SECTION 03 81 27
CORING AND SAWING OF CONCRETE

PART 1 -GENERAL

1.1 SECTION INCLUDES

A. Coring and sawing of existing concrete walls and slabs for penetrating of mechanical and electrical systems.

1.2 CODES AND STANDARDS

A. Reference Standards and Specifications: Comply with provisions of following specifications and standards, except as otherwise noted or specified.

1. Safety and Health Standards Digest -Construction Industry (OSHA-2202) "Occupational Safety and Health Administration".

B. California Building Code Title 24.

1.3 REGULATORY REQUIREMENTS

A. No coring of reinforcing steel in structural concrete is permitted.

B. All coring and cutting of structural members must submit to Architect and approved by Structural engineer of Record. Agency approvals shall be obtained by Architect, not by Contractor.

PART 2- PRODUCTS

NOT USED.

PART 3- EXECUTION

3.1 PREPARATION

A. Before coring, determine following:

1. Location and size of steel-rebar in walls and slabs.
2. Location of utility lines in concrete.

B. Notify Architect of any structural coring according to 1.03B.

3.2 CORING REQUIREMENTS

A. Cutting Rebar during Core Drilling operations not permitted. Use drills equipped with Ground Fault Interrupter. Prior to drilling the area shall be mapped to determine the locations of rebars.

B. Holes over 1 inch in diameter must be drilled with non-impact rotary tool in order to minimize spalling at hole exit.

C. Supply non-impact rotary tool with diamond core drills of proper size. Supply equipment in accordance with OSHA standards.

D. Hole shall have 1/2 inch minimum clearance of largest portion of pipe or conduit passing through hole. This prevents dust or foreign matter from entering or leaving the area. If patching or packing is required around pipe or conduit it is recommended that minimum of one inch clearance be allowed to accommodate such patching or packing.

E. Rotary machine and tools used to drill holes or openings must operate below OSHA noise standards and lubricant, water or other chemical coolant, must be used to maintain dust-free operation.

F. Slurry or tailings generated from drilling operation must be vacuumed or washed from Work area.

G. Equipment in drilling operations must meet OSHA standards and specifications as to plugs, noise and fume pollution, wiring and maintenance.

3.3 SAWING REQUIREMENTS

A. Provide sawing equipment adequate in units and power to complete sawing operation.

B. Contractor shall be responsible for reference points to properly chalk line his proposed saw cuts.

C. Pilot holes and cored holes at corners shall be provided prior to saw cutting.

D. Sawing Method -Consisting of cutting groove in concrete with power-driven concrete saw to required depth and width as designated.

3.4 PROTECTION OF EXISTING PROPERTY

A. Damages to utilities or other objects within concrete slab are responsibility of Contractor.

B. Prior to starting sawing operation, Contractor shall protect against damage to property caused by water travelling through cracks in concrete.

C. Adequate protection against water or other damage caused by drilling or sawing above, adjacent to or below critical or occupied areas shall be provided.

3.5 CLEAN-UP

A. Do not allow debris to accumulate. Clean up concrete and cement materials, equipment, and debris upon completion of each portion of concrete Work. Remove demolished materials from site as Work progresses. Upon completion of Work, leave areas in clean condition.

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