ft<sup>2</sup>)
  - .4 Continuous Insulation:

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1. Compliant with CAN/ULC S702 Type I and ASTM C612 Type IA, IB, II, III, IVA requirements
2. CAN/ULC S102: 0 flame spread, 0 smoke development
3. Noncombustible as defined by CAN/ULC S114
- .5 Base Coat: Noncombustible as defined by CAN/ULC S114
- .6 Exterior Wall Assembly Water Penetration Resistance, ASTM E331: no water penetration after 2 hour duration at 299 Pa (6.24 lb/ft<sup>2</sup>) and after an additional 15 minute duration at 718 Pa (15 lb/ft<sup>2</sup>)

*SPEC NOTE: Refer to StoTherm ci Mineral Design Guide for details on substrates, fastener patterns, and ultimate wind load resistance*

- .7 Wall Cladding Assembly Wind Load Resistance, ASTM E330 Procedure B, Ultimate wind load achieved: + 12.1 kPa (253 lb/ft<sup>2</sup>), -6.03 Pa (-126 lb/ft<sup>2</sup>) when installed over minimum 18 gage, 150 mm (6") deep metal studs spaced maximum 406 mm (16") on center with 16 mm (5/8") glass mat gypsum sheathing attached 200 mm (8") on center maximum.
- .8 Wall Cladding Assembly Impact Resistance, ASTM E2486: Medium Impact resistance with one layer standard reinforcing mesh, Ultra-High Impact resistance with one layer intermediate reinforcing mesh
- .9 Wall Cladding Assembly Durability, ASTM E 2568; meets requirements for resistance to weathering, freeze-thaw cycles, salts, and water
10. Wall Cladding Assembly Fire Resistance, ULC S102: maintains hourly rating of concrete, concrete masonry, and non-load bearing steel frame wall assemblies

## 1.9 QUALITY ASSURANCE

- .1 Qualifications: Provide proof of qualifications when requested by Consultant:
  - .1 Contractor: Execute Work of this Section using qualified personnel skilled in installation of work of this Section, having a minimum of three (3) years proven experience of installations similar in material, design, and extent to that indicated for this Project. Installation shall comply with ULC S716.2 in conjunction with manufacturer's installation guide and EIFS Practice Manual.

*SPEC NOTE: Mock-ups establish quality of work and sequence of installation for the materials indicated in this Section. Delete the following paragraph if the scope of work in this section is minimal and a mock-up is not required. Add or delete tests consistent with the size and scope of the project and an appropriate level of field quality control.*

## 1.10 MOCK-UPS

- .1 Sample Installation: Construct a sample installation to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution of Work in accordance with Section 01 45 00 Quality Control.
  - .1 Construct mock-up of typical cladding/window assembly with specified tools and materials and test air and water infiltration resistance in accordance with ASTM E283 and ASTM E331 respectively. Test structural capacity in accordance with ASTM E330. Test through independent testing agency.

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- .1 When tested to ASTM E283, verify that the assembly meets the air leakage requirements for an air barrier system of 0.2 L/s/m<sup>2</sup>.
- .2 When tested to ASTM E331, verify that no water passes inbound of the air barrier system.
- .3 Establish and conduct field water spray test method to verify no leakage of window assembly into the wall.
- .4 When tested to ASTM E330, verify conformance with design wind pressure requirements (with appropriate safety factor).

*SPEC NOTE: Adequacy of fastener pull-out can be verified with manufacturer's pull-out value into substrates – wood, steel, and masonry. Under certain conditions, for example, aged or weakened masonry substrates, jobs site pull-out testing of fasteners in the substrate may be necessary.*

- .5 Verify adequacy of pull-out or withdrawal capacity of fasteners in relation to design negative wind pressures.
- .6 Conduct wet sealant adhesion testing in accordance with sealant manufacturer's field quality control test procedure.
- .2 Notify Consultant a minimum of seven (7) days prior to testing.
- .3 Once reviewed by Consultant, acceptable sample installation can form a permanent part of the Work, and will form the basis for acceptance for the remainder of the project.

#### 1.11 DELIVERY, STORAGE AND HANDLING

- .1 Delivery and Acceptance Requirements: Deliver and store packaged materials in their original containers with manufacturer's labels and seals intact.
- .2 Store as recommended by manufacturer in a weatherproof enclosure, and protect materials during handling and application to prevent damage.
  - .1 Store mineral wool insulation in a well-ventilated unheated room or in an open area covered with a tarpaulin. Prevent exposure to water (rain or snow), direct heat or sun.
  - .2 Store reinforcing mesh cartons on side (not upright) in dry area protected from sunlight.
  - .3 Protect coatings (pail products) from freezing and temperatures in excess of 32 deg C (90 deg F) and store away from direct sunlight.
  - .4 Protect portland cement based materials (bag products) from extreme heat (32 deg C [90 deg F]), moisture, humidity and freezing. Store under cover, off the ground, and in a dry location.
  - .5 Store cartridge or sausage products in a cool 27 deg C (80 deg F) or less, dry area. Protect from heat, freezing, moisture, and direct sunlight. Store away from sources of ignition.
- .3 Handle all products as directed on labeling.

#### 1.12 SITE CONDITIONS

- .1 Ambient Conditions: Proceed with installation when ambient and substrate temperature conditions are within limits permitted by manufacturer and when substrates are free from

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dirt or wetness arising from frost, condensation, or other causes detrimental to adhesion or drying of wet components.

- .1 Temperature Range: Above 4 deg C (40 deg F) during application and for 24 hours minimum after set of ci cladding system components and finish materials.
- .2 Provide supplementary heat for installation in temperatures less than 4 deg C (40 deg F) such that material temperatures are maintained as indicated above. Prevent concentration of heat on uncured ci cladding system and vent fumes and other products of combustion to the outside to prevent contact with ci cladding system.
- .3 Prevent uneven or excessive evaporation of moisture from ci cladding system during hot, dry or windy weather. Do not install ci cladding system materials if ambient temperatures are expected to rise above 38 deg C (100 deg F) within a 24-hour period.
- .4 Provide protection of surrounding areas and adjacent surfaces from application of materials.

### 1.13 WARRANTY

- .1 Provide manufacturer's standard limited warranty.

## PART 2: PRODUCTS

### 2.1 MANUFACTURER

- .1 Continuous Insulation cladding system specified herein is supplied by:

Sto Canada Ltd.  
1821 Albion Road  
Unit 1-2  
Etobicoke, ON M9W 5W8  
Phone: 416 855 0460  
URL: [www.stocanada.com](http://www.stocanada.com)

### 2.2 MATERIALS

*SPEC NOTE: The StoGuard air barrier assembly is to be installed as per the StoTherm ci Mineral Installation Guide. Self-Adhered Membrane (SAMs [Peel and Stick]) air barrier materials may be considered when circumstances such as cold weather prohibit use of fluid-applied materials. In such cases the design professional or AHJ (Authority Having Jurisdiction) must approve the selected material and verify conformance with the applicable building code. Refer to the SAM manufacturer for installation instructions, product performance, and warranty information.*

*SPEC NOTE: Select one of the sheathing joint treatment options and delete the ones not required on the project.*

*SPEC NOTE: Select one of the rough opening protection options and delete the ones not required on the project.*

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- .1 Fluid Applied Air and Moisture Barrier: Consisting of the following multiple compatible components:
  - .1 One component, ready-mixed flexible air and moisture barrier, compatible for application on wood or gypsum sheathing, concrete, and concrete masonry substrates.
    - .1 Basis-of-Design Material: Sto Gold Coat by Sto Canada.
  - .2 Sheathing joint treatment: One component quick-drying air and moisture barrier material to seal sheathing joints, seams, cracks and transitions in above grade wall construction.
    - .1 Basis-of-Design Material: Sto RapidGuard by Sto Canada.
  - .3 Rough opening protection: One component quick-drying air and moisture barrier material for rough opening protection.
    - .1 Basis-of-Design Material: Sto RapidGuard by Sto Canada.
  - .4 Mesh reinforced joint treatment and rough opening protection: Nominal 142 g/m<sup>2</sup> (4.2 oz/yd<sup>2</sup>), self-adhesive, flexible, symmetrical, interlaced glass fibre mesh, with alkaline resistant coating for compatibility with Sto materials, used with acrylic elastomeric joint filler to reinforce rough openings, inside and outside corners, sheathing joints, and connections with flashing.
    - .1 Basis-of-Design Material: StoGuard Mesh with Sto Gold Fill by Sto Canada.
  - .5 Fabric reinforced joint treatment and rough opening protection: non-woven cloth reinforcement used with Sto Gold Coat to reinforce rough openings, inside and outside corners, sheathing joints, and connections with flashings.
    - .1 Basis-of-Design Material: StoGuard Fabric with Sto Gold Coat
  - .6 Tape for rough opening protection: Self-adhering rubberized asphalt tape for rough opening protection in wood or metal frame construction.
    - .1 Basis-of-Design Material: StoGuard Tape by Sto Canada.
  - .7 Primer for use with StoGuard Tape.
    - .1 Basis-of-Design Material: StoGuard Primer by Sto Canada.
  - .8 Transition Membrane: Flexible air barrier membrane, 0.64 mm (25 mils, 0.025”) thick, designed to detail transition areas and achieve continuity of the air barrier assembly, and functions as a secondary weather seal at joints in construction.
    - .1 Basis-of-Design Material: StoGuard Transition Membrane by Sto Canada
- .2 Drainage Medium
  - .1 Tangled filament drainage mat with fabric facing, 10 mm thick
    - .1 Basis-of-Design Material: Sto DrainScreen 10mm by Sto Canada
- .3 Continuous Insulation:
  - .1 Noncombustible mineral wool insulation manufactured in accordance with CAN/ULC S702 and ASTM C612 Type IV and tested in accordance with CAN/ULC S102 and CAN/ULC S114, thickness as indicated on drawings
    - .1 Basis-of-Design Material: Thermafiber CI-C SC18 as furnished by Owens Corning

*SPEC NOTE: Select one of the following fastener options, and delete the fasteners not chosen. Refer to StoTherm ci Mineral Design Guide for fastener type relative to*

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*substrate, fastener layout, and wind load resistance. Verify acceptable pull-out values relative to design wind pressures with appropriate safety factor.*

- .4 Fasteners
  - .1 StoThermo Dowel surface mount for nominal 50mm (2") insulation
  - .2 StoThermo Dowel countersunk for nominal 75mm (3") and 100mm (4") insulation
- .5 Base Coat:
  - .1 One-component polymer modified factory-blended portland cement-based high build base coat material.
    - .1 Basis of Design Material: Sto BTS Plus by Sto Canada.
- .6 Detail Reinforcing Mesh:
  - .1 Nominal 143 g/m<sup>2</sup> (4.2 oz./yd<sup>2</sup>), flexible, symmetrical, interlaced open-weave glass fibre mesh treated with alkaline resistant coating for compatibility with Sto materials used for standard back wrapping and aesthetic detailing.
    - .1 Basis of Design Material: Sto Detail Mesh by Sto Canada.
- .7 Standard Reinforcing Mesh:
  - .1 Nominal 153 g/m<sup>2</sup> (4.5 oz./yd<sup>2</sup>), symmetrical, interlaced open-weave glass fibre mesh treated with alkaline resistant coating for compatibility with Sto materials.
    - .1 Basis of Design Material: Sto Mesh by Sto Canada

*SPEC NOTE: Select the following mesh to supplement impact resistance on ground floors or other areas of anticipated impact or abuse*

- .1 Nominal 380 g/m<sup>2</sup> (11.2 oz./yd<sup>2</sup>), symmetrical, interlaced open-weave glass fibre mesh.
  - .1 Basis of Design Material: Sto Intermediate Mesh by Sto Canada.

*SPEC NOTE: Priming is recommended to provide uniform substrate absorption and finish colour, to improve adhesion and water resistance, and to retard efflorescence. Select one of the following primers and delete the ones not required for the project.*

- .8 Primer: Acrylic based low VOC primer:
  - .1 Sanded Primer Basis of Design Material: StoPrime Sand by Sto Canada.
  - .2 Smooth Primer Basis of Design Material: StoPrime Smooth by Sto Canada.

*SPEC NOTE: Select the following paragraph when a faux brick is desired on the project. Sto Primer Creativ has enhanced UV resistance and can be left exposed to simulate mortar joints.*

- .3 Basis of Design Material: StoPrime Creativ by Sto Canada.
- .9 Finish Coat
  - .1 Acrylic-based low VOC textured wall finish

*SPEC NOTE: Select one of the following finishes. Delete finishes which are not required on the project.*

- .1 Basis of Design Material: Stolit Lotusan by Sto Canada with Lotus-Effect technology for highest water repellency and resistance to soiling.

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- .2 Basis of Design Material: Stolit by Sto Canada
- .3 Basis of Design Material: Stolit X by Sto Canada
- .4 Standard Finish Textures: [1.0 - Fine Finish][1.5 - Medium Finish][R1.5 – Swirl Finish] [Freeform Finish (Stolit and Stolit Lotusan only)].
- .5 Colour: [\_\_\_\_\_] [As selected by the Consultant from the manufacturers standard product line] [As indicated on Drawing \_\_\_\_\_]

*SPEC NOTE: Select one of the following specialty finishes if an alternate finish is desired. Delete finishes which are not required on the project.*

- .2 StoCreativ Brick Finish: Decorative wall finish system requiring a two-step application process. Self-adhering stencils applied over the primer layer to provide appearance of mortar. Finish layer is applied in varying thickness to achieve the desired stand-out appearance of the brick.
- .3 Stolit Milano Finish: A very fine, ultra-smooth finish used to achieve multiple distinctive looks.
- .4 StoCreativ Lux Finish: Combines the texture and depth of natural stone with the luster of reflective materials.
- .5 StoCreativ Granite Finish: Trowel applied and designed to provide a polished granite look.
- .6 StoTique Finish: Specialty coating applied over finish to achieve a mottled, antiqued or old world appearance.
- .7 Sto Decocoat Finish: Ready-mixed, decorative wall coating composed of fine aggregate encased in an acrylic binder.
- .8 Sto Limestone Finish: Provides the look and feel of natural stone.
- .9 Sto GraniTex Finish: Spray-applied, acrylic based wall finish providing the look and feel of natural stone.
- .10 Colour: [\_\_\_\_\_] [As selected by the Consultant from the manufacturer's standard product line] [As indicated on Drawing \_\_\_\_\_].

*SPEC NOTE: Accessories listed below "by others" are not furnished by Sto Canada and are not typically installed by the contractor who installs the Sto components .*

- .10 Accessories
  - .1 Corner Bead: Sto-Mesh Corner Bead Standard as furnished by Sto Canada
  - .2 Drip Edge: Sto Drip Edge Profile as furnished by Sto Canada
  - .3 Flashing (by others): In accordance with Section 07 62 00.
  - .4 Joint Sealants (by others): In accordance with Section 07 92 00

## 2.3 MIXES

- .1 Mix materials in compliance with written instructions on packaging or product bulletins.
  - .1 Use only clean potable water, free of salts, other contaminants or deleterious materials to mix adhesive/base coat.
  - .2 Use clean, rust-free, high-speed mixer to stir finish to uniform consistency. Add small amounts of clean potable water to aid workability.

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- .3 Use of antifreeze agents, accelerators, rapid binders or other additives is not permitted.
- .4 Mix only as much material as can readily be used.

## 2.4 SOURCE QUALITY CONTROL

- .1 Ensure ci cladding system components, air and moisture barrier, adhesive, reinforcing mesh, base coat, primer, finish coat materials, and applicable accessories are supplied by Sto Canada Ltd.

## PART 3: EXECUTION

### 3.1 EXAMINATION

- .1 Verification of Conditions: Verify that substrate conditions which have been previously installed under other sections or contracts meet design tolerances and are acceptable for product installation in accordance with StoTherm ci Mineral installation instructions prior to installation of ci cladding system.

### 3.2 COORDINATION

- .1 Provide coordination such that earth grade terminates a minimum 200 mm (8") below ci cladding system, minimum 50 mm (2") above finished grade (pavers/sidewalk). Provide increased clearance in freeze/thaw climate zones.
- .2 Coordinate installation of foundation waterproofing, roofing membrane, windows, doors and other wall penetrations to provide a continuous air barrier and continuous moisture protection.
- .3 Provide protection of rough openings before installing windows, doors, and other penetrations through the wall, and provide sill flashing.
- .4 Coordinate installation of air and moisture barrier components with window and door installation to provide weatherproofing of the structure and to prevent moisture infiltration and excess air infiltration.
- .5 Provide head flashing immediately after windows, doors, and similar elements are installed.
- .6 Provide diverter flashings wherever water can enter the wall assembly to direct water to the exterior, for example, at lower-to-higher wall intersections.
- .7 Install splices or tie-ins from the air/moisture barrier over back leg of flashings and similar details to form a shingle lap that directs incidental water to the exterior.
- .8 Install copings and sealant immediately after installation of the ci cladding system when coatings are dry, and such that, where sealant is applied against the ci cladding system surface, it is applied against the base coat or primed base coat surface.
- .9 Schedule work such that the air/moisture barrier is exposed to weather no longer than 30 days.
- .10 Attach penetrations through ci cladding system to structural support and provide airtight and water tight seals at penetrations.

### 3.3 INSTALLATION

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- .1 Install in accordance with the manufacturer's written instructions and the contract documents over plumb, true, level, and clean prepared substrate. Refer to StoTherm ci Mineral Installation Guide

### 3.4 SITE QUALITY CONTROL

- .1 Schedule site visits by design professional, owner's consultant, or third party quality assurance agent to conduct tests and review work as follows:

*SPEC NOTE: Edit the following to suit project requirements. Establish the type and frequency of tests and the number and duration of site visits required and modify below.*

- .1 Testing:
  - .1 [Fastener withdrawal capacity from substrate]
  - .2 [Window water spray tests at [three per elevation.]]
  - .3 [Sealant field adhesion tests on each elevation.]
- .2 Site visits:
  - .1 [At project pre-installation meeting.]
  - .2 [After delivery and storage of products.]
  - .3 [Upon completion of preparatory work upon which this Section depends, but before installation begins.]
  - .4 [Two times during progress of work [at [25%] and [60%] of completion.]
  - .5 [Upon completion of work, after cleaning is carried out.]

*SPEC NOTE: Joint sealants, copings, and flashing are not furnished by Sto Canada and are not typically installed by the installer of Sto components. Provide for their installation in tandem with the insulated cladding work or shortly after the finish work is completed to complete the weatherproofing of the structure. Refer to ASTM C1481 and the EIFS Practice Manual Section 3.3 for more information on the design of joints and sealant selection with EIF systems.*

### 3.5 CLEANING AND PROTECTION

- .1 Provide protection of installed materials from water infiltration into or behind the system. Provide protection of installed primer and finish coat from dust, dirt, precipitation, freezing, and continuous high humidity until fully dry.
- .2 Provide sealant complying with ASTM C1481 and backer material at ci cladding system terminations to protect against air, water and insect infiltration. Provide weeps at floor lines, window and door heads, and other areas to conduct incidental water to the exterior.
- .3 Progress Cleaning: Leave work area clean at the end of each work-day, ensuring safe movement of passing pedestrians.
- .4 Final Cleaning: At completion of installation, clean all surfaces so they are free of foreign matter using cleaners recommended by material manufacturer.
- .5 Refer to StoTherm EIFS Reference Guide: Repair and Maintenance, for detailed information on cleaning, repairs, recoating, resurfacing and refinishing, or re-cladding.
- .6 Waste Management: Co-ordinate recycling of waste materials and packaging at appropriate facility, diverting waste from landfill. Installer shall be responsible for ensuring waste management efforts are practiced.

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- .1 Clean pails with water prior to recycling.
- .2 Collect and separate for disposal [paper] [plastic] [polystyrene] [corrugated cardboard] packaging material [in appropriate onsite bins] for recycling.

END OF SECTION 07 24 26

#### ATTENTION

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