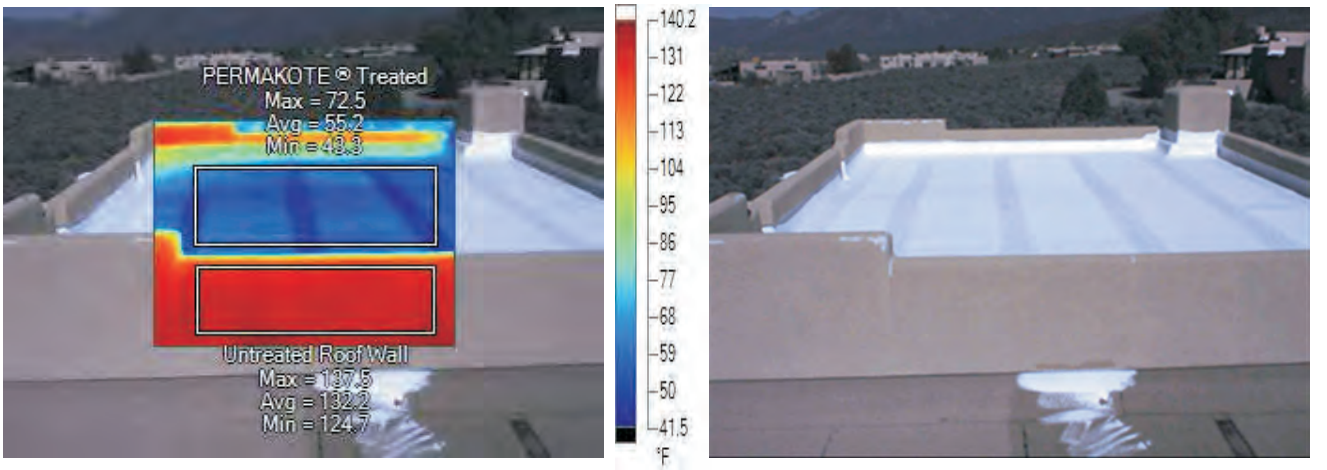
HOME INFRARED ROOF INSPECTION



IR20071025_0032.is2 **Visible Light Image**

10/25/2007 1:25:03 AM

-The untreated section of the roof wall has hot temperatures averaging 132.2 F and is represented by the redish-orange color.

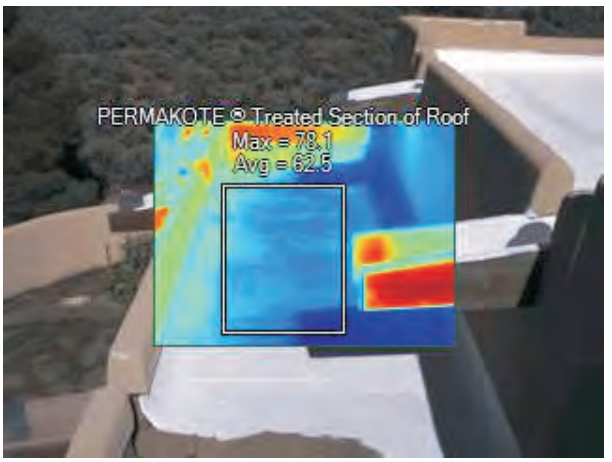
-The PERMAKOTE ® treated section of the roof has much cooler temperatures averaging 55.2 F and is represented by the blue color.

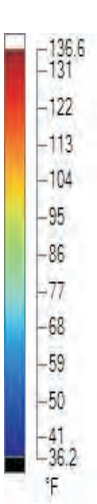
-The temperature average difference is as much as 94.2 F when comparing the untreated section of the roof wall to the PERMAKOTE ® treated section of the roof.

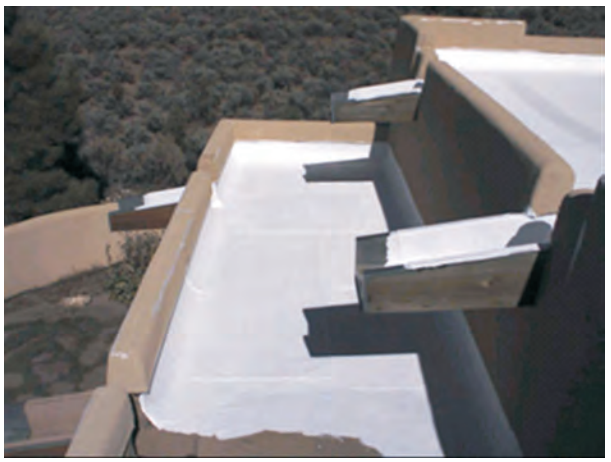
-Description of Substrate: BRAI/Flex SBS The Styrene Butadine Styrene (SBS) M, 170, membranes are hot or cold applied, SBS roof membranes, manufactured in rolled sheet form, using polymer modified bitumen reinforced with polyester or glass fiber mat and surfaced with granules. The modified bitumen is formulated by blending non-blown asphalt with SBS elastomeric ploymers. This modified bitumen compound is reinforced with polyester (1.7-2.3) lb/sq) mats which provide tensile strength and puncture resistance. A fine mineral particulate covers the bottom of the membranes to function as a non-blocking agent that facilitates application. These membranes are designed to be applied with either hot asphalt or Matrix SB cold adhesive as fully adhered cap membranes in two or three-ply roof system configurations.

Markers

Label	Average	Minimum	Maximum	Emissivity	Background	Std. Dev.
PERMAKOTE Treated	55.2 °F	43.3 °F	72.5 °F	0.95	68.0 °F	2.549
Untreated Roof Wall	132.2 °F	124.7 °F	137.5 °F	0.95	68.0 °F	1.151







IR20071025_0033.is2

Visible Light Image

10/25/2007 1:25:29 AM

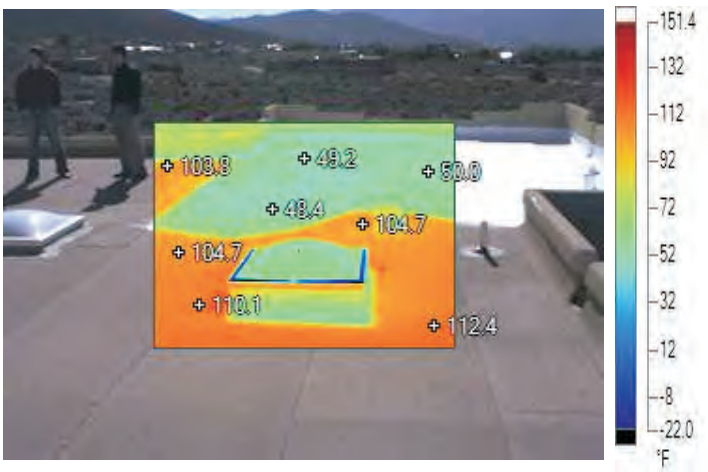
-This image reflects only the PERMAKOTE ® treated section of the roof which displays cooler temperatures averaging 62.5 F and is represented by the blue color.

-The PERMAKOTE ® Elastomeric Acrylic Ceramic coating in this image was applied to BRAI/Flex SBS Membranes.

-Description of Substrate: BRAI/Flex SBS The Styrene Butadine Styrene (SBS) M, 170, membranes are hot or cold applied, SBS roof membranes, manufactured in rolled sheet form, using polymer modified bitumen reinforced with polyester or glass fiber mat and surfaced with granules. The modified bitumen is formulated by blending non-blown asphalt with SBS elastomeric ploymers. This modified bitumen compound is reinforced with polyester (1.7-2.3) lb/sq) mats which provide tensile strength and puncture resistance. A fine mineral particulate covers the bottom of the membranes to function as a non-blocking agent that facilitates application. These membranes are designed to be applied with either hot asphalt or Matrix SB cold adhesive as fully adhered cap membranes in two or three-ply roof system configurations.

Markers

Label	Average	Minimum	Maximum	Emissivity	Background	Std. Dev.
PERMAKOTE Treated	62.5 °F	38.0 °F	78.1 °F	0.95	68.0 °F	3.676



IR20071025_0037.is2

Visible Light Image

10/25/2007 1:27:28 AM

-BRAI/FLEX SBS-untreated section of the roof has hot temperatures ranging from 103.8 F through 112.4 F and is represented by the color orange.

-The PERMAKOTE ®-treated section of the roof has much cooler temperatures ranging from 48.4 F through 50.0 F and is represented by the bluish-green color.

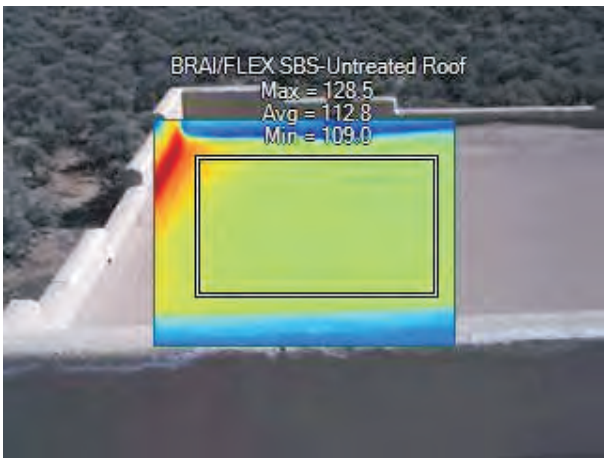
-The temperature difference is as much as 64 F when comparing the BRAI/FLEX SBS-untreated section of the roof to the PERMAKOTE ® treated section of the roof.

-The PERMAKOTE ® Elastomeric Acrylic Ceramic coating in this image was applied to BRAI/Flex SBS Membranes.

-Description of Substrate: BRAI/Flex SBS The Styrene Butadine Styrene (SBS) M, 170, membranes are hot or cold applied, SBS roof membranes, manufactured in rolled sheet form, using polymer modified bitumen reinforced with polyester or glass fiber mat and surfaced with granules. The modified bitumen is formulated by blending non-blown asphalt with SBS elastomeric ploymers. This modified bitumen compound is reinforced with polyester (1.7-2.3) lb/sq) mats which provide tensile strength and puncture resistance. A fine mineral particulate covers the bottom of the membranes to function as a non-blocking agent that facilitates application. These membranes are designed to be applied with either hot asphalt or Matrix SB cold adhesive as fully adhered cap membranes in two or three-ply roof system configurations.

Markers

Label	Temperature	Emissivity	Background
P0	110.1 °F	0.95	68.0 °F
P1	112.4 °F	0.95	68.0 °F
P2	104.7 °F	0.95	68.0 °F
P3	104.7 °F	0.95	68.0 °F
P4	48.4 °F	0.95	68.0 °F
P8	103.8 °F	0.95	68.0 °F
P7	50.0 °F	0.95	68.0 °F
P9	49.2 °F	0.95	68.0 °F



IR20071025_0038.is2

Visible Light Image

10/25/2007 1:28:10 AM

-This image reflects only the BRAI/FLEX SBS-untreated section of the roof which displays hot temperatures averaging 112.8 F and is represented by the green color.

-Description of Substrate: BRAI/Flex SBS The Styrene Butadine Styrene (SBS) M, 170, membranes are hot or cold applied, SBS roof membranes, manufactured in rolled sheet form, using polymer modified bitumen reinforced with polyester or glass fiber mat and surfaced with granules. The modified bitumen is formulated by blending non-blown asphalt with SBS elastomeric ploymers. This modified bitumen compound is reinforced with polyester (1.7-2.3) lb/sq) mats which provide tensile strength and puncture resistance. A fine mineral particulate covers the bottom of the membranes to function as a non-blocking agent that facilitates application. These membranes are designed to be applied with either hot asphalt or Matrix SB cold adhesive as fully adhered cap membranes in two or three-ply roof system configurations.

Markers

Label	Average	Minimum	Maximum	Emissivity	Background	Std. Dev.
Untreated Roof	112.8 °F	109.0 °F	128.5 °F	0.95	68.0 °F	1.124

IR20071025_0039.is2

Visible Light Image

10/25/2007 1:28:43 AM

-This image reflects only the BRAI/FLEX SBS-untreated section of the roof which displays hot temperatures averaging 113.7 F and is represented by the red color.

-Description of Substrate: BRAI/Flex SBS The Styrene Butadine Styrene (SBS) M, 170, membranes are hot or cold applied, SBS roof membranes, manufactured in rolled sheet form, using polymer modified bitumen reinforced with polyester or glass fiber mat and surfaced with granules. The modified bitumen is formulated by blending non-blown asphalt with SBS elastomeric ploymers. This modified bitumen compound is reinforced with polyester (1.7-2.3) lb/sq) mats which provide tensile strength and puncture resistance. A fine mineral particulate covers the bottom of the membranes to function as a non-blocking agent that facilitates application. These membranes are designed to be applied with either hot asphalt or Matrix SB cold adhesive as fully adhered cap membranes in two or three-ply roof system configurations.

Markers

Label	Average	Minimum	Maximum	Emissivity	Background	Std. Dev.
Untreated Roof	113.7 °F	106.6 °F	124.0 °F	0.95	68.0 °F	1.904

IR20071025_0042.is2

Visible Light Image

10/25/2007 1:30:37 AM

-BRAI/FLEX SBS- untreated section of the roof has hot temperatures averaging 107.4 F and is represented by the redish-orange color.

-The PERMAKOTE ® treated section of the roof has much cooler temperatures averaging 59.6 F and is represented by the blue color.

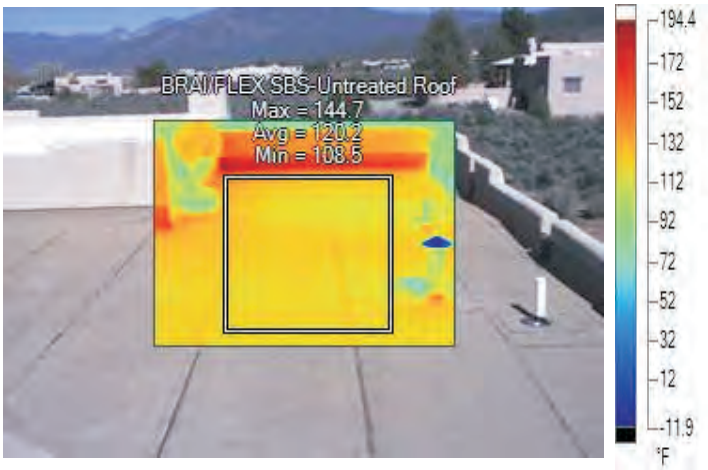
-The temperature difference is as much as 61 F when comparing the BRAI/FLEX SBS-untreated section of the roof to the PERMAKOTE ® treated section of the roof.

-The PERMAKOTE ® Elastomeric Acrylic Ceramic coating in this image was applied to BRAI/Flex SBS Membranes.

-Description of Substrate: BRAI/Flex SBS The Styrene Butadine Styrene (SBS) M, 170, membranes are hot or cold applied, SBS roof membranes, manufactured in rolled sheet form, using polymer modified bitumen reinforced with polyester or glass fiber mat and surfaced with granules. The modified bitumen is formulated by blending non-blown asphalt with SBS elastomeric ploymers. This modified bitumen compound is reinforced with polyester (1.7-2.3) lb/sq) mats which provide tensile strength and puncture resistance. A fine mineral particulate covers the bottom of the membranes to function as a non-blocking agent that facilitates application. These membranes are designed to be applied with either hot asphalt or Matrix SB cold adhesive as fully adhered cap membranes in two or three-ply roof system configurations.

Markers

Label	Average	Minimum	Maximum	Emissivity	Background	Std. Dev.
PERMAKOTE Treated	59.6 °F	53.0 °F	78.6 °F	0.95	68.0 °F	1.807
Untreated Roof	107.4 °F	98.9 °F	114.0 °F	0.95	68.0 °F	1.312



IR20071025_0043.is2 **Visible Light Image**

10/25/2007 1:31:59 AM
-This image reflects only the BRAI/FLEX SBS-untreated section of the roof which displays hot temperatures averaging 120.2 F and is represented by the orange color.

-Description of Substrate: BRAI/Flex SBS The Styrene Butadine Styrene (SBS) M, 170, membranes are hot or cold applied, SBS roof membranes, manufactured in rolled sheet form, using polymer modified bitumen reinforced with polyester or glass fiber mat and surfaced with granules. The modified bitumen is formulated by blending non-blown asphalt with SBS elastomeric ploymers. This modified bitumen compound is reinforced with polyester (1.7-2.3) lb/sq) mats which provide tensile strength and puncture resistance. A fine mineral particulate covers the bottom of the membranes to function as a non-blocking agent that facilitates application. These membranes are designed to be applied with either hot asphalt or Matrix SB cold adhesive as fully adhered cap membranes in two or three-ply roof system configurations.

Markers

Label	Average	Minimum	Maximum	Emissivity	Background	Std. Dev.
Untreated Roof	120.2 °F	108.5 °F	144.7 °F	0.95	68.0 °F	1.925