

## DESIGNED FOR STYLE, ENGINEERED TO PROTECT.

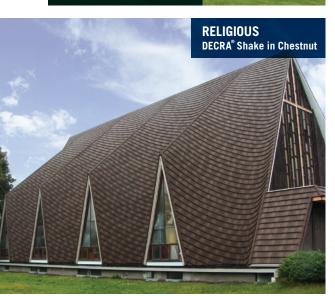


As the pioneer of stone coated steel technology, DECRA® Metal Roofing systems have been proven around the world since 1957. Marketed and installed in over 120 countries, there are millions of DECRA installations worldwide.

Manufactured to US and international quality standards, DECRA products are tested to comply with or exceed current building codes and regulations. DECRA Metal Roofing has been assessed and registered as meeting the ISO 9001:2008, OHSAS 18001:2007 and ISO 14001:20004 requirements.

Metal roofing is specified as a solution for performance, longevity, versatility and design. DECRA's lightweight metal roof systems are ideal for new construction or renovation in commercial, institutional and residential applications where high performance, long life and low maintenance are necessary.











# WHAT SETS DECRA® METAL ROOFING APART?

DECRA Metal Roofing systems provide safety and protection when it comes to nature's harshest elements such as fire, wind, hail, hurricanes, seismic activity and extreme cold and heat.

#### Why?

The cutting edge technology of the acrylic priming system enhances the superior corrosion resistance of the aluminum-zinc alloy coated steel combined with a 61 year history of manufacturing stone coated steel.

- ✓ 50 Year Commercial Warranty\*(first 20 years non-prorated material and labor)
- Wind 120 mph warranty. Max design pressure up to -153.6psf (equates to over 180 mph). Refer to profile fastening schedules
- ✓ Hail Class IV impact resistance (highest rating)
- $\checkmark$  Fire Class A, B, and C fire rated, non combustible
- Earthquakes Lightweight roofing fastened with screws strengthens the roof deck to reduce seismic activity failure. Material weight – 150 to 160 lbs per sq. based on profile
- ✓ Miami Dade County Approval
- ✓ Coastal Environments Salt Fog Tested to ASTM B117
- Energy Efficient Above Sheathing Ventilation (ASV)
- Sustainability Attributes Made with 25-30% recycled content combined, recyclable at end of life, potable water run off, long life, low maintenance
- Added tensile strength through higher grade steel and panel designs.
- 26 gauge steel accessories adds strength and durability to the whole roof system
- Install Savings Full warranty when roofing over a layer of material – contact Decra for specifics
- 🗸 Insurance Discounts available
- LEED Points Available





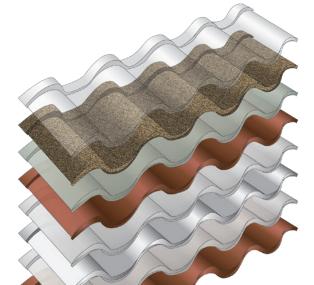




#### **PRODUCT COMPARISONS**

Protection / Benefits	Stone Coated Steel Panels	Concrete & Clay Tile	Fiber Cement	Architectural Shingles	Wood Shake	Synthetic Composite	Standing Seam
Weight	Lightest 1.25 – 1.5 lbs./sq.ft. Avg. Roof: 3,700 to 4,500 lbs.	6–15 lbs./sq.ft. Avg. Roof: 18,000 to 45,000 lbs.	6 lbs./sq.ft. Avg. Roof: 18,000 lbs.	2.5 – 4 lbs./sqft Avg. Roof: 7,500 to 12,000 lbs.	1.5 – 2 lbs./sq.ft. Avg. Roof: 4,500 to 6,000 lbs.	2.5 – 3 lbs./sq.ft. Avg. Roof: 7,500 to 9,000 lbs.	.7 – 1.5 lbs./sq.ft. Avg. Roof: 3,750 to 4,500
Fire	Class A Rated Material	Class A Rated Material	Class A Rated Material	Class A Rated Material	Class B or C (no rating if untreated)	Class A or C underlayment requirements	Class A Rated Material
Wind Warranty	120 mph Wind Warranty	Wind damage not covered	75 mph Wind Warranty	60 - 110 mph Wind Warranty	Wind damage not covered	70 - 110 mph Wind Warranty	ULTested
Hail Resistant Impact Resistant UL2218	Class 4 Impact Resistant	Cracks very easily, hail can cause severe damage.	Class 4	Class 3 or 4 (not all meet 2218)	Class 3 or 4	Class 4	Class 4
Snow / Ice	Freeze/Thaw Resistant	Not waterproof, when wet can absorb 15% of weight in water.	Freeze/Thaw Resistant	Freeze/Thaw Resistant	Limited Freeze/Thaw Cycles	Freeze/Thaw Resistant	Freeze/Thaw Resistant (snow guards recommended)
Earthquake	Lightweight + Added Shear Strength	Heaviest weight with no added shear strength	Moderate weight with no added shear strength	Moderate weight with no added shear strength	Light to moderate weight with no added shear strength	Moderate weight with no added shear strength	N/A
Warranty	50 Year Commercial Warranty	25 - 50 Year Limited Warranty	50 Year Limited Warranty	25 Year to Lifetime Limited Warranty	25 - 40 Year Limited Warranty	50 Year Limited Warranty	Coverage varies by manufacturer.
Environmental Impact	Low Impact (often no tear-off needed, recycled material, end of life recyclability)	High Impact (high embodied energy, tear-off is required, limited recycling use)	Moderate Impact (not virgin material, tear-off is required, limited recycling use)	High Impact (high embodied energy in relation to life cycle, tear-off usually required, limited recycling use)	Moderate Impact (low embodied energy, renewable resource, tear-off required, end of life recyclability)	Moderate to High Impact (limited information, only on market 25 years, some made of recycled rubber & TPO, tear-off required, not all are recyclable)	Low Impact (often no tear-off needed, recycled material, end of life recyclability)
Required Maintenance	Low	Moderate to High (broken tiles)	Moderate to High (broken tiles)	Low	High (fire-resistance maintenance required)	Moderate (replacement for breakage and curling)	Moderate to High (if repainting required)
Life Cycle Costs	Low Life Cycle Costs (lifespan is 2 to 3 times longer than other roofing products)	High Costs (lifespan is 20 to 50 years)	High Costs (lifespan is 25 to 40 years)	High Costs (lifespan is approx. 20 years)	High Costs (lifespan is 20 - 30 years)	High Costs (lifespan is unproven, expect 50 years)	Low Life Cycle Costs (lifespan is 2 to 3 times longer than other roofing products)

Information gathered from manufacturer's specifications, promotional literature, websites, Independent testing laboratories and published Industry statistics.



### **PEACE OF MIND**

Impressive aesthetic designs are what you see at first glance, but underneath are layers of pure protection. A DECRA® roof is a piece of beauty that offers peace of mind.

- Steel Aluminum-Zinc Alloy Coating
- ✓ Acrylic Priming System
- ✓ Acrylic Basecoat
- Ceramic Coated Stone Granules
  - Clear Acrylic Overglaze



### **PROVEN HISTORY OF SURVIVING HARSH CONDITIONS**

DECRA's roofing systems have excelled through some of the harshest weather conditions around the world for over 60 years. DECRA's interlocking panels are strong and non-combustible (Class A fire-rated). They are covered by a 50 Year Warranty\* of which the first 20 years are non-prorated and include peace-of-mind coverage for winds up to 120 mph and hail penetration (Class 4 Impact Resistant). Learn more at DECRASTORM.COM & DECRAFIRE.COM.



#### **SURVIVING THE STORM**



"Our Naples, Florida condo was hit dead-on by the eye of Hurricane Irma in September 2017. Lashing us with 140 mph winds, I am happy to report that our DECRA Shake XD<sup>®</sup> roof delivered outstanding performance and protection. Not a single DECRA roof panel in our complex was uplifted or torn off during the storm." — Pattie Villari, Naples Bath & Tennis Club in Naples, Florida





This DECRA Shake roof survived a tornado with no damage.

### ENERGY EFFICIENCY

Oak Ridge National Laboratory conducted a study, commissioned by the Department of Energy's Buildings Technologies Program, to test different products and roof assemblies. The DOE funded the study because of the development of infrared-blocking color pigments. The first IR-blocking color pigments were used in military camouflage to hide objects from heat seeking devices, and the DOE was interested in the possible benefits of the "cool" pigment when applied to roofing materials, especially stone coated metal roofs. IR-blocking granules are both highly emissive and reflective.

Testing on the metal panels covered with IR-pigments returned unexpected results. When compared to the asphalt shingle roof, the test roof covered with an IR-pigment granule, installed on a counter-batten and batten system, reduced heat transfer by about 45% — however, only 15% could be attributed to the IR-pigment granules, and 30% of the reduction could be attributed to over the deck venting.



Benefit from Above Sheathing Ventilation (ASV): DECRA Metal Roofing panels create an airspace between the panel and the roof deck. This reduces heat transfer and helps to reduce and or eliminate ice dams.



#### **SOLAR INTEGRATION**

Solar panels can easily be integrated into a DECRA® Metal Roof system. Solar systems need a long term roofing system to avoid replacing the roof underneath the panels. Solar mount options for DECRA panels can be found at www.Quickmountpv.com.





#### COOL ROOFING

Energy saved by switching from concrete tile to DECRA Villa Tile





Antique Chestnut CC, Sicilian Sand CC, and Tuscan Sun CC are now available in all DECRA profiles. These CRRC-approved cool roof colors are effective at reflecting unwanted solar heat on the roof.

Concrete Tile

### **DECRA PROFILES**

#### **DECRA®** TILE

**Installed over battens**, DECRA Tile, offering the beauty and style of Mediterranean tile, adds a unique elegance to any roof.



#### **DECRA® VILLA TILE**

**Installed direct-to-deck**, DECRA Villa Tile features the classic beauty, elegance and architectural detail of an old-world Italian tile.



#### **DECRA®** SHAKE

**Installed over battens**, DECRA Shake offers the distinctive beauty and richness of cedar shake, while providing durability and longevity.



#### DECRA® SHAKE XD®

**Installed direct-to-deck**, DECRA Shake XD emulates the classic beauty and architectural detail of a thick, rustic, hand-split wood shake.



#### **DECRA® SHINGLE XD**

**Installed direct-to-deck**, DECRA® Shingle XD has the rich, bold appearance of a heavyweight architectural shingle at a fraction of the weight.

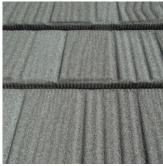


Installation:	Over Battens
Minimum Pitch:	3:12
Panel Size:	16-1/2" x 52"
Installed Exposure:	14-1/2" x 50"
Panels per Square:	20
Installed Weight:	150 lbs./sq.

Installation:	Direct-to-Deck
Minimum Pitch:	3:12
Panel Size:	17" x 44-1/4"
Installed Exposure:	14-1/2" x 39-1/2"
Panels per Square:	25.2
Installed Weight:	160 lbs. / sq.

Installation:	Over Battens
Minimum Pitch:	3:12
Panel Size:	14-5/8" x 53"
Installed Exposure:	12-5/8" x 51"
Panels per Square:	22.4
Installed Weight:	150 lbs./sq.















#### **ACCESSORIES TO ENHANCE AND COMPLIMENT DECRA PROFILES**

Description	Stone Coated	DECRA Tile	DECRA Villa Tile (Direct to Deck) Hidden Fasteners	
Description	Stone Coated	(Battens Only)		
Panel Vent 1 Panel Vent / box	$\checkmark$	Panel Size: 16-1/2" x 52" 12.35 lbs Exposure: 14-1/2" x 50" Net Free Area: 55 sq. in.	Panel Size: 17" x 44-1/4" 13.80 lbs Exposure: 14-1/2" x 39-1/2" Net Free Area: 64 sq. in.	
Hip & Ridge	\$	Tile Hip & Ridge 14-1/2" Exposure 1.1 lbs / piece 900 / 990 lbs / pallet	Tile Hip & Ridge 14-1/2" Exposure 1.1 lbs / piece 900 / 990 lbs / pallet	
End Cap	$\checkmark$	Tile End Cap .2 lbs / piece 50 / 10 lbs / bundle	Tile End Cap .2 lbs / piece 50 / 10 lbs / bundle	
Нір	1	Tile Hip & Ridge	Use Villa Channel along both sides of hip Finish with Tile Hip & Ridge	
Ridge	✓	Tile Hip & Ridge DECRA Ridge Vent	Villa Bird Stop - Ridge - 5' Length (both sides of ridge, cover w/ Tile Hip & Ridge) 1.93 lbs / piece 300 / pallet / 579 lbs / pallet DECRA Ridge Vent	
Eave Fascia Detail or Starter	all except Starter Pieces	3.5" or 5" Fascia Metal (Eave) Flashing 6'6" length 3.5" - 3.5 lbs / piece 300 pcs / 657lbs / pallet 5" - 3.11 lbs / piece 300 pcs / 933 lbs / pallet	Villa Bird Stop - Eave 5 <sup>°</sup> Length 1.99 lbs / piece 300 / pallet 597 lbs / pallet	
Short Course		use batten	use batten	
Roof-to-Wall	Side Flashing Only	Side Flashing – 6'6" length 2.27 lbs / piece 150 pcs / pallet 340 lbs / pallet	Villa Channel – 6'6" length 3.4 lbs / piece 150 pcs / 510 lbs / pallet	
Roof Penetrations (pipe or vents)		Tile Underpan 1.95 lbs / piece 25 / bdl, 2 bdl / pallet 98 lbs / pallet 16-1/2" x 24"	Villa Underpan 1.9 lbs / piece 25 / bdl, 2 bdl / pallet 95 lbs / pallet 18-1/4" x 22"	
Valley	✔ Valley Cap Only	Source Locally	Villa Valley – 6'6" Length 8.70 lbs / piece 100 / 870 lbs / pallet	
Rake/Gable	✓ Hip & Ridge, Rake/Gable Channel, only visible area	Use Tile Hip & Ridge	Villa Channel – 6'6" length 3.4 lbs / piece 150 pcs / pallet 510 lbs / pallet (cover w/ Tile Hip & Ridge)	
Colors	1	Charcoal, Chestnut, Garnet, Granite Grey, Shadowood, Terracotta, Tuscan Sun*, Weathered Timber, Woodland Green**	Amalfi Sand, Capri Clay, Pompeii Ash, Rustico Clay, Tuscan Sun*, Venetian Gold, Woodland Green**	
Installed Weight (approximate)		150 lbs / square (100 sq. ft.)	160 lbs / square (100 sq. ft.)	
Additional items av	vailable:			

DECRA XD Debris Guard Use with Shake XD and Shingle XD as needed along rakes and valleys 1-1/2" W x 3/4" H x 50' L (2 Rolls) 50' rolls / 4.28 lbs / pkg 28 pkgs / 120 lbs / pallet



DECRA Ridge Vent (see venting calculator at www.decra.com) 2-1/2" W x 1" H x 20' L (2 Rolls) 20' / 3.31 lbs / pkg 40 pkgs / 133 lbs / pallet



Flat Sheet 16" x 54" (coordinate with panel color) 5.60 lbs / piece - 50 / bundle



Side Flashing 6'6" length (coordinate with panel color) Counterflashing for headwalls and side walls 2.27 lbs / piece - 150 pcs / pallet 341 lbs / pallet

Reference individual estimating sheets on DECRA.COM/Estimating

DECRA Shake	DECRA Shake XD <sup>®</sup>	DECRA Shingle XD <sup>®</sup>
(Battens Only)	(Direct to Deck) Hidden Fasteners	(Direct to Deck) Hidden Fasteners
Panel Size: 14-5/8" x 53" 12.80 lbs Exposure: 12-5/8" x 51" Net Free Area: 64 sq. in.	Panel Size: 14-1/8" x 52-1/8" 12.70 lbs Exposure: 12-3/8" x 49-7/8" Net Free Area: 64 sq. in.	Panel Size: 14-1/8" x 52-3/8" 12.05 lbs Exposure: 12-1/4" x 49-1/2" Net Free Area: 64 sq. in.
Shake Hip & Ridge 12-5/8" Exposure .85 lbs / piece 900 / 765 lbs / pallet	Shake Hip & Ridge 12-5/8" Exposure .85 lb / piece 900 / 765 lbs / pallet	Shingle Hip & Ridge 25-3/4" Exposure 1.08 lbs / piece 460 / 497 lbs / pallet
Shake End Cap .2 lbs / piece 50 / 10 lbs / bundle	Shake End Cap .2 lbs / piece 50 / 10 lbs / bundle	n/a
Shake Hip & Ridge	Use XD® Channel along both sides of hip Finish with Shake Hip & Ridge	Use XD® Channel along both sides of hip Finish with Shingle Hip & Ridge
Shake Hip & Ridge DECRA Ridge Vent	Shake Hip & Ridge DECRA Ridge Vent	Shingle Hip & Ridge DECRA Ridge Vent
3.5" or 5" Fascia Metal (Eave) Flashing 6'6" length 3.5" - 3.5 lbs / piece 300 pcs / 657lbs / pallet 5" - 3.11 lbs / piece 300 pcs / 933 lbs / pallet	Starter Clip w/ Drip Edge 6'6" length 2.58 lbs / piece 120 pcs / 310 lbs / 1/2 pallet 240 pcs / 620 lbs / pallet	Starter Clip w/ Drip Edge 6'6" length 2.58 lbs / piece 120 pcs / 310 lbs / 1/2 pallet 240 pcs / 620 lbs / pallet
use batten	Short Course Clip – 6'6" length 2.04 lbs / piece	Short Course Clip – 6'6" length 2.04 lbs / piece
Side Flashing – 6'6" length 2.27 lbs / piece 150 pcs / pallet 340 lbs / pallet	XD® Channel – 6'6" length 2.95 lbs / piece 150 pcs / pallet 443 lbs / pallet (Side Flashing available)	XD® Channel – 6'6" length 2.95 lbs / piece 150 pcs / pallet 443 lbs / pallet (Side Flashing available)
Shake Underpan 1.8 lbs / piece 25 / bdl, 2 bdl / pallet 90 lbs / pallet 14-5/8" x 24"	Shingle/XD <sup>®</sup> Underpan 3.3 lbs / piece 25 / bdl, 2 bdl / pallet 165 lbs / pallet 24-3/4" x 30"	Shingle/XD <sup>®</sup> Underpan 3.3 lbs / piece 25 / bdl, 2 bdl / pallet 165 lbs / pallet 24-3/4" x 30"
Source Locally	XD® Valley & Cap – 6'6" Length for both 11.15 lbs & 2.46 lbs / piece Valley 40 pcs / pallet / 446 lbs Cap 300 pcs / pallet / 738 lbs	XD® Valley & Cap – 6'6" Length for both 11.15 lbs & 2.46 lbs / piece Valley 40 pcs / pallet / 446 lbs Cap 300 pcs / pallet / 738 lbs
Use Shake Hip & Ridge	XD® Rake/Gable Channel – 6'6" length 3.84 lbs piece 120 / pallet 461 lbs / pallet	XD® Rake/Gable Channel – 6'6" length 2.79 lbs / piece 120 / pallet 335 lbs / pallet
Charcoal, Chestnut, Granite Grey, Shadowood, Weathered Timber, Woodland Green**	Antique Chestnut, Pinnacle Grey, Woodland Green	Classic Cobblestone, Midnight Eclipse,Natural Slate, Old Hickory, Woodland Green
150 lbs / square (100 sq. ft.)	150 lbs / square (100 sq. ft.)	150 lbs / square (100 sq. ft.)

Carlot Ca

Touch-Up Kit (coordinate with panel color) 5.53 lbs / each bag of stone chip & tube of sealant (touch up pipe/vent penetrations, transitions & panels) 5 lb bag of stone chip available separately

Fasteners (hidden) Corrosion Resistant Screws #9 Hex (1/4" diameter) x 1-1/2" long 2000 pcs / bag 16.65 lbs / box

DECRA

Fasteners (exposed) Color Coordinated Screws (coordinate with panel color, see chart at www.decra.com) #9 Hex (1/4" diameter) x 1-1/2" long 500 pcs / bag (4 bags / box) 16.70 lbs / box

\*A CRRC-approved cool roof color is available (Tuscan Sun CC) | \*\*Made to order; Extended Lead Time 6-8 weeks

### **DECRA® COMMERCIAL CASE STUDIES**

All of DECRA's case studies are available for printing and downloading from the website in PDF format. In addition to the highlighted case studies below, also find case studies on durability, environmental solutions, low maintenance historical preservation and innovative design.

#### HISTORIC PRESERVATION: THE RED ANTIQUITIES BUILDING

Problem: Constructed in 1873, the Red Antiquities Building in London, Ontario Canada, needed to preserve its historical appearance of a wood shake roof while finding ways to reduce energy and maintenance costs.

Solution: DECRA Shake XD<sup>®</sup> in Antique Chestnut reduces the heat in the attic and provides the classic wood shake appearance that meets historical preservation requirements.

Results: The restoration of the building will allow for many more years of service to the community and the new roof has helped in reducing maintenance and energy costs.



#### **RELIGIOUS: BETHLEHEM LUTHERAN CHURCH**



Problem: Bethlehem Lutheran Church's existing asphalt shingles were falling off due to high wind conditions in Aberdeen, South Dakota.

Solution: Installing DECRA Shake XD<sup>®</sup> in Pinnacle Grey. The interlocking nature of DECRA's direct to deck, hidden fastener product can withstand 120 mph winds.

Results: Eliminated the need for constant patching, repairing, and fixing the existing asphalt roof. The Shake XD<sup>®</sup> roof provided an upgraded more dimensional appearance while coordinating with the existing style of the church.

#### **COMMERCIAL: SLEEP CENTER**

Problem: The new commercial Sleep Center needed to blend into the residential area it resided in and the old wood shake roof posed a fire hazard.

Solution: Installing DECRA Shake XD<sup>®</sup> in Pinnacle Grey. Shake XD<sup>®</sup> is a Class A fire rated material and emulates wood shake.

Results: The Class A fire rating ensured patient safety and the choice of Shake XD<sup>®</sup> preserved the residential feel, blending with the surrounding neighborhood. Easy maintenance, a 50-year warranty and minimal noise requirements are also a plus.



#### **GOVERNMENT: 29 PALMS MILITARY HOUSING**



Problem: 29 Palms Military Housing was built in a harsh desert environment with harsh winds and extreme temperatures.

Solution: Installing DECRA Tile, Shake and Villa Tile. DECRA's fastening methods, ability to withstand 120 mph winds and resistance to temperature fluctuations made it the right choice for the desert.

Results: DECRA provided an attractive, yet durable long-term roofing solution. The steel panels not only stand up to the environment but reduce energy consumption and met the sustainability requirements for the military.



### DECRA® RESOURCES

#### Website



DECRA's website contains a wealth of information on products and continuing education, their commitment to sustainable products and the manufacturing processes. Learn about the benefits of stone coated steel and DECRA's contribution to LEED 2009 and LEED Homes.

Additionally you can find DECRA's cost calculator, Distributor Locator and an extensive photo gallery. Log onto **DECRA.com** today to find the answers you need to all of your DECRA questions.

### PDF DOC

#### Specifications & CAD Drawings

DECRA offers three part CSI specifications in Word and PDF format for Tile, Villa Tile, Shake, Shake XD<sup>®</sup> & Shingle XD<sup>®</sup>. For a quick reference see the one page specification sheet in the Technical Section on the website.



DECRA also offers Technical Drawings for all products, available for download in PDF, JPG and CAD format for Tile and Shake Details with Battens and Villa Tile, Shake XD<sup>®</sup> & Shingle XD<sup>®</sup> Direct to Deck.



#### Architect CEU

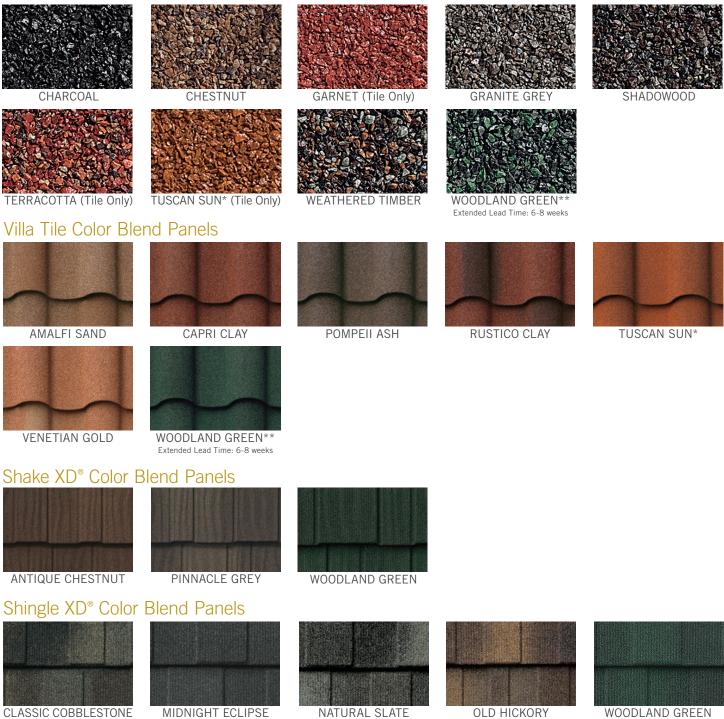
DECRA offers CEU courses on at AECDaily (www.aecdaily.com) and also can facilitate Lunch and Learn courses upon request.

#### **Evaluations & Testing**

- See latest list and report links for ICC-ES, Florida Building Code, LA City, Miami-Dade County NOAs at www.decra.com/ technical/ product-evaluations
- Texas Department of Insurance Report RC-281
- Fire: UL 790 (ASTM E108 A,B&C) Class A Pass
- Hail: UL 2218 Class 4
- 🗸 Wind Uplift: UL 1897
- Plant: ISO 9001:2008; OHSAS 18001:2007; ISO 14001:2004

### **DECRA® COLOR BLENDS**

#### Tile/Shake Color Blend Panels



\*A CRRC-approved cool color version is available (Tuscan Sun CC) | \*\*Made to order; Extended Lead Time 6-8 weeks Due to lighting and the printing process, roof colors and color swatches may vary from the actual product. For optimum visual appearance, install with a random stagger of the panels.





