

## GEMTHANE WOOD SIDING INSTALLATION GUIDELINES

### IMPORTANT: READ BEFORE INSTALLING GEMTHANE SIDING

**Our goal is to supply the highest quality wood and coating in the industry. In the event that a board is not satisfactory for some reason, do not install. For assistance in this or any regard, call 1 (800) 879-3704 and your call will be directed to one of our GemThane Siding System representatives.**

Install GemThane Siding in compliance with applicable building codes and good industry practices. Only a few installation requirements are mandatory to maintain warranty protection. These are as follows.

### STORAGE

- ✓ Handle bundles of boards with care so as not to damage same, particularly when lifting or moving mechanically. Do not dump or slide off truck or fork lift.
- ✓ Store boards on a raised, flat surface in their original bundles and mini-bundles until use. Keep clean with plastic or other suitable covering.

### BUILDING WRAP

Use Typar brand building wrap as it drains more readily than other brands. Apply Typar as per manufacturer's instructions, with particular attention to sequencing and overlaps around openings, corners, bottoms of walls and other vulnerable areas. Installer is responsible for siding problems resulting from improper application of building wrap.

### CREATE A DRAINAGE PLANE

#### Introduction

Most building codes require a ***drainage plane*** behind wood siding. The codes do not require an air space as such, nor do they explicitly require strapping. Having said that, GemThane is the only wood product on the market that does not specify strapping or something similar, because GemThane is the only

Using Sill Gasket to Create  
Drainage Plane



product with a true polymer coating on the backside (for a full explanation, see sidebar commentary below, *Why GemThane is Quicker and Easier to Install*). To comply with the “drainage plane” requirement, we simply ask the installer to hang strips of sill-plate gasket hung vertically and stapled to the wall on 16” to 24” centers (see illustration above). Sill gasket is the waterproof foam used in construction to separate the base plate of stud walls from a concrete floor. The recommended brand is FoamSealR from Owens Corning. The 3.5” wide version is recommended. Install with the ribbed side outwards for better drainage.

### ***Why GemThane is Quicker and Easier to Install***

Strapping is, of course, the practice of putting vertical wood strips on the building before installation of the siding. Most wood siding manufacturers demand strapping or something similar. Strapping gets expensive because it usually leads to the necessity to build out the door and window openings to that they project beyond the siding.

It is important to note that strapping is not a building code requirement, nor is it a GemThane requirement. Many building codes require a Drainage Plane, which is a provision for diverting downward any wind-driven rain that penetrates through the spaces between the siding boards. The codes do not require strapping or an air space as such. There is confusion on this point because most brands of wood siding require strapping behind their boards; however, this is not because of building codes, but because other siding products are not sealed against moisture or protected against bacterial attack (the backsides are, at best, painted with latex paint, which is porous and can actually support microbial growth rather than inhibit it). The backside of GemThane siding is protected with a polymer coating called **ArborSeal** which is water-resistant (in fact, it is totally immersible) and permanently anti-microbial. Thus strapping is not required for building code or warranty purposes when installing GemThane siding.

### **Performance Plus Siding**

Performance Plus is the version of GemThane Siding used for harsh environments or where the home owner simply wants the longest possible service life. The 5-layer coating system on the face of each board features a marine grade polyurethane polymer called **Cottage Coat**, which has a 5-star performance rating. The backside is protected with a triple-thick coat of ArborSeal (described in sidebar article above). Therefore, strapping is not required or recommended, even under severe conditions, in order to qualify for the Performance Plus Lifetime Warranty on both the coating and the wood itself.

With horizontal applications, simply apply sill gasket as described above. For vertical applications, the anti-cupping groove on the back of the siding will provide the drainage plane required under the building code, so you do not require either sill gasket or strapping. For easy installation on vertical siding, we recommend using thicker sheathing (5/8” rather than the 1/2” plywood normally used) and this will allow you to nail the vertical siding anywhere you choose. This is far faster than installing ordinary vertical siding which must be double strapped, first to create the drainage plane and then to provide a nailable surface.

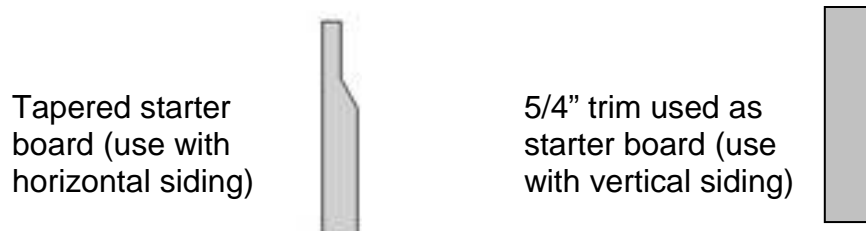
**IMPORTANT NOTE: NO STRAPPING OR SILL GASKET ON VERTICAL SIDING**

## Value Plus Siding

Value Plus is the version of GemThane siding used for moderate service conditions. The back side is protected with a single layer ArborSeal and the face-side is protected with GemThane **AquaTech**, an industrial-grade water-dispersible acrylic coating with a 4-star performance rating. Strapping is optional unless the owner wants the Value Plus warranty to cover the wood as well as the coating system (which is always covered, whether you strap or not). Refer to warranty documentation for details.

## STARTER BOARDS

Whether the siding is vertical or horizontal, we strongly suggest a horizontal “starter board” at the bottom of the wall. If the siding is horizontal, a 6” or 8” tapered starter board is typically used. If the siding is vertical, a piece of 5/4x6 or 5/4x8 trim is normally used as the starter board (see illustrations below).



Before installing the starter board, consider how the drainage water behind the starter board will escape. It is imperative that, having created a drainage plane, you prevent the water from accumulating at the bottom of the wall. One way is continue the sill gasket to a point below the starter board (this assumes that the siding has clearance beyond the supporting structure below it). Another is to use an aluminum drip cap above the starter board that diverts drainage water out to the face of the starter board (this is the preferred method with a non-tapered starter boards). Another method is to tape a horizontal strip of Typar, about 6” to 8” wide, to the wall above the starter board and overlap the strip an inch or two on to face of the starter board (the preferred method with tapered starter boards). This Typar strip can be trimmed after the first course of siding is installed above the starter board. In any event, the clearance of the starter board lower edge from ground must be 4” or such greater distance as dictated by local building code.

The starter board may be omitted so long as the bottom of the siding is at least 12” vertically from any structure below or from the ground and the siding projects out horizontally from the foundation or other structure below by not less than 1 ½” (4 cm). The above should meet building code in your area but check with municipal inspector.

## SIDING INSTALLATION

### General Guidelines

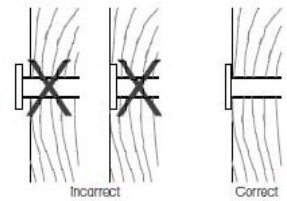
Install siding following standard industry practices. For example, use chalk lines and layout poles to keep horizontal siding straight, use two nails per board, bevel adjoining pieces of board, always use touch-up material on exposed wood, and caulk around

windows and doors. See details below and refer to industry textbooks such as *Exterior Trim, Siding and Finishes* by The Taunton Press Inc, 2004.

## Nails

Approved nails (supplied by GemThane) must be used. When nailed flush (see Illustration on right), these nails are self-sealing. Two nails per board are necessary to prevent warping. Some installers prefer to use only one nail per board. While this does not void the warranty, it is not considered good installation practice. Warping and cracking are not covered by warranty.

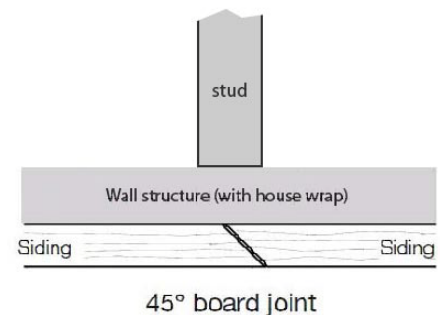
The nail must be driven so that the head sits flush on the wood's surface.



GemThane discourages the use of air nailers because they do not provide a secure bond to the substrate, and every nail penetration **MUST** be touched up to maintain the warranty. This is laborious and a multitude of touch-ups will result in a blotchy, unattractive finish.

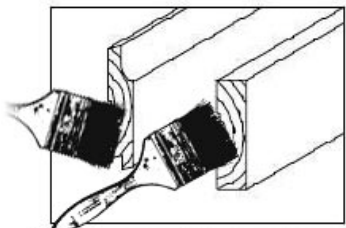
## ON-SITE TOUCH UP / ENDS OF BOARDS

When joining two boards, cut each on a 45° angle (see Illustration at right) and coat exposed wood with appropriate touch-up material. All ends of boards must be coated on site, whether they have been cut on site or not, with approved Touch-Up Kit. The approved touch-up material for Performance Plus siding is Cottage Coat (a solvent-dispersible product requiring GemThaneVR-2 Reducer –do not substitute), and the approved touch-up material for Value Plus siding is AquaTech (water dispersible). Trim pieces are always Performance Plus grade but where the main siding is Value Plus, it is permitted to touch up trim pieces with AquaTech.

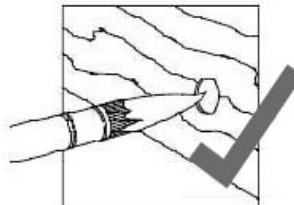


TOP VIEW OF BEVELLED ENDS OF ADJOINING BOARDS

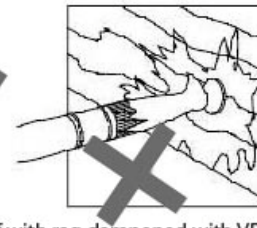
All damage to coating or exposed wood must be touched up. This includes all exposed wood where nail head is recessed into the wood surface. (TIP: touch up points of penetration with a Q-tip or artist paint brush dipped in recommended touch-up material: the use of a larger brush will result in a blotchy appearance.)



Wipe excess off front of board to prevent "blotchiness"



Do not spill over; wipe excess off with rag dampened with VR-2 reducer to prevent "blotchiness". If shininess or blotchiness occur, or if the coating is too thick, thin sparingly as directed in touch-up kit instructions



All joints (e.g. around windows and doors and at corners) must be continuously caulked. GemThane recommends translucent caulking as opposed to transparent caulking. Warranty does not cover where water has penetrated at joints.