

## Energy Control Room – Reduce Radiant Heat Gain

**Location:** Baytown, TX

**Coating:** Mascoat WeatherBloc

**Thickness:** 20 mils (0.5 mm)

**Reason for application:** Reduce radiant heat gain



A company in Baytown, TX was having problems with the control rooms at their facility. Although they were insulated and had 3–6 air conditioning units in them, they were still getting too hot during the summer. On occasion they would get so hot that it would trip the circuit breakers, which would cause the whole unit connected to the control room to automatically shutdown. An unscheduled shutdown could cost the plant hundreds of thousands of dollars, so a solution to this problem had to be found.



The company asked their contractors, Brock Group, if they had any ideas about how to proceed. Brock had done quite a few projects with Mascoat in the past, so they contacted a Mascoat representative for a recommendation. Mascoat recommended that 20 mils (0.5 mm) of their WeatherBloc coating be put on the outside of control buildings to help reduce the solar loading and reduce the temperature in the control rooms.



Brock completed coating the first building in May of 2013. To measure the performance of the WeatherBloc, Brock only coated half of the roof of the first building on the first day of the project. They then went inside to take temperature readings on the underside of the roof. The uncoated side had a surface temperature of 79°F (26.1°C) while the side coated with WeatherBloc was 66°F (18.9°C). They were hoping to drop the surface temperature to 72–74°F (22.2–23.3°C), so dropping it to 66°F (18.9°C) was a very pleasant surprise.



To date, there have been no shutdowns due to overheating in the coated control room. The plant is in the process of coating a second building and they plan to coat several more buildings in 2013.

