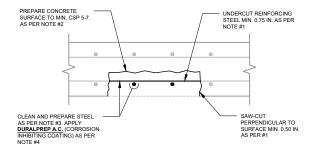
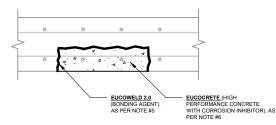


# EXISTING CONDITION



# CONCRETE REMOVAL AND SURFACE PREPARATION



COMPLETED REPAIR

1 OVERHEAD 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 MINIUM 19 INCH (12 MM) DEEP SAW CUT AT PERIMETER BOUNDARIES OF REPAIRS. MAKE SAW-CUTS PERPENDICULAR TO CONCRETE SURFACE. SAW-CUT BOUNDARIES ARE TO BE STRAIGHT AND ALIGNED PARALLEL TO OPPOSITE BOUNDARY EDGES. REPAIR CONFIGURATIONS SHOULD BE KEPT SIMPLE, PREFERABLY RECTANGULAR. MINIMIZE REENTRANT CORNERS TO PREVENT CRACKING, DO NOT ALLOW SAW TO COME INTO CONTACT WITH REINFORCING STEEL. REPAIR AREA CONFIGURATION EXAMPLE:





EXISTING DETERIORATION

REENTRANT CORNERS NOT RECOMMENDED

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, DEVAINIVATED, AND CRACKED CONCRETE HAS BEEN REMOVED.

WHERE % OR MORE OF REINFORCING STEEL'S PERIMETER IS EXPOSED EITHER BY EXISTING CONDITIONS OR CONCRETE REMOVAL PROCEDURES, BOND BETWEEN CONCRETE AN DENIFORCING STEEL'S BROKEN, OR CORROSSION IS PRESENT, REMOVE CONCRETE AS REQUIRED TO PROVIDE MINIMUM ¼ NICH (19 MM) CLEARANCE AROUND ENTIFIE PERIMETER OF STEEL DR MINIMUM ¼ INCH (6 MM) LARGER THAN COARSE AGGREGATE NE REPAIR MATERIAL, WHICH EVER IS GREATEST. REMOVE CONCRETE AL NOIG ENTIFIE EXPOSED LENSTH, EXTEND CONCRETE REMOVAL DOUDARISE TO BEVOND CORROSSION OR REINFORCING BARS.

RECTANGULAR BOUNDARIES

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. EFFLORESCENCE, LATTANCE, AND OTHER CONTAMINANTS THAT COULD INTERFREE WITH BOOND. MECHANICALLY ARADE SUBFACTE TO PROVIDE MINIMUM CONCRETE SURFACE PROFILE (CSP) EQUAL TO THAT RECOMMENDED BY REPAIR MORTAR MANUFACTURER AND IN ACCORDANCE WITH RECOMMENDATIONS OF ICAI GUIDELINE 310.2R "SELECTING AND SPECIFYING CONCRETE SURFACE PREPARATION FOR SEALERS, COATINGS, POLYMER OVENLAYS, AND CONCRETE REPAIR."

#### 3. PREPARING REINFORCING STEEL:

CLEAN AND PREPARE EXPOSED REINFORCING STEEL IN ACCORDANCE WITH RECOMMENDATIONS OF ICID (GUIDELINE 316.1R 'GUIDE FOR SURFACE PREPARATION FOR THE REPAR OF DETERIORATED CONCRETE RESULTING FROM STEEL CORROSION." TO ENSURE A CLEAN SURFACE FOR ADOLITE BOND WITH THE REPAR MATERIAL, REMOVE CONCRETE FRAMEMENTS, CORROSION PRODUCTS, MILL SCALE, AND OTHER CONTAMINANTS FROM REINFORCING BARS USING ABRASIVE 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:

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 METHODSMATERIALS PERMITTED IF RECOMMENDED BY REPAIR MORTAR MANUFACTURER AND APPROVED BY ENGINEER.

## 6. REPAIR MORTAR:

MIX AND APPLY REPAIR MORTAR IN ACCORDANCE WITH MANUFACTURER'S 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 MANUFACTURER'S PUBLISHED RECOMMENDATIONS AND LIMITATIONS.

