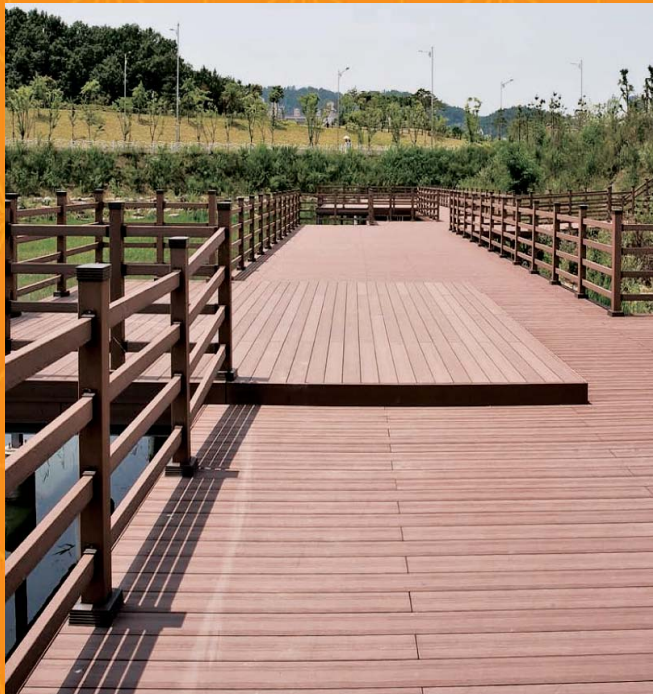




ORIENTAL
HOUSE TOP



CertainTeed
SAINT-GOBAIN



ecodeck[®]
WAPS



STAHLCON[®]
Steel Fibre



MEGA MESH[®]
Polypropylene Fibre

CertainTeed

SAINT-GOBAIN

Fiberglass Asphalt Shingle Manufacturer

Through the responsible development of innovative and sustainable building products, CertainTeed has helped shape the building products industry for more than 110 years. Founded in 1904 as General Roofing Manufacturing Company, today, CertainTeed® is North America's leading brand of exterior and interior building products, including roofing, siding, fence, decking, railing, trim, insulation, gypsum and ceilings. A subsidiary of Saint-Gobain, one of the world's largest and oldest building products companies, CertainTeed and its affiliates have more than 6,300 employees and more than 60 manufacturing facilities throughout the United States and Canada.



Benefits of Integrity Roof System

A superior roof is stronger than the sum of its parts

A quality roofing system involves the underlayments, shingles, accessory products, and ventilation all working together. Day after day, year after year.

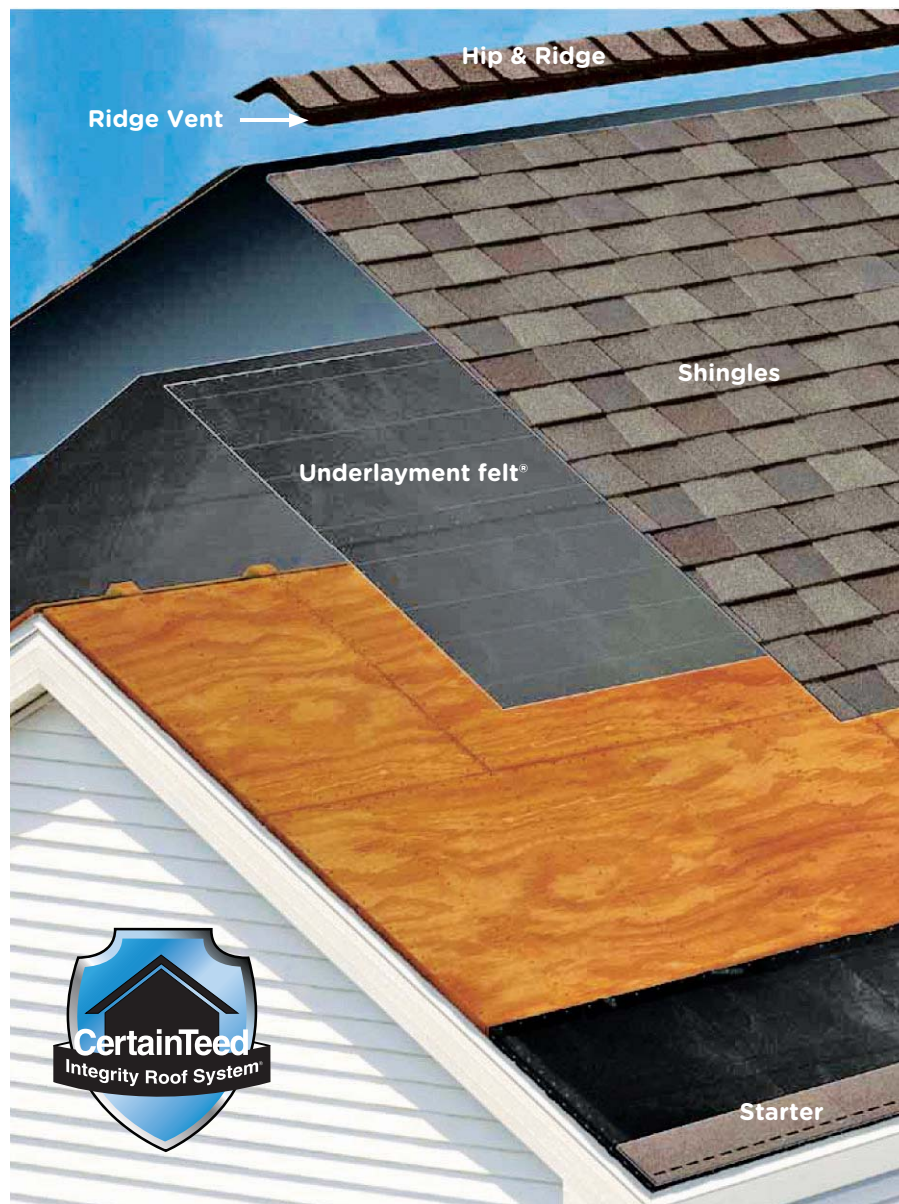
At CertainTeed, we call that the Integrity Roof System

The Integrity Roof System is designed to provide optimum performance — no matter how bad weather conditions are. After all, better quality shingles mean longer-lasting roofs.

Add in underlayment and accessory products, and you've got a roof system that really works.

When you choose an Integrity Roof System you gain the advantage of having CertainTeed as your single manufacturing source to stand behind its roof system components.

If different brands of products are installed on your roof, then you do not gain the full value of a complete roof system



Hip & Ridge Accessories

Accessory shingles are used to finish the hips and ridges of the roof and are designed to complement the appearance of CertainTeed shingles.

CertainTeed Ridge Vent

CertainTeed ridge vents combined with sufficient intake vents, such as CertainTeed Intake Vents, are the most effective ventilation system.

CertainTeed Shingles

High-quality shingles available in a wide variety of styles and colors, covered by the strongest warranty in the business.

Underlayment felt

High-performance underlayment provides a protective water-resistant layer over the roof deck and a secondary barrier against leaks.

WinterGuard®

Waterproofing shingle underlayment prevents leaks from wind-driven rain and ice dams in vulnerable areas.

Starter Shingles

Starter shingles are designed to work specifically with each different type of CertainTeed shingle for maximum performance.



Flat Roofs

CertainTeed Flintlastic® roofing products are also available for flat roof areas.

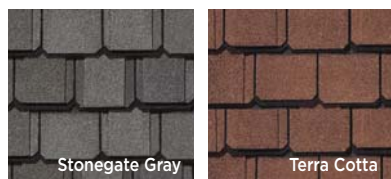
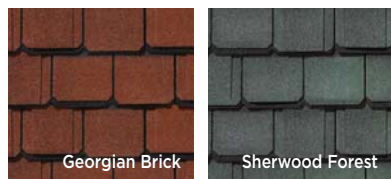
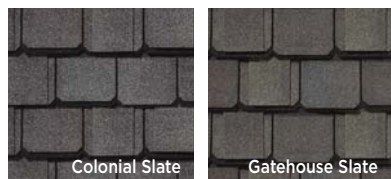
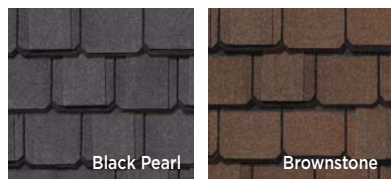
Fiberglass Asphalt Shingle @ Pitched Roof

For Those Who Wants To Stand Out From The Crowd

Luxury Shingles

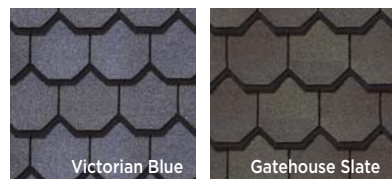
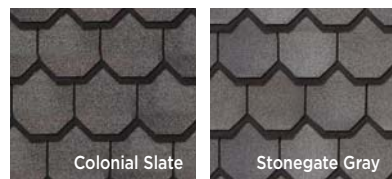
GRAND MANOR

Color Palette:



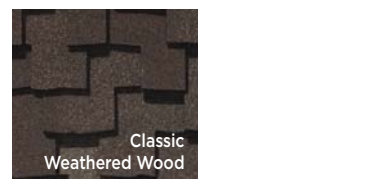
CARRIAGE HOUSE

Color Palette:



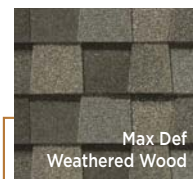
PRESIDENTIAL SHAKE / TL

Color Palette:

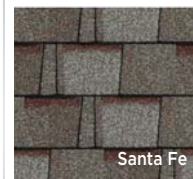
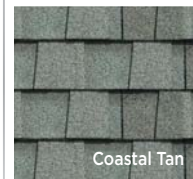
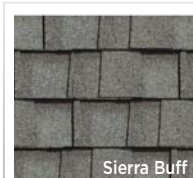


LANDMARK SOLARIS

Color Palette:



Landmark Solaris Gold



Landmark Solaris Platinum

An industry leading four strips of our Quadra-Bond adhesive for durability.

NAILTrak® Shingle Technology

The bond that holds it together.

For more than a decade, NailTrak has improved shingle installation by providing a nailing area three times wider than that of a typical laminate shingle. This increases efficiency and accuracy in installation, providing homeowners greater peace of mind. Landmark® shingles also feature our specially-formulated Quadra-Bond® adhesive, providing industry-leading resistance to delamination. Together, our NailTrak and Quadra-Bond technologies deliver the strength and durability that allow your roof to stand the test of time.

STREAKFighter® Algae-Resistant Shingle Technology

The ultimate in stain protection.

Those streaks you see on other roofs in your neighborhood? That's algae, and it's a common eyesore on roofing throughout North America. Certain Teed's Streak Fighter technology uses the power of science to repel algae before it can take hold and spread. StreakFighter's granular blend includes naturally algae-resistant copper, helping your roof maintain its curb appeal and look beautiful for years to come.

Granule with StreakFighter Technology



Landmark Solaris Gold Solar Reflectivity (SR), Thermal Emittance (TE) & Solar Reflectance Index (SRI) Data

Solaris Blend Gold	CRRC Initial SR	CRRC Initial TE	ASTM E408 TE	Solar Reflectance Index (SRI)
Landmark Solaris Gold				
Max Def Resawn Shake	.26	.88	.96	29
Max Def Weathered Wood	.26	.90	.95	29
Landmark Solaris Platinum				
Sierra Buff	.41	.92	.95	48
Coastal Tan	.40	.91	.95	47
Santa Fe	.40	.90	.94	47

Landmark Solaris shingles have taken solar reflective roofing technology to the next level by providing residential roof surfaces with a Solar Reflectivity of 0.40 (SR40). This exceptional level of Solar Reflectivity is 60% greater than the minimum initial SR25 value required for ENERGYSTAR® qualification of residential shingles and is 50% greater than that of typical solar reflective residential.

Fiberglass Asphalt Shingle @ Pitched Roof

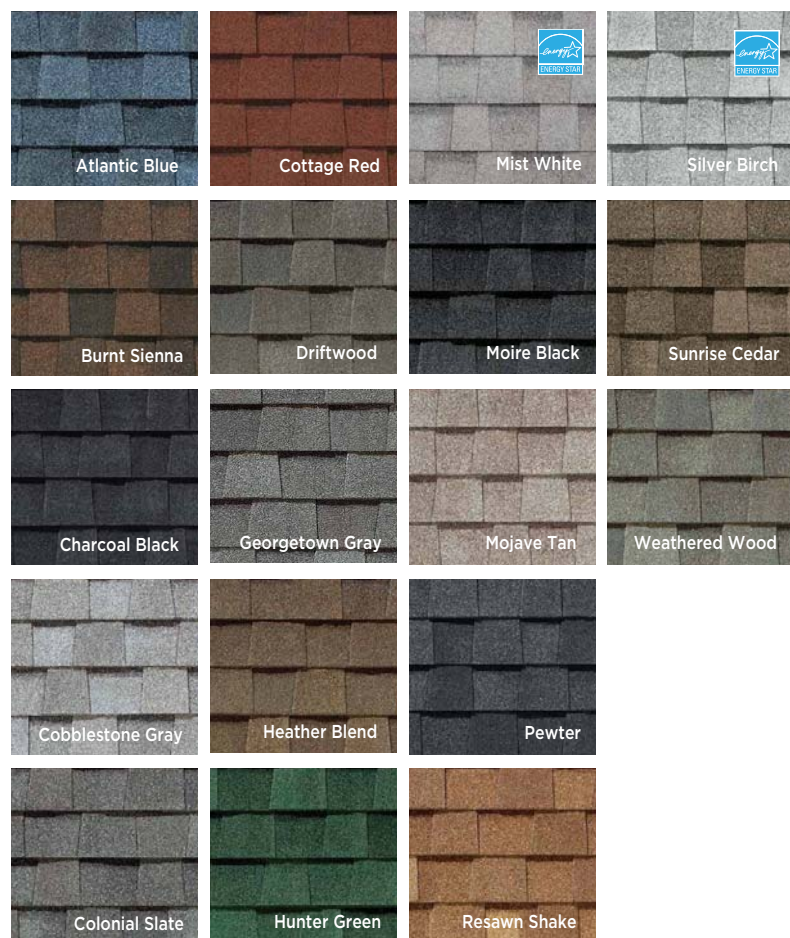
Turn Your Home Into Landmark Because Roof Is Your Canvas

Premium
Shingles

Traditional
Shingles

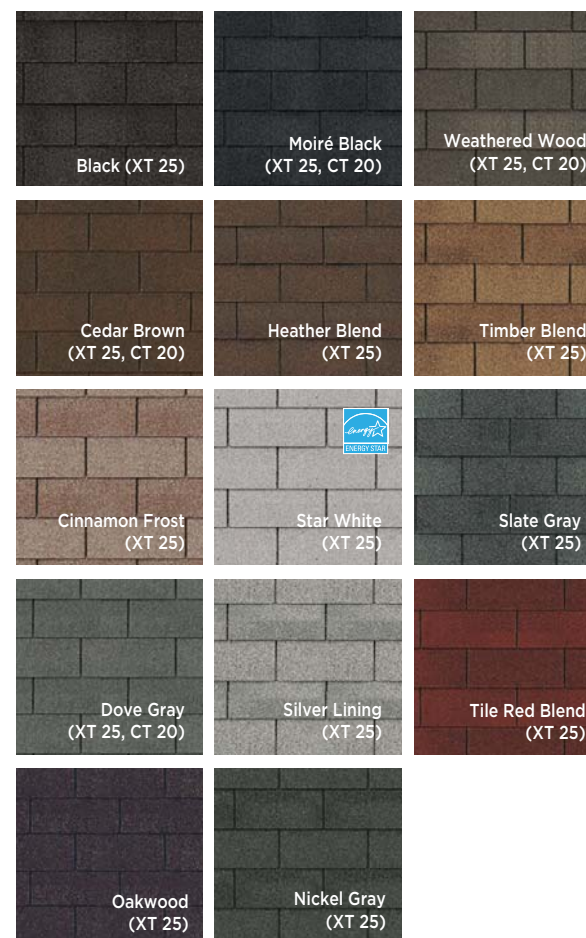
LANDMARK 30

Color Palette:



XT25 / CT20

Color Palette:



Benefits of using Fiberglass Asphalt Shingle for your roof

1. Abundant color choice to match and blend with various building style & environment. The colorful mineral granules help to protect shingles from weathering and aging.
2. Excellent Heat Insulation with proper ventilation system.
3. Very flexible, Adaptable in all kind of roof design / idea. Not easy crack during laying.
4. Added Security. Anti-break in, as system come with the timber decking as a base.
5. Sound / Noise absorption due to asphalt base.
6. 99% watertight system.
7. Less Maintenance.
8. No Salt erosion. Important advantages to houses built close to sea and in coastal area.

Why CertainTeed?

- ✓ Shingles are made in US.
- ✓ Minimum 20 years International Product Warranty.
- ✓ We provide not only shingle, but also the roof system that works.
- ✓ Cooler homes that come with roof inlet and exhaust to ventilate your roof.

CertainTeed products are tested to ensure the highest quality and comply with the following industry standards:

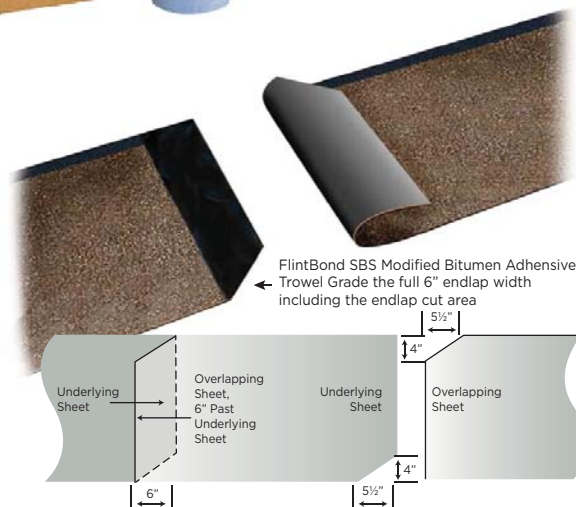
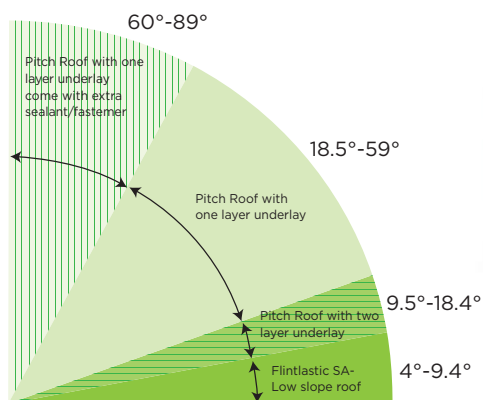
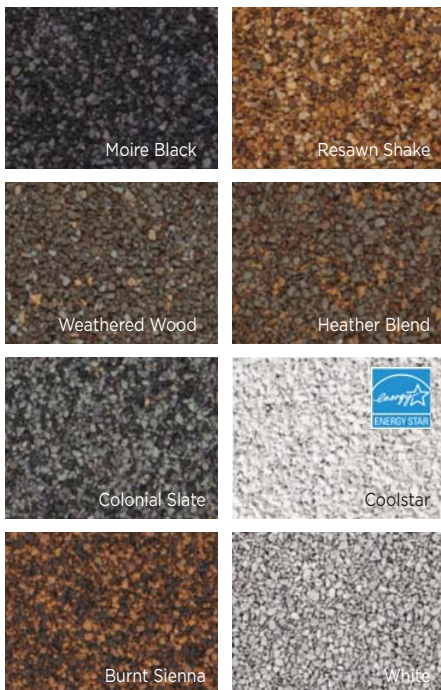
Fire Resistance:	<ul style="list-style-type: none"> • UL Class A • UL certified to meet ASTM D3018 Type 1
Wind Resistance:	<ul style="list-style-type: none"> • UL certified to meet ASTM D3018 Type 1 • ASTM D3161 Class F
Tear Resistance:	<ul style="list-style-type: none"> • UL certified to meet ASTM D3462 • CSA standard A123.5
Wind Driven Rain Resistance:	<ul style="list-style-type: none"> • Miami-Dade Product Control Acceptance: Please reference www.certainteed.com to determine approved products by manufacturing location.
Quality Standards:	<ul style="list-style-type: none"> • ICC-ES-ESR-1389 & ESR-3537

Benefits of using Flintlastic® SA for your low slope roof

1. Light weight roofing.
2. Reduce cost of the building with roofing system.
3. Suitable for modern roof - mono pitch roof / low slope roof / RC roof.
4. Easy & clean application.
5. Solution for roof designs that transitions from steep to low slope.

FLINTLASTIC® SA

Color Palette:





Proper Ventilation is Vital

Protection against damage to the roofing materials and structure, increase comfort inside the home and energy savings.



Triple 3-1/3" InvisiVent offers at least 50% more ventilation than most standard vinyl soffit, providing more than 10" of net-free intake area.

This means that not only will Triple 3-1/3" InvisiVent provide a balanced ventilation system, but will do so with an overhang as short as 10".

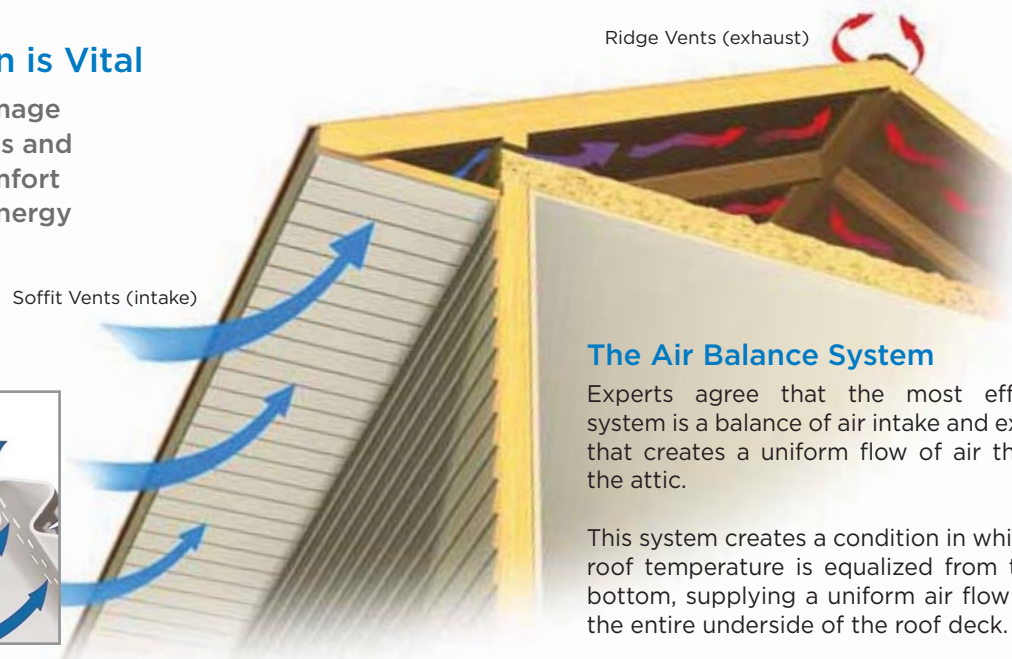


Balanced attic ventilation promote:

1. Reduce heat buildup; help reduce energy consumption
2. Reduce moisture buildup;
3. Prolong lifespan of building material;

Soffit Vents (intake)

Ridge Vents (exhaust)



The Air Balance System

Experts agree that the most effective system is a balance of air intake and exhaust that creates a uniform flow of air through the attic.

This system creates a condition in which the roof temperature is equalized from top to bottom, supplying a uniform air flow along the entire underside of the roof deck.

Hidden vents provide a smooth, flat non-perforated surface versus most vented soffits with unsightly perforations.



PermaColor™ System Color performance, impact resistance and durability are assured through our exclusive PermaColor System, a blend of our own Certavin™ resin, superior micro-ingredients and state-of-the-art pigment chemistry.

Roof Venting Made Easy - And Done Right

Attic ventilation is an important element of a home's design and construction. Effective attic ventilation helps prevent attic heat buildup, humidity and ice-dams by continuously moving air along the underside of the roof.

CertainTeed® Ridge Vents combined with sufficient intake vents, such as CertainTeed Intake Vent, are the most efficient and effective systems you can install.

Ridge Vents

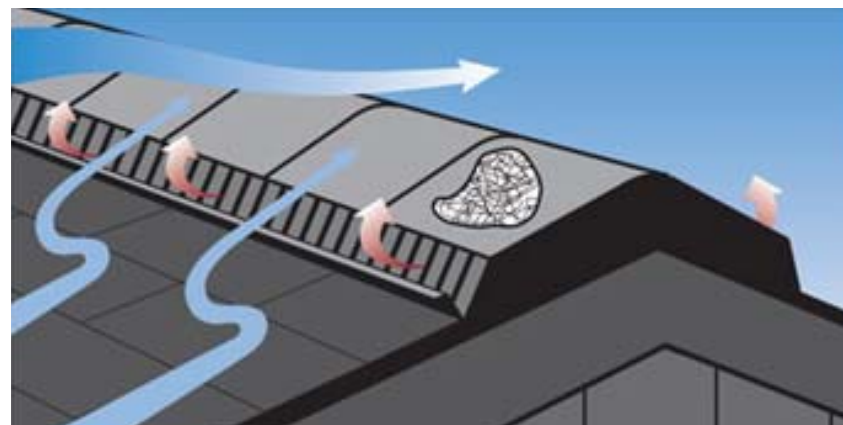
CertainTeed Ridge Vents install on the peak of the roof, allowing exhaust ventilation all along the roofline. Less than an inch in height, these molded, high-impact copolymer shingle-over any of CertainTeed's ridge vents permit capping of the ridge with shingles like the rest of the roof or with enhanced ridge and cap shingles.

Features

- Designed with an external baffle to deflect wind and weather over the vent to help protect the attic from rain infiltration. The external baffle creates low pressure over the vent openings to "pull" air from the attic.
- Easy installation - has pre-printed slot guides for truss or ridge pole construction. Pre-drilled nail holes are designed to assure proper nailing.
- CertainTeed Ridge Vent is pre-formed to a 4/12 pitch, and fits pitches from 3/12 to 16/12.

Benefits

- Works year-round to ventilate the attic.
- Provides evenly distributed ventilation along the entire underside of the roof.
- Slim design for visual appeal.
- Provides a higher volume of airflow per square foot of attic area than any other fixed-vent system.
- Design maximizes airflow across the entire underside of roof sheathing.
- Changes in wind direction have no significant effect on vent performance.



Types of exhaust vents:



Ridge Vent



Solar Power Vent



Black Slant Vent



Intake Vent

Re-Roof

Re-roofing works - call us to change the existing roof to new shingles - get a new roof without even have to move out from the premise.

New Shingle Onto Existing

Change from old shingle to new shingle - new shingles can be applied directly onto the existing roof shingle for those who wish to have a new color roof.

Total Roof System

We can also package the total roof system which include design, supply and install roof structure complete with PE endorse.

Soffit Ceiling

To complete the exterior roof, we also have soffit ceiling to offer which conveniently serves as air intake for a balance air ventilation for your roof attic.



Existing Roof



New Shingle



Wood Shingle and Wood Decking

Natural ironwood for roof and floor deck

For Those Who Prefer Natural Finish

General Specification

Size/piece (approx):

12mm (thk) x 100mm (w) x 450mm (l)

Weight/piece (approx):

0.6kg

No. of Piece/sqm (approx):

Minimum 50 pieces

Batten Spacing:

150mm, 200 etc.

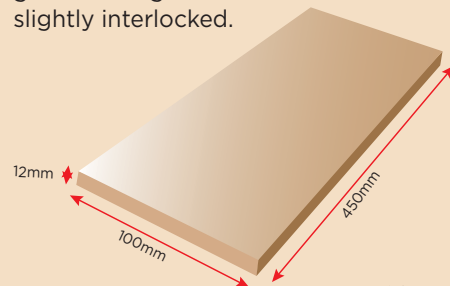
(please check with installer for accurate spacing for your roof design)

System weight +50kg/m²:

System = 1 layer 12mm Plywood/
Corrugated sheet c/w counter batten

Description:

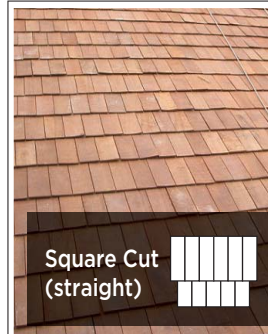
Light brown to almost bright yellow in colour when freshly cut, darkens on exposure to a deep reddish brown or very dark brown or almost black. The texture is fine and even, grain is straight or slightly interlocked.



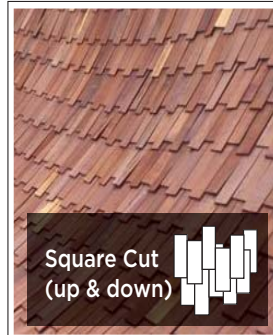
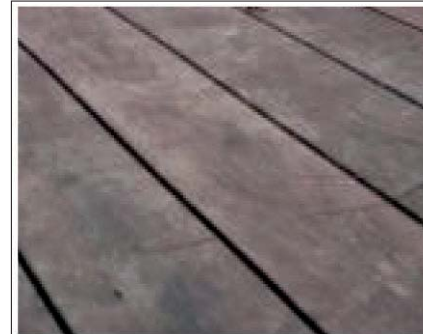
Size/piece (approx):
20mm (thk) x 95mm (w) nom. Size



Square Cut
(random)



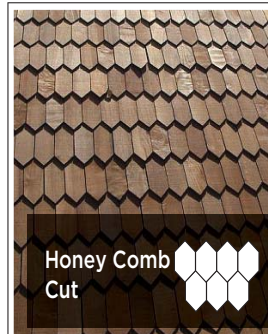
Square Cut
(straight)



Square Cut
(up & down)



Diamond
Cut



Honey Comb
Cut



WHY IS IT GREEN?

- ecodeck® is manufactured with natural wooden fibers and recyclable polyolefin. Even after the production is worn from extended use, it can be reused again to produce new products.
- By using eco-friendly resin, ecodeck® is free of any endocrine disrupting chemicals, heavy metals, noxious gases (dioxins) and is safe for the body and the environment.
- The wood fiber used to produce ecodeck® is made from scrap wood, recycled decks, and saw dust. Our selection of materials saves trees, ultimately minimising Green House Gas emission.
- An average of 51% recycled wood floor is used.

PRODUCT FEATURES

- ecodeck® is made of two structures: the an inner core which is made strong for endurance and the an outer sheath specialised for excellent weatherability.
- The surface of the ecodeck® has been designed to for a natural look, with its elegant colors that work well within natural surroundings.
- The emboss pattern is specially designed for the look and texture of wood.
- Unlike natural wood which requires periodic maintenance of painting and surface treatment, ecodeck® also requires very low and ezsy maintenance, while maintaining its durability and fine looks for a long time.



PRODUCT CERTIFICATION & COMPLIANCE

ISO9001, Good Quality Certification, Collective Standard Certification, Inno-biz Certification, Patent, Korean Industrial Standards Certification, Green Technology Certification, Good Recycled Mark.

APPLICABLE GBI CREDITS

NRNC	MR2, MR4
RNC	MR2, MR4
INC	MR2, MR4
NREB	MR2, MR3
IEB	MR2, MR3
INTERIORS	MR2, MR4

Green Labels



064-003



10832

Product Labels



FSC



Color Palette:



Aluminum hybrid composite DURA SQUARE ~a structure by itself

Durasquare - H45 75

Specification

Thickness	45mm
Width	75mm
Length	1500mm

Durasquare - H45 150

Specification

Thickness	45mm
Width	150mm
Length	1500mm

Durasquare - H100 100

Specification

Thickness	100mm
Width	100mm
Length	1200mm

Durasquare - H150 150

Specification

Thickness	150mm
Width	150mm
Length	1200mm

Durasquare - H46 48

Specification

Thickness	46.3mm
Width	48mm
Length	1500mm



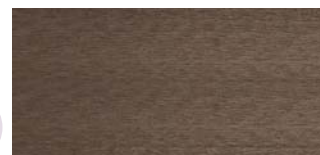
Cherry



Surface finish

Sanding

Walnut



Surface finish

Sanding

Cover (synthetic wood)

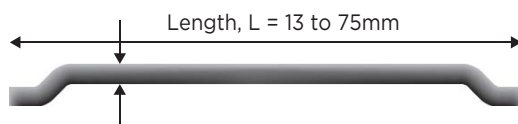
- Polyolefin based resin containing wooden powder
- Materialize the texture of natural timber
- Improvement not to twist or transformation - minimized wooden powder content

Adnered layer (resin bonded)

- Resin technically developed by an individual
- Offset the shrinking and swelling from its elastic nature to prevent from stripping
- Metal adhesion through polarity bond
- Synthetic wood adhesion through polyolefin

Metallic Material (Aluminium)

- Aluminum material with high water repellency and durability
- Use of light weight core - easy handling, excellent construct ability



Diameter, $d = 0.25$ to 1mm

Aspect ratio (L/d) = 30 to 100
Tensile strength = 350 to 1700 MPa

Certification and Testing Report



SIRIM Standards Malaysia UiTM Test Report

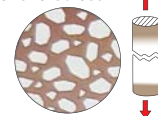
Description	Hooked-end steel fibre glued in bundles to facilitate concrete mixing process	
Material	Cold drawn wire	
Elastic Modulus, E	205,000 MPa	
Coating	None	
Packaging	Non-degradable bag (Non-water soluble)	
Net Weight/ pallet	1,200kgs = 60bags	
Standard Compliances	Conforms to BS EN 14889-1:2006 & MS 2388:2010 - Group 1 - cold drawn wire	
Profile	HE 0.75/60	HE 0.55/35
Fibre Diameter, d (mm)	0.75 (± 0.04)	0.55 (± 0.03)
Fibre Length, L (mm)	60 (± 3)	35 (± 1.75)
Aspect Ratio,	80 (± 6)	65 (± 4.5)
Tensile Strength (MPa)	Min 1,100 ($\pm 5\%$)	Min 1,200 ($\pm 5\%$)
Quantity (pc/kg)	$\pm 4,653$	$\pm 14,490$
Applications	<ul style="list-style-type: none"> Industrial Flooring Pavement Port Residential Flooring (jointed or joint less non suspended slab, suspended slab) Shotcrete application (Tunneling, slop stabilization, rehabilitation of old structures, swimming pool) Safety Vaults Port 	



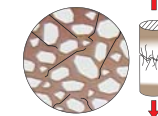
Why use STAHLCON® Steel fibre?

The main purpose of STAHLCON® steel fibre is to increase the energy absorption capacity and toughness of the concrete which grant it with superior crack resistance. Steel fibres suppress and bridge the cracks in the concrete matrix hence avoid total loss of the bearing capacity after first crack (which happens in brittle fracture) by enhancing the concrete matrix a ductile behaviour.

Tensile Stress

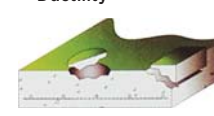


PLAIN CONCRETE
• Tensile force is transferred to STAHLCON® Steel Fibres across the crack.



STAHLCON® SFRC
• The fibre with deformed shape provide additional anchorages which improve tensile load bearing capacity of concrete.

Ductility

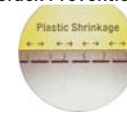


PLAIN CONCRETE
• STAHLCON® Steel Fiber are evenly distributed throughout the concrete to prevent the delamination of concrete surface and edges.

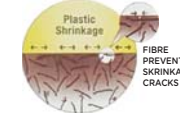


STAHLCON® SFRC
• Fibres force a ductile behaviour to brittle concrete.

Crack Prevention

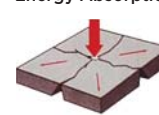


CONVENTIONAL SLAB DESIGN FOR CRACK CONTROL
• STAHLCON® Steel Fibres bridge across the micro-crack and prevent it from growing.

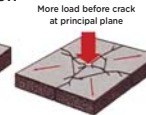


FRC SLAB DESIGN FOR CRACK CONTROL
• It minimizes and even eliminates the shrinkage crack, giving in a better surface quality.

Energy Absorption






PLAIN CONCRETE
• STAHLCON® Steel Fibres reinforcing in all direction and distribute load more evenly.



STAHLCON® SFRC
• SFRC has relatively much higher load bearing capacity due to its ability in absorbing large amount of energy before failure.

* The above tolerances are allowed for their respective mean values and at least 95% of the individual specimens shall meet the specified tolerances as conformed to BS EN 14889-1:2006 specifications.

Type	Mega Mesh 55	Mega Mesh I - Fibrillated	Mega Mesh II - Multi-filament
Material	Homo polypropylene (Macro Synthetic Fibre)	100% Virgin polypropylene	100% Virgin polypropylene
Color	White	White	White
Length	55mm	19mm	12mm
Mass (Denier)	4780 denier	1g/9m (1000 denier)	15 denier
Specific Gravity	0.90 kg/dm ³	0.90 kg/dm ³	0.90 kg/dm ³
Aspect Ratio	65-70	Nil	Nil
E-modulus	7,288 N/mm ²	3,900 N/mm ²	3,500 N/mm ²
Tensile Strenght	425 N/mm ²	400 N/mm ²	400 N/mm ²
Tensile at Break	45N per 1000 denier	35N per 1000 denier	35N per 1000 denier
Elongation at Break	15% (Average)	15% (Average)	15% (Average)
Chemical Composition	C-33%, H-67%	C-33%, H-67%	C-33%, H-67%
Melting Point	160-170 °C	160-170 °C	160-170 °C
Ignition Point	350 °C	590 °C	590 °C
Thermal Conductivity	Low	Low	Low
Electrical Conductivity	Low	Low	Low
Acid and Alkaline Resistane	Superb	High	High
Dosage for 1m³ of concrete	1 bag = 1 kg/m ³ - 9 kg/m ³ (concrete)	1 bag = 0.9kg/m ³ (concrete & mortar)	1 bag = 0.6kg/m ³ (concrete & mortar)
Advantages	Alkali resistant, non-corrosive, cost effective, higher quality of concrete, excellent in flexural toughness, excellent in premature cracking and easy to handle and use.	Reduce plastic settlement plastic shrinkage craking and permeability of concrete, increase impact and abrasion resistance.	Reduce plastic settlement plastic shrinkage craking and permeability of concrete.
Applications:	 <ul style="list-style-type: none"> • Overlays • Floor Topping • Precast Products • Segmental Lining + • Cellar Walls • Ramp • Concrete Pipe • Bridge Decks • Sidewalk • Water Reservoirs • Buggy Track • Concrete Driveway • Median Barriers + 	 <ul style="list-style-type: none"> • Patching • Road Curb • Concrete Planter Box • Concrete Imprint • Concrete Imprint • Apron • Fountain • Statue 	 <ul style="list-style-type: none"> • Wall Plastering • Screeding for RC roof • Patching • Road Curb • Statue • Concrete Planter Box • Concrete Imprint • Apron • Fountain

Cause Cracking in Concrete	Fibre Type	
	MEGA MESH® Polypropylene Fibre	STAHLCON® Steel Fibre
Reduced Plastic Shrinkage	✓	
Reduced Plastic Settlement	✓	
Reduced Segregation	✓	
Improved Hydration	✓	
Maximum Toughness Index	✓	
Fire Resistance	✓	✓
Permeability	✓	✓
Corrosion Resistance	✓	✓
Greater Ductility		✓
Flexural Toughness		✓
Post-crack Residual Strength		✓
Crack Width Control		✓
Fatigue Improvement		✓
Impact Resistance		✓
Abrasion Resistance		✓
Long Term Shrinkage		✓
Freeze-thaw Damage		✓
Tensile Load		✓
Load Bearing Capacity		✓
Additional Durability		✓



Segmental Lining



Industrial Flooring



Tunnel



Precast Products



Road Barrier & Noise Wall



Safety Vaults



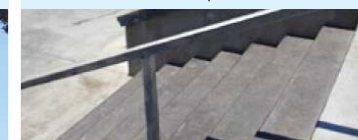
Concrete Pipe



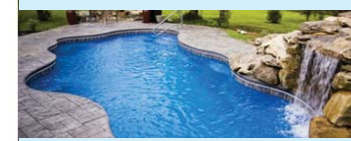
Ramps



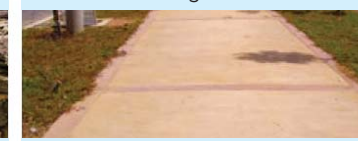
Water Tanks



Enhance Edge Protection



Swimming Pool



Concrete Driveways



Wood Shingle

About Oriental Housetop

Established in 2002, Oriental Housetop has been distributing and marketing roofing shingle. The Company has earned an excellent reputation and frequently carries out large projects for private clients, local authorities, housing associations, construction companies and works closely with developers and architects for new development in Malaysia, as well as private individuals with one stop solution provided. Oriental Housetop is a subsidiary of Oriental Castle, which originated in 1998 as a single foundation steel unit in Malaysia - Oriental Sheet Piling. What happened next was nothing short of revolutionary - in 2000 we joined forces in a strategic alliance with the European ARBED (now ArcelorMittal). Still adamantly choosing to be connected within our roots in Malaysia, our ventures took us next to the property development industry with Oriental Housetop. Although a completely different playing field from our previous ventures, by staying true to the values and principles that led us to success, we've gone on to become the premier option within Malaysia for luxurious, reliable roofing and decking solutions.

Playing a part to bring the nature closer to people in city, Oriental Housetop expands the business with Green Products for Landscape works to help the investors to obtain an excellence in revenue, reputation, sustainability and contribution to the society as well.

Oriental Housetop being a dynamic and ever energetic team, has also further venture into manufacturing Steel Fibre, focusing on the best materials and techniques available for flooring and shotcreting.

Call us today for more information.



Ask about our products & services:

- **CertainTeed** Fiberglass Asphalt Shingle - Pitched Roof
- **CertainTeed** Flintlastic® SA - Low Slope Roof
- Wood Shingle
- Ventilated Soffit - Air Intake
- Ventilated Ridge - Exhaust
- **MEGA MESH**® Polypropylene Fibre
- **STAHLCON**® Steel Fibre
- **ecodeck**® Wood Plastic Composite



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