

# MULTISHAKE

## INSTALLATION GUIDE



Read all instructions prior to installing any siding product. Failure to install and finish this product in accordance with all local building codes, regulations and MaxiTile written application may lead to personal injury, affect system performance, violate local building codes, and void the product warranty. We suggest that you read these instructions at least twice.

**MULTISHAKE** is a fiber-cement exterior Siding Panel. It will not rot or deteriorate. It is non-combustible with zero flame spread and zero smoke generation.

**MULTISHAKE** are available in Straight Edge, Staggered Edge, Half Round and Provenzal with a cedar or combed texture.



### STORAGE AND HANDLING

- **MULTISHAKE** is produced with a factory applied primed, this primer does not provide adequate resistance to moisture in the event the product is allowed to become saturated during storage. If **MULTISHAKE** becomes wet or saturated, allow product to dry before installation.
- Use plastic coverage that is provided with the pallet to keep product dry prior to installation
- Installing wet or damp **MULTISHAKE** may cause shrinkage at butt joints which may produce breakage at corners.
- **MULTISHAKE** must be stored to protect against weather damage. Keep product dry and flat. Maximum height for storage is 5 pallets.
- Product must be carried on edges to avoid breakage.



MaxiTile is not responsible for damage caused by improper storage and/or handling of the product.

### PACKAGING

**MULTISHAKE** are shipped in pallet quantities

Thickness	Width	Length	Area	Exposure	Pieces per square	Weight /piece	Packing
1/4" (6 mm)	16" (0.41 m)	48" (1.22 m)	5.333 sq/ft	7"	43	9.9 lb (4.50 kg)	300 pieces/pallet
				6"	50		

## FRAMING

- Follow local building code for proper underlayment framing and flashing requirements.
- **MULTISHAKE** siding panels can be installed over braced wood or steel studs, spaced at 16" O.C. with maximum 24" O.C (16" O.C. recommended) and covered by minimum nominal ½" thick plywood or OSB sheathing.
- A weather resistant barrier between the framing and the siding is required. The water resistive barrier must be appropriately installed with penetration and junction flashing in accordance with local building code requirements.
- Do not install MaxiTile products, in any manner that allows contact with standing or running water.

*MaxiTile will not assume any responsibility for water infiltration within the wall or wall cavity*

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## CLEARANCE

- Install **MULTISHAKE** with minimum of 6" clearance between the bottom edge of the product and the adjacent finished grade.
  - Provide the necessary clearance between **MULTISHAKE** and roofs, decks, paths, steps and drive ways.
  - Maintain ¼" clearance between the bottom of **MULTISHAKE** and horizontal flashing. Do not caulk
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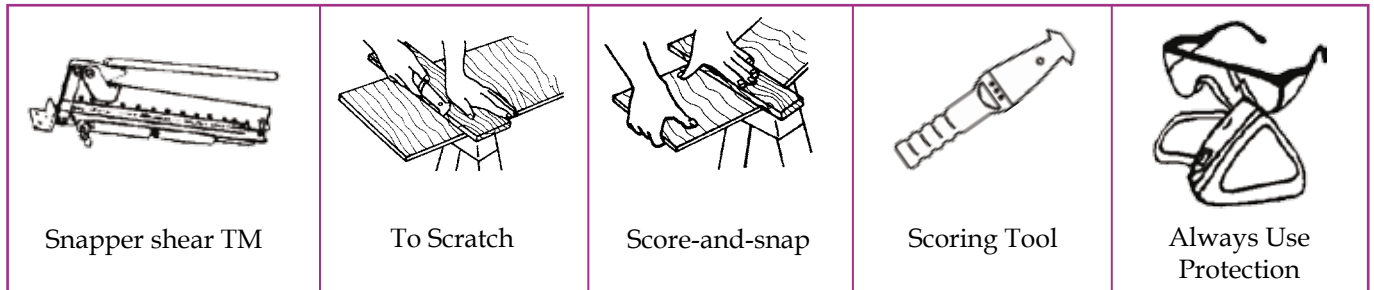
## CUTTING

- If power-sawing, use carbide or diamond-tipped blades. Position cutting station so that wind will blow dust away from user and others in working area.
- Use NIOSH-approved respirators and goggles for protection when power-sawing.
- For score and snap cutting, use a carbide tipped scoring tool:
- Using a straight edge as a guide, carefully draw the scoring tool several times towards
- Bend upwards and break.
- Round openings can be made by drilling several holes around circumference of the desired opening and tapping out the center.
- Snapper tools and shears can also be used.
- Only use power cutting tools in well ventilated areas.
- NEVER use a power saw indoors.
- NEVER dry sweep. Use wet suppression or HEPA vacuum.

**WARNING: AVOID BREATHING SILICA DUST.**

MaxiTile siding products contain respirable crystalline silica, which is known to the State of California to cause cancer and is considered by IARC and NIOSH to be a cause from some occupational sources. Breathing excessive amounts of respirable silica dust can also cause a disabling and potentially fatal lung disease called silicosis, and has been linked with other diseases. Some studies suggest smoking may increase these risks. During installation or handling: (1) work in outdoor areas with ample ventilation; (2) use fiber cement shears

for cutting or, where not feasible, use a dust-reducing circular saw attached to a HEPA vacuum; (3) warn others in the immediate area; (4) wear a properly-fitted, NIOSH-approved dust mask or respirator (e.g. N-95) in accordance with applicable government regulations and manufacturer instructions to further limit respirable silica exposures. During clean-up, use HEPA vacuums or wet methods, never dry sweep. For further information, refer to our installation guides and Material Safety Data Sheet available at [www.maxitile.com](http://www.maxitile.com) or by calling (800) 338-8453. **FAILURE TO ADHERE TO OUR WARNINGS, MSDS, AND INSTALLATION GUIDES MAY CAUSE SERIOUS PERSONAL INJURY OR DEATH.**



## FASTENER

- Fasteners must be corrosion-resistant, preferably hot dipped galvanized nails. MaxiTile is not responsible for corrosion resistance of fasteners. Stainless steel fasteners are recommended when installing MaxiTile products near the ocean, or in very humid climates. Always check local building codes for additional requirements.
- Staples are not allowed.
- Use 2" long siding nails, with min. 0.113" diameter shank and 0.270" head, or No. 11 gage 3/8" head composition roofing nail.
- Fastener heads should fit snug and flush against **MULTISHAKE** siding. If over-driven, patch and re-nail.
- If hand nailing, first pre-drill the holes to avoid accidental breakage.
- Drive fasteners perpendicular to **MULTISHAKE** and framing.

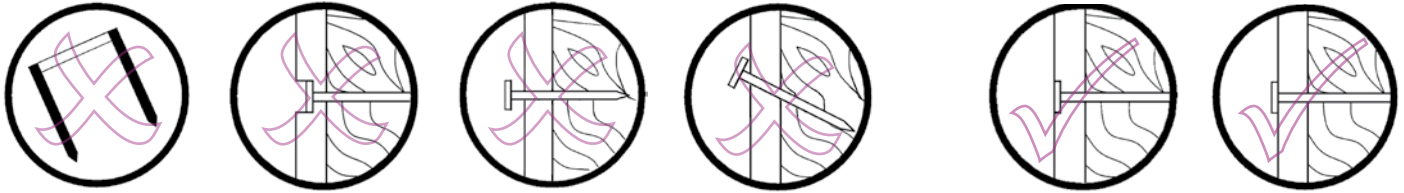
*Do not use aluminum fasteners, staples, or clipped head nails*

- Nails can be applied using a smooth head hammer or a pneumatic nail gun with flush attachment so nails are not over-driven.
- If hand nailing, first pre-drill the holes to avoid accidental breakage.
- Nails must always hit studs, penetrating into stud. If nails hit sheathing only, warranty may be void.
- The use of a pneumatic nail gun with flush attachment is recommended.
- Fastener heads must hold the panel without over-driving. In the event of over-driven nails, caulk nail hole and re-nail.
- Fastener heads should fit snug against siding (no air space).
- Do not over-drive nail heads or drive nails at an angle.
- If nail is countersunk, caulk nail hole and add a nail.
- For wood framing, under driven nails should be hit flush to the panel with a hammer (For steel framing, remove and replace nail).



Pneumatic Finishers Gun with Flush Attachment

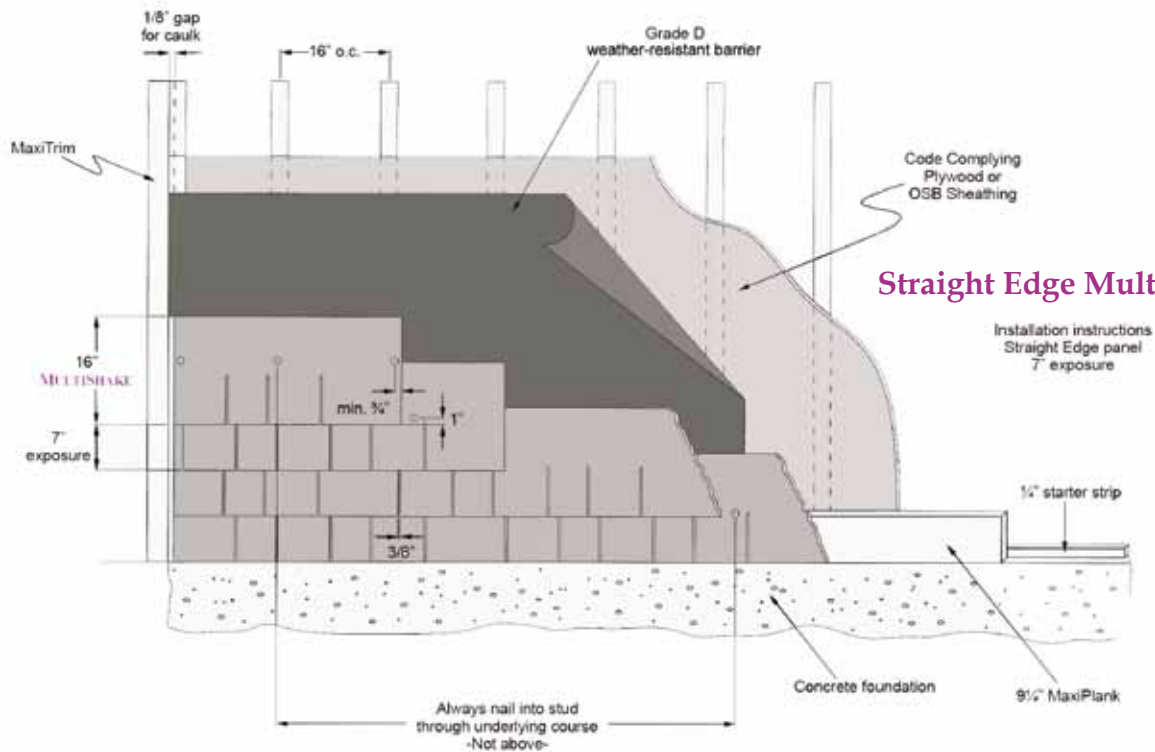
Remember: Fastener always must be attached to structural framing members.



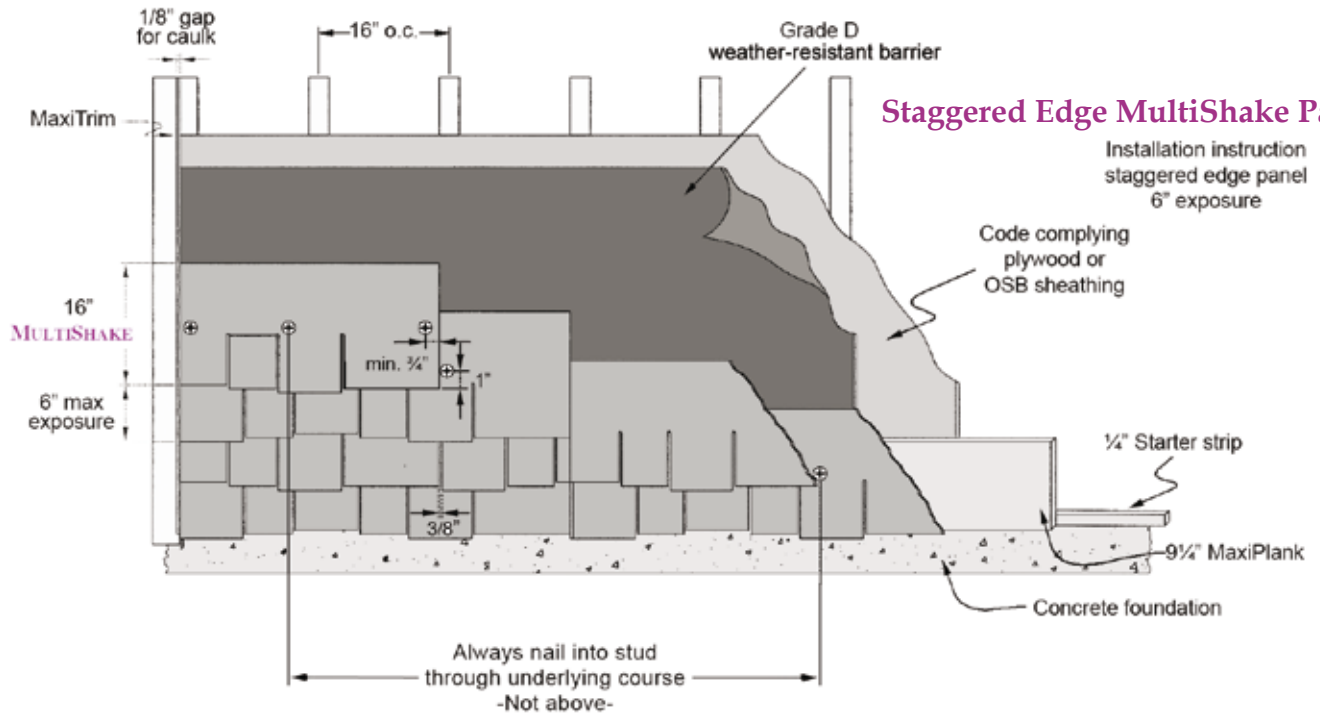
NOTE: Published wind loads may not be applicable to all areas where Local Building Codes have specific jurisdiction. Consult MaxiTile Technical Assistance if you are unsure of applicable compliance documentation

## INSTALLATION OF MULTISHAKE STRAIGHT AND STAGGERED EDGE PANELS

- 1) Fasten metal or wood stops at all corners.
- 2) Locate and mark stud locations behind the weather barrier and sheathing to be sure that all nails will hit studs.
- 3) Install a ¼" thick starter strip level to the bottom of the first **MULTISHAKE** course by nailing to the sill plate, and a minimum 9¼" wide **MULTISHAKE** starter course.
- 4) Starting at an external corner and leaving 1/8" gap at trim, install the first panel level to the base of the starter course and, if necessary, trim to hit furthest stud.  
Nail panel above slots, through previous course, into studs 16" o.c. Butt the next panel lightly to the preceding piece.  
Caulk is necessary only at trim boards at doors, windows, corners, etc. (Be sure to allow 1/8" gap at trim.)
- 5) The first piece in the second course, and in every following even numbered course (4, 6, 8, etc.), must be trimmed equivalent to one full stud cavity.  
Measure and cut from the straight edge end.  
You may be able to use the cut piece at the other end of the wall.  
Following pieces are full-size.  
All even numbered courses will measure one full stud cavity less than the odd numbered courses.
- 6) To begin the second course, the head lap must be 9" on straight edge panels to allow a 7" maximum exposure (if using staggered edge panels the maximum exposure is 6").  
Nails shall be located at least 3/8" from edge of panel and at least 1" from the butt edge of underlying previous course. (Be sure to nail through previous course not above).
- 7) At doors, windows, or other exterior wall penetrations, continue as the wall was complete.
- 8) **MULTISHAKE** panels should be installed in compliance with local Building Code requirements for clearance between the bottom edge of panel and the adjacent finished grade.

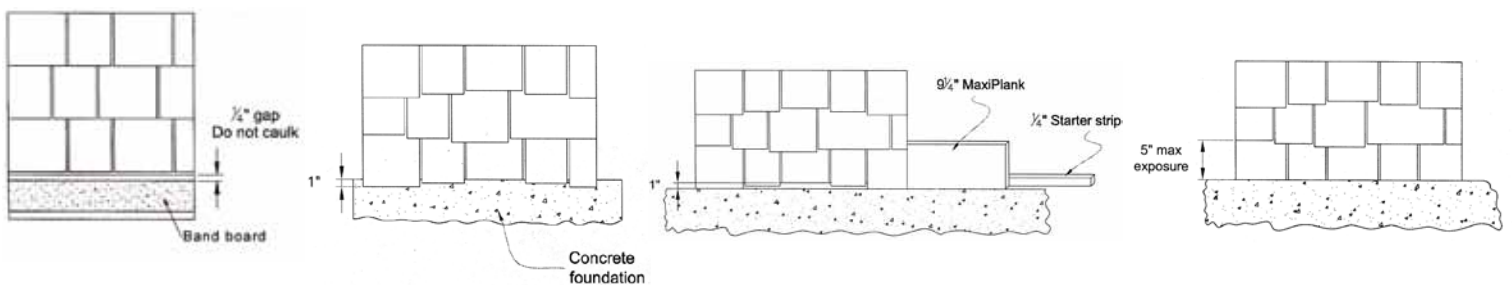


**Straight Edge MultiShake Panel**



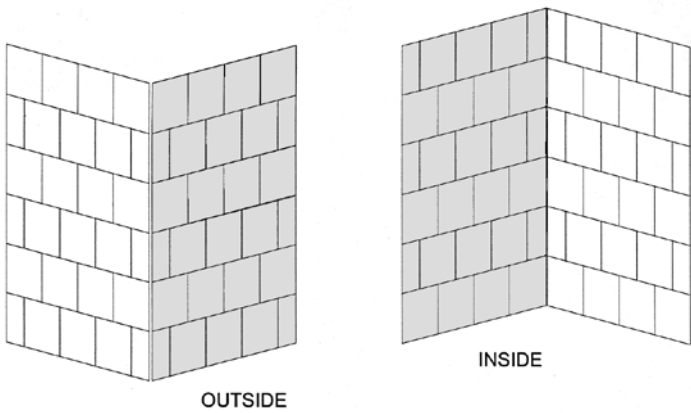
**Staggered Edge MultiShake Panel**

**First Course (Optional)**

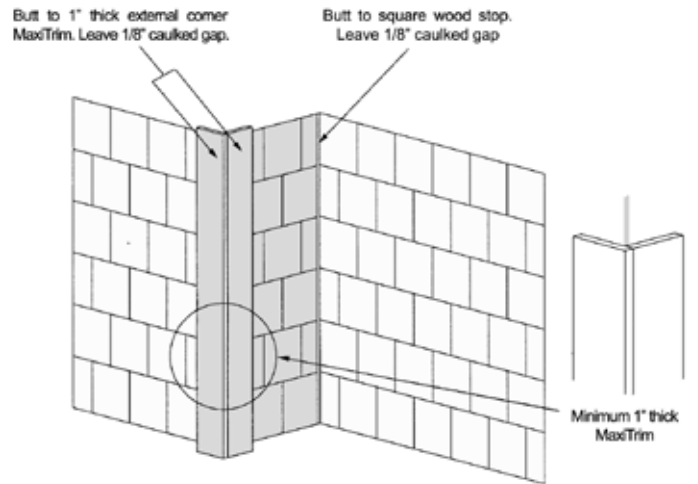


## Corner Details

LACED CORNERS

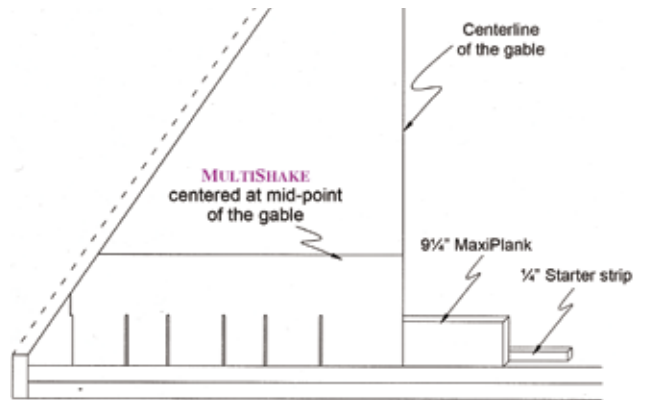
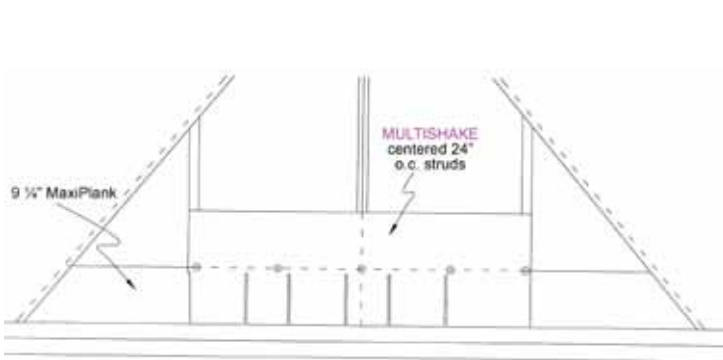


TRIMMED CORNERS



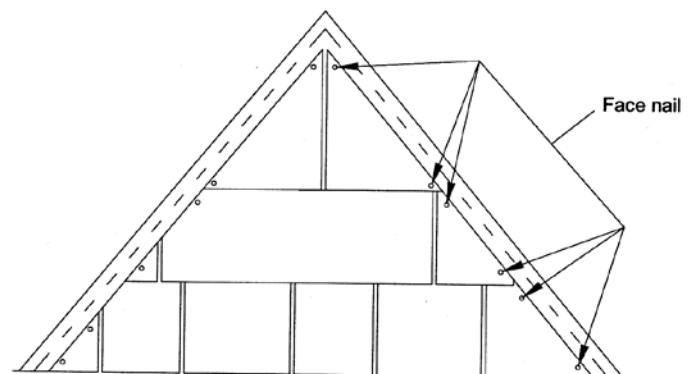
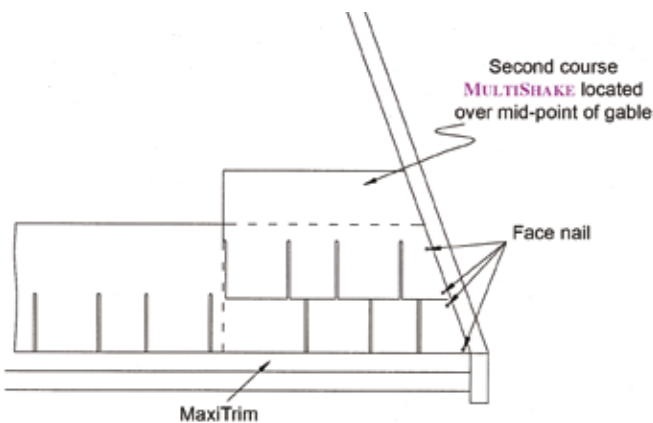
## Gable

Installation of **MULTISHAKE** over sheathing is recommended



**MULTISHAKE** over studs

**MULTISHAKE** centered at mid-point of the gable



Rake angle

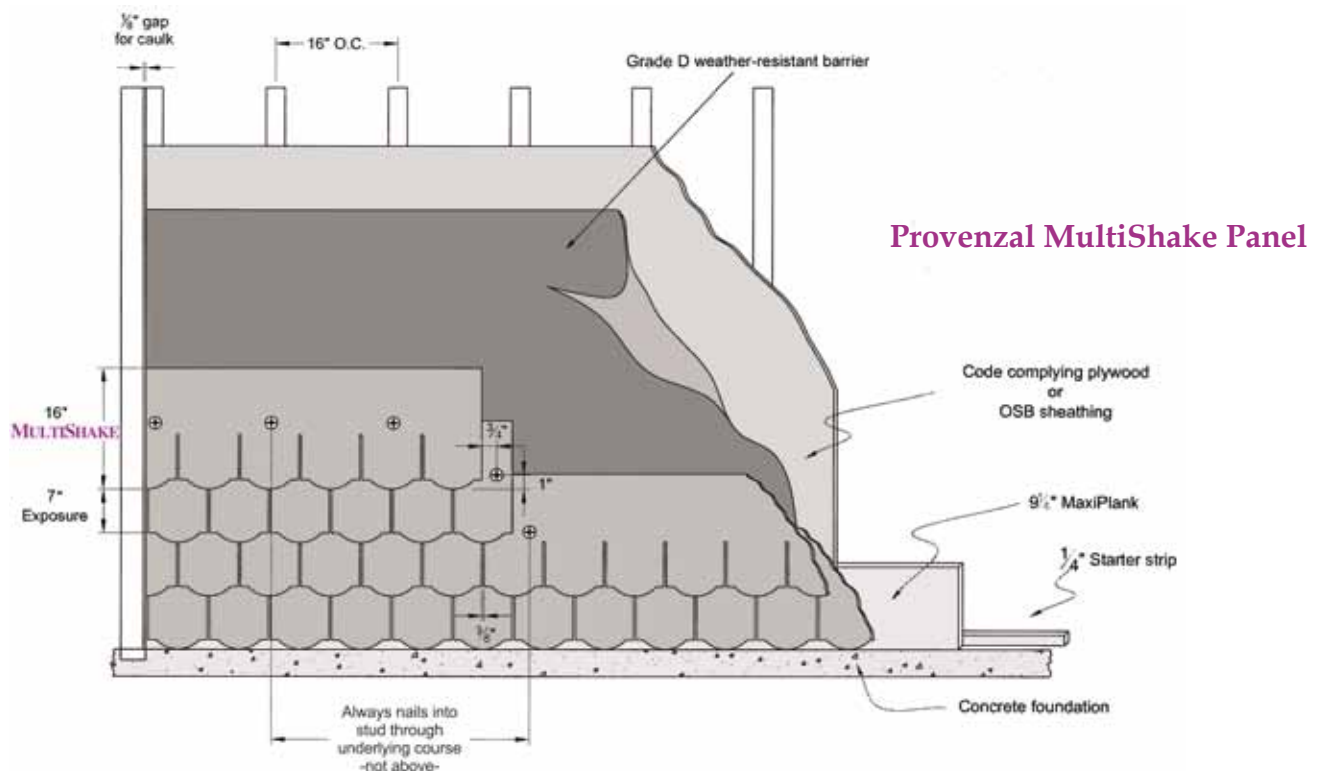
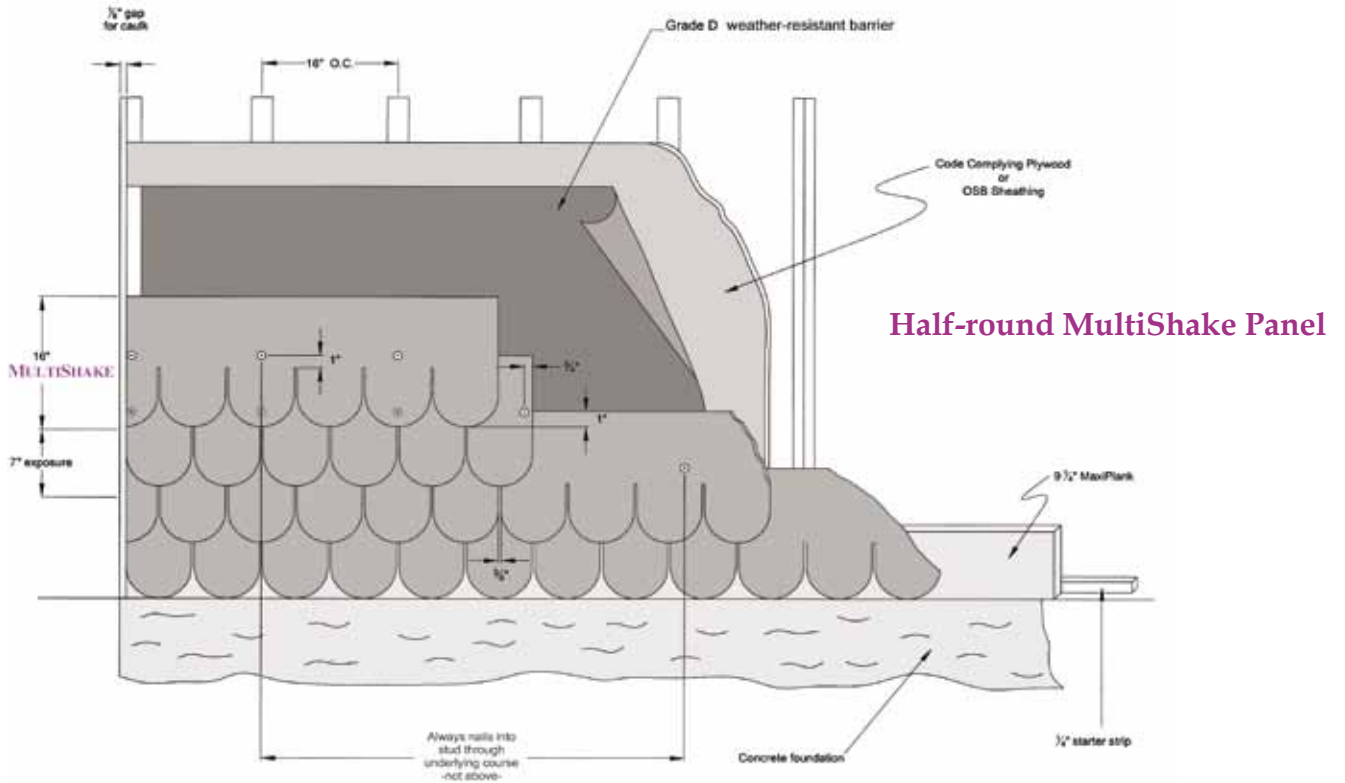
Top of the gable

## MULTISHAKE HALF ROUND AND PROVENZAL PANEL

Repeat steps 1 through 4 of installation instructions for Straight and Staggered edge Panels.

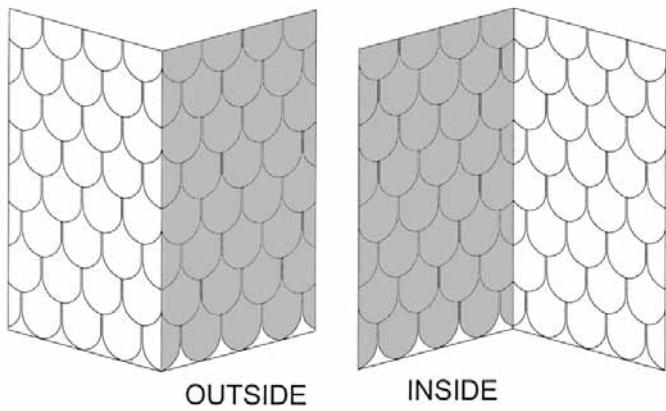
1) The first piece in the second course, and every following even numbered course (4, 6, 8, etc.) must be trimmed equivalent to quarter to half round. Measure and cut from straight edge end. Following piece is full-size. All even numbered courses are measured one quarter of half-round of the odd numbered courses.

Repeat steps 6 to 8 of installation instructions for straight and staggered edge panels.

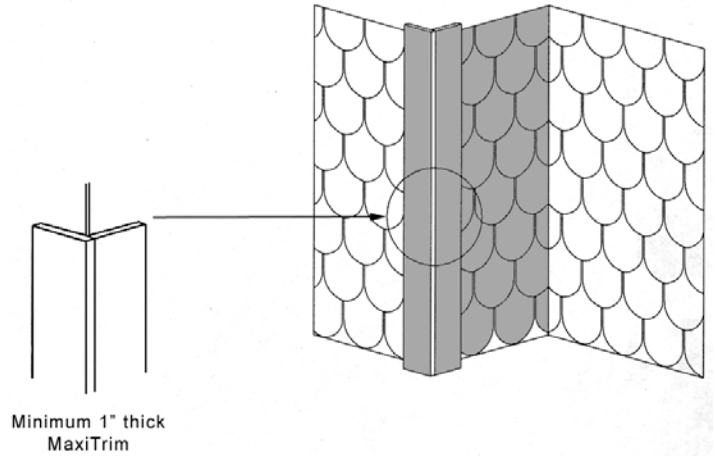


## Corner Details

LACED CORNERS

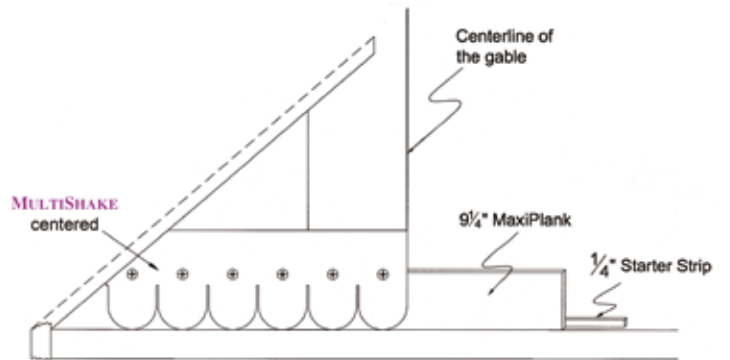
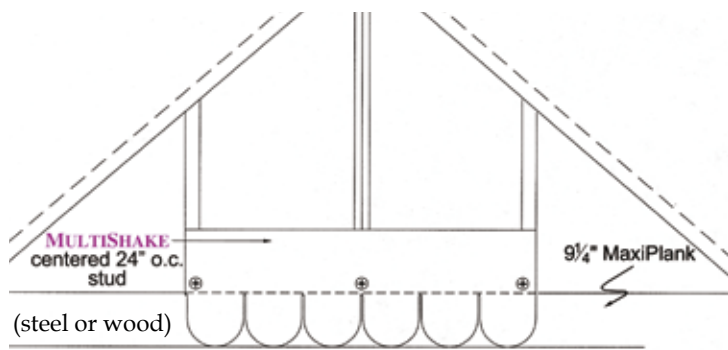


TRIMMED CORNERS



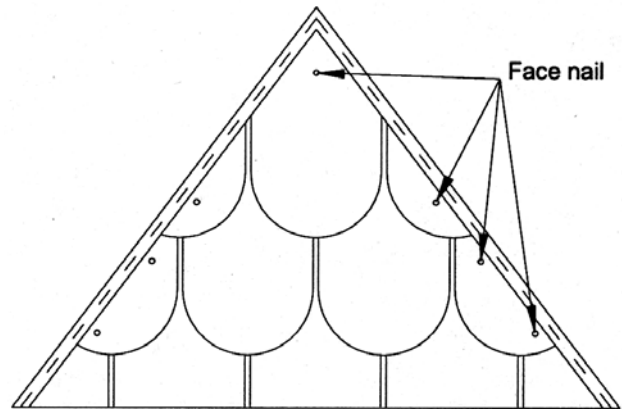
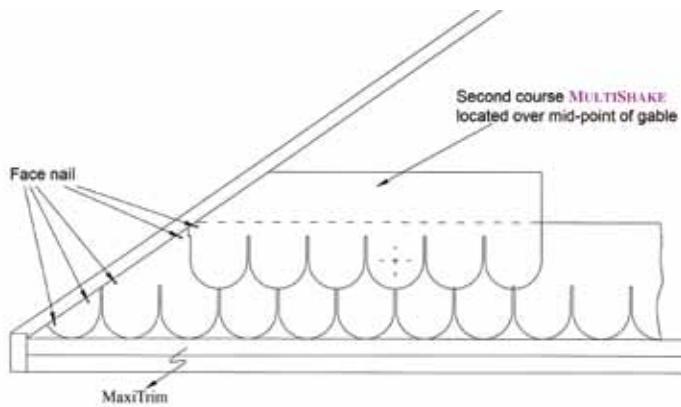
## Gable

Installation of **MULTISHAKE** over sheathing is recommended



**MULTISHAKE** over studs

**MULTISHAKE** centered at mid-point of the gable



Rake angle

Top of the gable

## FINISHING

### Repairs

Repair chips or small dents with acrylic mortar.  
Apply primer to repaired areas and then paint.

### Caulk

Use a high quality paintable exterior grade elastomeric sealant that complies with ASTM-C-834 or ASTM-C-920 (Grade NS, Class 25) regulations. The sealant must be applied in accordance with sealant manufacturer's instructions.

### Painting

MaxiTile siding, soffit and trim must be allowed to breathe. Some factory-applied prime or paint on the back is normal, never completely prime or paint the back side, the product does not require this.

A small amount of material should be painted and evaluated to ensure satisfaction with the appearance before painting all material needed for job.

Never apply oil-based paints or stain to siding, soffit or trim, the use on unprimed or primed product could result in increase surface roughness, loss of adhesion, cracking or excessive chalk. Stains containing linseed oil are specifically designed for woods and not be suitable for fiber-cement products, primer or unprimed.

MaxiTile neither does nor recommended semi-transparent stain or paint because they can vary in uniformity of appearance and they have not proven durable in exterior exposure and may require application of a refurbishing sealer at regular intervals.

Before applying the finish coat, clean all the fiber-cement products thoroughly. Use a high-quality 100% acrylic paint or primer. Always follow the paint manufacturer's instructions when painting.

If you desire stained fiber-cement product, uses a high-quality 100% acrylic latex stain. Before stained test in small amount of material should be stained and evaluated to ensure satisfaction. Always follow the stain manufacturer's instructions when staining.

All fiber-cement products must be painted once installation, you have up 90 days (3 months) to apply a finish coat on unprimed products and 180 days (6 months) on primed products. For best result with unprimed products, prime first and then finish with exterior-grade topcoats, two coats of paint must be applied on primed products.

Remember all exposed field cut edges should be covered with primer, sealant or paint, the caulk/sealant should be paintable or color matched, it should be compatible with MaxiTile siding and the material used for the trim.

Never apply primer or paint to wet or saturated fiber-cement products. Do not allow paint to freeze. Apply primer or paint when temperature the air and the fiber-cement product is above 50°F (10°C).

MaxiTile will not warrant and does not assume any responsibility for the performance or appearance of field-applied primer and/or paint.

# MAXIMUM WIND SPEED ANALYSIS FOR 1997 UNIFORM BUILDING CODE

THICKNESS (inch)	FASTENER TYPE	FASTENER SPACING	FRAME TYPE	STUD SPACING (inches)	HEIGHT OF BUILDING (feet)	MAXIMUM BASIC WIND SPEED (mph) FOR EXPOSURE CATEGORY <sup>1</sup>											
						IBC, IRC <sup>2</sup>			BNBC <sup>3</sup>			SBC <sup>4</sup>			UBC <sup>5</sup>		
						B	C	D	B	C	D	< 60 ft	C	D	B	C	D
1/4	0.113 inch x 2 inch long x 0.267 inch (head diameter)	3 nails at each stud soaced 1/2 inch from each edge and at the center of the panel	2 by 4 wood <sup>8</sup>	16	15	110	185	--	110	75	--	85	--	--	90	70	--
					20	105	--	--	105	70	--	80	--	--	85	--	--
					40	90	--	--	80	--	--	75	--	--	75	--	--
					60	85	--	--	80	--	--	70	--	--	70	--	--

1 N/A - not applicable

2 Basic wind speed is the 3-second gust, miles per hour (km/hr), in accordance with IBC Section 1609.3 and IRC Section R301.2.

3 Basic wind speed is the fastest mile speed in accordance with BNBC Section 1609.3.

4 Basic wind speed is the fastest mile speed in accordance with SBC Section 1606.

5 Basic wind speed is the fastest mile speed in accordance with UBC Section 1616.

6 Nails has 0.09-inch-diameter shank and 0.218-inch-diameter head.

7 Nails has 0.125-inch-diameter shank and 0.265-inch-diameter head.

8 Wood specific gravity is 0.49 or higher.

APPROVALS: In accordance with ICC-ES Legacy Report ESR-1381, **MULTISHAKE** is compliance with the following codes: 2006 International Building Code (IBC) and 2006 International Residential Code (IRC). **MULTISHAKE** lap siding is also recognized for application in the following: City of Los Angeles Research Report No. 25252, State of Florida listing FL # 11009, U.S. Dept. of HUD Materials Release 1338, Texas Department of Insurance Product Evaluation EC-56, and listing in Wildland Urban Interface Handbook (WUI). These documents should also be consulted for additional information concerning the suitability of this product for specific applications.

Additional Installation Information, Warranties, and Warnings are available at [www.maxitile.com](http://www.maxitile.com)

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