



- 1 EIFS TAPE & PRIMER
- 2 HYDROFLEX STD MEMBRANE
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- 9 BRICK OR STONE VENEER

Description

The adex-ABS system is a thin stone or a brick veneer installed over a water-managed exterior insulation and finish system. The system incorporates a secondary weather resistant barrier (WRB), a vertical drainage plane, mechanical fasteners and a geometrically designed EPS board with 10mm grooves.

Benefits

- Provides a monolithic blanket of insulation; reduces energy use
- Seals the building envelope and ensures seamless protection of the substrate
- Allows for the drainage of incidental moisture
- Durable
- Architectural design flexibility
- Non-combustible rated as per the National Building Code

Features

- EPS-insulation
- Seamless substrate protection
- Non-combustible basecoat
- Dual barrier

Please refer to adex.ca for the latest version of this document, specifications (PDF + Word), technical drawings, product technical sheets, warranties, maintenance guide...and much more.

SYSTEM SPECIFICATION
SECTION 07 24 00:
EXTERIOR INSULATED FINISH SYSTEM
W/ADHERED BRICK AND STONE

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.

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 20 00: Thermal Protection
7. Section 07 25 00: Weather Barriers (Vapour / Air Barriers)
8. Section 07 60 00: Flashing and Sheet Metal
9. Section 07 90 00: Joint Protection
10. Section 08 00 00: Openings
11. Section 09 28 00: Backing Boards and Underlayments
12. Section 09 90 00: Painting and Coating

1.2 DESCRIPTION

- 1.2.1 The adex-ABS system is a thin stone/masonry veneer installed over an Exterior Insulation and Finish System (EIFS). The EIFS is composed of a continuous water resistive barrier (air and/or vapour barrier) installed over an approved substrate, a 10mm deep geometrically-designed EPS board providing an effective thermal insulation and drainage plane, adhesive for attachment of insulation board, glass fibre reinforcement mesh embedded in a non-combustible acrylic basecoat on the insulation board face, mechanical fasteners and an adhered stone/masonry veneer including grout materials. Adjoining areas may include an ADEX acrylic primer and finish coat.

1.3 REFERENCE STANDARDS

- 1.3.1 ASTM International
- 1.3.1.1 ASTM B117: Standard Practice for Operating Salt Spray (Fog) Apparatus;
 - 1.3.1.2 ASTM C203: Standard Test Methods for Breaking Load and Flexural Properties of Block-Type Thermal Insulation;
 - 1.3.1.3 ASTM C518: Standard Test

- Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus;
- 1.3.1.4 ASTM C666: Standard Test Method for Resistance of Concrete to Rapid Freezing and Thawing;
 - 1.3.1.5 ASTM D522: Standard Test Methods for Mandrel Bend Test of Attached Organic Coatings;
 - 1.3.1.6 ASTM D523: Standard Test Method for Specular Gloss;
 - 1.3.1.7 ASTM D570: Standard Test Method for Water Absorption of Plastics;
 - 1.3.1.8 ASTM D822: Standard Practice for Filtered Open-Flame Carbon-Arc Exposures of Paint and Related Coatings;
 - 1.3.1.9 ASTM D1621: Standard Test Method for Compressive Properties Of Rigid Cellular Plastics;
 - 1.3.1.10 ASTM D1623: Standard Test Method for Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics;
 - 1.3.1.11 ASTM D1784: Standard Specification for Rigid Poly(Vinyl Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl Chloride) (CPVC) Compounds;
 - 1.3.1.12 ASTM D2126: Standard Test Method for Response of Rigid Cellular Plastics to Thermal and Humid Aging;
 - 1.3.1.13 ASTM D2370: Standard Test Method for Tensile Properties of Organic Coatings;
 - 1.3.1.14 ASTM D2523: Standard Practice for Testing Load-Strain Properties of Roofing Membranes;
 - 1.3.1.15 ASTM D2842: Standard Test Method for Water Absorption of Rigid Cellular Plastics;
 - 1.3.1.16 ASTM D4541: Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers;
 - 1.3.1.17 ASTM D5034: Standard Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test);
 - 1.3.1.18 ASTM D5420: Standard Test Method for Impact Resistance of Flat, Rigid Plastic Specimen by Means of a

- Striker Impacted by a Falling Weight (Gardner Impact);
- 1.3.1.19 ASTM E96: Standard Test Methods for Water Vapor Transmission of Materials;
- 1.3.1.20 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;
- 1.3.1.21 ASTM E330: Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference;
- 1.3.1.22 ASTM E331: Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference;
- 1.3.1.23 ASTM E1131: Standard Test Method for Compositional Analysis by Thermogravimetry;
- 1.3.1.24 ASTM E1252: Standard Practice for General Techniques for Obtaining Infrared Spectra for Qualitative Analysis;
- 1.3.1.25 ASTM E2098: Standard Test Method for Determining Tensile Breaking Strength of Glass Fiber Reinforcing Mesh for Use in Class PB Exterior Insulation and Finish Systems (EIFS), after Exposure to a Sodium Hydroxide Solution;
- 1.3.1.26 ASTM G 155: Standard Practice for Operating-Xenon Arc Light Apparatus, for Exposure of Non-metallic Materials.
- 1.3.2 CSA International
- 1.3.2.1 CAN/CSA A3000: Cementitious materials compendium (Consists of A3001, A3002, A3003, A3004 and A3005).
- 1.3.3 National Research Council of Canada (NRC)
- 1.3.3.1 Canadian Construction Materials Centre (CCMC): Technical Guide for EIFS.
- 1.3.4 Underwriters' Laboratories of Canada (ULC)
- 1.3.4.1 CAN/ULC S701: Standard for Thermal Insulation, Polystyrene, Boards and Pipe Covering;
- professional engineer. For more information, please contact a local Adex representative.
- 1.4.2 All work undertaken must comply with the current codes and norms, best practice guides, as well as the manufacturer's installation instructions.
- 1.4.3 The substrate shall be engineered to withstand all applicable loads, including safety factors, live, dead, seismic, suction, etc..
- 1.4.4 On horizontal surfaces, the minimum slope of the system shall be a 6:12 pitch with a maximum length of 250mm (6").
- 1.4.5 Wall deflections should not exceed L/600;
- 1.4.6 The substrate shall be protected with a waterproofing membrane sealed at all joints and openings.
- 1.4.7 The substrate shall be one of the following:
- a) Brick, masonry or concrete;
 - b) Cement board;
 - c) Glass-mat faced gypsum board;
 - d) Plywood or OSB board.
- 1.4.8 Expansion joints that allow for natural building movement shall be installed in the following locations:
- 1.4.8.1 At expansion joints that occur in the substrate;
- 1.4.8.2 At any abutment of the system with other materials;
- 1.4.8.3 Where the substrate changes;
- 1.4.8.4 Where significant structural movement occurs;
- 1.4.9 Expansion joints in the stone/masonry veneer installation shall be installed in the following locations:
- 1.4.9.1 At expansion joints in the EIFS;
- 1.4.9.2 At any abutment of the system with other materials;
- 1.4.9.3 Thin stone veneer: In accordance with the stone manufacturer's recommendations;
- 1.4.9.4 Thin brick veneer: Shall include soft joints every 5.5m (18ft);
- 1.4.9.5 Tile: Shall include soft joints every 3m (10ft).
- 1.4.10 Expansion joints, or fire-breaks, shall extend through the EIFS and stone/masonry veneer and shall include proper flashing attached to the substrate (horizontal joints).
- NOTE: Indicate joint width on drawings for movement expansion/contraction conditions.

1.4 DESIGN REQUIREMENTS

- 1.4.1 The system height is limited to one story applications 244 cm to 305cm (8 to 10 feet) above grade. Installations outside of this scope are possible, and may require additional engineering and acceptance by an architect or

1.5 QUALITY ASSURANCE

- 1.5.1 Manufacturers
- 1.5.1.1 EIFS manufacturer shall be ADEX SYSTEMS Inc.
- 1.5.1.2 Be a member of and in good standing with the EIFS Council of

Canada.

1.5.1.3 All other third-party material manufacturers shall be recognized by ADEX SYSTEMS Inc.

1.5.2 Applicators

1.5.2.1 Applicators shall have the necessary permits.

1.5.2.2 Applicator shall have a minimum of (2) two-years of experience in applying EIF systems and employ sufficient, knowledgeable personnel to complete work on schedule.

1.5.2.3 Applicator shall follow all EIFS manufacturer's directions when installing system components.

1.6 DELIVERY & STORAGE

1.6.1 Deliver materials to the job site in their original unopened packages, clearly marked with the manufacturer's name and description of contents.

1.6.2 Store in a clean, dry, well-ventilated area at a temperature not less than 5°C (41°F).

1.6.3 Protect materials from the elements of weather, and keep away from excessive heat (temperatures above 32°C (90°F)).

1.7 ARCHITECTURAL SAMPLES

1.7.1 Upon request, ADEX SYSTEMS or its distributor will provide a minimum 200mm x 200mm (8"x8") sample for colour and texture approval.

1.7.2 Do not start any final work until the Consultant gives final approval of sample(s).

1.8 JOB MOCK-UP

1.8.1 Construct a 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 and no work of inferior quality will be accepted. The mock-up shall match sample panel(s) submitted to the Consultant as described in paragraph 1.7 of this Section.

1.9 JOB CONDITIONS

1.9.1 Ambient and surface temperatures shall be minimum 5°C (41°F) during installation.

1.9.2 When installing in climatic temperatures below 5°C (41°F), tarping, heating and ventilation shall be provided to maintain proper installation temperatures.

1.9.3 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.

1.9.4 Installation of ADEX materials shall be co-ordinated with other construction trades.

1.10 ALTERNATIVES

1.10.1 Systems considered equivalent to adex-ABS shall approved by the architect, in writing, at least ten (10) working days prior to the project bid date.

1.11 WARRANTY

1.11.1 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 PRODUCTS

2.1 MANUFACTURER

2.1.1 All components of the adex-ABS system shall be obtained from ADEX SYSTEMS Inc. or its authorised distributors. No substitution or addition of other material is permitted without written consent from the manufacturer.

2.2 PRODUCTS

2.2.1 Weather Resistant Barrier

2.2.1.1 Shall be 100% acrylic, such as

a) Vapour permeable membranes:

- HYDROFLEX STD mixed 1:1 by weight with Type GU cement or;
- HYDROFLEX WO or;
- HYDROFLEX SEAL or;
- HYDROFLEX AD.

b) Vapour barrier membranes:

- HYDROFLEX-GUARD, mixed 1:1 by weight with Type GU cement or;
- HYDROFLEX VB.

2.2.1.2 Shall meet UEAAct article 3.3.1.1 for water permeability;

2.2.1.3 Shall meet ASTM E-283 for air permeability;

2.2.1.4 Shall be supplied by ADEX SYSTEMS Inc.

Design and location of all air and vapour barriers is the responsibility of the Design Professional.

2.2.2 GD-Contour Board:

2.2.2.1 Shall be made by a manufacturer approved by Adex Systems Inc. Please contact your Adex representative

- to select the appropriate EPS Board design.
- 2.2.2.2** Shall conform to CAN-ULC S701-97, Type 1 and be made from virgin material with a nominal density of 16Kg/m³ (1Lb/ft³).
- 2.2.2.3** Shall be geometrically grooved to a 10mm minimum depth.
- 2.2.2.4** Minimum board thickness shall be 38mm (1-1/2").
- 2.2.2.5** Shall be supplied by Adex Systems Inc.
- 2.2.3** Adhesive
- 2.2.3.1** Shall be a 100%-acrylic polymer based material.
- 2.2.3.2** ADEX BASECOAT mixed with an approximately equal weight of Type GU Portland cement (weight ratio is 1:1).
- 2.2.3.3** Adhesive shall be applied onto the approved membrane on the wall when using ADEX EPS-GD INSULATION using a 3/8"x1/2"x1-1/2" U-notched trowel (typical).
- 2.2.4** Adhesive (Thin stone and thin brick))
- 2.2.4.1** Shall be a 100%-acrylic polymer based material.
- 2.2.4.2** ADEX BASECOAT mixed with an approximately equal weight of Type GU Portland cement (weight ratio is 1:1) or any adhesive recommended by the thin stone, thin brick or tile manufacturer.
- 2.2.4.3** Adhesive for the adhered veneer shall be installed as specified by the mortar manufacturer.
- 2.2.5** Insulation Board
- 2.2.5.1** ADEX EPS-GD INSULATION made by a manufacturer approved by Adex Systems Inc. Please contact your Adex representative to select the appropriate EPS Board design.
- 2.2.5.2** Shall conform to CAN-ULC S701-01, Type 1 and be made from virgin material with a nominal density of 16 Kg/m³ (1 Lb/ft³).
- 2.2.5.3** Shall be grooved at the back with 10mm deep grooves according to specifications of Adex Systems Inc.
- 2.2.5.4** ADEX EPS-GD INSULATION thickness shall range between 38mm and 125mm (1.5" and 5") and maximum board size shall be 600mm x 1200mm (24" x 48").
- 2.2.5.5** Shall be sold by ADEX SYSTEMS. or by one of its authorised distributors.
- 2.2.6** Basecoat
- 2.2.6.1** Shall be a 100% acrylic-based, asbestos-free product, manufactured by ADEX SYSTEMS. such as ADEX Basecoat.
- 2.2.6.2** ADEX Basecoat mixed with an approximately equal weight of Type GU Portland cement (Weight ratio = 1:1).
- 2.2.6.3** Shall conform the norm: CAN/ULC S114: Method for Determination of Non-Combustibility;
- 2.2.7** Reinforcing Fibreglass Mesh
- 2.2.7.1** Shall be purchased from ADEX SYSTEMS Inc. or from one of its authorised distributors.
- 2.2.7.2** Shall meet ASTM D-5034 standards.
- 2.2.7.3** Shall have different weights according to specific needs:
- a)QUICK TAPE MESH: 65g/m² (2 oz/yd²)
 - b)STARTER MESH: 150g/m² (4.5 oz/yd²)
 - c)INTERMEDIATE MESH: 375g/m² (11 oz/yd²)
- 2.2.8** Mechanical Fasteners
- 2.2.8.1** Corrosion resistant screws, with suitable attachment for installed framing. Minimum penetration: 19mm (3/4" inch) into wood framing and three full diameter threads into steel framing.
- 2.2.8.2** 32mm (1-1/4") diameter Wind-Lock LATH PLATES, G90 galvanized metal plates.
- 2.2.9** Stone/Masonry Veneer
- 2.2.9.1** Stone Veneer; manufactured thin stone matching the following description:
- a)Manufacturer: _____
 - b)Thickness: _____
 - c)Size: _____ (no larger than 610mm x 610mm [2' x 2'])
 - d)Weight: _____ (weighing no more than 49 Kg/m² [10 Lbs/ft²]) AND with no individual stones heavier than 9 Kg [20 Lbs])
 - e)Pattern: _____
 - f)Colour/Finish: _____ (and/or as noted on the architectural drawings)
- 2.2.9.2** Brick Veneer; thin brick matching the following description:
- a)Manufacturer: _____
 - b)Thickness: _____ (between 15 and 40mm)
 - c)Size: _____ (no larger than 0,1 m² [1ft²])
 - d)Pattern: _____
 - e)Colour/Finish: _____ (and/or as noted on the architectural drawings)
- 2.2.9.3** Tile; conforming to and matching the following description:
- a)Manufacturer: _____
 - b)Thickness: _____
 - c)Size: _____ (no larger than 305mm x 305mm [12" x12"])
 - d)Pattern: _____
 - e)Colour/Finish: _____ (and/or as noted on the architectural drawings)
- 2.2.9.4** Molding and Trim components as follows; _____.

2.2.9.5 Sanded Cementitious Grout, as per CSA A179-04 (Type N).

2.3 OTHER MATERIALS

2.3.1 Portland Cement

2.3.1.1 Shall be lump-free, Type GU (Type 10) Portland cement conforming to CSA-A3001 standards.

2.3.2 Water

2.3.2.1 Shall be clean, potable and free of sediment.

2.3.3 Mechanical Fasteners

2.3.3.1 Shall be ADEXLOC for usage with steel studs or wood substrate. Screws must be galvanized or have an approved coating with tips designed to fasten to steel studs or wood studs.

2.3.3.2 Shall be ADEXTEC for usage with substrate such as concrete or masonry.

2.3.4 Transition Membrane

2.3.4.1 Shall be a flexible, self-adhesive composite material tested for adhesion to itself and to ADEX components. Suitable material includes ADEX EIFS TAPE (4"-12" rolls) used with the appropriate primer or the A-FLEX SEALANT AND MESH. All other materials must be approved by ADEX SYSTEMS Inc.

2.3.5 PVC trims (if necessary):

2.3.5.1 Shall meet ASTM-D1784 standards for exterior use.

2.3.6 Backer Rod & Sealant

2.3.6.1 Refer to Section 07 90 00.

2.3.6.2 Backer rod must be closed pore type.

2.3.6.3 Use only low-modulus caulking with long service lives. Products should meet ASTM C1481 - 12 Standard Guide for Use of Joint Sealants with Exterior Insulation and Finish Systems (EIFS).

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 HYDROFLEX STD and HYDROFLEX GUARD membrane

3.3.1.1 Mix the contents of the HYDROFLEX pail until thoroughly blended. This will remove any settling of the contents due to storage.

3.3.1.2 In a clean container, mix HYDROFLEX and Type GU Portland cement at a ratio (by weight) of one-to-one. Add Portland cement in small increments to prevent lumps from occurring.

3.3.1.3 Allow mixture to set up for 5 minutes and 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 (such as rapid binder, anti-freeze, accelerator or others) are strictly prohibited.

3.3.2 ADEX BASECOAT basecoat/adhesive

3.3.2.1 Mix the contents of the ADEX BASECOAT 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 BASECOAT with fresh, lump-free 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.

3.3.2.3 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.

3.4 INSTALLATION

3.4.1 Flashing

3.4.1.1 Refer to Section 07 60 00, Flashing.

3.4.1.2 Ensure flashing is installed where specified on the construction documents. Flashing must be installed at through-wall breaks, at the baseline of walls, and anywhere else the system is to drain to the exterior.

PART 3 EXECUTION

3.1 INSPECTION

3.1.1 Inspect the substrate to verify that it is structurally sound and solid, ensuring there are no irregular voids or projections.

3.1.2 Inspect all metal flashing to ensure that they are properly installed, making certain that moisture will be deflected to the exterior of the system.

3.1.3 The architect and general contractor shall be advised of any discrepancies. Work shall not proceed until unsatisfactory conditions are corrected.

3.2 PREPARATION

3.4.1.3 Apply EIFS TAPE or A-FLEX SEALANT AND MESH over the flashing leg and apply the trowel-on membrane directly to the membrane surface.

3.4.2 Sheathing Joint Treatment

3.4.2.1 Complete sheathing joint treatments as per the Weather Resistant Barrier (WRB) data sheets.

3.4.3 Weather Resistant Barrier

3.4.3.1 Ensure transition membranes (EIFS TAPE or A-FLEX SEALANT and MESH) are installed, sealing all junctions between the substrate and other materials (wall penetrations, openings, and dissimilar materials).

3.4.3.2 The Weather Resistant Barrier (WRB) shall be joined to other components of the system so that the air barrier is continuous in three dimensions.

3.4.3.3 Read the Weather Resistant Barrier data sheets for complete installation instructions.

3.4.3.4 Two-coat applications are required over oriented strand board (OSB) substrates.

3.4.3.5 ADEX HYDROFLEX STD, HYDROFLEX VB or ADEX HYDROFLEX WO:

- a) Ensure flexible membranes are installed, sealing all junctions between the substrate and other materials (openings, wall penetrations, etc.).
- b) Apply a layer of HYDROFLEX membrane over all sheathing joints and immediately embed STARTER/DETAIL MESH into the membrane.
- c) Apply HYDROFLEX membrane over the entire surface ensuring a minimal thickness of 1.6mm (1/16").

3.4.3.6 HYDROFLEX SEAL:

- a) Apply HYDROFLEX SEAL using a 10-15mm (3/8"-3/4") nap paint roller. HYDROFLEX SEAL may also be spray-applied.
- b) Roll HYDROFLEX SEAL over the substrate and treated sheathing joints to an approximate thickness of 0.25mm-0.35mm (10-15mils). Ensure the HYDROFLEX SEAL application is complete and without voids.

3.4.3.7 HYDROFLEX GUARD membrane:

- a) STANDARD MESH is embedded into the HYDROFLEX GUARD membrane to help dictate proper thickness as well as treat the sheathing joints.
- b) Trowel HYDROFLEX GUARD over the substrate to an approximate thickness of 2mm (3/16").
- c) Immediately embed the STANDARD MESH into the wet HYDROFLEX

GUARD membrane. Trowel from the centre of the mesh outwards to prevent wrinkles from forming in the mesh. Smooth out the membrane to eliminate trowel lines.

d) The final thickness of the HYDROFLEX GUARD membrane shall be such that the STANDARD MESH is fully embedded and not visible. If mesh is visible, apply an additional skim coat of HYDROFLEX GUARD.

3.4.3.8 Allow the Weather Resistant Barrier (WRB) to fully cure before adhering insulation boards over the membrane.

3.4.4 Backwraps

3.4.4.1 Edges of ADEX EPS INSULATION that meet dissimilar substrates, terminations, wall openings, etc. shall be backwrapped.

3.4.4.2 Basecoat/mesh backwrap method

a) Spread ADEX BASECOAT (mixed with Portland cement) over the end and onto the face of the board wide enough to adhere minimum 76mm (3") of mesh. Wrap the mesh around the board edge so it extends minimum 76mm (3") onto the opposite surface.

b) Allow the basecoat/mesh backwrap to dry prior to installation.

3.4.4.3 GD-CONTOUR BOARD method

a) Pre-wrapped GD-CONTOUR BOARD shall be installed at the perimeter of walls and openings (this includes system terminations, where dissimilar substrates meet, at expansion joints, at doors and windows, etc.).

b) See section 3.4.6 for details on the insulation board installation.

3.4.5 Insulation Boards

3.4.5.1 Apply ADEX BASECOAT adhesive as vertical ribbons onto the approved membrane on the wall using a 3/8" x 1/2" x 1-1/2" U-notched trowel.

3.4.5.2 ADEX EPS-GD INSULATION boards shall be placed horizontally on the walls starting with edge wrapped boards at the base of the wall. Apply firm pressure over the entire surface of the board to ensure complete contact of the adhesive to the substrate. Ensure the adhesive does not dry prior to installation of the insulation boards.

3.4.5.3 EPS Boards shall be butted tightly together to eliminate any thermal breaks. Care must be taken to prevent adhesive from getting between the joints of the ADEX EPS-GD INSULATION boards.

- 3.4.5.4 Gaps between insulation boards shall be packed with slivers of EPS foam or filled with an expanding spray-foam compatible with the insulation board.
- 3.4.5.5 Stagger vertical joints and interlock insulation boards at all inside and outside corners.
- 3.4.5.6 Stagger insulation board and sheathing board joints at least 150mm (6") apart from each other.
- 3.4.5.7 Where the adex-ABS system meets dissimilar substrates and/or terminates (vertically) the ADEX EPS-GD INSULATION shall be backwrapped (as per paragraph 3.4.4 of this Section).
- 3.4.5.8 ADEX EPS-GD INSULATION boards shall be rasped to achieve a smooth even surface, create better adhesion, and remove possible ultra-violet damage and/or other surface pollutants.
- 3.4.5.9 The entire surface of the ADEX EPS-GD INSULATION boards shall be clean prior to the application of the ADEX BASECOAT and reinforcing mesh.
- 3.4.6 Basecoat & Reinforcing Mesh
 - 3.4.6.1 Apply ADEX BASECOAT over the ADEX EPS-GD INSULATION 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 INTERMEDIATE MESH into the wet basecoat.
 - 3.4.6.2 Install an additional 300mm (12") long piece of STARTER/DETAIL MESH (at a 45-degree angle) at the corners of all wall openings.
 - 3.4.6.3 INTERMEDIATE 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.
 - 3.4.6.4 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.
 - 3.4.6.5 Lightly scoring the surface of the basecoat to increase the adhesion of the mortar is recommended.
 - 3.4.6.6 Allow the basecoat to dry before applying the mechanical fasteners (24-hours).
 - 3.4.6.7 Install corrosion resistant screws with 1-1/4" inch metal washers (Wind-Lock LATH PLATES) through the assembly and into framing members. Maximum spacing along vertical framing members shall be 600mm (24" inches) on center.
- 3.4.7 Installation of Thin Veneers
 - 3.4.7.1 Install stone to comply with referenced installation standards, using setting materials specified.
 - 3.4.7.2 Using a masonry trowel, completely butter the backside of the stone veneer with 12.5mm (1/2") of adhesive. Cover the entire backside of the veneer.
 - 3.4.7.3 Firmly press the stone veneer onto the basecoat/mesh substrate. Gently twist and slightly slide (back and forth) the stone veneer to set in place.
 - 3.4.7.4 To ensure a full setting bed of adhesive, visually confirm that adhesive has squeezed out from around the entire perimeter of the stone veneer.
 - 3.4.7.5 As an alternative to the back-butter only method, ADEX BASECOAT may be troweled onto the scratch coat (at 12.5mm [1/2"]) and the stone veneer pressed into the full bed of adhesive. Both techniques are approved and can be combined.
 - 3.4.7.6 Expansion Joints: Leave a gap in the veneer application over all expansion joints. After the stone/brick is set, fill the joint with the specified backer rod and approved sealant.
- Tile / Brick Veneers
 - 3.4.7.7 Install tile to comply with referenced installation standards, using setting materials specified.
 - 3.4.7.8 Using the appropriate notched trowel, spread a consistent layer (using the flat edge of the trowel) of adhesive over the basecoat/mesh substrate.
 - 3.4.7.9 With the notched edge, comb the adhesive while holding the trowel at a 45° angle to the wall surface.
 - 3.4.7.10 Spread only as much adhesive as can be covered while to maintain a wet and tacky adhesive surface.
 - 3.4.7.11 You need to apply adhesive to the back of the tile (back-buttering) when installing 30 x 30 cm (12 x 12 in.) or larger tiles.
 - 3.4.7.12 Place tiles in position and firmly apply pressure to the face of the tile while moving the tile back and forth perpendicular to the trowel ridges.
 - 3.4.7.13 Make cut edges smooth, even and free from chipping.

- 3.4.7.14 Expansion Joints: Leave a gap in the veneer application over all expansion joints. After the tile is set, fill the joint with the specified backer rod and approved sealant.
- 3.4.7.15 Keep the grout joints clear of any setting material.
- 3.4.8 Bracing:
 - 3.4.8.1 Provide temporary bracing as required during installation of masonry
 - 3.4.8.2 Maintain bracing in place until building structure provides permanent support.
- 3.4.9 Cure Times
 - 3.4.9.1 Allow the adhesive to dry for 24-hours prior to grouting. Increased drying times may be required in cooler temperatures or where higher humidity exists.
- 3.4.10 Grouting
 - 3.4.10.1 Verify grout joints are free of dirt, debris or tile spacers.
 - 3.4.10.2 Refer to the grout manufacturer for installation instructions.
- 3.4.11 Caulking
 - 3.4.11.1 Refer to Section 07 90 00, Sealant.
 - 3.4.11.2 Caulking shall be installed in a timely manner. Protect open joints from water intrusion during the construction period with backer rod until permanently sealed.

3.5 PROTECTION

- 3.5.1 Ensure that the general contractor protects all work against moisture infiltration and other damages by installing the necessary flashing and caulking in a timely manner.
- 3.5.2 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 (used in this Section) from the 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.

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