

TECHINICAL BRIEFING.

CASE STUDIES ON HEAT REDUCTION.

FOR ROOF APPLICATIONS ONLY.

Real conditions under tropical weather.

1. EXECUTIVE SUMMARY.

The application of BBG Rust Cover /Thermic Insulator, white, as a 0,5 mm thickness coating on metal sheet roofing, decreases temperature up to 15-20°C on the exterior surface (35F), which translates into 10-15°C decrease in the interior surface of metal, and room temperature that varies from 5-8°C; under tropical weather conditions. Efficiency varies, depending on several factors like material thickness, external wind, humidity, sunlight, building height and internal ventilation.

2. CASE STUDIES.

- Dry coat thickness. 0,5 mm.
- Rust Cover applied directly, in 2 coats, with no primer, no acid, no dilution.

a. Rusted galvanized roofing. 35F decrease. INTERIOR.

Nicaragua, Industrial Free Zone. Dry weather, rusted galvanized sheet, at noon.

Test took place on February 2016 in Managua, Nicaragua, Las Mercedes Free Zone, industrial warehouse #20. Twin samples of metal tin for roofing, galvanized tin #26, over 30 years old, damaged and ready for replacement. BBG Rust Cover BBG, (Thermic Insulator) is applied in one coat, water based, by hand, with brush, no dilution, 0,5 mm thick. Test of thermal reduction, metal samples get sunlight from 11 am to noon, sunny day, clear sky. Metal with no treatment at all. 54°C (130 F) Metal treated with one coat of Rust Cover: 35°C. (95 F) Thermal reduction. 19°C. (35F)



Link to: YouTube video with case documentation:

HOW TO COOL METAL ROOF? 35F DECREASE, IN THE INTERIOR

<https://www.youtube.com/watch?v=xEM47bldSHM>

b. Untreated galvanized roofing. 30F decrease. Exterior.

Same location than case above. In this case, comparing un treated galvanized sheet against areas treated with Rust Cover.



Link to: YouTube video with case documentation:

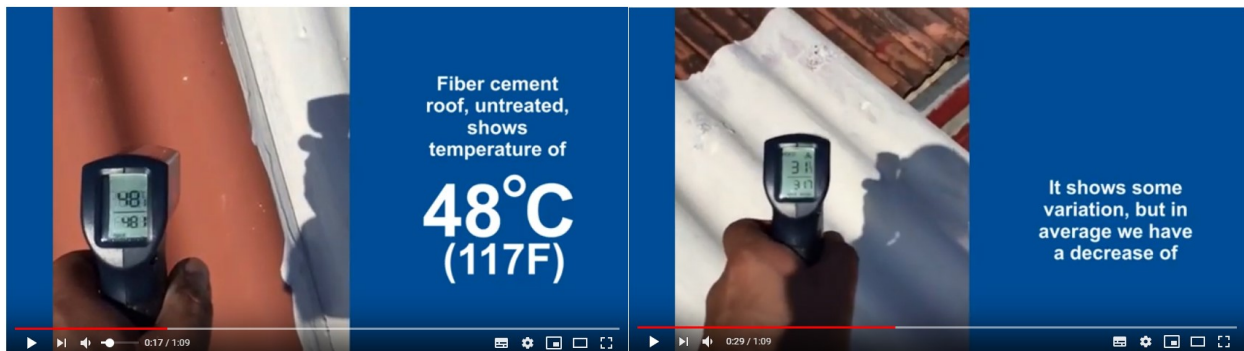
HOW TO COOL METAL ROOF? 30F DECREASE, ON THE EXTERIOR

<https://www.youtube.com/watch?v=eEATblTHxCA>

c. Fiber Cement roofing. 30 F decrease. Exterior.

Panamá, Pacific coast. Cloudy. 10 am.

Test took place on November 2016 in Panamá, San Miguelito, Barrio El Crisol. House roofing.. Fiber cement material, 20 years old, shows fungus and cracking damage. Its dark color increase the sunlight abortion and the surface heat. BBG Rust Cover BBG, (Thermic Insulator) is applied in one coat, water based, by hand, with brush, no dilution, 0,3 mm thick. Test of thermal reduction, sample get sunlight from 9 to 11 am, partially cloudy sky. Fiber cement with no treatment at all. 47°C (117 F) Fiber cement treated with one coat of Rust Cover: 31°C. (87 F) Thermal reduction. 16°C. (30F)



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Guyana. Guyana Colorcrete. 15A Water Street, Georgetown (592) 226-5280.
Jamaica. Omega Manufacturing. 164 Spanish Road. Kingston 11. (876) 923-8512.

Link to: YouTube video with case documentation:

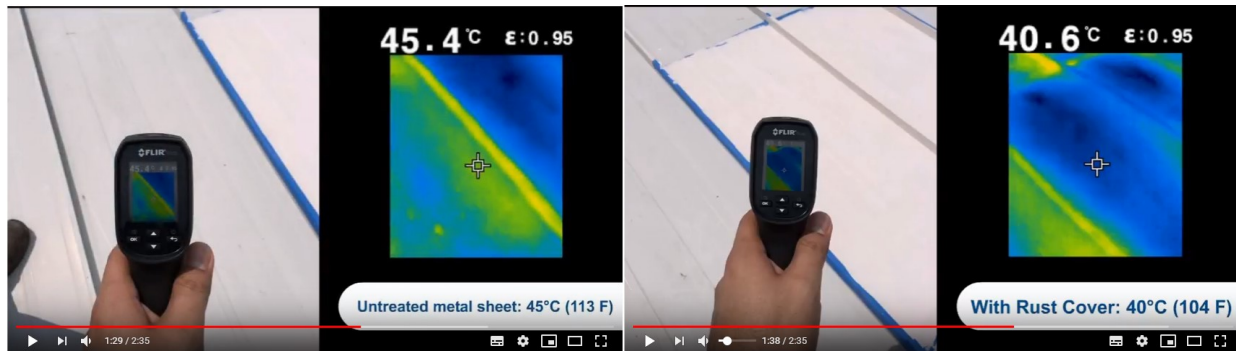
HOW TO COOL FIBRE CEMENT ROOF? 30F DECREASE, ON THE EXTERIOR

https://www.youtube.com/watch?v=x_miHAq9hC0

d. Enameled metal roofing. 30 F decrease. Exterior.

Costa Rica, Pacific coast. Cloudy. 10 am.

Test took place on April 2017 in Guacima, Alajuela, Costa Rica. New roofing of white enameled sheet. BBG Rust Cover BBG, (Thermic Insulator) is applied in two coats, water based, by hand, with brush, no dilution, 0,5 mm thick. Test of thermal reduction, sample get sunlight at 1:00 pm, partially cloudy sky. Thermal reduction. 5°C. (9F)



Link to: YouTube video with case documentation:

How to cool enameled sheet roof?

<https://www.youtube.com/watch?v=f5ynSeaw4e8>

ADDITIONAL INFORMATION

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