



# CASE STUDY

## HARRIS COUNTY, TX

## Sheet Pile Corrosion Protection



### Project Data

Location	Houston, TX
Project Type	Sheet Pile Corrosion Prevention
Products Used	Protal 600 Coal Tar Epoxy (CTE)
Contractor or Applied By	Certified Pipe Service (CPS Houston)

### Overview

Houston, TX has experienced a major construction boom in recent years. With the recent devastation of Hurricane Harvey, a large number of steel sheet pile projects have been included in this construction for added flood control. Many of the city's waterways are being revamped in the hopes it will help prevent another catastrophic flooding event like Harvey. Corrosion protection for sheet piles is paramount to their long-term service life as they are extremely difficult to repair once corrosion has begun.

For decades, the most popular method to protect sheet piles has been coal tar epoxy coatings due to the low cost and excellent water resistance. However, many problems arise during the application of these standard coal tar epoxies such as delamination between multiple coats, poor adhesion, and long cure times. These issues can cripple the applicator's production rates and lead to premature coating failures once the sheet piles are in service.

The Protal 600 Coal Tar Epoxy (CTE) was chosen for this sheet pile project in Harris County, TX due to its high build one coat application, excellent adhesion, abrasion resistance and fast cure time. The coating was spray applied using a Graco 70:1 Single Leg Airless Pump by an extremely experienced and qualified spray applicator. The applicator, CPS Houston, was impressed with the efficient one coat application and fast cure time, which dramatically increased their production rates. The owner was very pleased with the quick delivery, success of installation, and quality of the coating. The owner and applicator have made the Protal 600 Coal Tar Epoxy their coating of choice for sheet pile protection.

### Benefits

- Good impact resistance
- High build up to 26 mils WFT
- Excellent resistance to water, seawater, wastewater, and more
- Exceeds AWWA C-210 for exterior
- Exceeds Corp of Engineers C-200, C200a



Protal 600 CTE Part "A" & "B" being mixed prior to the spray application.



Application of Protal 600 CTE using a single leg airless spray pump.



Sheet Piles coated with Protal 600 CTE being driven into place.

Date Published: 08/2018

Denso North America - Canada (Ontario)  
 90 Ironside Crescent, Unit 12 / Toronto, M1X 1M3  
 Tel: 416-291-3435 Fax: 416-291-0898  
 sales@densona-ca.com

[www.densona.com](http://www.densona.com)  
 A Member of Winn & Coales International

Denso North America - USA  
 9747 Whithorn Drive / Houston, TX 77095  
 Tel: 281-821-3355 Fax: 281-821-0304  
 info@densona.com