

TECHNICAL BULLETIN

APPLYING CERTAINTEED VINYL OR POLYPROPYLENE SHAKE SIDING OVER CONTINUOUS INSULATION SYSTEMS GREATER THAN 1" IN THICKNESS

The goal of a continuous insulating system is to establish insulation across all structural members to eliminate thermal bridging with the exception of fasteners and service openings. With the increase in the type of building projects that require continuous insulation systems (both residential and commercial) where insulating sheets exceed 1" in thickness, questions have risen as to the requirements for attachment of CertainTeed Vinyl and Polypropylene Siding to these structures. This document is intended to serve as a guide for these types of projects.

- Continuous non-structural products (e.g. rigid insulation) in excess of 1" create a condition where CertainTeed Vinyl and Polypropylene Siding products can not be properly attached to the existing structural surface (e.g. framing members, steel studs, or structural sheathing).
- The easiest way to meet the fastening requirements for CertainTeed Vinyl and Polypropylene Siding is to install ¾" structural sheathing (such as OSB or plywood) over the continuous foam insulation. **However, the wall assembly must be designed in such a way that a structural fastening surface that is sufficient to meet the requirements of [ICC-ES Evaluation Report ESR-1066](#) for vinyl siding or [ICC-ES Evaluation Report ESR-3085](#) for polypropylene shakes is re-established on the exterior of the insulating products for attachment of CertainTeed Vinyl and Polypropylene siding.**
- CertainTeed does not provide instructions for wall design or assembly, specifically relating to the fastening requirements for re-establishing a structural fastening surface for CertainTeed Vinyl and Polypropylene Siding to attach to. FastenMaster® provides two documents to assist in successfully re-establishing a structural fastening system on the exterior of a continuous insulation system:
 - Technical Evaluation Report (TER No. 1009-01) [Use of FastenMaster HeadLok™ Fasteners to Attach Cladding and/or Furring to Wood Framing through Foam Sheathing.](#)
 - Technical Bulletin: [Attaching Exterior Wall Covering Assemblies with Foam Sheathing to Steel Wall Framing](#)
- The FastenMaster reports must be used in combination with [ICC-ES Evaluation Report ESR-1066](#) for vinyl siding or [ICC-ES Evaluation Report ESR-3085](#) to determine attachment requirements.

Conditions of CertainTeed Vinyl and Polypropylene Siding use over continuous insulation systems greater than 1” in thickness:

- Design of attachment system for wall sheathing, rigid insulation, and structural fastening surface (e.g. structural sheathing, lathe strips, or 1x or 2x framing lumber) is the responsibility of the property owner, architect/designer, general contractor and/or installer. CertainTeed Corporation is neither liable nor responsible for the designs or performance of the wall assembly.
- Three factors are critical to the determination of the wall system design: furring thickness (e.g. 1x or 2x), fastener selection (nails or screws) and furring/fastener spacing (12”, 16” or 24” OC). It is critical that the individual responsible for the design of the wall assembly consult the latest version of the [ICC-ES Evaluation Report ESR-1066](#) for vinyl siding or [ICC-ES Evaluation Report ESR-3085](#) for installation requirements when making these determinations.
- Vinyl siding and polypropylene shakes must be applied over a rigid sheathing that provides a smooth, flat surface or an underlayment (such as wood, wood composition, rigid foam or fiber sheathing). Vinyl siding cannot be applied directly to studs. If using wood lathe, rigid sheathing of identical thickness to the lathe can be cut to fit between the strips to create a smooth, flat surface for siding application.
- All products must be installed in accordance with all National, State, and Local building codes. Be sure to check with your local code official or governing body for the building requirements in your area.
- All installation requirements listed in the CertainTeed Vinyl and Polypropylene Siding Installation Manual must be met.
- Wall assembly must be designed to insure that all appropriate windload and anchoring requirements are met. Consult the latest version of the [ICC-ES Evaluation Report ESR-1066](#) for vinyl siding or [ICC-ES Evaluation Report ESR-3085](#) for guidance on approved fasteners.
- Use of the technical documents referenced within this document is at the wall system designers sole discretion. Current versions of the documents are available by contacting FastenMaster at 800-518-3569.

Questions regarding the utilization of the above information should be directed to:

CertainTeed Vinyl and Polypropylene Siding Information: 800-233-8990

OMG, Inc. d/b/a FastenMaster Fastener Product Information: 800-518-3569

For more information on CertainTeed Vinyl Siding and Polypropylene Shake application please refer to document code no. [CTS205](#).
[CertainTeed Vinyl Siding and Polypropylene Shake Installation Manual](#).