



KWP naturetech™ Prefinished Engineered Wood Siding Installation Instructions

KWP naturetech™ siding meets or exceeds CAN/CGSB-11.5-M 87 requirements. These instructions are in accordance with the standards of the National Building Code of Canada, section 9.2 and are intended to cover normal building practices in effect in Canada and the United States.

Important

These instructions must be followed when installing all profiles of KWP naturetech™ siding. To ensure a quality installation, read carefully before starting. **Deviation from KWP naturetech™ Engineered Wood Siding Installation Instructions may void warranty.**

Storage

- Store off the ground, on a flat surface on pallets to avoid sagging and contact with the ground.
- Siding must be covered and protected from the elements with a water resistant cover provided by KWP.
- Allow siding to adjust to atmospheric conditions prior to installation. Do not store KWP naturetech™ siding in a heated building. This can affect the humidity content in the wood and make it susceptible to buckling.

A) GENERAL

Siding must be installed in a manner that prevents moisture infiltration and water build-up.

As with all wood products, do not apply KWP naturetech™ siding to a structure where excessive moisture conditions exist such as drying concrete, plaster or wet blown cellulose insulation.

Installation over new masonry walls is not recommended until walls are thoroughly dry.

To prevent buckling, do not apply siding to green or crooked structural framing materials.

Always leave a 5/16" (8 mm) space wherever siding butts against trim or other materials to allow for normal expansion.

All exposed wood substrate must be primed and painted.

In coastal areas, KWP naturetech™ siding must be installed on furring strips (strapping). In order to allow ventilation behind the siding thus reducing moisture accumulation in the walls, the National Building Code specifies that a humidistat-controlled mechanical ventilation system be used in conjunction with strapping. Automatically controlled mechanical ventilation greatly reduces the risk of condensation moisture problems occurring in the walls.

Check your local building codes for application procedures for handling moisture and moisture vapor in your area.

Basements, attics and crawl spaces

To reduce the risk of moisture damage to the structure and siding, it is essential that dirt or gravel floors be sealed by a layer of asphalt, polyethylene film, concrete, etc. Attics and crawl spaces must be vented to the outside.

Stud Spacing and wall construction

KWP naturetech™ siding may be installed over sheathed or unsheathed walls (use a breather-type paper) and must be nailed into studs spaced not more than 16" (400 mm) O.C.

To reduce moisture absorption by the siding, leave at least 8" from the ground. The siding should not have direct contact with concrete.

Water Resistant Barrier (WRB)

Properly installed water resistant barrier is required behind siding. Consult your local building code for details.

KWP naturetech siding's limited warranty does not expressly or implicitly cover water penetration. KWP does not assume any responsibility for water penetration.

Furring strips (strapping)

For proper ventilation behind any wood siding, CCMC and the building code recommend the use of furring strips.

The furring strips must be installed vertically for horizontal siding installation, horizontally for vertical siding installation, and either horizontally or diagonally for diagonal siding installation (refer to the installation diagram within these installation instructions). Consequently, usage of furring strips will vary with the various installations. When furring is installed, for horizontal siding installation it should be installed vertically 16" (400 mm) O.C. and be a minimum thickness of 1/2" (12 mm). For vertical and diagonal siding installation, furring strips should be a minimum thickness of at least 1" (25 mm). The space between furring strips above and below should be left open to ensure proper ventilation. Anti-rodent trims should be installed to block insects and small animals. At the bottom of the wall, to provide better support for the first row of siding, a furring strip of about 12" (300 mm) long should be installed vertically centered between each main furring strip.

Masonry construction

Where siding is applied over masonry construction, it must be installed over furring strips spaced 16" (400 mm) O.C. and of adequate thickness to accept

the full length of the recommended nail. If the wall is insulated, a continuous air/vapor barrier must be installed between the framing and the masonry. Any added insulation should have an R factor preferably greater than the overall R factor of the wall being covered or at least equal to it.

Re-siding of existing buildings

As the original air/vapor barrier may not meet modern-day requirements, the new siding must be installed on furring strips (strapping). If the old siding is not straight and cannot provide a solid nailing base for the furring strips it should be removed. If necessary, shims should be used to straighten the furring strips.

Windows and doors

A space between the furring strips and horizontal framing members under and above windows and above doors must be 2" (50 mm).

Space nails 8" (200 mm) O.C. along edge of siding under windows (shim if/where necessary). Any use of force when putting siding into place will cause buckling.

B) General installation instruction

When installing KWP naturetech™ siding over foam plastic or fiberglass sheathings, the following precautions must be followed:

Adequate bracing of the wall in accordance with the National Building Code is required.

Strapping must be installed to provide a solid, level nailing base.

KWP siding must be installed over a minimum 1x4 (nominal size) Southern Pine furring strip with a specific gravity greater than or equal to 0.55

KWP will not assume responsibility for problems related to moisture accumulation within the walls or to crushing of the sheathing during or after application of the siding. Siding shall be installed to safely resist all loads, including wind load, of locally adopted building codes. The installation of siding shall result in a system that provides a load path that meets the requirements for the transfer of loads from their point of origin through the load-resisting to the structure. The mechanical connection of the furring strip to structure is the responsibility of a design professional. KWP assumes no liability for any loss or damage caused by the design of the mechanical connection of the furring strip to the structure and is expressly released by the purchaser or owner from any such loss or liability.

Type 1 air/vapor barrier

In order to prevent moisture condensation from damaging the components of the wall system, it is necessary to use a Type 1 air/vapor barrier (e.g. polyethylene or foil) on the inside surface of the wall, and extend it behind partition walls to form continuous protection of exterior walls. Any opening in the wall (wiring, electrical boxes, pipes, etc) or tears in the air/vapor barrier must be well sealed to prevent moisture from entering and damaging the wall system. An air/vapor barrier must be installed in all un-insulated buildings where the average temperature in January is 2 (35) or below.

Cutting KWP naturetech™ siding

For proper cutting use a fine-toothed saw or power saw with a combination blade. Make sure that the cutting action is on the painted side of the product.

Nailing KWP naturetech™ siding

KWP offers 2" (50 mm) spiral color-matched nails. Nail length will be determined by wall construction and in all cases must allow a minimum of 1-1/4" (32 mm) penetration into solid backing or 1-1/8" (28 mm) if spiral nails are used. There must not be more than 16" (400 mm) O.C. spacing between nails. Nailing should always start at one end of the siding and proceed toward the other end to prevent rippling.

Ensure that strips are aligned at corners of the building.

Do not countersink nail heads. Particular attention is necessary when using an air nailing gun.

Trims and accessories

A complete range of trims and accessories are available from KWP including:

- Starter strips.
- Color-matched aluminum moldings for joints, inside and outside corners, j moldings, drip caps, anti-rodent trim and Z flashings.
- Color-matched nails.
- Engineered wood Trim Board to match siding colors.
- Engineered wood outside corners in matching colors.
- Color-matched caulking and touch-up paint.

C) DETAILED INSTALLATION INSTRUCTIONS

KWP naturetech™ siding may be installed horizontally, vertically or diagonally depending on the profile selected, over sheathed for unsheathed walls. Colonial Double 4" Dutchlap, Classic 6" Lap, Heritage 6" Dutchlap, Distinction Double 3" Dutchlap and Prestige Double 5" Dutchlap are typically installed horizontally

Provincial Vertical Double 5" is typically installed horizontally and vertically. All our KWP naturetech™ siding can be installed diagonally.

Note the correct installation method for each type of installation.

Siding Joints: The vertical joint between adjacent siding pieces must be located over the middle of a stud or furring strip located over a stud. Leave a 5/16" (8 mm) gap between siding pieces and nail into the stud or furring strip located over a stud. Nail on each side of the joint spacing at the top nailing line.

For horizontal siding installation, the siding joints can be covered using one of the 3 following methods:

- 1) Insert a color-matched joint molding over the gap and nail.
- 2) Insert a joint spacer (reverse joint) behind the gap, and caulk using color-matched Thermoplastic Caulking.
- 3) Use Thermoplastic Caulking only.

For vertical and diagonal siding installation use Thermoplastic Caulking ONLY.

When caulking, cut spout, hold the tube at 90 degrees to the joint, and fill from the bottom up leaving a convex bead of caulking. Do not level the caulking.

Corners: If inside and outside corners are used (vinyl or aluminum), they should be installed BEFORE the siding; alternatively, wood trim or KWP naturetech™ engineered wood Trim Board should be installed over the siding AFTER it has been installed. Siding should not be butted tightly to inside and outside corners, a 5/16" (8 mm) gap must be provided between the edge of the siding panel and the inside or outside corners.

Two stories or higher (New construction only): When siding is installed vertically or diagonally on walls two stories or more, cut the siding at each floor line leaving a 5/16" (8 mm) gap between the bottom and top pieces. Finish the gap by either:

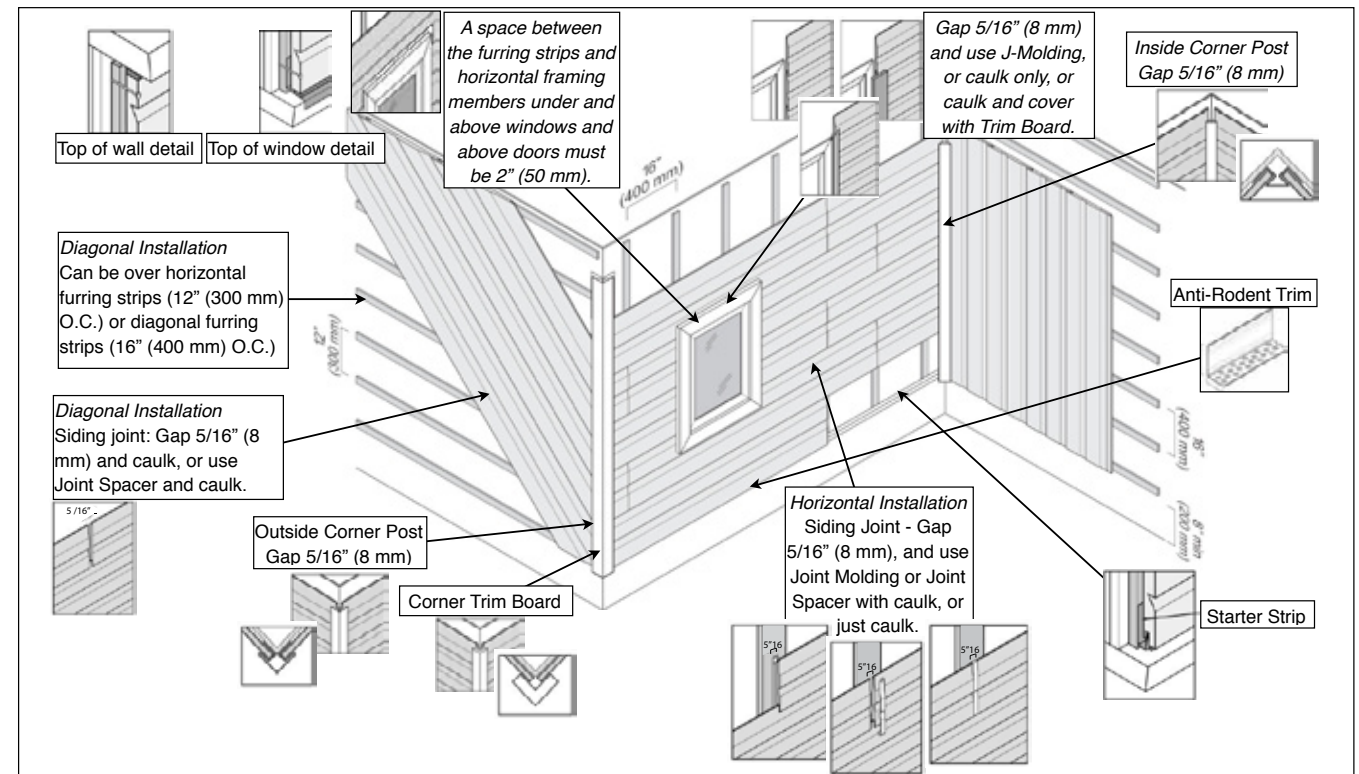
- Caulking the gap and installing trim to cover joint. Caulk the gap between the trim and the siding.
- Installing a Z flashing and caulking the gap between the flashing and the siding.

Horizontal installation

If furring strips are used, they must be installed vertically and must be nailed into the wall studs at 16" (400 mm) O.C. at the bottom of the wall, to provide better support for the first row of siding, a furring strip of about 12" (300 mm) long should be installed vertically centered between each main furring strip. Both the top and bottom of the space between furring strips must be left open to ensure ventilation. The opening at the bottom should be open to the outside except for the insect screen. Level and install metal starter strips along bottom edge of sheathing or sill plate, or up to 1" (25 mm) below these, as required by course layout. Install first course of siding so that the machined groove on the lower back of the siding fits over the edge of the starter strip. The siding must be fastened by nailing into the nailing line (about 1/2" [12 mm] from the top edge of siding) at each stud or vertical furring strip located over the stud, leaving no more than 16" (400 mm) between nails.

Vertical installation

Vertical installation must be made over horizontal furring strips spaced not more than 16" (400 mm) O.C. Furring strips must be a minimum of 1" (nominal) (25 mm) thick



and nailed into solid sheathing (lumber or waferboard). DO NOT put on foam, fiberboard, or resilient glass fibre sheathings.

In case of vertical installation, the horizontal furring strips must have periodic spacing at abutments to ensure proper ventilation (see diagram).

The lower end of the laps must be protected from the elements either by retouching the exposed ends by using color-matched KWP touch-up paint or installing a metal drip cap under the lower end.

Diagonal installation

Diagonal installation must be made over horizontal or diagonal furring strips. Nail spacing should not exceed 16" (400 mm).

Furring strips must be a minimum of 1" (25 mm) (nominal) thick and nailed into solid sheathing (lumber or waferboard). DO NOT put on foam, fiberboard, or resilient glass fibre sheathings.

If furring is installed horizontally, it should be spaced 12" (300 mm) O.C. If it is installed diagonally, it should be spaced 16" (400 mm) O.C.

Nailing should be into the framing stud and also intermediately into the sheathing. Nail both sides of the lap every time the lap crosses a stud or furring strip. Joints should be cut vertically and occur only at stud/furring locations. The lower end of the laps must be protected from the elements either by retouching the exposed ends by using color-matched KWP touch-up paint or installing a metal drip cap under the lower end and caulk the space between the end of the lap and the drip cap.

Finish repairs

Any scratches should be covered by color-matched KWP touch-up paint. Soak the raw surface with touch-up paint by applying it with a fine brush or point of a cloth, then immediately rub off the excess with a cloth to prevent any blotchy appearance.

Care of pre-finished siding

All KWP naturetech™ siding finishes are long wearing and require little maintenance. However, for best results, siding must be washed annually using non-abrasive household cleansers according to the manufacturer's recommendations. Test cleansers on a small area to ensure they do not damage the finish. Rinse siding surface thoroughly after applying cleanser