



THESE DETAILS ARE APPLICABLE TO HORIZONTAL, VERTICAL AND OVERHEAD LOCATIONS. THEY ALSO APPLICABLE TO REMOVE BY HYDRO-DEMOLITION, HYDROMILLING, AND ELECTRIC, PNEUMATIC OR HYDRAULIC IMPACT BREAKERS.

1.- REMOVE LOOSE OR DELAMINATED CONCRETE ABOVE CORRODED REINFORCING STEEL.

2.- ONCE INITIAL REMOVALS ARE MADE, PROCEED WITH THE UNDERCUTTING OF ALL EXPOSED CORRODED BARS. UNDERCUTTING WILL PROVIDE CLEARANCE FOR UNDER BAR CLEANING AND FULL BAR CIRCUMFERENCE BONDING TO SURROUNDING CONCRETE, AND WILL SECURE THE REPAIR STRUCTURALLY, PROVIDE MINIMUM $\frac{3}{4}$ " INCH. (19MM) CLEARANCE BETWEEN EXPOSED REBARS AND SURROUNDING CONCRETE OR $\frac{1}{4}$ " LARGER THAN LARGEST AGGREGATE IN REPAIR MATERIAL, WHICHEVER IS GREATER. 3.- CONCRETE REMOVALS SHALL EXTEND ALONG THE BARS THE BAR FREE OF BOND INHIBITING CORROSION, AND WHERE THE BARS IS WELL BONDED TO SURROUNDING CONCRETE.

4.- IF NON-CORRODED REINFORCING STEEL IS EXPOSED DURING THE UNDERCUTTING PROCESS CARE SHALL BE TAKEN NOT TO DAMAGE THE BAR'S BOND TO SURROUNDING CONCRETE IS BROKEN, UNDERCUTTING OF THE BAR SHALL BE REQUIRED.

5.- ANY REINFORCEMENT WHICH IS LOOSE SHALL BE SECURED IN PLACE BY TYING TO OTHER SECURED BARS OR BY WHEN APPROVAL METHODS.

A EXPOSING AND UNDERCUTTING OF REINFORCING STEEL

EDGE AND SURFACE CONDITIONING OF CONCRETE C TYPICAL DETAIL N.T.S.

IF REINFORCING STEEL HAS LOST MORE THAN 5% OF ITS CROSS SECTION, A STRUCTURAL ENGINEER SHOULD BE CONSULTED. IF REPAIRS ARE REQUIRED TO THE REINFORCING STEEL, ONE OF THE FOLLOWING REPAIR METHODS SHOULD BE USED.

- COMPLETE BAR REPLACEMENT, OR
- ADDITIONAL OF SUPPLEMENT BAR OVER AFFECTED SECTION.
- NEW BARS MAY BE MECHANICALLY SPLICED TO OLD BARS OR PLACED PARALLEL TO AND

APPROXIMATELY 1/4" FROM EXISTING BARS. LAP LENGTH SHALL BE DETERMINED IN ACCORDANCE WITH ACI318; ALSO REFER TO CRSI AND AASHTO MANUAL.





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DO NOT USE THESE DETAILS FOR SHOTCRETE APPLICATIONS, FOR SHOTCRETE REPAIRS REFER TO AC1506

1.- REMOVE DELAMINATED CONCRETE, UNDERCUT REINFORCING STEEL (REFER TO "EXPOSING AND UNDERCUTTING OF REINFORCING STEEL" ON THIS SHEET), REMOVE ADDITIONAL CONCRETE AS REQUIRED TO PROVIDE MINIMUM REQUIRED THICKNESS OF REPAIR MANUAL.

2.- AT EDGE LOCATIONS, PROVIDE RIGHT ANGLE CUTS TO THE CONCRETE SURFACE WITH EITHER OF THE

- SAWCUT $\frac{1}{2}$ "(16MM) or less as required to avoid cutting reinforcing steel.

- USE POWER EQUIPMENT SUCH AS HYDRO DEMOLITION OR IMPACT BREAKER, AVOID FEATHER EDGES. 3.- REPAIR CONFIGURATIONS SHOULD KEPT AS SIMPLE AS POSSIBLE, PREFERABLY WITH SQUARED

4.- AFTER REMOVALS AND EDGE CONDITIONING ARE COMPLETE, REMOVE BOND INHIBITING MATERIALS (DIRT CONCRETE SLURRY, LOOSELY BONDED AGGREGATES) BY ABRASIVE BLASTING.

CHECK THE CONCRETE SURFACES AFTER CLEANING TO INSURE THAT SURFACE IS FREE FROM ADDITIONAL LOOSE AGGREGATE, OR THAT ADDITIONAL DELAMINATIONS ARE NOT PRESENT.

5.- IF HYDRO DEMOLITION IS USED, CEMENT AND PARTICULATE SLURRY MUST BE REMOVED FROM THE PREPARED SURFACES BEFORE SLURRY HARDENS.

6.- DO NOT REMOVE MORE THAN 16 SQFT OR 4FT X 4FT OF SLAB A TIME WITHOUT APPROVAL OF THE E.O.R 7.-SHORE SLAB APPROPRIATELY BEFORE CONCRETE REPAIR START.

8.- A PROFESSIONAL ENGINEERING TO SIGN AND FLORIDA REGISTERED SEAL SHORING PLAN SHORING



DATE	01/27/2023					
ISSUE	4. CITY OF MIAMI COMMENTS					
AMERICANO MEDIA GROUP STUDIO 2920 NW 7 ST MIAMI, FL 33125						
CONCRETE REPAIRS & DETAILS						
EI	FELIX FLIX <i>Civil,</i> au	NW 12 Doral (786) www.n C.A. F. RO ORID Struct dmin@ S PRC	ing th Stru , FL 33 762-2 /es-us #325 DRIGL A PE 7 fural, I DVes-u	S e r S e r eet, St 3126 2204 5.com 810 JEZ, P #7448 Mecha us.com #220	DF vice e. 101 E, SE nical n	R es
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