The application of a mounting block is aesthetically pleasing and performs a vital function in maintaining the exterior envelope. Through-wall penetrations, such as dryer and furnace vents, hose bibs, plumbing, lighting and electrical outlets, larger than 1 ½" in diameter, must incorporate the use of a mounting block to maintain the weather resistant barrier and deter water and moisture entry.

Mounting blocks are beneficial to the long-term performance of any siding project. For example, they aid in extending warm, moisture-laden air from dryer, stove, and furnace vents away from the siding surface, extend spigots/hose bibs away from the wall, and greatly reduce the likelihood of water access into the wall cavity. In addition, mounting blocks provide a vertical and level base for mounting exterior lighting fixtures and electric outlets.

Mounting blocks can be fabricated on-site using NichiTrim 4/4” or 5/4” boards, dependent on the desired look and siding product used. The siding must not extend beyond the thickness of the trim block. NichiTrim 5/4” product is adequate for NichiBoard lap siding applications.

NOTE: When fabricating blocks for Sierra Premium and Savannah Smooth ½” thick products, or when using NichiStaggered, NichiStraight, or individual NichiShake, “build-out” of the mounting block with 5/16” thick product, placed under the block, will be necessary to provide sufficient thickness.

Pre-made vinyl and PVC mounting blocks and flashing products are also available.

To install a mounting block around an existing penetration when using NichiTrim, the trim must be cut into two pieces. For best results, cut the trim horizontally utilizing a 22.5 degree weather cut. Using a jigsaw with a blade suitable for cutting fiber cement, cut the radius of the penetration, and fit the top and bottom halves of the block around the existing penetration (pipe or vent). See Figure 1.

Next, install a section of Z flashing over the top of the trim block which extends across the full length of the block. Ensure the flashing incorporates a slope away from the wall. On larger blocks when installing lap or shake siding, install a shim or starter strip of appropriate height and thickness under the siding to maintain an even plane across the block.
NichiProducts and Blocked Penetrations

Install the siding with a 1/8” gap at siding-to-block junctures on the sides and bottom of the block. Fill this gap with a quality exterior grade caulk which meets ASTM C920 requirements. At the top of the block, maintain a ¼” gap between the bottom of the siding and the Z flashing. Do not caulk this gap. See Figure 3.

For penetrations smaller than 1 ½” such as wires, electrical conduit, and small pipes, blocking is not required. These small penetrations must be sealed with a quality exterior grade caulk or barrier foam, or combination of both. Exhaust vents which incorporate an integral, flanged mounting block do not require additional blocking.