

December 3, 2019

CBC Steel Buildings is constantly seeking ways to improve our product offering and remain the low cost supplier for our Builders. We are pleased to announce improvements coming soon to our SP and PVDF color programs.

PVDF Color Program Changes:

To provide customers with an improved selection of PVDF color options; CBC Steel Buildings has added three new colors to the PVDF color lineup and removed three colors. In addition, some color names and/or color codes in eQuote have been changed to ensure consistency and clarity across our color programs.

- **New PVDF Colors Added:**
 - Brite Red (BT)
 - Charcoal (CH)
 - Midnight Black (BL)
- **PVDF Color Name and Color Code Changes:**
 - Light Stone has been renamed Desert Sand (DS)
 - Evergreen has been renamed Cypress Green (CY)
- **PVDF Color Code Changes:**
 - Royal Blue color code changed to (RO)
 - Surrey Beige color code changed to (SU)
 - Warm White color code changed to (WW)
- **PVDF Colors Removed:**
 - Taupe Sand
 - Light Bronze
 - Hemlock Green

SP Color Program Changes:

In our SP Color program, some color names and codes have been changed in eQuote to ensure consistency and clarity across our color programs.

- **SP Color Name Changes:**
 - Hunter Green has been renamed Forest Green (FO)
- **SP Color Code Changes:**
 - Brick Red color code changed to (BD)
 - Fox Gray changed to (FG)

New PVDF and SP color charts are attached and printed copies are available by request from your division.

Please reference the following chart with a full list of PVDF and SP colors and associated color codes; changes are labeled in shading.

PVDF Cool Coatings Colors:

PVDF Color Name	Color Code
Reflective White	RF
Pearl Gray	PG
Desert Sand <i>(formerly Light Stone)</i>	DS
Brite Red <i>(new)</i>	BT
Charcoal <i>(new)</i>	CH
Midnight Black <i>(new)</i>	BL
Regal White	RW
Warm White	WW
Surrey Beige	SU
Slate Gray	SG
Royal Blue	RO
Terra Cotta	TC
Cypress Green <i>(formerly Evergreen)</i>	CY
Dark Bronze	DB

SP Cool Coatings Colors:

SP Color Name	Color Code
Polar White	PW
Sandstone	SS
Fox Gray	FG
Sagebrush Tan	SA
Brick Red	BD
Aztec Blue	AB
Forest Green <i>(formerly Evergreen)</i>	FO
Burnished Slate	BS

Galvalume	Color Code
Galvalume	GM

Critical Dates: The new color program changes will be available in eQuote on December 6, 2019. Your Project Coordinator will review any color name changes to existing orders if applicable. For more information, contact your local Sales Representative or Project Coordinator.

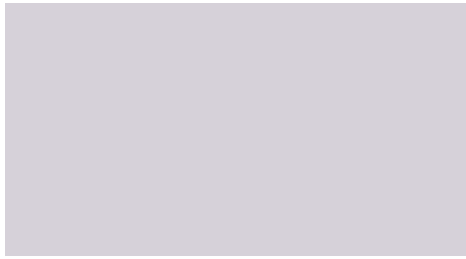
Our Commitment

CBC Steel Buildings is committed to ongoing product quality and we stand behind every product we offer. This change is part of our commitment to quality and ongoing improvements in all aspects of our business.

If you have specific questions regarding this bulletin or any other area of our business, please contact your District Sales Manager or Project Coordinator.

SP Cool Coatings

This cool silicone-polyester paint system utilizes a two-coat system that offers superior quality and durability.



Polar White †

IR .67 SRI 81



Sandstone †

IR .59 SRI 69



Fox Gray †

IR .51 SRI 58



Sagebrush Tan †

IR .51 SRI 59



Brick Red †

IR .38 SRI 40



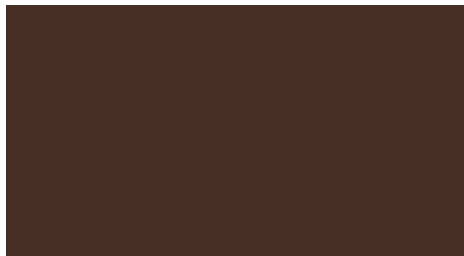
Aztec Blue †

IR .27 SRI 26



Forest Green †

IR .27 SRI 25



Burnished Slate †

IR .32 SRI 32



Galvalume **

IR .77 SRI 72

*Non-Stock Color: Extended lead times may apply. *The Galvalume coating process is likely to result in variances in spangle (size, number, and reflection) from coil to coil which may result in noticeable shade variations. Galvalume is also subject to variable weathering and may appear to have different shades due to weathering characteristics. These shade variations are not cause for rejection. † ENERGY STAR® Qualified Color. All SP colors have a 25-year finish warranty. Colors shown closely approximate actual coating colors. These colors utilize Cool Coating Technology. The term "TBS" on the Order Document refers to "To Be Selected" from standard SP colors as shown on this chart.



SP Cool Coatings

Product Specifications



Solar Reflectance, Thermal Emittance and Solar Reflectance Index (SRI)

Solar Reflectance

To be considered “cool,” products must have a Solar Reflectance of at least .25. Solar Reflectance is the fraction of the total solar energy that is reflected away from a surface.

Thermal Emittance

Thermal Emittance is the measure of a panel’s ability to release heat that it has absorbed.

Solar Reflectance Index (SRI)

Put Solar Reflectance and Thermal Emittance together and you get the Solar Reflectance Index (SRI). SRI is calculated by using the values of solar reflectance, thermal emittance and a medium wind coefficient. The higher the SRI value, the lower its surface temperature and consequently, the heat gain into the building. Metal roofs coated with SP Cool Coatings achieve an SRI of 25-81, depending on the color.

Conventional roof surfaces have low reflectance (0.05 to 0.25) and high thermal emittance (typically over .85). Roof panels with both high reflectance and high emittance can reduce the surface temperature by as much as 30-50% based on color and geographic location, which will result in a reduced heat gain to the building, therefore reducing the energy demand.

GALVALUME® is a registered trademark of BIEC International Inc., and some of its licensed producers.

SP COOL PANEL COLORS

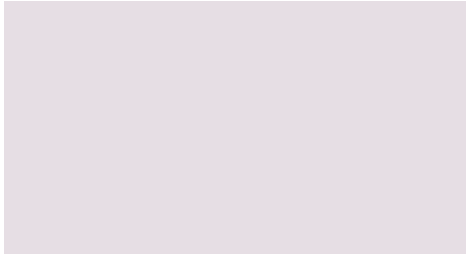
SP Cool Color	Initial Solar Reflectance (IR)	Initial Thermal Emittance	Solar Reflectance Index (SRI)
Polar White	.67	0.83	81
Sandstone	.59	0.84	69
Fox Gray	.51	0.85	58
Sagebrush Tan	.51	0.85	59
Brick Red	.38	0.85	40
Aztec Blue	.27	0.85	26
Forest Green	.27	0.83	25
Burnished Slate	.32	0.85	32
Galvalume®	.77	0.08	72

SP COOL TECHNICAL INFORMATION

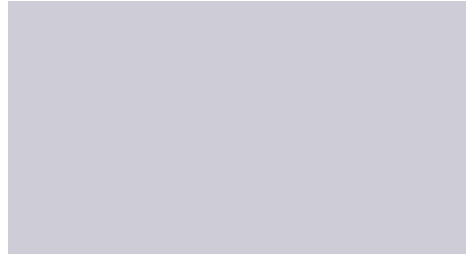
Test	Test Methods	Performance
Dry Film Thickness	ASTM D1005	0.15 - 0.30 mil primer 0.70 - 0.90 mil topcoat
Gloss	ASTM D523 @ 60°	10 - 80+
Solar Reflectance	ASTM E903, ASTM E1918 Using portable reflectometer	0.25 (25%) min.
Emissivity	ASTM C1371, ASTM E408	0.80 (80%) min.
Pencil Hardness	ASTM D3363	F min.
Flexibility	T-Bend, ASTM D4145	2 T-bend, No pick off
Adhesion	ASTM D3359	1.5 x metal thickness, No adhesion loss
Reverse Impact	ASTM D2794	2 x gauge or 80 lbs.
Abrasion, Falling Sand	ASTM D968	25 - 40 l/mil
Mortar Resistance	ASTM C267	No effect
Detergent Resistance	ASTM D2248 3% detergent @ 100°F (72 hrs.)	No effect
Acid Resistance	ASTM D1308 10% muriatic acid - 15 min. 20% sulfuric acid - 24 hrs.	No effect No effect
Acid Rain Test	Kesternich SO2, DIN 50018	10 cycles min. No objectionable color change
Alkali Resistance	ASTM D1308 10% , 20% NaOH, 1 hr.	No effect
Salt Spray Resistance	ASTM B117 5% salt fog @ 95°F	Passes 1000 hrs.
Humidity Resistance	ASTM D714, ASTM D2247 100% relative humidity @ 95°F	Passes 1000 hrs. No blisters, cracks or peeling
Exterior Exposure	ASTM D2244, ASTM D4214 10 yrs. @ 45°F, South Florida	Max. 5 fade Max. 8 chalk

PVDF Cool Coatings

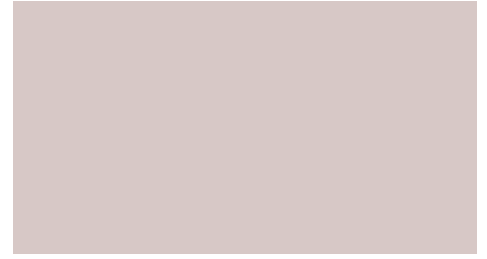
PVDF utilizes a two-coat system featuring fade resistant color, incredible durability, and environmentally-friendly “cool” technology.



Regal White [†] IR .72 SRI 88



Reflective White ^{**} IR .63 SRI 76



Warm White [†] IR .63 SRI 76



Pearl Gray ^{**} IR .47 SRI 54



Desert Sand ^{**} IR .57 SRI 67



Surrey Beige [†] IR .50 SRI 56



Slate Gray [†] IR .37 SRI 40



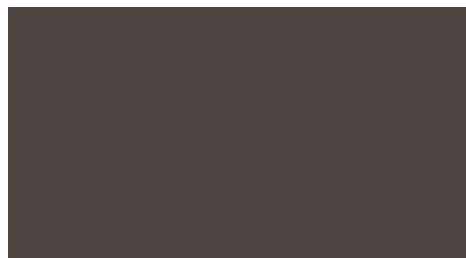
Royal Blue [†] IR .30 SRI 30



Terra Cotta [†] IR .36 SRI 38



Cypress Green [†] IR .31 SRI 31



Dark Bronze [†] IR .32 SRI 33



Brite Red ^{**} IR .38 SRI 40



Charcoal ^{**} IR .32 SRI 34



Midnight Black ^{**} IR .27 SRI 26



Galvalume ^{**} IR .77 SRI 72

*Non-Stock Color: Extended lead times may apply. *The Galvalume coating process is likely to result in variances in spangle (size, number, and reflection) from coil to coil which may result in noticeable shade variations. Galvalume is also subject to variable weathering and may appear to have different shades due to weathering characteristics. These shade variations are not cause for rejection. [†]ENERGY STAR[®] Qualified Color. All standard PVDF colors have a 35-year finish warranty. Colors shown closely approximate actual coating colors. These colors utilize Cool Coating Technology. The term “TBK” on the Order Document refers to “To Be Selected” from standard PVDF colors as shown on this chart. Please note that PVDF is a slight upcharge over SP.



PVDF Cool Coatings

Product Specifications



Solar Reflectance, Thermal Emittance and Solar Reflectance Index (SRI)

Solar Reflectance

To be considered “cool,” products must have a Solar Reflectance of at least .25. Solar Reflectance is the fraction of the total solar energy that is reflected away from a surface.

Thermal Emittance

Thermal Emittance is the measure of a panel’s ability to release heat that it has absorbed.

Solar Reflectance Index (SRI)

Put Solar Reflectance and Thermal Emittance together and you get the Solar Reflectance Index (SRI). SRI is calculated by using the values of solar reflectance, thermal emittance and a medium wind coefficient. The higher the SRI value, the lower its surface temperature and consequently, the heat gain into the building. Metal roofs coated with pigmented PVDF resin achieve an SRI of 26-88, depending on the color.

Conventional roof surfaces have low reflectance (0.05 to 0.25) and high thermal emittance (typically over .85). Roof panels with both high reflectance and high emittance can reduce the surface temperature by as much as 30-50% based on color and geographic location, which will result in a reduced heat gain to the building, therefore reducing the energy demand.

GALVALUME® is a registered trademark of BIEC International Inc., and some of its licensed producers.

PVDF COOL PANEL COLORS

PVDF Cool Color	Initial Solar Reflectance (IR)	Initial Thermal Emittance	Solar Reflectance Index (SRI)
Regal White	.72	0.85	88
Reflective White	.63	0.86	76
Warm White	.63	0.86	76
Pearl Gray	.47	0.86	54
Desert Sand	.57	0.86	67
Surrey Beige	.50	0.85	56
Slate Gray	.37	0.85	40
Royal Blue	.30	0.85	30
Terra Cotta	.36	0.85	38
Cypress Green	.31	0.85	31
Dark Bronze	.32	0.86	33
Brite Red	.38	0.84	40
Charcoal	.32	0.86	34
Midnight Black	.27	0.85	26
Galvalume®	.77	0.08	72

PVDF COOL TECHNICAL INFORMATION

Test	Test Methods	Performance
Dry Film Thickness	ASTM D1400	0.15 - 0.30 mil primer 0.70 - 0.90 mil topcoat
Gloss	ASTM D523 @ 60°	25 - 35
Solar Reflectance	ASTM E903 Steep Slope: Low Slope:	>25% Initial >15% after 3 years >65% Initial >50% after 3 years
Emissivity	ASTM C1371, ASTM E408	0.80 (80%) min.
Pencil Hardness	ASTM D3363	F-2H
Flexibility	T-Bend, ASTM D4145	0 - 2 T-Bend; No pick off
Adhesion	ASTM D3359	No adhesion loss
Reverse Impact	ASTM D2794	No cracking or adhesion loss
Abrasion, Falling Sand	ASTM D968	65 - 85 l/mil
Mortar Resistance	ASTM C267	No effect
Detergent Resistance	ASTM D2248 3% detergent @ 100°F (72 hrs.)	No Effect
Acid Resistance	ASTM D1308 10% muriatic acid - 24 hrs. 20% sulfuric acid - 18 hrs.	No effect No effect
Acid Rain Test	Kesternich SO2, DIN 50018	15 cycles min. No objectionable color change
Alkali Resistance	ASTM D1308 10% , 25% NaOH, 1 hr.	No effect
Salt Spray Resistance	ASTM B117 5% salt fog @ 95°F	None or few #8 blisters; Max. average 1/8” Scribe creep Passes 1000 hrs.
Humidity Resistance	ASTM D714, ASTM D2247 100% relative humidity @ 95°F	Passes 1500 hrs. No #8 blisters
Exterior Exposure	ASTM D2244, ASTM D 4214 10 yrs. @ 45°F, South Florida	Max. 5 fade Max. 8 chalk