



EUCLID CHEMICAL

PROJECT PROFILE

ARTICULATED CONCRETE MATTRESS CASTING



SCOPE OF PROJECT

Metal forms were used to cast concrete blocks approximately 3 feet by 4 feet by 4 inches thick, utilizing Euclid Chemical concrete admixtures and macro synthetic fibers. The concrete blocks were tied together with a stainless steel wire, picked up by a crane and loaded on barges for transport to a bank along the Mississippi River for stabilization.

PRODUCTS FEATURED

EUCON WR 91

Water Reducing, Set Retarding Admixture

EUCON AEA-92S

Air Entraining Agent for Concrete

Tuf-Strand MaxTen

Macro Synthetic Fiber, Polypropylene/Polyethylene Copolymer

Kurez VOX White Pigmented

White pigmented, Water-Based Curing Compound

Concrete Blaster

High Performance Equipment Cleaner

PROJECT DATA

Location – Richardson Landing Drummonds, TN

General Contractor – Mississippi Limestone

Concrete Producer – Mississippi Limestone

Total Area – 59,000 yd³ of concrete

PROJECT SUMMARY

The Richardson Landing mat casting field is used to produce articulated concrete mats that are tied together to form articulated concrete revetment “blankets” that are then placed on riverbanks to serve as erosion control. In the past, corners of some of these concrete mats were becoming damaged as they were moved from the casting field to the construction site. To combat this issue, it was decided to incorporate Tuf-Strand MaxTen synthetic fibers into the concrete mixture. Additionally, Euclid Chemical water reducing and air entraining admixtures were chosen after Euclid Chemical’s laboratories conducted extensive testing and mix design optimization for the concrete supplier.