



EUCLID CHEMICAL

PROJECT PROFILE

RESIDENTIAL STEM WALL REPAIR



PROJECT DATA

Location – Buckeye, AZ

Application – House Stem Wall Repair

Engineer – Sterling Madison Lofquist

Matreial Supplier – Construction Sealants and Supply

Applicator – Gaje Contracting LLC

Total Area – 200 linear ft (61 m)

PRODUCTS FEATURED

EUCOCRETE™

High-Performance Concrete With Corrosion Inhibitor

DURAL™ 452 MV

ASTM C881 Compliant, High Modulus Epoxy Bonding Adhesive

TAMMSCRETE™

Polymer-Modified, Cementitious Finishing Material

SCOPE OF PROJECT

- Remove crumbling stem wall concrete
- Clean and/or replace rebar
- Form and Pour EUCOCRETE
- Skim coat TAMMSCRETE over the whole stem wall after the repair

PROJECT SUMMARY

Challenge: After the home owner attempted to make some repairs, it was discovered that the concrete used for the stem walls was defective. During demo the concrete crumbled to a dust-like consistency. The entire stem wall needed to be removed and replaced under the residence without disturbing the structure and with minimal impact to the home owner.

Solution: The construction team developed a plan to remove the stem wall in a saw-tooth pattern in 4 ft (1.2 m) sections. The exterior stucco system was removed approximately 18 in (46 cm) above the stem wall to open access. In addition, the front porch and back patio were removed to access the repair area. Once each section of the stem wall was completely demoed the rebar was cleaned or replaced utilizing commercially available bar locks. All anchor bolts and hold down straps were replaced. Once the rebar was in proper condition, it was primed with DURAL 452 MV epoxy. Forms were set in place and poured back with EUCOCRETE. Care was taken to isolate the interior slab edge from bonding to the new pour. Once the material was set, forms were released and the pour was wet cured. This process continued until the entire stem was removed and replaced. After completion the entire stem was coated with TAMMSCRETE to create a uniform finish and to further protect the stem in the future.