



INSTALLATION GUIDE

NICHIPANEL™

Commercial & Multifamily

This guide is intended to enable successful installation of Nichiha's NichiPanel™ fiber cement siding¹ on commercial and multifamily projects. Further installation information and technical resources such as instructional videos, Technical Bulletins, three-part specifications, product testing and certifications, and other technical documents are available on Nichiha's website: nichiha.com/resource-center.

Install products in accordance with the latest installation guidelines and all applicable building codes and other laws, rules, regulations, and ordinances. Review all installation instructions, [Intertek CCRR-0258](#), and other applicable product documents before installation. This install guide's effective date is **January 2021**.

PRODUCT INSPECTION, STORAGE & HANDLING

Inspect all products thoroughly prior to installation. Do not install any product which may have been damaged in shipment or displays damage to the primer.

Contact your local dealer or Nichiha Customer Service Representative toll-free at 1-866-424-4421 immediately should you have any questions about NichiProducts™.

NichiPanel™ MUST be stored flat and off the ground prior to installation. Nichiha recommends storing on pallets. Protect corners and edges. Product MUST be kept dry and stored in a covered area. Material on-site must be covered with a breathable tarp before installation and during off hours. Moisture saturation before installation may result in shrinkage or product damage. Do not install saturated siding.

Carry the products on edge. Do not carry or lift NichiPanel™ flat. Improper handling may cause cracking or panel damage.

Nichiha is not responsible for damage caused by improper product storage and handling.

SAFETY & CUTTING

As with any natural stone, masonry, or concrete based product, when cutting, drilling, sawing, sanding, or abrading fiber cement cladding, proper safety measures must be taken due to the potential for airborne silica dust, an [OSHA-identified hazardous substance](#) that can pose serious medical risks.

Work outdoors where feasible, otherwise use mechanical ventilation. Position cutting stations so that wind will carry the dust away from the user and others in the work area. Use a dust-reducing or dust collecting circular saw with a vacuum attachment in combination with a diamond-tipped blade designed for cutting fiber cement products. The dust collector must be connected to a HEPA vacuum.

Always wear safety glasses and NIOSH/OSHA approved respirator with a rating of N100, O100 or P100.

A jig saw fitted with a carbide tipped blade may be used for cutting service opening holes, irregular shapes, radii, and scrollwork. When using a circular saw, shears, or jigsaw, cut Nichiha products face down. Also ensure the panel is fully supported.

Refer to OSHA guidelines and consult with environmental health and safety professionals for compliance assistance with construction jobsite silica dust regulations.

DESIGN & LAYOUT

The minimum field-cut NichiPanel size is 12" x 16" apart from where cutting, notching, and/or fitting at openings or terminations are necessary. NichiPanel is primarily a vertically-oriented product (long edges parallel to vertical framing). However, horizontal applications can be facilitated by the presence of horizontal framing and/or by vertical stud and edge-only fastening schedules. Utilize appropriate flashings, trim boards, and metal trim extrusions/channels in accordance with the NichiPanel vertical and horizontal joint requirements. **A drainable WRB² is required.**

¹NichiPanel is manufactured in Macon, Georgia along with NichiBoard, NichiSoffit, NichiStaggered/Straight, and NichiShake which are all NichiProducts™. These are available in only the following states: Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia. Washington D.C. is included.

GENERAL & CONSTRUCTION REQUIREMENTS

FRAMING & SHEATHING

NichiPanel™ must be installed on flat, vertical wall applications only. Do not install on sloped or tilted walls, or Mansard type roofs. *Correct any misaligned framing as irregularities in the framing or exterior sheathing may mirror through the finished application.*

Framing:

Stud Walls (Braced by structural sheathing or lateral/horizontal framing): 2x wood or steel studs (20 gauge or heavier)

- Stud Spacing: 24" o.c. maximum

SIPs: Min. 7/16" OSB

CMU: Furring is optional but highly recommended. Use min 5/4" lumber or 20 gauge, shaped metal (hat channel, z, or c) spaced at a maximum of 24" o.c.

Sheathing:

- APA rated 7/16" OSB or plywood (strongly recommended)
- Non-structural sheathing: exterior gypsum, foam plastic insulation, and fiber builder board. Non-structural sheathing thickness shall not exceed 1" without the addition of furring.

Due to the compressive nature of some non-structural sheathing, care must be taken not to overdrive the siding fasteners and compress the sheathing which may result in distortion or waviness. The fastener length must be increased in accordance with the thickness of the non-structural sheathing.

- With braced wall framing, sheathings may be omitted. *Note: this increases the possibility of panel distortion or waviness.*

NICHIPANEL FASTENING SCHEDULES

Refer to [Intertek CCRR-0258](#) for fastening schedule options. Table 4 lists numerous wind-load rated assemblies for NichiPanel. Projects located in the Florida High Velocity Hurricane Zone (Broward and Dade Counties only) must follow Table 8 assembly/fastening schedules.

WEATHER RESISTIVE BARRIERS (DRAINABLE)²

A weather resistive barrier *with enhanced drainage is required* in accordance with local building codes when installing NichiPanel™ on commercial/multifamily projects. Use an approved weather resistive barrier (WRB) as defined by the 2015 IRC. The weather resistive barrier must be installed in accordance with the manufacturer's specifications and local codes if applicable.

All openings, corners, penetrations, and transitions must have appropriate flashing to prevent moisture penetration. Follow moisture management best practices, WRB manufacturer's guidelines, window manufacturer instructions, and all local building codes. *Nichiha assumes no responsibility for moisture infiltration.*

²A drainable WRB is one manufactured to meet code requirements for weather resistance while also enhancing the ability of moisture reaching the WRB to drain. A high-quality drainable WRB will meet at least 90% efficiency when tested to ASTM E2273.

TECHNICAL DESIGN REVIEWS

Please consult with Nichiha's Technical Department directly when using NichiPanel on large projects, such as buildings greater than three (3) stories or taller than 45 feet. Further, please contact the Technical Department for assistance on any projects located in high wind regions (areas with 130 mph or higher ultimate wind speed).

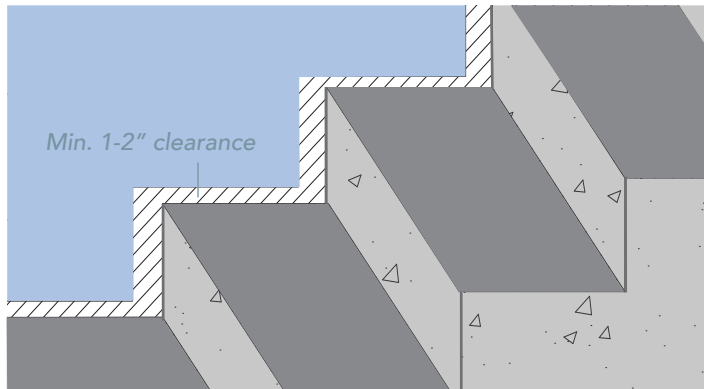
NICHIPANEL FINISHING

NichiPanel comes with primer coats only and must be field painted within 12 months of installation. Finish coats should be high-quality exterior acrylic latex paint *only*. Do not use stains, oil or alkyd-based paints. Follow the paint manufacturer's instructions for use. Nichiha does not warrant or accept liability for the appearance or performance of third party or field applied caulks, sealants, or finishes.

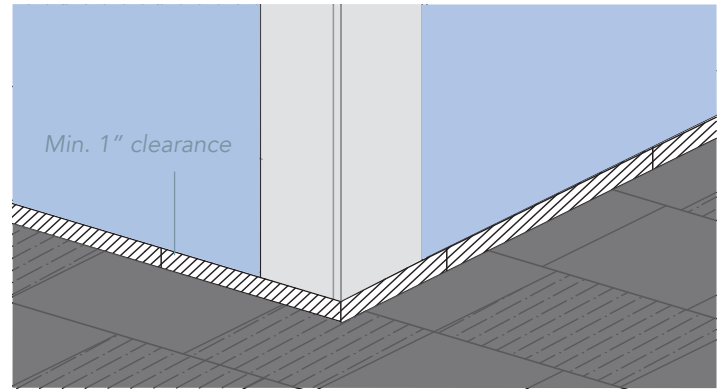
Always paint, prime, or caulk field-cut panel edges.

CLEARANCES & FLASHINGS

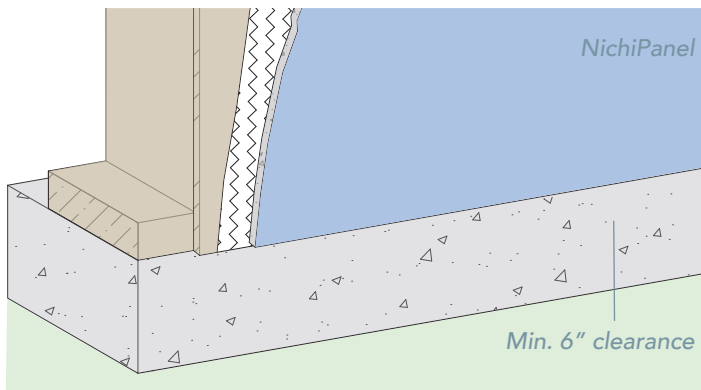
Maintain a minimum 1" - 2" clearance between panels and decking, walks, steps, stoops, porches, and hard surface driveways. Keep *min. 2" clearances for projects in DE, KY, MD, and VA.*



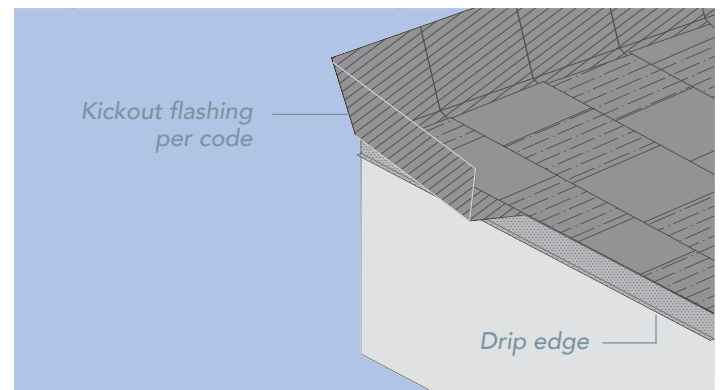
At roof and wall junctures and according to roofing manufacturer's instructions, flashing and counter-flashing are required. Panels must be installed with a minimum 1" clearance from roofing.



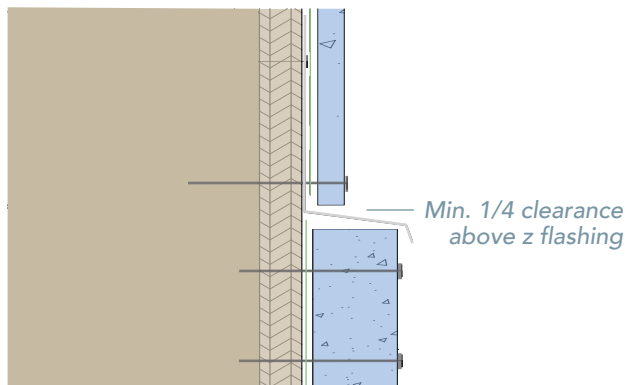
Maintain a minimum clearance of 6" above finished grade, or in accordance with local codes if greater than 6" clearance is required.



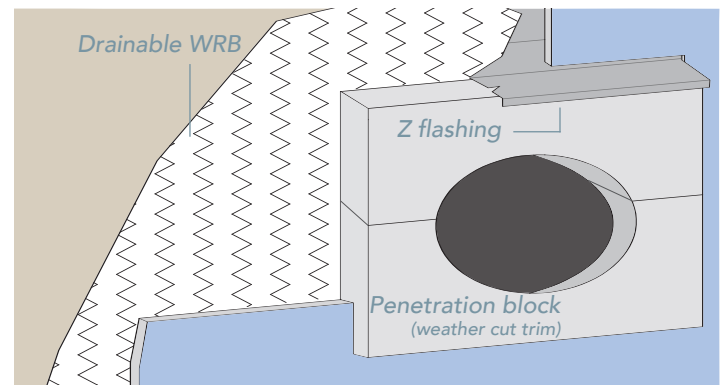
A kickout flashing must be present at roof to wall intersects in order to direct roof water away from the siding and trim. Include drip edge flashings to protect fascias/trim below roof edges.



All horizontal trim is required to be flashed with a 1/4" clearance between the siding and z flashing. Do not caulk the clearance gap.



Block out penetrations with flashing over the top edge of the block. Keep a 1/4" clearance between the siding and flashing.



GENERAL FASTENING REQUIREMENTS

Refer to [Intertek CCRR-0258](#) for fastening schedule options.

Corrosion resistant fasteners, such as hot-dipped galvanized nails and screws appropriate to local building codes and practices must be used. Stainless steel fasteners are highly recommended in high-humidity and high-moisture regions. Nichiha is not liable for corrosion resistance of fasteners. Do not use aluminum fasteners, staples, finish nails, clipped head or T-head nails, or fasteners not rated or designed for intended use.

Fasteners must penetrate into framing a minimum of 1" for wood or 1/2" into 20 gauge or heavier steel.

When using pneumatic tools, ensure the gun has an adjustable depth of drive or flush mount attachment to control fastener seating depth. The fastener head must be *flush* to the board surface. Do not over drive or under drive fasteners. Caulk or seal any fasteners that are countersunk more than 1/16" and add an additional, properly-seated fastener.

DO NOT use framing nailers as panel damage may result.

Pressure from compressors can vary depending on tank volume and the number of lines connected to the unit. For best performance, always test and adjust pressure before beginning installation.

NICHIPANEL INSTALLATION

Fasteners must be positioned 2" away from NichiPanel corners and 3/8" away from edges. *Joint/break vertical edges over studs (1)*. Add additional (double studs) as needed to maintain fastening requirements. (4)

VERTICAL JOINTS- Butt panel vertical edges in moderate contact, or cover with battens, utilize trim channels, or leave an appropriate gap and seal with caulk. (2-4)

HORIZONTAL JOINTS- Do NOT span floors with NichiPanel. Horizontal joints must have z-flashing (or equivalent metal trim) with a minimum 1/4" gap. Do not caulk. (5-7)

TRIM JOINTS AT OPENINGS & CORNERS- Leave a min. 1/8" gap and add caulk (at corner, jamb, and sill conditions). NichiPanel must not extend beyond the face of the trim.

CAULK - ASTM C834 or C920 compliant, applied per manufacturer instructions.

