

KWP NATURETECH PRIMED ENGINEERED WOOD PANEL INSTALLATION MANUAL

IMPORTANT:

Please read and understand all pages of this manual before starting panel application process.

These instructions must be followed when installing KWP naturetech wood panels. To ensure a quality installation, read carefully before starting. Deviation from KWP Naturetech Engineered Wood Panel Installation Instructions may void warranty.

STORAGE

- Store at a minimum of 8" off the ground, on a flat surface on pallets to avoid sagging and contact with the ground.
- Panels must be covered and protected from the elements with a water resistant cover.
- Allow panels to adjust to atmospheric conditions prior to installation. Do not store KWP naturetech panels in a heated building. This can affect the humidity content in the wood and make it susceptible to buckling.

GENERAL

Panels must be installed in a manner that prevents moisture infiltration and waterbuild-up. As with all wood products, do not apply KWP naturetech where excessive moisture conditions exist such as drying concrete or plaster. Installation over new masonry walls is not recommended until walls are thoroughly dry. To prevent buckling, do not apply panels to green or crooked structural framing materials.

FRAMING:

- Apply KWP panels on walls and gables that meet racking requirements.
- Follow specific nailing pattern of 3/8 in - 1/2 in vertical; 8 in o.c. edges; 1/2 in - 1 in horizontal; 8 in o.c. intermediate.
- Framing must be 16 in. on center (o.c.).

SHEATHING:

- Sheathing is required for all KWP panel products. Recommended sheathing is a minimum of 7/16 in. OSB or 1/2 in. exterior grade plywood.

VAPOR BARRIERS, VENTILATION & MOISTURE CONTROL:

- Roofs, gutters, roof to wall transitions, windows, doors, decks and attachments shall be designed, flashed and installed to prevent moisture entry into the panel or wall cavity or accumulation of water against the panel other than ambient moisture.
- Panel must have 2 in. clearance from masonry, concrete, brick, stone, stucco or mortar, or be properly flashed (see Fig. 6).
- A continuous vapor barrier rated 1 perm or less is required across the interior side of all walls to be panelled.
- A vapor barrier rated 1 perm or less must be installed between the wood sill, wood framing and the foundation wall.

GAPS AND CORNERS:

- Panels must have a 3/8 in. gap at the vertical joint (see Fig. 2). This gap must be sealed. It is recommended to cover the joint with a wood batten strip. KWP Trim is recommended for batten material.
- Leave 3/8 in. gap around all doors, window frames and corners. Seal all gaps.

JOINTS:

- All side edge joints must be located over studs.
- All horizontal joints must be located over framing.
- At horizontal joints with stacked panels or other types of panel, overlap panels 1 in. or use Z flashing and fasten as shown (see Fig. 4).

CLEARANCES:

- Panels must have a minimum 2 in. separation from concrete or be appropriately flashed.
- Panels must be 8 in. from soil or landscaping material.
- Where the panel meets the roof, it must be spaced a minimum of 2 in. from the plane of the roof and be properly flashed. The cut edge must be primed and painted.
- Vegetation must not be in direct contact with the panel.

SEALING:

- Use the best quality flexible, paintable, mildew resistant exterior grade sealant material that meets ASTM C920, Class 25 or higher.
- Seal around all openings such as window and door frames and at butt joints.
- Seal all overdriven nails.
- Seal or flash all horizontal trim material in a manner that creates proper out-sloping.

PAINTING:

- Touch up damaged areas with premium acrylic latex primer or 100% acrylic latex paint.
- Panels must be finish-painted within 90 days after installation. If panel is exposed for a longer period, reprime the panel.
- Panel must be clean and dry when paint is applied.
- For best performance, use 100% acrylic latex paints or 100% acrylic latex solid body (opaque) stain.
- Follow paint manufacturer's recommendations for engineered wood panels.
- A minimum of 4 dry mils, which includes 1 mil factory primer, is required. This is best achieved with two coats of finished paint.
- Drip edges and grooves must be well coated.
- All surfaces and exposed cut edges must be painted in place.



FLASHING:

- In areas where the bottom drip edge of the panel is adjacent to flashing, provide a minimum 3/8 in. gap between bottom drip edge of the panel and the flashing (see Fig. 6).
- Install flashing in a manner that creates proper out-sloping (see Fig. 6).
- Kick out flashing is required in areas where the roof and gutters are adjacent to the panel.

INSTALLING:

- Examine the framed structure to determine the positioning of the studs in relation to the exterior corners, windows and openings. Plan for areas that do not allow for installation of full panels.
- From your pre-selected starting position, place a panel square on the wall with the bottom edge level. All side edges must be positioned over studs. All horizontal edges must be positioned over framing. When positioning the next panel, do not force the panel into place. If installing a shiplap panel, place overlap edge on top of the underlap edge prior to nailing.
- At corners, use KWP Trim (see Fig. 3).

FASTENING:

- Use corrosion resistant boxhead nails with a minimum head diameter of 1/4 in. (10% variance allowed).
- Fastening must not exceed 16 in. o.c. (see Framing section for 24 in. o.c. stud spacing).
- All panel joints must be located on studs (see Fig. 2).
- Nails must penetrate wood framing 1-1/2 in.
- Avoid countersinking nails or rupturing the surface of the panel. If countersinking occurs, seal nail prior to painting (see Fig. 1).
- Fasten from side to side or center side to avoid internal stress.



WARRANTY REQUIREMENTS:

- The terms of the Limited Warranty require strict compliance with the installation instructions. These instructions are supplemental to applicable local building codes and standard building practices. Compliance with the most stringent of these is required. Architectural designs, plans and specifications must comply with these instructions.

INSTALLATION ERRORS THAT VOID THE WARRANTY:

- Do not apply panels to a rain soaked structure.
- Do not apply panels that is wet. Wet panels can shrink after application and shrinkage is not covered by the KWP warranty.
- Wet blown insulation is not allowed.
- Do not apply stucco or composite stucco products over the panels.
- Do not apply the panels to floating structures or buildings over water.
- Staples are not an acceptable fastening device.
- Do not apply to wall systems without conventional framing.
- Do not paint in wet or cold conditions.
- Do not use shake and shingle paints, low quality flat oil or alkyd paints, vinyl acetate (PVA), vinyl acrylic or vinyl acetate-acrylic co-polymer paints. These coatings do not adequately protect the panels.
- Do not blind nail panels.

Note: This list is not intended to be inclusive of all errors that would void the warranty. These are just some examples.

KEY HOMEOWNER MAINTENANCE RESPONSIBILITIES

- Inspect and renew all sealant and immediately repair any water penetration issues every year.
- Maintain gutters and downspouts to avoid water cascading down walls.
- Ensure sprinkler patterns are directed away from structures.
- Follow paint manufacturer's recommendations for repainting and paint maintenance.
- Apply panels over approved structural sheathing.
- Maximum nail spacing is 16 in. on center.
- Nails must penetrate wood framing 1-1/2 in.
- Do not use staples. Use only the nails specified in these instructions.
- Install a minimum 3/8 in. gap at butt joints and ends. Use only approved methods to protect joints areas.
- Panels must not be in direct contact with stucco, mortar, stone, brick, concrete or masonry.
- Apply panels in a method that will prevent moisture entry into the panel or wall cavity.
- Seal all exposed cut ends using a method that will prevent moisture intrusion.
- Maintain the proper clearance from the panels bottom drip edge to the finished grade, walkways and adjacent to the roof lines.



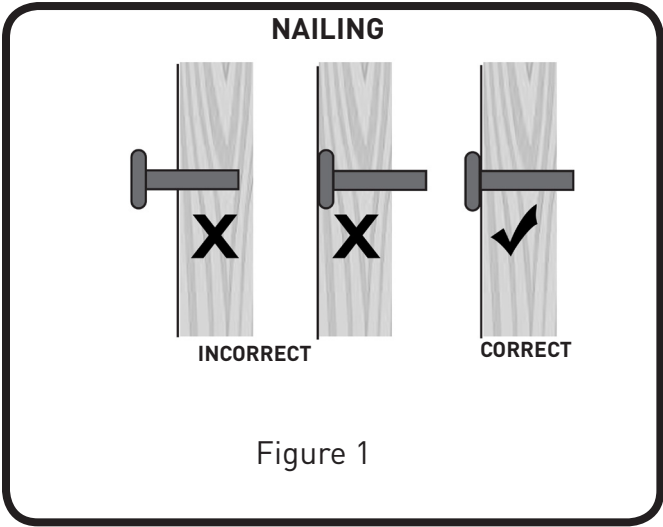


Figure 1

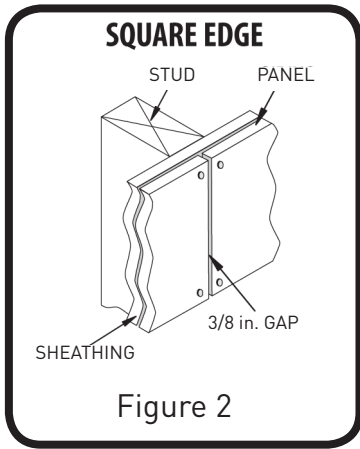


Figure 2

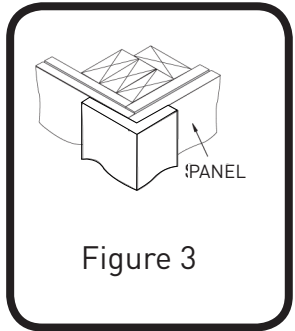


Figure 3

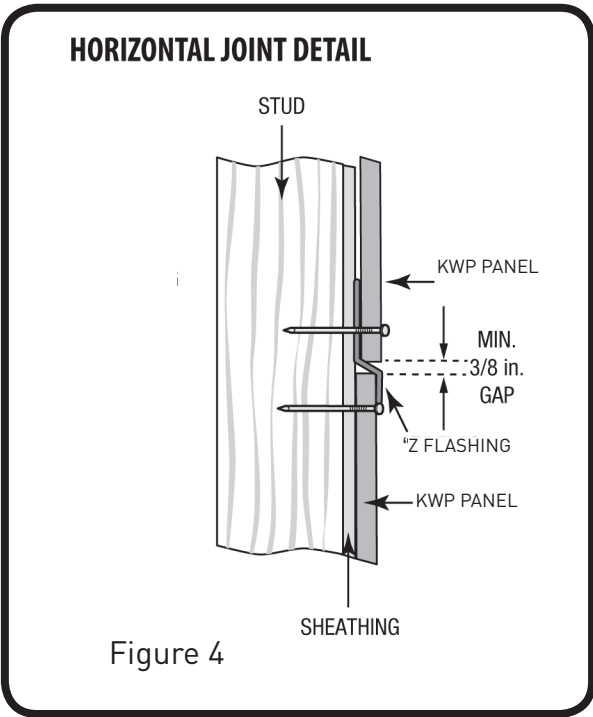


Figure 4

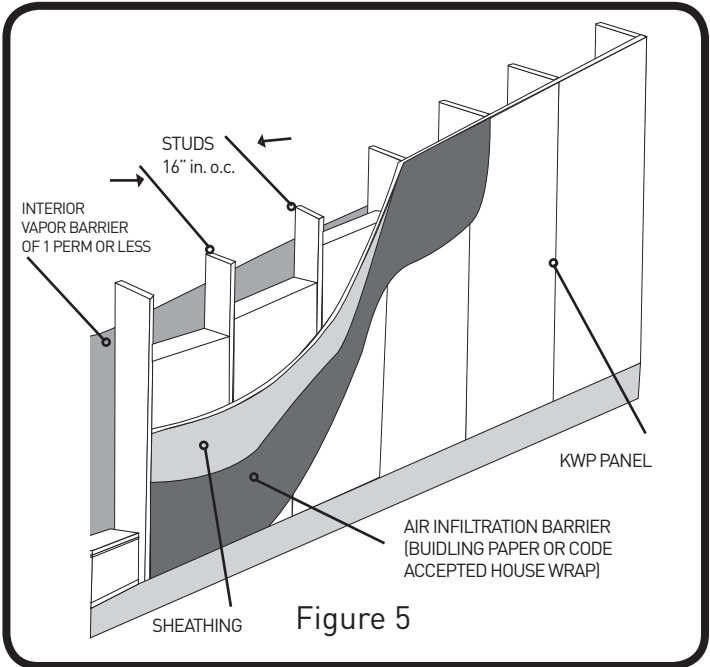


Figure 5

