

Applying Allura Fiber Cement 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 Allura Fiber Cement 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 Allura Fiber Cement 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 Allura Fiber Cement siding is to install $\frac{3}{4}$ " or $\frac{1}{2}$ " 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-1668 is re-established on the exterior of the insulating products for attachment of Allura Fiber Cement siding.**
- Allura does not provide instructions for wall design or assembly, specifically relating to the fastening requirements for re-establishing a structural fastening surface for Allura Fiber Cement 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-1668 to determine attachment requirements. NOTE: The ICC report requirements for framing type must be adhered to so as to meet the minimum requirements for fastening Allura Fiber Cement Siding.

Conditions of Allura Fiber Cement 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. Allura 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 (8", 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-1668 for installation requirements when making these determinations.
- 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 Allura Fiber Cement 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-1668 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.

For more information on Allura Fiber Cement Siding application please refer to the [Allura Fiber Cement Siding Installation Manual](#).