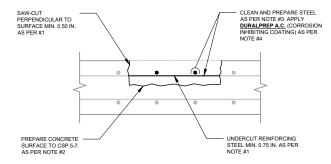
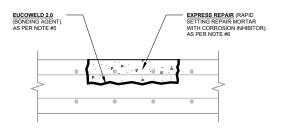


# **EXISTING CONDITION**



### CONCRETE REMOVAL AND SURFACE PREPARATION



# COMPLETED REPAIR

1 HORIZONTAL REPAIR

# **GENERAL CONCRETE REPAIR NOTES**

### 1. CONCRETE REMOVAL:

EXCEPT WHERE NOTED OTHERWISE, PERFORM CONCRETE REMOVAL IN ACCORDANCE WITH RECOMMENDATIONS OF ICRI GUIDELINE 310.1R "GUIDE FOR SURFACE PREPARATION FOR THE REPAIR OF DETERIORATED CONCRETE RESULTING FROM REINFORCING STEEL CORROSION."

PROVIDE MINIMUM 5: NICH (12 MM) DEEP SAW CUT AT PERIMETER BOUNDARIES OF REPAIRS, MAKE SAW CUTS PERPENDICULAR TO CONCRETE SURFACE. SAW-CUT BOUNDARIES ARE TO DE STRAIGHT AND ALIGNED PARALLE. TO OPPOSITE BOUNDARIES REPAIR CONFIGURATIONS SHOULD BE KEPT SIMPLE, PREFERBALY RECTANGULAR, MINIMIZE REENTRANT CORNERS TO PREVENT CRACKING, DO NOT ALLOW SAW TO COME INTO CONTACT WITH REINFORCING STEEL REPAIR AREA CONFIGURATION EXAMPLE:







EXISTING DETERIORATION

RECTANGULAR BOUNDARIES

SEENTRANT CORNERS NOT RECOMMEND

REMOVE ALL CONCRETE WITHIN REPAIR BOUNDARY TO A UNIFORM DEPTH. MINIMUM DEPTH IS AS REQUIRED BY REPAIR PRODUCT LIMITATIONS, AND AS REQUIRED TO PROVIDE MINIMUM REQUIRED CLEARANCE AROUND EXPOSED REINFORCING STEEL AND EMBEDDED GALVANIC ANODES WHEN SPECIFIED. CONTINUE REMOVAL UNTIL ALL UNSOUND, DELAMINATED, AND CRACKED CONCRETE HAS BEEN REMOVED.

WHERE 'N OR MORE OF FEINFORCING STEEL'S PERIMETER IS EXPOSED EITHER BY EXISTING CONDITIONS OR CONCRETE REMOVAL PROCEDURES, BOND BETWEEN CONCRETE AND REINFORCING STEEL IS BROKEN, OR CORROSION IS PRESENT, TREMOVE CONCRETE AS REQUIRED TO PROVIDE MINIMIM % INCH (IP MM), CLEARING APOUND ENTIRE PERIMETER OF STEEL, OR MINIMUM % INCH (IF MM), LEARGER THAN COARSE AGGREGATE IN REPAIR MATERIAL, WHICH EVER IS GREATEST. REMOVE CONCRETE ALONG ENTIRE EXPOSED LENGTH, EXTEND CONCRETE REMOVAL TO BEVOID CORROSION ON REINFORCING BARS.

AFTER CONCRETE REMOVAL HAS BEEN COMPLETED, USE ABRASIVE BLASTING OR HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVE TO REMOVE ANY BRUISED CONCRETE SUBSTRATE WEAKENED BY MICROCRACKING.

CONTACT THE ENGINEER BEFORE REMOVING CONCRETE IN COLUMNS.

#### 2. CONCRETE PREPARATION AND CLEANING:

AREAS TO RECEIVE CONCRETE REPAIR ARE TO BE STRUCTURALLY SOUND AND FREE OF LOOSE OR DETERIORATED CONCRETE, DUST, DIRT, PAINT, SEALERS, OIL, FEFLORESCENCE, LATRANCE, AND OTHER CONTAMINANTS THAT COULD INTERFERE WITH BOOM. MECHANICALS PRABED SUBFACE TO PROVIDE MINIMUM CONCRETE SUBFACE PROFILE (CSP) EQUAL TO THAT RECOMMENDED BY REPAIR MORTRA MANUFACTURER AND IN ACCORDANCE WITH RECOMMENDATIONS OF ICRI GUIDELINE 310.2R "SELECTING AND SPECIFYING CONCRETE SUBFACE PREPAIR."

#### 3. PREPARING REINFORCING STEEL:

CLEAN AND PREPARE EXPOSED REINFORCING STEEL IN ACCORDANCE WITH RECOMMENDATIONS OF ICRI GUIDELINE 310.1R "GUIDE FOR SURFACE PREPARATION FOR THE REPAIR AFTER THE REPAIR MATERIAL, REMOVE CONCRETE FRAGMENTS, CORROSION PRODUCTS, MILL SCALE, AND OTHER TONTAMINANTS FROM REINFORCING BARS USING ARRASIVE MEDIA BLASTING (AMB) OR MECHANICAL CLEANING IN ACCORDANCE WITH ICRI 210.5R "GUIDE FOR SURFACE PREPARATION FOR THE REPAIR OF DETERIORATED CONCRETE RESULTING FROM REINFORCING STEEL CORROSION"

IF REINFORCING STEEL HAS LOST CROSS-SECTIONAL AREA, CONTACT THE ENGINEER BEFORE PROCEEDING.

ENSURE MINIMUM COVER OVER REINFORCING STEEL IN ACCORDANCE WITH ACI 562 "CODE REQUIREMENTS FOR ASSESSMENT, REPAIR, AND REHABILITATION OF EXISTING CONCRETE STRUCTURES." IF MINIMUM COVER CANNOT BE ACHIEVED, CONTACT THE ENGINEER.

REPAIR DAMAGE TO EPOXY-COATED REINFORCEMENT IN ACCORDANCE WITH ASTM D3963 "STANDARD SPECIFICATION FOR EPOXY-COATED REINFORCING STEEL BARS."

### 4. CORROSION INHIBITING COATING:

5/20/2025

MIX EUCLID CHEMICAL DURALPREP A.C. CORROSION-INHIBITING COATING AND APPLY TWO 20 MIL (0.51 MM) COATS TO DRY, PROPERLY PREPARED, STEEL SURFACES IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED RECOMMENDATIONS AND LIMITATIONS.

## 5. BONDING AGENT:

APPLY EUCLID CHEMICAL EUCOWELD 2.0 BONDING AGENT TO PROPERLY PREPARED SUBSTRATE IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED RECOMMENDATIONS AND LIMITATIONS, PROVIDE COMPLETE AND THOROUGH COVERAGE ENSURING THAT BONDING AGENT HAS BEEN FULLY WORKED INTO SURFACE. ALTERNATIVE BONDING METHODS MATERIALS PERMITTED IF RECOMMENDED BY REPAIR MORTRA MANUFACTURER AND APPROVED BY TROINEER.

### 6. REPAIR MORTAR

MIX AND APPLY REPAIR MORTAR IN ACCORDANCE WITH MANUFACTURERS PUBLISHED RECOMMENDATIONS AND LIMITATIONS, AND WITHIN OPEN TIME OF ANY PRODUCT SCRUB COATS OR BONDING AGENTS.

FULLY CONSOLIDATE REPAIR MORTAR AS REQUIRED TO ENCAPSULATE REINFORCEMENT, FILL ALL VOIDS, AND AVOID HONEYCOMBING, FINISH TO MATCH SURROUNDING SURFACE.

# 7. CURING:

IMMEDIATELY FOLLOWING PLACEMENT AND FINISHING PROCEDURES CURE CEMENTITIOUS REPAIR MORTARS IN ACCORDANCE WITH MANUFACTURERS PUBLISHED RECOMMENDATIONS AND LIMITATIONS.

<b>EUCLID CHEMICAL</b>

# **EUCLID CHEMICAL CONCRETE RESTORATION SYSTEMS**

Detail: EXPRESS REPAIR - HORIZONTAL CONCRETE REPAIR

Checked by: BDG

File Name:

CR-15

Note: These paragraphs and details are meant to be incorporated into a project's general structural notes or directly onto the plans. They must be carefully reviewed by a qualified design professional and edited to meet the particular requirements of the project at hand, assure compliance with any governing building codes, and coordinate with other specification sections and drawings. In no case shall these guide specifications be considered to be contract documents or serve as installation instructions for the product being discussed, in any cases of discrepancy, the manufacturer's most recently published data sheet shall take precedence.

Drawn by: AMH

Scale: NTS