SECTION 07 05 33

CLADDING FASTENING SYSTEMS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Fasteners for the building envelope including the following:
   1. Continuous insulation attachment.
   2. Mineral wool attachment.
   3. Brick cavity wall anchors.
   4. Masonry veneer anchors.
   5. Building wrap attachment.
   6. Stucco attachment.
   7. Lath attachment.
   8. Adhered masonry attachment.
   9. Gypsum sheathing attachment.
   10. Tilt-wall insulation attachment
   11. EIFS attachment.
   12. Insulated nail base and SIP (structurally insulated panel) fasteners

B. Installation tools of the following types:
   1. Grip-Lok Autofeed Fastening System.
   2. Thermal-Grip Insulation Fastening Tool

1.2 RELATED SECTIONS

A. Section 03 30 00 - Cast-in-Place Concrete.

B. Section 04 20 00 - Unit Masonry.

C. Section 06 12 16 - Stressed Skin Panels.

D. Section 06 16 36 - Wood Panel Product Sheathing.

E. Section 07 21 19 - Foamed-In-Place Insulation.

F. Section 07 24 00 - Exterior Insulation and Finish Systems.

G. Section 07 27 00 - Air Barriers.

H. Section 09 24 13 - Adobe Finish.

1.3 REFERENCES

A. The International Organization for Standardization (ISO):
   1. ISO 9001 - Quality Management Systems.

B. ASTM International (ASTM):
   1. ASTM C1063 - Standard Specification for Installation of Lathing and Furring to Receive Interior and Exterior Portland Cement-Based Plaster.
   2. ASTM E330 - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.
   3. ASTM E331 - Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference.
   4. ASTM E2357 - Standard Test Method for Determining Air Leakage Rate of Air Barrier Assemblies.

C. National Fire Protection Association (NFPA):
   1. NFPA 285 - Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Wall Assemblies Containing Combustible Components.

1.4 SUBMITTALS

A. Submit under provisions of Section 01 30 00 - Administrative Requirements.

B. Product Data:
   1. Manufacturer's data sheets on each product to be used.
   2. Preparation instructions and recommendations.
   3. Storage and handling requirements and recommendations.
   4. Typical installation methods with requirements to accommodate specific site conditions.

C. Shop Drawings: Indicate details of materials including but not limited to relationship with adjacent construction.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with a minimum ten years documented experience.
   1. Certification: ISO 9001 - Quality Management Systems.

B. Source Limitations: Each product type sourced from single manufacturer for uniformity.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver products in manufacturer's original packaging and unopened containers with identification labels intact.

B. Store and handle products in strict compliance with manufacturer's written instructions and recommendations.

C. Protect from damage due to weather, excessive temperature, and construction operations.

1.7 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

1.8 WARRANTY

A. Manufacturer's Warranty: Provide manufacturer's standard limited warranty against defects in materials or manufacturing.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer: TruFast Walls, which is located at: 130 Graham St. SW, Grand Rapids, MI 49503; Tel: 616-454-3100; Email: request info (wallsales@trufast.com); Web: http://trufastwalls.com

B. Substitutions: Not permitted.

C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

2.2 FASTENING SYSTEMS FOR ATTACHMENT OF CONTINUOUS INSULATION

A. Fasteners for Attachment of Continuous Insulation, General:
   1. Compliance: Performance requirements.
      a. Fire Propagation: NFPA 285.
      b. Air Leakage: ASTM E2357.
      c. Water Leakage: ASTM E331.
      d. Structural and Wind Load Resistance: ASTM E330.
   2. Quantities, Locations and Configurations: As required for complete installation.
   3. Lengths and Diameters: Manufacturer recommended screw lengths as determined by assembly thickness; minimum of 4 threads penetration through steel studs is required.
   4. Description: Corrosion resistant, ceramic coated screws; Phillips drive with bugle head.

B. Fasteners for Attachment of Continuous Insulation: Standard, bulk.
   1. Basis of Design: Grip-Deck Self-Drilling Screws as manufactured by TruFast Walls.
      a. Application: Bulk screws for attachment to 12 to 18 gauge steel substrates.
   2. Basis of Design: Grip-Deck Hi-Lo Thread Screws as manufactured by TruFast Walls.
      a. Application: Bulk screws for attachment to light gauge steel or wood.

C. Fasteners for Attachment of Continuous Insulation: Collated screws for use with Grip-Lok Autofeed Fastening System.
   1. Basis of Design: Grip-Deck Self-Drilling Collated Screws as manufactured by TruFast Walls.
      a. Application: For attachment to 12 to 18 gauge steel substrates.
   2. Basis of Design: Grip-Deck Hi-Lo Thread Collated Screws as manufactured by TruFast Walls.
      a. Application: For attachment to light gauge steel or wood substrates.

D. Autofeed Fastening System:
   1. Basis of Design: Grip-Lok Autofeed Fastening System with collated screws as manufactured by TruFast Walls.
   2. Application: To attach exterior gypsum sheathing, building wrap, continuous insulation, and lath to wood or steel studs; for use with Grip-Deck collated screws up to 3 inches (76 mm) in length.

3. Power: 18 volts DC power, battery operated cordless unit.
4. Power: AC power, corded unit.
5. Overdrive Protection: 8 adjustable depth settings to prevent overdrive.

E. Sealing Fasteners for Attachment of Continuous Insulation:
1. Basis of Design: Grip-Deck TubeSeal Fasteners System as manufactured by TruFast Walls.
2. Application: Seals blind fastener penetrations of a WRB or air-barrier behind the layer of continuous insulation.
3. Description: Pre-assembled fastener units consisting of:
    a. Pre-assembled Thermal-Grip washer w/ Grip-Deck screw (available in various length and thread/tip types for steel or wood substrates) and TubeSeal gasketing tube of varying lengths for insulation thickness ranging from 1 to 4 1/2 inches (25 to 114 mm) thickness
    b. Flexible perimeter flattens without tearing insulation facer for air-barrier performance.
    c. UV Inhibitor for exposure protection during course of construction.
    d. Suitable for all insulation types including XPS, polyisocyanurate, mineral wool, and expanded polystyrene.

F. Washers:
1. Basis of Design: Thermal-Grip ci Prong Washers as manufactured by TruFast Walls.
2. Application: Washers for use with Grip-Deck screws for continuous rigid insulation (ci) for use when insulation is being installed as the weather barrier or if insulation is being attached over a primary air barrier system.
3. Description: Washers only, not paired with screws.
    a. Solid plastic cap and flexible perimeter seal penetration of screw, stiffened center ring prevents screw pull-through.
    b. Prongs to enable pre-spotting into insulation for on-the-wall screw assembly.
    c. Flexible perimeter flattens without tearing insulation facer for air-barrier performance.
    d. UV Inhibitor for exposure protection during course of construction.
4. Diameter: 2 inches (51 mm).

G. Washers:
1. Basis of Design: Plasti-Grip ci Prong Washers as manufactured by TruFast Walls.
2. Application:
    a. For use with fasteners to attach rigid insulation (EPS, XPS, ISO...) over a primary air barrier.
    b. Attaches EPS foam for EIFS synthetic wall systems.
    c. Compatible with a nail gun, hammer, or screw gun.
3. Description:
    a. 1 3/4 inches (44 mm) diameter, plastic, tapered, white washer with keyholes.
    b. Prongs to enable pre-spotting into insulation for on-the-wall screw assembly.
    c. Keyholes on washer for base coat bonding in polymer modified (PM) EIFS or synthetic wall systems.
    d. Stiffened center with flexible perimeter that flattens without tearing insulation facer for air-barrier performance.

H. Washers:
1. Basis of Design: Grip-Lok Hurricane Washers as manufactured by TruFast

Walls.
2. Application: Prevents wind blow-off of insulation in high wind velocity areas.
   a. Mechanical attachment of mineral wool insulation.
   b. To attach drainage board for foundation water-proofing systems.
   c. Compatible with nails and screws.
3. Description: 3 inches (76 mm) diameter, high-density polypropylene washers; span joints between panels.

I. Fasteners for Attachment of Continuous Insulation to Masonry Substrates:
1. Basis of Design: Plasti-Grip PMF Plastic Masonry Fasteners as manufactured by TruFast Walls.
2. Application: No pins, screws, or adhesives required.
   a. Permanently attaches insulation with a flush finish.
   b. For use fastening EPS foam in PB EIFS systems, rigid foam insulation, and waterproofing drainage fabric into concrete or masonry block applications.
   c. Inserted into pre-drilled 5/16-inch (8 mm) hole and hammered flush.
3. Description: 2 1/4 inches (57 mm) diameter, solid plastic, to reduce thermal bridging.
4. Lengths: Manufacturer recommended lengths as determined by insulation thickness. Penetration of 1 1/4 to 2 inches (32 to 51 mm) into masonry substrate recommended.

2.3 FASTENING SYSTEMS FOR ATTACHMENT OF MINERAL WOOL INSULATION

A. Fasteners for Attachment of Mineral Wool Insulation, General:
1. Quantities, Locations and Configurations: As required for complete installation.
2. Lengths and Diameters: Manufacturer recommended screw lengths as determined by assembly thickness; minimum of 4 threads penetration through steel studs is required.
3. Description: Corrosion resistant, ceramic coated screws; Phillips drive with bugle head.

B. Fasteners for Attachment of Mineral Wool Insulation: Standard, bulk.
1. Basis of Design: Grip-Deck Self-Drilling Screws as manufactured by TruFast Walls.
   a. Application: Bulk screws for attachment to 12 to 18 gauge steel substrates.
2. Basis of Design: Grip-Deck Hi-Lo Thread Screws as manufactured by TruFast Walls.
   a. Application: Bulk screws for attachment to light gauge steel or wood.

C. Fasteners for Attachment of Mineral Wool Insulation: Collated screws for use with Grip-Lok Autofeed Fastening System.
1. Basis of Design: Grip-Deck Self-Drilling Collated Screws as manufactured by TruFast Walls.
   a. Application: For attachment to 12 to 18 gauge steel substrates.
2. Basis of Design: Grip-Deck Hi-Lo Thread Collated Screws as manufactured by TruFast Walls.
   a. Application: For attachment to light gauge steel or wood substrates.

D. Autofeed Fastening System:
1. Basis of Design: Grip-Lok Autofeed Fastening System with collated screws as manufactured by TruFast Walls.
2. Application: To attach exterior gypsum sheathing, building wrap, continuous insulation, and lath to wood or steel studs; for use with Grip-Deck collated

screws up to 3 inches (76 mm) in length.
3. Power: 18 volts DC power, battery operated cordless unit.
4. Power: AC power, corded unit.
5. Overdrive Protection: 8 adjustable depth settings to prevent overdrive.

E. Sealing Fasteners for Attachment of Continuous Insulation:
1. Basis of Design: Grip-Deck TubeSeal Fasteners System as manufactured by TruFast Walls.
2. Application: Seals blind fastener penetrations of a WRB or air-barrier behind the layer of continuous insulation.
3. Description: Pre-assembled fastener units consisting of:
   a. Pre-assembled Thermal-Grip washer w/ Grip-Deck screw (available in various length and thread/tip types for steel or wood substrates and TubeSeal gasketing tube of varying lengths for insulation thickness ranging from 1 to 4 1/2 inch (25 to 114 mm) thickness
   b. Flexible perimeter flattens without tearing insulation facer for air-barrier performance.
   c. UV Inhibitor for exposure protection during course of construction.
4. Suitable for all insulation types including mineral wool, XPS, polyisocyanurate, mineral wool and expanded polystyrene.

F. Washers:
1. Basis of Design: Grip-Lok Hurricane Washers as manufactured by TruFast Walls.
2. Application: Prevents wind blow-off of insulation in high wind velocity areas.
   a. Mechanical attachment of mineral wool insulation.
   b. To attach drainage board for foundation water-proofing systems.
   c. Compatible with nails and screws.
3. Description: 3 inches (76 mm) diameter, high-density polypropylene washers; span joints between panels.

G. Fasteners for Attachment of Mineral Wool Insulation to Masonry Substrates:
1. Basis of Design: Plasti-Grip PMF Plastic Masonry Fasteners as manufactured by TruFast Walls.
2. Application: No pins, screws, or adhesives required.
   a. Permanently attaches insulation with a flush finish.
   b. For use fastening EPS foam in PB EIFS systems, rigid foam insulation, and waterproofing drainage fabric into concrete or masonry block applications.
   c. Inserted into pre-drilled 5/16 inch (8 mm) hole and hammered flush.
3. Description: 2 1/4 inches (57 mm) diameter, solid plastic, to reduce thermal bridging.
4. Lengths: Manufacturer recommended lengths as determined by insulation thickness. Penetration of 1 1/4 to 2 inches (32 to 51 mm) into masonry substrate recommended.

H. Fasteners for Attachment of Mineral Wool Insulation: General.
1. Compliance: Performance requirements.
   a. Fire Propagation: NFPA 285.
   b. Air Leakage: ASTM E2357.
   c. Water Leakage: ASTM E331.
   d. Structural and Wind Load Resistance: ASTM E330.

I. Fastening System for Attachment of Mineral Wool Insulation: Grip-Lok MW Plates and Pan Head Screws as manufactured by TruFast Walls.
1. Application: Secures 1 to 5 inches (25 to 127 mm) mineral wool to wood, metal, and masonry substrates.

2. Description: Provides permanent attachment; adhesive stick pins not acceptable.
    a. Mill galvanized to prevent corrosion
    b. Curled sides provide rigidity and to prevent sharp edges from cutting into weather resistive barrier.
3. Screws:
    a. Basis of Design: Grip-Deck Pan Head Screws as manufactured by TruFast Walls.
    b. Basis of Design: Grip-Deck Gasketed Pan Head Screws with Gasket as manufactured by TruFast Walls.
        1) Gasket: EPDM gasket on screw extends through the plate and compresses against substrate to self-seal the screw penetration.

J. Washers:
1. Basis of Design: Thermal-Grip Brick Tie Washers as manufactured by TruFast Walls.
2. Application to attach extra thick mineral wool layers:
    a. For use with SIP TP, SIP HD, or SIP LD as described above.
    b. Large 5/8 inch (16 mm) SIP screw head design recesses into brick tie washer for a flush profile.
3. Description:
    a. Solid plastic cap and flexible perimeter seal penetration of screw.
    b. Prongs to enable pre-spotting into insulation for on-the-wall screw assembly.
    c. Flexible perimeter flattens without tearing through insulation.
    d. Carbon Black UV Inhibitor for exposure protection during course of construction.

2.4 FASTENING AND ANCHORING SYSTEMS FOR BRICK CAVITY WALL AND MASONRY VENEER APPLICATIONS

A. Fastening Systems for Brick Cavity Wall and Masonry Veneer Applications: General.
1. Compliance: Performance requirements.
    a. Fire Propagation: NFPA 285.
    b. Air Leakage: ASTM E2357.
    c. Water Leakage: ASTM E331.
    d. Structural and Wind Load Resistance: ASTM E330.
2. Quantities, Dimensions, Locations and Configurations: As required and recommended by manufacturer for complete installation.

B. Anchors:
1. Basis of Design: Thermal-Grip MVA Masonry Veneer Anchor as manufactured by TruFast Walls.
2. Application: Attaches rigid insulation and anchors brick veneer to the supporting structure in masonry cavity wall construction.
    a. Anchors brick veneer through continuous insulation to steel, wood, or masonry structure while maintaining air barrier performance when used with Thermal-Grip brick tie washer.
    b. Transfers compression and tension loads to the structure ensuring long term air barrier performance.
3. Description: Barrel style brick tie anchors brick and stone through continuous insulation and exterior gypsum sheathing to substrate.
    a. Polycarbonate tube minimizes thermal transfer of heat energy by eliminating steel-on-steel contact of the wire-tie and structural screw.
    b. Wedge seal feature of the polycarbonate tube is designed to seal the blind penetration of the air barrier / water resistive barrier behind the

layer of continuous insulation.
c. Lengths available for sheathing/insulation assembly thicknesses ranging from 1 to 4 inches (25 to 102 mm), plus air gaps ranging from 1 to 2 inches (25 to 51 mm).
4. Screw Tip: SDS style screw for steel studs, wood studs, and masonry.

C. Wire Ties:
1. Basis of Design: T-shaped Wire Ties as manufactured by TruFast Walls.
a. Application: Connects with Thermal-Grip MVA Masonry Veneer Anchor
b. Description: Hot dip galvanized.
1) Size: 3 inches (76 mm) for 1 inch (25 mm) air gap typically.
2) Size: 4 inches (102 mm) for 2 inch (51 mm) air gap typically.
3) Size: Custom, as indicated on Drawings.
c. Description: Stainless steel.
1) Size: 3 inches (76 mm) for 1 inch (25 mm) air gap typically.
2) Size: 4 inches (102 mm) for 2 inch (51 mm) air gap typically.
3) Size: Custom, as indicated on Drawings.

D. Washers:
1. Basis of Design: Thermal-Grip Brick Tie Washers as manufactured by TruFast Walls.
2. Application: For use with barrel style brick ties to attach rigid insulation.
a. Compatible with Thermal-Grip MVA Masonry Veneer Anchor, Pos-I-Tie, Sure-Tie veneer anchors.
3. Description:
a. Solid Plastic Cap: 2-inch (51 mm) diameter solid plastic cap and flexible perimeter seal penetration of screw.
b. Prongs to enable pre-spotting into insulation for on-the-wall screw assembly.
c. Flexible perimeter flattens without tearing insulation facer for air-barrier performance.
d. Carbon Black UV Inhibitor for exposure protection during course of construction.

2.5 FASTENING SYSTEMS FOR ATTACHMENT OF BUILDING WRAP

A. Fasteners for Attachment of Building Wrap: General.
1. Compliance: Performance requirements.
a. Air Leakage: ASTM E2357.
b. Water Leakage: ASTM E331.
c. Structural and Wind Load Resistance: ASTM E330.
2. Quantities, Locations and Configurations: As required for complete installation.
3. Lengths and Diameters: Manufacturer recommended screw lengths as determined by assembly thickness; minimum of 4 threads penetration through steel studs is required.
4. Description: Corrosion resistant, ceramic coated screws; Phillips drive with bugle head.

B. Fasteners for Attachment of Building Wrap: Standard, bulk.
1. Basis of Design: Grip-Deck Self-Drilling Screws as manufactured by TruFast Walls.
a. Application: Bulk screws for attachment to 12 to 18 gauge steel substrates.
2. Basis of Design: Grip-Deck Hi-Lo Thread Screws as manufactured by TruFast Walls.
a. Application: Bulk screws for attachment to light gauge steel or wood.

C. Fasteners for Attachment of Building Wrap: Collated screws for use with Grip-Lok Autofeed Fastening System.
   1. Basis of Design: Grip-Deck Self-Drilling Collated Screws as manufactured by TruFast Walls.
      a. Application: For attachment to 12 to 18 gauge steel substrates.
   2. Basis of Design: Grip-Deck Hi-Lo Thread Collated Screws as manufactured by TruFast Walls.
      a. Application: For attachment to light gauge steel or wood substrates.

D. Autofeed Fastening System:
   1. Basis of Design: Grip-Lok Autofeed Fastening System with collated screws as manufactured by TruFast Walls.
   2. Application: To attach exterior gypsum sheathing, building wrap, continuous insulation, and lath to wood or steel studs; for use with Grip-Deck collated screws up to 3 inches (76 mm) in length.
   3. Power: 18 volts DC power, battery operated cordless unit.
   4. Power: AC power, corded unit.
   5. Overdrive Protection: 8 adjustable depth settings to prevent overdrive.

E. Washers:
   1. Basis of Design: Thermal-Grip FastCap as manufactured by TruFast Walls and approved for use Dupont Tyvek CommercialWrap.
   2. Application:
      a. Mechanical attachment of commercial building wrap and rigid foam insulation.
      b. Use with Grip-Deck screws over wood, steel, or concrete substrates to attach building wrap.
   3. Description: Available pre-assembled w/ screws, or washers separate w/ collated screws for auto-feed screw gun system option.
      a. Solid plastic cap and flexible perimeter seal penetration of screw, stiffened center ring prevents screw pull-through.
      b. Flexible perimeter flattens without tearing insulation facer for air-barrier performance.
      c. Carbon Black UV Stabilizer for exposure protection during course of construction.
   4. Diameter: 2 inches (51 mm).

F. Washers:
   1. Basis of Design: Thermal-Grip Flat Washers as manufactured by TruFast Walls.
   2. Application:
      a. Mechanical attachment of commercial building wrap and rigid foam insulation.
      b. Use with screws over wood, steel, or concrete substrates to attach building wrap.
   3. Description: Available either pre-assembled or washers only.
      a. Solid plastic cap and flexible perimeter seal penetration of screw, stiffened center ring prevents screw pull-through.
      b. Flexible perimeter flattens and compresses against wrap.
      c. Carbon Black UV Stabilizer for exposure protection during course of construction.
   4. Diameter: 2 inches (51 mm).

2.6 FASTENING SYSTEMS FOR ATTACHMENT OF STUCCO, LATH, ADHERED MASONRY APPLICATIONS

A. Fasteners for Attachment of Stucco, Lath and Adhered Masonry Applications:

General.

1. Compliance: Performance requirements.
    a. Conforms to ASTM C-1063
    b. Air Leakage: ASTM E2357.
    c. Water Leakage: ASTM E331.
    d. Structural and Wind Load Resistance: ASTM E330.
2. Quantities, Locations and Configurations: As required for complete installation.
3. Lengths and Diameters: Manufacturer recommended screw lengths as determined by assembly thickness; minimum of 4 threads penetration through steel studs is required.
4. Description: Corrosion resistant, ceramic coated screws; Phillips drive with bugle head.

B. Fasteners for Attachment of Stucco, Lath and Adhered Masonry Applications: Standard, bulk.

1. Basis of Design: Grip-Deck Self-Drilling Screws as manufactured by TruFast Walls.
    a. Application: Bulk screws for attachment to 12 to 18 gauge steel substrates.
2. Basis of Design: Grip-Deck Hi-Lo Thread Screws as manufactured by TruFast Walls.
    a. Application: Bulk screws for attachment to light gauge steel or wood.

C. Fasteners for Attachment of Stucco, Lath and Adhered Masonry Applications: Collated screws for use with Grip-Lok Autofeed Fastening System.

1. Basis of Design: Grip-Deck Self-Drilling Collated Screws as manufactured by TruFast Walls.
    a. Application: For attachment to 12 to 18 gauge steel substrates.
2. Basis of Design: Grip-Deck Hi-Lo Thread Collated Screws as manufactured by TruFast Walls.
    a. Application: For attachment to light gauge steel or wood substrates.

D. Autofeed Fastening System:

1. Basis of Design: Grip-Lok Autofeed Fastening System with collated screws as manufactured by TruFast Walls.
2. Application: To attach exterior gypsum sheathing, building wrap, continuous insulation, and lath to wood or steel studs; for use with Grip-Deck collated screws up to 3 inches (76 mm) in length.
3. Power: 18 volts DC power, battery operated cordless unit.
4. Power: AC power, corded unit.
5. Overdrive Protection: 8 adjustable depth settings to prevent overdrive.

E. Washers:

1. Basis of Design: Grip-Plate Lath and Plaster Washers as manufactured by TruFast Walls.
2. Application: Lath attachment over various substrates. For use with Grip-Deck screws.
    a. Use to attach various metal laths including expanded metal lath, diamond lath, woven wire mesh (chicken wire), welded wire lath, and similar items.
    b. Use to attach fiberglass and non-metallic lath including Spiderlath, BASF PermaLath, plastic lath, and similar items.
    c. For use with one-coat stucco, three-coat stucco, insulated stucco wall systems, adhered stone veneer.
    d. Large 1 1/4 inch (32 mm) diameter washer helps spread the load and

secure lath over various thicknesses of continuous insulation. Contact TruFast Walls. for consultation to help determine fastening pattern and fastener selection.

e. Stabilizes and secures sagging plaster or stucco to lath for recoat and repair.

f. Can be used to attach exterior gypsum sheathing for high wind-load areas.

3. Description: 1 1/4 inch (32 mm) diameter galvanized steel washer with keyholes for plaster or basecoat bonding.
4. Center Hole: Large for screws; No.6 - No.10 diameter.
5. Center Hole: Small for shot-in pins or smaller diameter screws No. 6 - No 8 diameter.

F. Washers:

1. Basis of Design: Grip-Plate Tab Washers as manufactured by TruFast Walls.
2. Application: Lath attachment over various substrates. For use with Grip-Deck screws.
   a. Compatible with No. 6 - No. 8 diameter screws.
   b. For use with screws or pins over wood or steel to attach wire or expanded metal lath in insulated stucco walls, one-coat stucco.
   c. Also used to attach foam-core tile backer board.
3. Description: 1 1/4 inches (32 mm) diameter, solid cap, galvanized steel washers.
   a. Tabs for pre-spotting and encapsulation of wire strands in one-coat stucco.
   b. Keyholes for base coat bonding.
   c. Washer spans board joints.

2.7 FASTENING SYSTEMS FOR ATTACHMENT OF GYPSUM SHEATHING

A. Fasteners for Attachment of Gypsum Sheathing: General.

1. Quantities, Locations and Configurations: As required for complete installation.
2. Lengths and Diameters: Manufacturer recommended screw lengths as determined by assembly thickness; minimum of 4 threads penetration through steel studs is required.
3. Description: Corrosion resistant, ceramic coated screws; Phillips drive with bugle head.

B. Fasteners for Attachment of Gypsum Sheathing: Standard, bulk.

1. Basis of Design: Grip-Deck Self-Drilling Screws as manufactured by TruFast Walls.
   a. Application: Bulk screws for attachment to 12 to 18 gauge steel substrates.
2. Basis of Design: Grip-Deck Hi-Lo Thread Screws as manufactured by TruFast Walls.
   a. Application: Bulk screws for attachment to light gauge steel or wood.

C. Fasteners for Attachment of Gypsum Sheathing: Collated screws for use with Grip-Lok Autofeed Fastening System.

1. Basis of Design: Grip-Deck Self-Drilling Collated Screws as manufactured by TruFast Walls.
   a. Application: For attachment to 12 to 18 gauge steel substrates.
2. Basis of Design: Grip-Deck Hi-Lo Thread Collated Screws as manufactured by TruFast Walls.
   a. Application: For attachment to light gauge steel or wood substrates.

D. Autofeed Fastening System:
   1. Basis of Design: Grip-Lok Autofeed Fastening System with collated screws as manufactured by TruFast Walls.
   2. Application: To attach exterior gypsum sheathing, building wrap, continuous insulation, and lath to wood or steel studs; for use with Grip-Deck collated screws up to 3 inches (76 mm) in length.
   3. Power: 18 volts DC power, battery operated cordless unit.
   4. Power: AC power, corded unit.
   5. Overdrive Protection: 8 adjustable depth settings to prevent overdrive.

E. Washers:
   1. Basis of Design: Grip-Plate Sheathing Washers as manufactured by TruFast Walls.
   2. Application: Fasteners to attach exterior gypsum sheathing or lath.
      a. Can be used to attach exterior gypsum sheathing for high wind-load areas.
      b. Large diameter washer greatly increases wind blow-off resistance and can span board joints potentially reducing the number of fasteners required. Consult with gypsum sheathing manufacturer.
   3. Description: 1 1/4 inches (32 mm) diameter galvanized steel washer with keyholes for plaster or basecoat bonding.
      a. Center Hole: Large for screws (#6 - #10 dia.).
      b. Center Hole: Small for shot-in pins or smaller diameter screws (#6-#8 dia.).

2.8 FASTENING SYSTEMS FOR ATTACHMENT OF INSULATION ON TILT-WALL OR PRECAST CONCRETE WALL CONSTRUCTION

A. Fasteners for Attachment of Tilt-Wall Insulation: In quantities required for complete installation.
   1. Basis of Design: Plasti-Grip PMF Plastic Masonry Fasteners as manufactured by TruFast Walls.
   2. Application: No pins, screws, or adhesives required.
      a. Permanently attaches insulation with a flush finish.
      b. For use attaching all types of rigid insulation including XPS, EPS, polyisocyanurate and mineral wool.
      c. Inserted into pre-drilled 5/16-inch (8 mm) hole and hammered flush.
   3. Description: 2 1/4 inches (57 mm) diameter, solid plastic, to reduce thermal bridging.
   4. Lengths: Manufacturer recommended lengths as determined by insulation thickness. Penetration of 1 1/4 to 2 inches (32 to 51 mm) into masonry substrate recommended.

B. Fasteners for Attachment of Tilt-Wall Insulation: In quantities required for complete installation.
   1. Basis of Design: Thermal-Grip Insulation Fastening Tool as manufactured by TruFast Walls.
   2. Application: The IP50D tool is a concrete pinner tool designed to attach insulation to a concrete wall. Gas-Actuated insulation fasteners. No screws or adhesives required.
      a. Permanently attaches insulation with a flush finish.
      b. For use attaching all types of rigid insulation including XPS, EPS, polyisocyanurate and mineral wool.
   3. Description: 2 1/4 inches (57 mm) diameter, solid plastic, to reduce thermal bridging.
   4. Lengths: Anchor lengths available for insulation thickness 1” to 6” thick

2.9 FASTENING SYSTEMS FOR ATTACHMENT OF EIFS

A. Fasteners for Attachment of EIFS: General.
   1. Quantities, Locations and Configurations: As required for complete installation.
   2. Lengths and Diameters: Manufacturer recommended screw lengths as determined by assembly thickness; minimum of 4 threads penetration through steel studs is required.
   3. Description: Corrosion resistant, ceramic coated screws; Phillips drive with bugle head.

B. Fasteners for Attachment of EIFS: Standard, bulk.
   1. Basis of Design: Grip-Deck Self-Drilling Screws as manufactured by TruFast Walls.
      a. Application: Bulk screws for attachment to 12 to 18 gauge steel substrates.
   2. Basis of Design: Grip-Deck Hi-Lo Thread Screws as manufactured by TruFast Walls.
      a. Application: Bulk screws for attachment to light gauge steel or wood.

C. Fasteners for Attachment of EIFS to Masonry Substrates:
   1. Basis of Design: Plasti-Grip PMF Plastic Masonry Fasteners as manufactured by TruFast Walls.
   2. Application: No pins, screws, or adhesives required.
      a. Permanently attaches insulation with a flush finish.
      b. For use fastening EPS foam in PB EIFS systems, rigid foam insulation, and waterproofing drainage fabric into concrete or masonry block applications.
      c. Inserted into pre-drilled 5/16 inch (8 mm) hole and hammered flush.
   3. Description: 2 1/4 inches (57 mm) diameter, solid plastic, to reduce thermal bridging.
   4. Lengths: Manufacturer recommended lengths as determined by insulation thickness. Penetration of 1 1/4 to 2 inches (32 to 51 mm) into the masonry substrate required.

D. Washers:
   1. Basis of Design: Plasti-Grip CBW Washers as manufactured by TruFast Walls.
   2. Application: Multi-use fasteners to attach rigid insulation, commercial building wrap, EIFS (PM) systems, metal, or fiberglass lath, or for stucco applications.
   3. Description:
      a. 1 3/4 inches (44 mm) diameter, tapered, white washer with keyholes for base coat bonding in EIFS or stucco.
      b. Flexible perimeter reduces tearing.
      c. Flat bottom for flush mounting.

E. Washers:
   1. Basis of Design: Plasti-Grip PBLP2 Prong Washers as manufactured by TruFast Walls.
   2. Application: No hand assembly required.
      a. For use with screws to attach EPS or XPS foam in polymer based (PB) EIFS assemblies.
      b. When installed, the screw head is recessed inside the washer away from the basecoat, preventing thermal spotting.
   3. Description: Washers only, not preassembled with screws.
      a. 2 inches (51 mm) diameter washer provides thermal break.

b. Prong to enable pre-spotting into insulation for on-the-wall screw assembly.
c. Keyholes to grab on to base coat finish.

F. Washers: Preassembled with screws.
1. Basis of Design: Plasti-Grip PBLP2 Washers Preassembled with Grip-Deck Screws as manufactured by TruFast Walls.
2. Application: No hand assembly required.
a. For use with screws to attach EPS or XPS foam in polymer based (PB) EIFS assemblies.
b. When installed, the screw head is recessed inside the washer away from the basecoat, preventing thermal spotting.
3. Description: Washers only, not preassembled with screws.
a. 2 inches (51 mm) diameter washer provides thermal break.
b. Keyholes to grab on to base coat finish.
4. Screws: Corrosion resistant, ceramic coated, self-drilling screws; Phillips drive with bugle head.
a. Basis of Design: Grip-Deck Self-Drilling Screws as manufactured by TruFast Walls.
1) Application: For attachment to 12-to-18-gauge steel substrates.
b. Basis of Design: Grip-Deck Hi-Lo Thread Screws as manufactured by TruFast Walls.
1) Application: For attachment to light gauge steel or wood substrates.
c. Lengths and Diameters: Manufacturer recommended screw lengths as determined by assembly thickness. Contact TruFast Walls for recommendations.

2.10 FASTENING SYSTEMS FOR ATTACHMENT OF INSULATED NAILBASE PANELS AND STRUCTURAL INSULATED PANELS

A. SIP Screws:
1. Basis of Design: SIP LD Screws as manufactured by TruFast and available through TruFast Walls.
2. Application: For attaching insulated nail base or structural insulation panels (SIP) to wood, CMU, concrete, corrugated steel deck or 16 to 20 gauge steel substrates.
3. Description: Light duty drill point with epoxy E-coating for corrosion resistance; T-30 star drive bit included in bucket.
4. Shaft Diameter: No. 14.
5. Head Diameter: 5/8 inch (16 mm).
6. Lengths and Diameters: Manufacturer recommended screw lengths as determined by assembly thickness.

B. SIP Screws:
1. Basis of Design: SIP HD Screws as manufactured by TruFast and available through TruFast Walls.
2. Application: For attaching nailbase or structural insulation panels (SIP) to 12 to 16 gauge steel substrates.
3. Description: Heavy duty drill point with epoxy E-coating for corrosion resistance; T-30 star drive bit included in bucket.
4. Shaft Diameter: No. 14.
5. Head Diameter: 5/8 inch (16 mm).
6. Lengths and Diameters: Manufacturer recommended screw lengths as determined by assembly thickness.

C. SIP Screws:

1. Basis of Design: SIP TP Screws as manufactured by TruFast and available through TruFast Walls.
2. Application: For attaching nailbase or structural insulation panels (SIP) to wood and timber substrates.
3. Description: Thread point with epoxy E-coating for corrosion resistance; T-30 star drive bit included in bucket.
4. Shaft Diameter: No. 14.
5. Head Diameter: 5/8 inch (16 mm).
6. Lengths and Diameters: Manufacturer recommended screw lengths as determined by assembly thickness.

PART 3 EXECUTION

3.1 EXAMINATION AND PREPARATION

A. Prepare substrates using the methods recommended by the manufacturer for achieving best result for the substrates under project conditions.

B. Do not proceed with installation until substrates have been prepared using the methods recommended by the manufacturer and deviations from manufacturer's recommended tolerances are corrected. Commencement of installation constitutes acceptance of conditions.

C. If preparation is the responsibility of another installer, notify Architect in writing of deviations from manufacturer's recommended installation tolerances and conditions.

3.2 INSTALLATION

A. Install in accordance with manufacturer's instructions, approved submittals and in proper relationship with adjacent construction.

3.3 CLEANING AND PROTECTION

A. Clean and protect products in accordance with the manufacturer's recommendations.

B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION