GENERAL INSTRUCTIONS FOR SAVANNAH SMOOTH & SIERRA PREMIUM SHAKE

CONSTRUCTION REQUIREMENTS

Savannah Smooth and Sierra Premium Shake boards must be installed over vertical wood framing spaced no greater than 16” oc. with an APA rated 7/16” thickness (minimum) OSB or plywood sheathing.

Boards may be installed on flat, vertical wall applications only. Do not install on sloped or tilted walls or Mansard type roofs.

Shake and lap siding products must be installed horizontally. Do not install in an angled, sloped, or other non-horizontal (chevron, sunburst, diamond) fashion.

A weather resistive barrier is required in accordance with local building codes when installing Savannah and Sierra boards. Use the 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. Nichiha is not liable for water infiltration.

Please consult with your local dealer or Nichiha directly when using Savannah or Sierra on large projects, such as buildings greater than three (3) stories or taller than 45 feet. Some special reinforcements may be required.

PRODUCT INSPECTION

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 or finish coat.

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

STORAGE & HANDLING

Savannah and Sierra boards MUST be stored flat and off the ground prior to installation. Nichiha recommends storing on pallets.

Boards MUST be kept dry and stored in a covered area or covered with a tarp before installation. Moisture saturation before installation may cause shrinkage and board damage. Do not install saturated boards.

All prefinished products are required to be stored in a covered area.

Carry the products on edge. Do not carry or lift boards products flat. Improper handling may cause cracking or board damage.

Nichiha is not responsible for damage caused by improper storage and handling of products.
MINIMUM CLEARANCES

Maintain a minimum 1” - 2” clearance between boards and decking, walks, steps, stoops, porches, and hard surface driveways.

At roof and wall junctures and according to roofing manufacturer’s instructions, flashing and counter-flashing are required. Boards 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.

All horizontal trim is required to be flashed with a ¼” clearance between the siding and flashing.
BLOCKED PENETRATIONS

All penetrations of 1 ½” or larger in diameter must incorporate a blocked and flashed penetration to deter water entry behind the siding.

FASTENING

Savannah and Sierra boards may be fastened with appropriate screws or nails, either by hand or with a pneumatic tool. Pneumatic fastening is recommended.

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 board 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.

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.

Corrosion resistant, full round head siding nails or appropriate screws may be used to install boards to wood framing members. Fasteners must penetrate into wood a minimum of 1”, except at board ends/butt joints.

CUTTING

For your protection and that of others, also refer to the Safety Instructions and OSHA guidelines for important safety practices.

Work outdoors where feasible, otherwise use mechanical ventilation. Position cutting station so that wind will carry the dust away from the user and others in the work area.

Always wear safety glasses and NIOSH/OSHA approved respirator with a rating of N100, O100 or P100 whenever cutting, drilling, sawing, sanding or abrading fiber cement products.

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.

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 board is fully supported along its length.

Additionally, on factory prefinished products, take steps to protect board finish from damage.

1. See Silica Dust Warning on last page.*
FINISHING & MAINTENANCE

Use an exterior grade high-quality sealant that complies with either ASTM C-834 (for primed products) or ASTM C-920 (for prefinished products) requirements for all gaps that require filling with sealant. Follow the manufacturer’s instructions for use.

All exposed field cut edges (i.e. outside edges, field cut door and window cut outs, field cut butt joints, bottom ends of corners and window trim), must be sealed with a primer, paint, or caulk.

Dents, chips, scratches, etc. on the products should be filled with exterior grade cementitious patching or putty. Follow the manufacturer’s instructions for use.

All unfinished (pre-primed) products must be painted within 12 months of installation. High quality, exterior grade, 100% acrylic latex paints are recommended.

DO NOT use stain, or oil or alkyd based paints on Nichiha products. Do not apply paint when siding is wet. Follow the 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.

Periodic maintenance of the exterior of any structure is considered normal. As a guide, it is recommended that normal maintenance shall include:

Washing down the exterior surfaces periodically with a low pressure spray or garden hose to remove dirt and debris. DO NOT use high pressure power washers as they may damage the siding.

Reapplication of exterior finishes.

Please refer to your paint manufacturer for recoating requirements and schedules.

Maintaining caulks and sealants.

Ensure that gutters are clear and unclogged to prevent overflows.

Ensure the minimum ground clearance is maintained by preventing build up of decorative mulch, stone, etc.

Maintain a clearance between the siding and any vegetation, shrubs, etc.
SAFETY INSTRUCTIONS

Whenever drilling, cutting, sawing, sanding or abrading fiber cement products, users must observe the following safety practices:

Use best work practices to reduce airborne dust concentrations.

Use a dust reducing circular saw with collector or vacuum attachment for cutting. The dust collector must be connected to a HEPA vacuum.

Position cut station where wind will carry dust away from user and others in the area.

Do not use compressed air for cleaning dust.

Work outdoors when feasible; otherwise use mechanical ventilation.

Anyone handling or in the vicinity of others using fiber cement products must wear safety glasses and properly fitted respirators, prior to handling them. We require that users wear a NIOSH/OSHA approved respirator with a rating of N100, O100 or P100 in accordance with applicable government regulations and manufacturer’s instructions.

All users must comply with the OSHA PEL.

Notify others in the immediate area.

PREPARATION

Follow all General Instructions beginning on Page 1 of this guide.

Sierra Premium™ Shake and Savannah Smooth boards must be installed over vertical wood framing spaced no greater than 16” o.c. with an APA rated 7/16” thickness (minimum) OSB or plywood sheathing. Correct any misaligned framing as irregularities may mirror through finished application. (Fig. 5)

DOUBLE WALL CONSTRUCTION

WEATHER RESISTANT BARRIER

MIN. 7/16" PLYWOOD/OSB SHEATHING

STARTER STRIP

SIERRA PREMIUM SHAKE

MIN. 6" CLEARANCE ABOVE FINISHED GRADE

16” O.C. MAX
Sierra Premium™ Shake and Savannah Smooth boards may be installed on flat, vertical wall applications only. Do not install on sloped or tilted walls, or Mansard type roofs.

Boards must be installed horizontally. Do not install in an angled, sloped, or other non-horizontal (chevron, sunburst, diamond) fashion.

Ensure all weather resistive barriers are in place in accordance with local code.

When installing Savannah and Sierra boards, it is required that an APA rated minimum thickness 7/16” OSB or plywood sheathing be used.

FASTENING

Follow all fastening requirements in the General Instructions section this guide.

Sierra Premium™ Shake and Savannah Smooth boards must be installed with corrosion resistant, galvanized, or stainless steel fasteners.

A corrosion resistant, #8, ribbed, bugle head (.375” HD) screw of appropriate length is recommended. As an alternative at intermediate studs, a hot-dipped galvanized, full round head (min .221” HD) siding nail may also be used. Fasteners must penetrate into wood a minimum of 1”, except at board ends/butt joints.

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, clipped head or T-head nails, finish nails, or fasteners that are not rated or designed for intended use.

The fastener head must be flush to the board surface. Do not over drive or under drive fasteners.
STARTER STRIP & FIRST COURSE

INSTALLATION

A starter strip is required to set the first course on the proper angle and to create the drip edge at the bottom course of siding. The starter strip material may be a cut piece of Savannah or Sierra board, PVC, or pressure treated lumber. Do not use untreated lumber, plywood, OSB or other engineered wood products as a starter strip. (Fig. 6)

Install the starter strip level with the bottom of the wall sheathing or mudsill.

Ensure the first course of boards is level as it will be the guide for the entire installation. Use a level and chalk line to establish a level and straight reference point for the first course. Continue to check for level lines throughout installation.

The first course of siding must hang below the starter strip a minimum of 1/4”.

The siding should not extend below the corner trim.

The bottom edge of the first course must have at least 6” clearance above finished grade.

It is recommended the course heights remain aligned and transfer around corners.

OVERLAP AND FASTENING METHODS

OVERLAP

Sierra Premium™ Shake and Savannah Smooth boards must be installed with a minimum overlap of 1 1/4”. (Fig. 7)

Alternatively, on Sierra Shake, a maximum overlap of up to but no greater than 2” may be used.

BLIND NAILING/FASTENING

For a more aesthetically pleasing installation, Savannah and Sierra boards may be installed in a hidden, or blind fastener application. (Fig. 7)

When installing boards with nails, the board ends must be secured with a corrosion resistant, #8, ribbed, bugle head screw at each butt joint or termination. Position the screw 1” back from board ends.

Position the fasteners a minimum of 1” down from the top edge of the board.

Fasten from one end of the board to the other.
FACE NAILING/FASTENING

It is permissible to install Sierra and Savannah boards in a face fastener type installation to meet certain installation requirements or when specified by local code.

When installing boards with nails, the board ends must be secured with a corrosion resistant, #8, ribbed, bugle head screw at each butt joint or termination. Position the screw 1” back from board ends.

Position the fasteners a minimum distance of 3/4” up from the bottom edge of the board and no more than 1”. This ensures the fastener will penetrate through the overlap and through both courses. (Fig. 8)

DO NOT install boards in a combined Blind and Face fastening manner.

Fasten from one end of the board to the other.

VERTICAL JOINT PLACEMENT, FASTENING, AND SEALING

When possible, Savannah and Sierra board vertical (butt) joints should land or break over studs or solid wood framing.

Position screw 1” from board end and the appropriate distance from top or bottom edge, depending on fastening method (Blind or Face). (Fig. 9)

Pin-backs may be done for aesthetic purposes only. Pin backs shall be done with corrosion resistant finish nails only and are not a substitute for blind or face fastening.

When possible, use factory sealed or finished ends at butt joints.

ALL exposed field cut ends and edges must be sealed with a primer or paint. NEVER leave exposed cut edges uncoated. When using factory prefinished products, all exposed field cut ends and edges must be painted with a color matching, exterior grade, acrylic latex paint.
STAGGERING THE SHAKE BOARDS

More than one pattern of boards may exist within each unit of Sierra Premium Shake. Install Sierra Premium Shake boards in a manner which minimizes keyway alignment.

Install boards with ends over studs or solid wood framing when possible with a minimum 16” stagger between courses.

For additional keyway alignment options, boards may be reversed, or incorporate an increased stagger amount. Layout of the application may be necessary to avoid repetition or stacked keyways.

JOINT TREATMENT

The use of a joint flashing behind the butt joints is required. (Fig. 9)

Install Savannah and Sierra boards in moderate contact at butt joints.

Suitable materials for joint flashing include anodized or PVC coated coil stock and code approved water resistive barriers.

The joint flashing should be at least 3” in width and long enough to extend above the board height a minimum of 2”.

AT ALL BUTT JOINTS/BTARD ENDS:
USE #8 SCREWS,
1” FROM JOINT EDGES

MIN. 7/16” PLYWOOD/OSB SHEATHING

JOINT FLASHING

WEATHER RESISTANT BARRIER

AT VERTICAL JOINTS,
BUTT BOARD ENDS
IN MODERATE CONTACT.

SIERRA PREMIUM SHAKE
SIDING TO TRIM JOINTS

Where board ends and edges meet trim at inside and outside corners, door, window, and other trim attachments, leave a minimum 1/8” gap and caulk with a quality sealant that meets ASTM C-920 requirements. (Fig. 10)

Corner trim and other trim attachments must be of sufficient thickness. The overlapped board siding must not extend beyond the face of the trim. A continuous, solid shim or build out behind the trim may be necessary.

All horizontal trim must be flashed. Leave a 1/4” gap between the siding and flashing. Do not caulk this gap. Do not use raw aluminum flashings. Flashings must be galvanized, anodized or PVC coated. (Fig. 11)

FINISHING

Follow all finishing instructions in the General section of this guide.
Never underestimate the power of really good tools

Whether you’re an architect, a builder or a contractor, Nichiha wants to see to it that you have all the information you need to make your project go as smoothly as possible. The way we see it, we’re partners.

Our website offers a comprehensive collection of technical information, Architectural details, in depth specifications and everything you’ll ever need to know about installing Nichiha products. We invite and encourage you to visit our website at nichihacom.

And by all means, if you have a troublesome question or comment, our ears are always open. Call us at 1.866.424.4421 or visit us at nichihacom.

### Nichiha Warranties

- **Sierra Premium Shake and Savannah Smooth - 30-year limited warranty** on boards, **15-year limited warranty** on finish

*See Nichiha warranties for detailed information on terms, conditions, and limitations. Visit nichihacom for easy downloadable warranties or call toll-free 1.866.424.4421 for a copy.

Nichiha SDS are also available on our website.

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### Certification & testing:

- **tdi**<br>Report No. EC.58
- **CCMC**<br>Report No. 13083-R<br>No. 13205-R
- **CA Fire**
- **Pei**

*Silica Dust Warning: NICHIA products may contain some amounts of crystalline silica [a.k.a. sand, silicon dioxide], which is a naturally occurring mineral. The amount will vary from product to product. Inhalation of crystalline silica into the lungs and repeated exposure to silica can cause health disorders, such as silicosis, lung cancer, or death depending upon various factors. To be conservative, Nichiha recommends that whenever cutting, sawing, sanding, snipping or abrading the product, users observe Safety Instructions. For further information or questions, please consult the MSDS, your employer, or visit www.osha.gov/SLTC/silicacrystalline/index.html and www.cdc.gov/niosh/topics/silica. The MSDS for Nichiha products are available at www.nichihacom, at your local Nichiha dealer or through Nichiha directly at 1.866.424.4421. FAILURE TO ADHERE TO OUR WARNINGS, MSDS, AND OTHER INSTRUCTION MAY LEAD TO SERIOUS PERSONAL INJURY OR DEATH.*

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